digital bridge

In-Person Governance Body Meeting Summary

January 21-22, 2020

Table of Contents

Table of Contents 1
Executive Summary 4
Action Items Summary 5
Charter and Bylaws 5
Communications 5
Use Case Determination 5
Next Steps 5
Assessment Framework Findings 5
Future Use Case Options 5
eCR Scale-Up 5
Meeting Overview 6
Background 6
Meeting Objectives 6
Meeting Preparation 6
Attendance 7
Meeting Agenda 9
Tuesday, January 21, 2020 - Day 1 9
Benefit from Perspective 9
Wednesday, January 22, 2020 - Day 2 10
Advance Together 10
Digital Bridge Appreciation 11
Opening Warm-up 11
Welcoming Remarks 11
Key Reflections 12
Centralized Decision Support for eCR 12
Data is Elemental to Health 12
Public Health Data Modernization 13
CDC Foundation Sponsorship 13
Table 1. Motivational Digital Bridge Successes 14
Successes 14
Table 2. Aspirations for Future Digital Bridge Achievements 14

Theme 14
Aspirations 14
Charter and Bylaws Enhancement 16
Revision Findings and Recommendations 16
Key Recommendations from Charter and Bylaws Workgroup 16
Key Discussion Points 16
Key Decisions 17
Next Steps 17
Use Case Assessment Framework Dialogue 17
Use Case Assessment Framework Findings 18
Recommendations for Revised Criteria 18
Example Use Cases 18
Use Case Options 19
Description 19
Use Case Selection 20
Overview 20
Description 20
Key Discussion Points 21
Key Decisions 21
Next Steps 22
eCR Scale-Up 22
Update 22
Expanding Engagement: Expectations for New Sites 23
Digital Bridge Role in Governance 23
Key Discussion Points 24
Closing Remarks and Outputs Summary 25
Closing Remarks 25
Themes in Closing Reflections 25
Outcomes 26
Outputs 26
Appendix 27
Meeting Outputs 27
Appendix 1: Inspirational Proverbs 27

Appendix 2: Feedback on Draft Charter 28
Appendix 3: Digital Bridge (DB) Validated Use Case Criteria 28
Appendix 4: Projects Explored during Use Case Assessment Framework Development 28
Appendix 5: Use Case Small Group Participants....29
[1]Shared verbally during closing activity; no written Post-It note from participant. 32
Appendix 8: Bike Rack Items....32
Meeting Materials 33
Appendix 9: Charter and Bylaws Recommendations....33
Meeting Handouts 34
Appendix 10: Meeting Roster 34

Executive Summary

On January 21-22, 2020, the Digital Bridge governance body met at the Task Force for Global Health (Decatur, GA) to continue work toward a common vision for exchanging actionable information between public health and health care. By the end of this meeting, they endorsed principles to guide new governing documents for Digital Bridge and selected four use cases for further Digital Bridge work (newly reportable conditions, National Healthcare Safety Network Hospital Acquired Infections Skilled Nursing Facilities (NHSN HAI SNF), immunizations, and cancer registries). The governance body also decided to develop a white paper for one additional use case in preliminary study – a national public health Application Program Interface (API). A quorum of governing organizations was present with guests from three organizations. Approximately 40 percent of participants were first-time Digital Bridge meeting attendees.

The meeting opened with participants reflecting on outcomes from 2019 and sharing aspirations for future achievements. Presentations, discussions and work focused on 1) refining and endorsing an enhanced charter and bylaws to adapt Digital Bridge's organizational structure as the effort grows, 2) determining the next use case(s), and 3) learning about eCR scale-up progress. The charter and bylaws workgroup presented findings and recommendations for revised Digital Bridge governance documents, and members discussed revisions and next steps toward adoption. The transition workgroup presented an assessment framework and criteria to use in determining the next use case(s). Guest speakers provided overviews of four example efforts in which Digital Bridge could assist and have a positive impact. Participants then discussed six potential use cases in depth to determine their alignment with assessment criteria and readiness for Digital Bridge to engage. Finally, participants learned about eCR scale-up progress and clarified the role of Digital Bridge moving forward.

The meeting produced the following key items that will be used to support the Digital Bridge organizational structure and initiation of the next use case(s):

A. Motivational successes and aspirations for future achievements (Tables 1-2)
B. Endorsement of the charter and bylaws workgroup principles used to suggest revisions to Digital Bridge's governing documents (feedback received in Appendix 2)
C. Validated use case criteria (Appendix 3)
D. Use cases for continued exploration and potential implementation
    a. Initial assessment of Digital Bridge role and potential impact
    b. Workgroup members for use cases and API white paper (Appendix 6)
E. Actions governance body members will take by April 2020 to support Digital Bridge (Appendix 7)

As a next step, the governance body will vote on adopting the enhanced charter and bylaws in February 2020. The transition workgroup and project management office (PMO) will also finalize workgroups for each of the selected use cases and the API white paper, and the workgroups will begin developing project scope statements and outlines, respectively. eCR scale-up activities will continue as planned.

The purpose of this document is to provide the governance body and Digital Bridge stakeholders with a record of the meeting proceedings summarizing discussions and next steps. The Digital Bridge PMO, and future secretariat, will use this document to revise the charter and bylaws and support initiation of the use case workgroups and related activities.

Action Items Summary[1]

Charter and Bylaws

- Provide line-level edits or sub-section-level comments to PMO **by 1/31/20** *(Governance Body)*
- Reconcile charter and bylaws text to align with input received during the meeting (see Appendix 2 for feedback received during meeting), and provide to governance body for final review **by 2/14/20** *(PMO)*
- Develop visual to depict the organizational relationships among the collaborative body, executive committee, incubator organization, and secretariat; clarify to whom the secretariat answers **by 2/14/20** *(Transition Workgroup and PMO)*
- Take formal vote on adoption of an enhanced charter and bylaws at next monthly governance body call **on 2/26/20** *(Governance Body)*

Communications

- Revise "PMO" to "secretariat" in communications and discussions subsequent to adoption of an enhanced charter and bylaws *(PMO)*
- Replace term "vendor" with "industry partner" in communications and discussions moving forward *(PMO)*

Use Case Determination

Next Steps

- Charge and form workgroups to develop project scope statements for the four cases selected during the meeting (i.e., cancer registries, etc.) *(Governance Body and PMO)*
- Provide project scope statement template based on prior Digital Bridge work *(PMO)*
- Determine next steps to support authorship of API white paper *(API White Paper Workgroup)*

Assessment Framework Findings

- Review the detailed Assessment Framework examples provided on Day 1 of meeting (1/21/20) and provide feedback on content *(Governance Body)*

Future Use Case Options

- Determine next steps for Digital Bridge regarding social determinants of health (SDOH) (*TBD*)

eCR Scale-Up

- Review the eCR website and provide feedback on content to Laura Conn **by 2/29/20** *(Governance Body)*
- Provide input on how to populate a dashboard map showing progress and eCR implementation coverage to Laura Conn **by 2/29/20** *(Governance Body)*

[1] Deadlines are estimates and subject to change.

Meeting Overview

Background

Digital Bridge is an innovative collaborative that brings together key decision makers in health care, public health and health IT (i.e., industry partners) to solve information exchange challenges. The vision of Digital Bridge is to ensure our nation's health through a bidirectional information flow between health care and public health. Since its creation, many of Digital Bridge's goals have been met: one of its greatest accomplishments has been forming the governance body and working together.

As its first project, Digital Bridge designed a nationally scalable, multi-jurisdictional approach to 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. Following success with eCR pilot sites and current scaling efforts, members are exploring and assessing use cases for the next project(s). As the Digital Bridge efforts grow, the organization's structure continues to evolve.

The Digital Bridge in-person governance body meeting summarized in this report was held on January 21-22, 2020 at the Task Force for Global Health (Decatur, GA). The purpose of this meeting was to work toward a common vision for exchanging actionable information between public health and health care. The meeting followed many successful outcomes from 2019. eCR implementation and scale-up efforts continue following successful pilots. Digital Bridge has also welcomed new members and growing partnerships as eCR scales and as the group explores potential next projects. Approximately 40 percent of attendees were attending their first Digital Bridge meeting.

Discussions focused on future milestones for the Digital Bridge initiative: (1) refining and adopting an enhanced charter and bylaws to guide Digital Bridge's evolving organizational structure, (2) initiating the next Digital Bridge project(s) and (3) understanding the role of Digital Bridge in eCR scale-up. Additional topics for future discussion are summarized in "Bike Rack Items" (Appendix 8).

Meeting Objectives

1. Appreciate progress and new member interests in Digital Bridge
2. Adopt a governance structure, procedures and rules that enhance initiative work
3. Decide Digital Bridge use case criteria and assess potential Digital Bridge impact on several use cases
4. Make commitment to implement new use case(s)
5. Identify ways to further support eCR scale-up

Meeting Preparation

Meeting participants were asked to prepare for the meeting by completing the following tasks:

1. Complete a brief pre-meeting survey on expectations
2. Review the draft charter and bylaws workgroup's findings and recommendations and the revised charter and Bylaws (C&B) document, and identify discussion questions and feedback to foster endorsement and agreement
3. Reflect on past Digital Bridge successes and aspirations for future achievements
4. Review suggested meeting ground rules

Attendance

Name	Organization	Day 1	Day 2
Chair			
John Lumpkin	BCBSNC Foundation	X	X
Public Health			
Scott Becker	APHL	X	X
Patina Zarcone	APHL	X	X
James Blumenstock	ASTHO	X	
Margaux Haviland	ASTHO	X	X
Priyanka Surio	ASTHO	X	X
Mylynn Tufte	ASTHO	X	X
Laura Conn	CDC	X	X
Adi Gundlapalli	CDC	X	X
Michael Iademarco	CDC	X	X
Jeff Engel	CSTE	X	X
Becky Lampkins	CSTE	X	X
Oscar Alleyne	NACCHO	X	X
Health Care			
Andrea Garcia	American Medical Association	X	X
Shan He	Intermountain Healthcare	X	X
Thomas Kottke	HealthPartners	X	X
Indu Ramachandran	Kaiser Permanente	X	X
Walter Suarez	Kaiser Permanente	X	X
Health IT			
Richard Hornaday	Allscripts	X	X
Kirsten Hagemann	Cerner	X	X
Bob Harmon	Cerner	X	X
Tushar Malhotra	eClinicalWorks	X	X
Pallavi Tummala	eClinicalWorks	X	X
Christopher Alban	Epic	X	X
James Doyle	Epic	X	X
Ex Officio			
Chesley Richards	CDC	X	X
Judy Monroe	CDC Foundation	X	X
Brandon Talley	CDC Foundation	X	X
Christine Kudrav	de Beaumont Foundation	X	X
Rob Brown	Deloitte	X	X
John Stinn	Deloitte	X	X
Andy Wiesenthal	Deloitte	X	X

Rachel Abbey	HHS/ONC	X	X
Vivian Singletary	PHII	X	X
Hilary Heishman	Robert Wood Johnson Foundation	X	X
George Hobor	Robert Wood Johnson Foundation	X	
Special Guests			
Wendy Blumenthal	CDC	X	X
Kathy Bruss	CDC	X	
Denise Cardo	CDC	X	
Nedra Garrett	CDC	X	
David Jones	CDC	X	
Grace Mandel	CDC		X
Dan Pollock	CDC	X	
Joseph Rogers	CDC	X	
Abigail Tumpey	CDC	X	
Brian Anderson	The MITRE Corporation	X	X
Paul Jarris	The MITRE Corporation	X	X
Sarah O'Dell	The MITRE Corporation		X
Andre Quina	The MITRE Corporation	X	
Jay Schnitzer	The MITRE Corporation	X	X
Mark Thomas	The MITRE Corporation	X	X
Patrick O'Carroll	Task Force for Global Health	X	X
Dave Ross	Task Force for Global Health		X

PMO			
Heather Head	Kahuina Consulting	X	X
Charlie Ishikawa	Kahuina Consulting	X	X
Nosipho Beaufort	PHII	X	X
Aubrey Cyphert	PHII	X	X
Piper Hale	PHII	X	X
Jim Jellison	PHII	X	X
Jelisa Lowe	PHII	X	X

Meeting Agenda

Tuesday, January 21, 2020 - Day 1

Benefit from Perspective

TIME	*AGENDA TOPIC*
9:30 AM	Breakfast
10:00 AM	Introductions and Welcome
10:25 AM	Meeting Overview and Orientation
10:45 AM	Digital Bridge Appreciation 1) *Reflection on history and progress (John Lumpkin)* 2) *Acknowledge key outcomes from 2019* a) *Centralized Decision Support for eCR (Jeff Engel)* b) *Data is Elemental to Health (Scott Becker)* c) *Public Health Data Modernization (Chesley Richards)* d) *CDC Foundation (Judy Monroe)* 3) *Motivational successes and aspirations*
11:30 AM	Charter and Bylaws Enhancement (Bob Harmon) 1) *Review Charter and Bylaws Workgroup recommended principles* 2) *Reach agreement on charter and bylaws concepts*
12:45 PM	LUNCH (30 minutes)
1:15 PM	Use Case Assessment Framework Dialogue (Michael Iademarco) 1) *CDC assessment of systems and programs enabling data exchange between public health and EHR* a) *Findings (15 min)* b) *Discussion (30 min)* 2) *Examples (90 min)* a) *Cancer Registries (Joseph Rogers, Wendy Blumenthal, David Jones)* b) *mCODE (Jay Schnitzer & Paul Jarris)* c) *NHSN HAI SNF (Dan Pollock & Denise Cardo)* d) *Social Determinants of Health (SDOH) (Jeff Engel, Walter Suarez, Hilary Heishman)*
3:30 PM	Break (15 minutes)
3:45 PM	Use Case Options (John Lumpkin) 1) *Analytic discussion* 2) *Small group formation and working time*
5:15 PM	Day 1 wrap-up, and preview Day 2
5:30 PM	End meeting Day 1
6:00 PM	DINNER RECEPTION| Location: Parker's on Ponce, 116 E Ponce de Leon Ave, Decatur, GA

Wednesday, January 22, 2020 - Day 2

Advance Together

TIME	*AGENDA TOPIC*
8:30 AM	Breakfast
9:30 AM	Reconvene
10:00 AM	Use Case Options, Continued 1) *Small group working session: Gauging feasibility of select cases*
11:30 AM	eCR Scale-up: Plans and Progress 1) *Summary (Laura Conn)* 2) *Legal update (Scott Becker)*
12:30 PM	BREAK (15 minutes)
12:45 PM	Use Case Selection – Working Lunch 1) *Small group use case presentations* 2) *Analytic discussion* 3) *Next steps*
2:30 PM	Meeting Conclusion 1) *Summary* 2) *Commitments and concluding remarks*
3:00 PM	Adjournment

Digital Bridge Appreciation

Description

The meeting began with opportunities for participants to honor one another's Digital Bridge interests, acknowledge key outcomes from 2019 and identify aspirations for future achievements.

Participants matched proverbs (Appendix 1) and described their meaning in the context of the Digital Bridge meeting. Sponsoring organizations and the governance body chair then made welcoming remarks, and members described key outcomes and lessons learned from 2019. Finally, participants shared motivational successes and aspirations for future Digital Bridge achievements.

Opening Warm-up

Participants were each given one half of a proverb and asked to find their match among meeting participants. Once matched, participants took turns reading the full proverb and sharing their interpretation for the phrase in the context of the meeting. Interpretation themes included:

A. Importance of trust for success in technological advancements; emphasizing human-to-human connections
B. Importance of finding common interests and aligning to support them
C. Effectiveness of persistence and teamwork in accomplishing complex tasks
D. Value in the combination of new and experienced perspectives among participants
E. Importance of humility in your knowledge area and willingness to learn
F. Appreciation for extent to which the Digital Bridge initiative has grown and desire to continue building on the previous work to scale and assess impact

Welcoming Remarks

Patrick O'Carroll of the Task Force for Global Health (TFGH) welcomed the group and provided an overview of how the Digital Bridge project fits in within the Task Force for Global Health's broader mission. The TFGH takes on large-scale, complex projects to build a pathway forward for all. The organization consistently initiates projects with the final mile in mind, visualizing what success looks like to orient and guide towards a goal.

Hillary Heishman of Robert Wood Johnson Foundation reflected on the progress achieved since the beginning of Digital Bridge, from breaking down plans, making commitments and getting to work. This effort has been important from the beginning and has evolved into a dream being realized. Digital Bridge serves as an example for data exchange between public health and health care, and also as an example of public-private partnership at the national scale. Groups like Digital Bridge's governance body are necessary for successful public-private problem-solving.

Chair John Lumpkin welcomed participants on behalf of Digital Bridge. He reflected on the Digital Bridge effort and emphasized how far it has come, although continued hard work and a long road remain ahead. As activities have progressed, he observed that some tasks that appeared easy turned out to be hard and vice-versa. Nevertheless, the group's accomplishments to date at one point seemed impossible. He welcomed participants to the next phase of Digital Bridge work. On Day 2, Dave Ross of the Task Force for Global Health also offered welcoming remarks to participants.

Key Reflections

John Lumpkin opened an appreciative discussion by reminding the group of highlights from the history and progress of Digital Bridge. He reflected on public health and health care moving forward with the same goal of building a healthier nation, although parties sometimes seem to have parallel conversation. From the beginning of Digital Bridge, observing the impact of people with like minds and similar goals getting together in the same room to take action has been amazing.

Today, Digital Bridge is at a pivotal point: the effort has its first implementation sites and is scaling the first use case. Data flowing from health care into public health and back was only a dream initially; now, Digital Bridge has successes and accomplishments and is working on others. Digital Bridge efforts have contributed to local, state and territorial public health agencies beginning to move towards using one platform to exchange notifiable conditions. Today, the governance body will explore next steps to move forward from here.

Following the chair's reflections, members expanded on key outcomes from 2019 in four areas: centralized decision support for eCR, data being elemental, public health data modernization, and CDC Foundation sponsorship.

Centralized Decision Support for eCR

The collaboration between the Council of State and Territorial Epidemiologists (CSTE) and the Association of Public Health Laboratories (APHL) to launch the reportable conditions knowledge management system (RCKMS) is a major accomplishment from 2019. Implementation has been successful in Utah (Utah Department of Health and Intermountain Healthcare) and Houston (Houston Health Department and Houston Methodist). New York City and New York State are now also working on implementation. One-to-one correspondence of electronic lab reporting (ELR) was confirmed (e.g., a good correlation with previous ELR feed on syphilis, chlamydia, gonorrhea), and eCR provided additional information (e.g., medication, partner notification). The New York State public health agency reflected that it was incredible to see the cases come in with ELR, which represents a strong endorsement of the success of the first use case.

Nevertheless, onboarding nationally is assumed to be a challenge. The logic for all 74+ notifiable conditions is written within RCKMS; however, limited resources for onboarding at the state level will pose a barrier. Factors affecting onboarding include cost variation among vendors, readiness to onboard and status of electronic disease surveillance.

Data is Elemental to Health

In 2019, CSTE, APHL, the Healthcare Information and Management Systems Society (HIMSS) and the National Association for Public Health Statistics and Information Systems (NAPHSIS) launched an advocacy campaign, "Data is Elemental to Health." Although not a Digital Bridge activity, campaign leadership believes that relationships forged by Digital Bridge were key to their campaign's success.

The goal of the multi-year initiative is funding at $100M/year for ten years. Previously, infrastructure received little interest among policymakers. Suddenly, infrastructure took a higher level of importance due to its role in global security and health security. The following support and challenges for the campaign were noted:

A. Support
    a. CDC senior leadership supported increasing data connections as a priority

   b. CSTE and APHL partnered to lead an effort to increase awareness about data modernization
   c. de Beaumont Foundation provided funding for an educational report about data infrastructure
   d. HIMSS sponsored a grassroots advocacy campaign – NAPHSIS, APHL, and CSTE shared the same dates for their annual meetings in Washington, DC. As a result, the combined group simultaneously put forward thousands of messages to Congress regarding the importance of data infrastructure. This confluence had never happened before in public health or for a topic such as data infrastructure
   e. Partnership from Epic

B. Challenges
   a. Communicating importance and urgency was challenging in the absence of a crisis.

Fifty-million dollars was budgeted for public health data modernization as part of the 2021 federal budget approved in December 2019.

Public Health Data Modernization

Chesley Richards reflected on the data modernization progress he has witnessed since he began working on coordinating CDC data systems in his roles there in 2013. Many significant health issues, including infectious and non-infectious chronic diseases, are ongoing today. Addressing every single one takes collaboration and integrated data systems. Siloed information poses increased difficulty to predicting and understanding impending situations based on risk factors. Public health and health care are reaching a critical point where something has to change. New tools, more computing power and new data sharing methods among partners and stakeholders continue to emerge. Meanwhile, public health still sends information by fax and other slow methods. The 2019 success in advancing data modernization began to come together because of a few key factors:

A. Dedicated partners are willing to speak up
B. CDC senior leadership is open to addressing infrastructure change
C. Together, partners have been able to drive change in Congress
   a. The critical aspect of 2019 data modernization success is that partners are all working on key problems together, recognizing each organization is approaching them from different perspectives with different needs

CDC Foundation Sponsorship

Judy Monroe provided an overview of CDC Foundation's mission and work. The CDC Foundation is an independent non-profit organization authorized by Congress to support CDC's public health work through fostering effective partnerships between CDC and other stakeholders. The organization is newly joining Digital Bridge and has secured a $4.5million gift for Digital Bridge work. As a result, Digital Bridge will be included in the CDC Foundation's donor report and in their 2019 annual report to Congress. CDC Foundation provided the donor with a three-year budget and is hopeful to receive follow-on funding for second and third years.

Motivational Successes and Aspirations

Participants shared their reflections on the following two statements:

1. What Digital Bridge success do you find most important and motivating?
2. Looking forward, what do you aspire to achieve through Digital Bridge?

Approximately half of participants wrote a success on a Post-It note; the remaining participants wrote an aspiration on a Post-It note. All then placed their Post-Its on respective boards. Following the meeting, the contributions were analyzed for common themes; results (shown in Tables 1-2 below) were shared back with participants for reflection.

Table 1. Motivational Digital Bridge Successes

Theme	Successes
Effective Collaborative Action	• The vision of Digital Bridge as a tripartite partnership has been most motivating • Digital Bridge showing it can be successful • Organizations coming together and problem-solving together • Seeing the partnerships grow between health care, public health and EHRs to support implementation of eCR • The convening and continued partnership of health care, public health and health IT/vendors • Sustained commitment across a complex constellation of stakeholders for breaking essential data out its silos…in service to public health action • Ideas, action, change; data modernization effort leading to $50 million in funding for data infrastructure
eCR Implementation and Scaling	• It works! AIMS + RCKMS • To be able to send the case reporting data electronically at these pilot sites is a huge milestone; successful implementation of the first use case of eCR • More than one pilot live; more than one vendor-base live • Three eCR sites live in parallel production • eCR demo/pilots and evaluation, and the implementation guidance
Sharing and Application of Lessons Learned	• Implementation sites sharing how they approached/overcame certain struggles with other implementation sites • Allowing the learnings [from eCR implementation] to inform next implementation to gain efficiencies • Brainstorming about how this [eCR] success can support other similar efforts
Continued Funding	• The continued support for Digital Bridge from foundations/funders

Table 2. Aspirations for Future Digital Bridge Achievements

Theme	Aspirations
National Scaling of eCR	• Nationwide eCR • eCR is implemented in 50 states and by ALL EHR vendors; data is analyzed and visualized for a national data service

Theme	Aspirations
	• National onboarding of eCR for all notifiable diseases—100 percent of encounters by 2020 • Scalability for first use case • Scaling eCR to a broader national implementation • Scale eICR to six to ten more sites in 2020
Successful and Coordinated Next Use Case(s)	• Show that Digital Bridge is not a one-hit wonder • New use cases come under the Digital Bridge initiative—one pathway to connect to public health • For Digital Bridge to forge forward and incubate many more impactful use cases aimed at improving health and saving lives (e.g., chronic disease) • Success in next Digital Bridge use case • Identify the most achievable and successful next use case • Continuity of project
Strengthened Surveillance	• Aspire to achieve stronger and faster disease detection • When "picornavirus" (i.e., sh*t) happens, it takes 24 hours to implement surveillance and provide clinical guidance in workflow context • Ongoing collaborative structure and method for joint planning of testing bidirectional data exchange between public health and health care • Assessment and development of tools to assist local health departments to manage data influx and disease impact on communities with partners and data
Formalized, Sustainable Governance Structure	• Governance model for collaborative • Achieve a formalized new structure for Digital Bridge • Sustainable funding/governance for Digital Bridge for the next three to five years

Recognized Value to Stakeholders	• Generate evidence-based value to healthcare through public health intervention enabled by Digital Bridge
	• Aspire to ensure our needs are paramount:
	  ▯ Providers: burden accommodate; business care (why would I do this?)
	  ▯ Public health: business case; "bang for buck" but where is the greatest unserved need
	• Scale and sustainability improved public health and clinical care
	• Have public health be progressively more central to the long arc of healthcare reform

Robust Disease Registries	• Aspire to achieve (1) robust disease registries, (2) social determinants of health data for action • Parallel to Chesley's observation that National data are balkanized, the same is true within medical groups. Small- to medium-sized groups cannot access their own data or manage it for quality

Theme	Aspirations
	management and patient management. Single condition registries are a potential problem. The aspiration is single registries that address multiple conditions
Centralized Platform	• To me success would be to be able to integrate with various public health agencies via a single platform without having to work with individual agencies

Charter and Bylaws Enhancement

Description

During this session, participants discussed and provided feedback on proposed revisions to the Digital Bridge governing documents and established guiding principles for an enhanced charter and bylaws.

Bob Harmon (charter and bylaws workgroup) presented to the group, reviewing the charter and bylaws workgroup charge, objectives, focus, and process to develop proposed updates to existing governance documents. See the charter and bylaws presentation for more details. Participants then walked through each recommendation and charter article to provide feedback. At the end of the session, Digital Bridge members voted to endorse the recommended guiding principles for the governance documents.

Revision Findings and Recommendations

The charter and bylaws workgroup drafted revised governing documents to prepare Digital Bridge for future incorporating actions, describe the realities of how Digital Bridge works more clearly, and provide new processes to make governance more efficient, effective and transparent.

Key Recommendations from Charter and Bylaws Workgroup

A. **Pursuit of 501(c) incorporation –**Digital Bridge is not currently positioned with resources to incorporate as 501(c). Seek growth and reserve the right to incorporate at a future time.
B. **Executive Committee creation –** Seek more transparency by establishing an executive committee with a chair and vice chair; this committee would meet quarterly.
C. **Revised mission and vision –** As overall direction of Digital Bridge has become clear through work to date, articulate a new vision, mission, and strategies; look for new partners and have criteria to identify those representatives.
D. **Member classes and onboarding –** Clarify membership qualifications and expectations and onboarding processes.
E. **Governance meeting frequency –** Maintain in-person meetings of the executive committee annually, with online or conference calls quarterly. The collaborative body, consisting of the current governance body, would meet monthly.
F. **Compliance with FACA –** Articulate that Digital Bridge does not advise the federal government within governing documents for clarity.

Key Discussion Points

Group discussion centered around the topics described below, related to A) pursuit of 501(c) incorporation, B) executive committee creation, and D) member classes and onboarding:

A. Creation of an Executive Committee
   a. Collaborative body (current governance body) to select the executive Committee of about 9 people
   b. Executive Committee would take items to Collaborative Body before making decisions

B. Clarification of overall organizational structure based on the draft charter and bylaws
   a. Clarification of relationship of PMO to other entities, and how PMO is selected
   b. Existing group would modify its structure to move to a new structure with modification of the charter and bylaws; amending bylaws by substitution

C. Timing of shift to revised organizational structure
   a. Considerations for if now is the optimal time in Digital Bridge's growth to revise structure
   b. Balance between minimizing challenges in governance at current scale and planning for future growth

D. Anticipated growth and evolution of membership
   a. Balance of membership across public health, health care, health IT vendors (industry partners), and possibly other areas as Digital Bridge grows over time
   b. Impact new use cases will have on membership expansion
   c. Importance of agility (proposed to be achieved via executive committee) as Digital Bridge grows

See Appendix 2 for a detailed summary of feedback provided by participants on the charter articles. No comments were received for articles three, four, six, seven or ten.

Key Decisions

The governance body voted to endorse the guiding principles for the charter and bylaws and to have follow-up discussion if any issues arise. Scott Becker motioned for the vote; Mylynn Tufte seconded the motion. Unanimous vote in agreement with the principles; no opposing votes or abstentions.

Next Steps

The PMO will revise the draft charter and bylaws based on the approved guiding principles and the governance body's feedback, and then share with members for review. The governance body anticipates voting on adoption of the enhanced charter and bylaws during the next governance body call, scheduled for February 26, 2020.

Use Case Assessment Framework Dialogue

Description

Participants began the process of identifying next use case(s) by reviewing lessons learned from developing a proposed assessment framework and learning about existing efforts that use bidirectional data exchange between EHRs and public health.

Michael Iademarco (transition workgroup) presented an update on the transition workgroup's efforts to develop a framework to assess potential next use cases and related lessons learned. Four guest speaker teams presented on example use case projects where Digital Bridge could potentially contribute with positive impact.

Following the presentations, participants reviewed proposed use case criteria to inform selection of the next use case(s) and agreed upon the criteria set.

Use Case Assessment Framework Findings

The objective of the assessment framework activity was to assess existing and potential initiatives with bidirectional data exchange between EHR and public health to understand how Digital Bridge could contribute. The goal of the activity was to inform the next use case(s) for Digital Bridge as members learn about other ongoing efforts in data exchange. See the Assessment Framework presentation for additional details.

Recommendations for Revised Criteria

Based on the assessment framework findings, the transition workgroup proposed the following revised criteria for use case assessment:

A. Necessary for Digital Bridge suitability:
    a. Promotes a standards-based approach
    b. Enables bidirectional data exchange
    c. Benefits health care and public health
    d. Sponsorship for nationwide use and Digital Bridge partnership

If the above criteria are met, the following aspects will be explored to further assess alignment with Digital Bridge values and potential for a Digital Bridge project:

B. Significance
    a. Benefits health care
    b. Advances social determinants of health
    c. Connects registries
    d. Impacts non-infectious disease
C. Feasibility
    a. Builds on (decision support intermediary (DSI) and RCKMS
    b. Participates in federal incentives
D. Sustainability
    a. Maintains funding potential from multiple stakeholders
    b. Engages insurers/payers, patient advocates, additional federal stewards

Example Use Cases

The transition workgroup reviewed 14 current bi-directional data exchange projects (see Appendix 4 for project listing), applying the assessment framework and reaching out to relevant organizations to determine potential "fit" of projects with Digital Bridge and to refine the proposed use case criteria. From the 14 projects, three example projects were identified to present at the in-person meeting to be considered for further exploration as a potential next use case(s). In addition, a fourth group was invited to speak on social determinants of health (SDOH) due to interest in exploring this area as a potential use case. Presenters from each project spoke to current project status

and plans, challenges, how Digital Bridge could engage, and the benefits to health care and public health. Key points regarding the value Digital Bridge could add are included in Table 3 below; see Assessment Framework presentation (See Jan 2020 Meeting Slides) for additional details.

Table 3. Summary of Digital Bridge Collaboration Value for Example Projects

Example Project	Potential Role and Value of Collaboration with Digital Bridge
Cancer Registries: Cloud-based Computing Platform	• Help foster relationships with industry partners to increase uptake by EHRs and improve workflow • Provide ability to pool resources to engage partners for reportable disease surveillance • Serve as central champion coordinating cancer registry technology advancement across industry partners
mCODE	• Increase awareness of initiative and value to stakeholders
National Health Safety Network (NHSN) Healthcare Associated Infections (HAI) in Long-Term Skilled Nursing Facilities (SNF)	• Leverage the eCR platform, services and experience to expand HAI surveillance coverage without much additional burden • Support development of eCR to enable use of hospital EHRs to detect and report HAIs among SNFs residents transferred to hospitals, provide new data and enable additional analysis • Convene key stakeholders including long-term care and skilled nursing facility partners, industry partners and public health
Social Determinants of Health (SDOH)	• Leverage existing partnerships through Digital Bridge to increase data collection in clinical settings and community organizations • Serve as a collaborative effort able to lift up the SDOH problem-solving from the local level to a national level

Following the presentations, participants engaged in full group discussion and reflected on the assessment framework findings, example project presentations and proposed use case criteria.

Key Decisions

The group expressed agreement with using the proposed use case criteria to further explore use case options during the remainder of the in-person governance body meeting.

Use Case Options

Description

With John Lumpkin's facilitation, the group discussed the four example use cases and proposed additional use cases for consideration. Eight total use case ideas were proposed, including the four presented to the group:

A. **Cancer Registries**[1]
B. **mCODE**[1]
C. **NHSN HAI SNF**[1]
D. **SDOH**[1]
E. **Newly Reportable Conditions** – Focusing on expanding disease and conditions within eCR as a next step (e.g., Parkinson's disease and other neurological diseases, suicide attempts that require hospitalizations, suicides, etc.).
F. **Immunizations** – Enabling bidirectional data sharing to alert pediatricians to which immunizations a child has not yet had. In particular, enabling cross-state data sharing. Exploring this project further would

include investigating the vaccine registries' data completeness. This project could also include data sharing for adult immunizations.

G. **National Public Health API** – Developing an API platform to help support FHIR implementation; a national approach to supporting a common capability needed in new systems. The project could include building an API that promotes patients accessing their data through a third-party mobile app. This concept could be incorporated into work towards the other use case ideas.
H. **Multiple Chronic Conditions** – Developing infrastructure that provides for centralized data management for patients with multiple chronic conditions.

[1]Included for consideration as described in Example Use Cases session above.

The group then reviewed the list of eight and identified one opportunity for consolidation: cancer registries and mCODE due to the close relationship between the two. This resulted in seven remaining use cases. Participants selected one of the seven potential use cases to explore further and formed small working groups . One idea—multiple chronic conditions—was not selected by any participants; therefore, this idea did not move forward into small group discussion.

Day 1 concluded with small group discussions to assess the six potential use cases based on the agreed upon criteria. See Appendix 5 for small group participation across use cases.

Key Decisions

During their small group discussion, the SDOH small group determined that their project was not ready to initiate a Digital Bridge use case at this time. The group requested that the PMO continue to study and monitor SDOH initiatives—particularly 1) the Gravity project and 2) HL7 value sets that are needed for housing, food security and transportation—to explore how Digital Bridge may be able to contribute in the future. Members of the SDOH use case small group each joined one of the remaining five use case groups of their choice.

Use Case Selection

Overview

Participants used the majority of Day 2 to further assess potential use cases using the agreed upon criteria (i.e., feasibility, suitability, sustainability and alignment with Digital Bridge values), focusing primarily on feasibility to demonstrate success in two years. They then selected four use cases to advance to the next phase of project exploration.

Description

Participants regrouped in the remaining five use case small groups. The small groups continued assessing use cases and developing value/impact presentations. Following working time, each small group presented their use case assessment to the governance body. A brief question and answer period followed each presentation. See Small Group Presentation Materials file for full presentation materials.

After all presentations were completed, facilitators used Poll Everywhere technology to ask Digital Bridge members the following question for each of the five topics, based on the information presented: "Are the conditions right to demonstrate success in two years?"

The governance body discussed the poll results and voted to select which use cases will move forward with developing project scope statements.

Selection of Use Cases to Move Forward

After hearing the presentations from each group, Digital Bridge members used Poll Everywhere to vote on whether, for each use case, the conditions are right to demonstrate success in two years. Members responded "Yes," "No," or "Unsure" to each of five questions (one per use case). The group reviewed the voting results (Table 4 below) and discussed which of the five use cases the group may move forward.

Table 4. Use Case Selection Polling Results (n=30)

Case	Yes	No	Unsure
Newly Reportable Conditions	**25 (83%)**	1 (3%)	4 (13%)
NHSN HAI SNF	**21 (70%)**	1 (3%)	8 (27%)
Immunizations	**19 (63%)**	1 (3%)	10 (33%)
Cancer Registries	**19 (63%)**	3 (10%)	8 (27%)
National Public Health API	8 (27%)	10 (33%)	**12 (40%)**

Key Discussion Points

During discussion, participants brainstormed potential "toll gates" and milestones to help determine whether a use case proceeds forward from exploration to planning and implementation. The following toll gate ideas were shared:

1. Are participants, with representation from all sectors, interested in working on a project scope statement describing the use case in more detail?
2. Is adequate information available to collaboratively develop a project scope statement for the use case? Details to include:
    a. Measurable health outcomes
    b. Regulatory and legal considerations
    c. Use case stakeholders and success as defined from their perspective
    d. Assessment of use case against established use case criteria
    e. Digital Bridge's role in the use case
        i. How can Digital Bridge help?
        ii. How can existing effort(s) help Digital Bridge?
3. Is there a funder willing to collaborate?
4. Are there stakeholders who must engage for success, and if so, are they able and willing to collaborate?
5. What role does a landscape analysis of existing efforts indicate for Digital Bridge to maximize impact? Is/are the role(s) a fit for Digital Bridge?
    a. Organizations leading existing efforts could either join Digital Bridge, or analysis could indicate that Digital Bridge presence is less needed in a space due to the existing efforts' success or impact
    b. Consideration of whether Digital Bridge would take on a primary position or secondary position

Key Decisions

The governance body voted on a proposal to develop five workgroups. Four workgroups will develop project scope statements for each of the identified potential use cases (newly reportable conditions, NHSN HAI SNF, immunizations, and cancer registries), with each workgroup to have representation from partners across Digital Bridge. Each of these four groups will share their project scope statements with the governance body during an upcoming Digital Bridge meeting. The fifth workgroup will work on a different timeline to develop a white paper on a national public health API.

Walter Suarez motioned the vote, and Oscar Alleyne seconded the motion. Unanimous vote to approve; no opposing votes or abstentions.

Next Steps

Members began signing up for the five workgroups prior to meeting adjournment. Organizations will have the opportunity to sign up for any of the workgroups following the meeting as well. Based on work from the sustainability workgroup in 2018, the PMO will share a standard project scope statement template for the four workgroups to use, and each group will present their statement to the governance body at a future Digital Bridge meeting.

eCR Scale-Up

Description

Laura Conn and Scott Becker provided updates on eCR scale-up and related legal efforts, respectively. The group concluded the session with discussion of status, lessons learned and Digital Bridge's role.

Update

The eCR services support team consists of CDC CSELS, CSTE, APHL, and CDC Foundation. The group reviewed the action items for transition and scale-up that the workgroup has been working on for the past year. Participants learned about ongoing activities, primary steps to scale up onboarding and lessons learned around organizing activities to maximize efficiency. Participants also observed a demonstration of the new eCR website. See the eCR Transition and Scale-Up Update presentation (See Jan 2020 Meeting Slides) for more details.

The support team continues to add conditions to eCR: in the pilot phase there were six conditions included; 14 more conditions have been added to date, with six more anticipated to be released in late January. The June 2020 release will raise the volume to 40 conditions, including the notifiable conditions. Including notifiables in eCR is important to state public health agencies because it allows them to streamline their surveillance and reporting systems. This will reduce the creation of one-off systems for states to fulfill their reportable conditions.

The team is tracking authoring by state public health agencies. To date, California and Maine have authored all conditions in the tool, and many other states have implemented several of the conditions. Connected states watch for incoming data. eCR participants are often pleasantly surprised by the value of the data received as they acclimate to using eCR. The support team plans a push to promote increased authoring this year. CSTE will publicize a competition to take place between now and the CSTE conference to motivate states to author the conditions. The winners will be announced at the conference.

To date, the support team has not encountered any pushback from states that want to use a platform other than AIMS. Instead, they have encountered responses indicating systems are not ready for AIMS connection. In these cases, the support team has provided a human case reporter to provide the state with access to the data. For conditions determined reportable across states—if AIMS processes a report and determines it needs to go to a state that does not have access—this interim process ensures the report is received by the state. This approach is not a long-term solution and would not be offered to a state able to connect to AIMS. As eCR scale-up progresses and users demonstrate how it works and its benefits, interest in connecting is anticipated to grow.

Currently, conditions included in eCR are not sufficient to enable providers to stop manual reporting. The support team is pushing to add conditions and reach a critical volume to enable this transition. Timing and comfort level in turning off other mechanisms will likely vary across users. With the onboarding approach in place, and the push on authoring from CDC and CSTE, as well as APHL's efforts to onboard public health agencies to AIMS, the team anticipates the goal of allowing providers to turn off previous transmissions will be reached.

Participants also heard anecdotes from active implementers and organizations interested in engaging and up next for onboarding.

Expanding Engagement: Expectations for New Sites

Readiness checklists are provided for health care providers, EHR implementers and public health agencies on the new eCR website. New sites are expected to have the following capabilities to enable onboarding:

1. AIMS connectivity
2. Authoring in RCKMS
3. Work with eCR to manage data

A concerted effort on the public health support side is needed to continue building these capabilities into systems to streamline eCR onboarding and set-up. Connectivity to AIMS is essential to effective eCR use. The AIMS connection from eHealth Exchange connects a network of networks, enabling greater data sharing. Increasing connectivity is an in-progress activity on the scale-up task list, and there will be a push to promote connectivity to AIMS to enable eCR use. The team has seen instances of cases determined reportable to multiple states that could not be delivered to the appropriate state electronically because they do not yet have the AIMS connectivity. Case reports are not generally kept on AIMS if they cannot be delivered; therefore, it is not possible to show states what they would have received when not connected.

Digital Bridge Role in Governance

Digital Bridge members can take the following actions within each stakeholder group to help promote electronic case reporting. Collectively, Digital Bridge can:

1. Sustain support as champions and ambassadors for eCR
2. Continue communications and education efforts about eCR (e.g., collect success stories, engage with prospective participants and refer them to join use cases, etc.)
3. Advocate for necessary resources to ensure nationwide scale-up

Legal Update

The group learned about the actions that the legal workgroup was tasked with in the post-pilot phase and shared the status of each. APHL provides eCR services through eHealth Exchange as a sub-contractor at no cost. APHL has

signed all of the legal agreements with eHealth Exchange (e.g., DURSA). They also negotiated and ratified an eCR services agreement. Persistence and perseverance helped them achieve their goals.

eHealth Exchange is building their hub so AIMS can connect to it instead of having to connect to each individual provider. At the moment, any provider who has signed the eHealth Exchange DURSA can use eCR transmission through AIMS.

eCR transmission through AIMS services will also be offered for providers outside of the eHealth Exchange network. A non-network BAA is available for providers who cannot, or do not want to, join the network. The terms are the same between non-network and eHealth Exchange. Both options needed to be consistent for scale-up and legal and liability reasons. Thus, providers have two connection options right now that mirror each other legally. To date, the scale-up team has not encountered any pushback on these being the only two options. Pilot providers are continuing on their existing legal agreements until the eHealth Exchange hub is ready, at which point they will sign new contracts.

As additional use cases are added, the existing contracts could be updated with addendums. No major legal hoops are anticipated for adapting the contracts as more use cases are added. The eCR scale-up team built trust with eHealth Exchange to work together and reach agreements on legal structure, with the common goal of enabling the valuable impact of eCR for providers and public health agencies. Now that trust is established, the scale-up team does not anticipate encountering similar challenges as they experienced for the first use case moving forward.

Key Discussion Points

Participants reflected on the update details and raised the following additional points during discussion:

A. **Reflecting on lessons learned from the eCR pilots** – On the legal side, reflection allowed the team to realize the need to include legal teams as stakeholders from the beginning of use case discussions to streamline the implementation process and accomplish goals.
B. **Celebrating successes** – APHL joining eHealth Exchange is a big accomplishment, as it helps raise awareness of public health among industry partners.
C. **Scaling through networks** – Growing through working with networks of networks, rather than individual organizations, on establishing legal arrangements and other implementation activities can advance scaling efforts
D. **Identifying strategic participants, e.g., New York City** – New York City coming on board is essential as eCR capabilities expand. The city experiences a lot of conditions and has large provider networks, including Institute for Family Health and New York Health and Hospitals. Their participation will represent a huge step in expanding eCR and increasing data. In addition, working on legal agreements with New York City and New York State has helped the eCR scale-up support team understand the value of persistence and prepare for similar legal activities with other states and cities.
E. **Understanding time frames**
    a. **For information delivery** –Essentially instantaneous once data is determined notifiable.
    b. **For legal discussions** – Time frames vary based on level of trust previously established in partnerships. Some relationships have been in place and in discussion on legal activities for a long time.
F. **Testing eCR for emergency response impact** – Coronavirus will be an opportunity to push codes out on eCR to the three active sites and explore how this system can help support emergency response. The

team has identified which codes to push out, and sites are authoring codes to enable use of eCR and receive notifications on coronavirus.

G. **Exploring Qualified Health Information Network (QHIN) certification** – APHL is exploring QHIN for AIMS and has had discussions with ASTHO; however, the qualifications and criteria have not yet been established. APHL has created a strategic workgroup with partners, and the Recognized Coordinating Entity (RCE) will present to the workgroup soon. RCE has given presentations recently and is interested in engaging and working with public health. APHL believes it will pursue QHIN certification for AIMS because it benefits Digital Bridge, eCR, and other activities.
H. **Identifying the next big milestone** – Potentially when a provider turns off a previous transmission because it is no longer needed. For eCR, need to think about the communications strategy around this major turning point in scale-up. When the PulseNet feed was cut, the importance of intentional preparation, ensuring participant readiness, and informing participants of what to expect was a critical lesson learned.

Next Steps

The eCR scale-up support team will continue with in-progress tasks. The governance body was asked to review the eCR website and provide feedback on content and to provide input on how to populate a dashboard map showing progress and eCR implementation coverage. Laura Conn will serve as the point of contact for feedback.

Closing Remarks and Outputs Summary

Closing Remarks

The meeting closed with final remarks from Charles Ishikawa and John Lumpkin, recognizing success with eCR and looking forward to the additional impact Digital Bridge can have to improve the health of our nation through new projects. All meeting objectives were met and closed. In one final activity, meeting participants wrote down their commitments and pledges of actions they will take by April 2020 to continue moving efforts forward. The group shared their commitments (see Appendix 7) and closing reflections.

Themes in Closing Reflections

A. **Positive, inspirational experience for participants**
    a. Getting to know the energy here has been amazing
    b. Discussions lead to riches – a lot of rich discussion and value from meeting
    c. Meeting truly inspiring
    d. Positive experience, opportunity to help small-to-medium provider practices to get their data out of their own records
B. **Appreciation of mutual trust, presence, and openness**
    a. Appreciation of everyone's openness
    b. Thank you for trust in sharing and giving ownership of key tasks to members
    c. Importance and impact of physical, spiritual, and mental presence in meeting
C. **Importance of taking ideas to action, particularly in the next year to maintain interest in data modernization from policymakers**
    a. Recent success in policy advocacy; need for continued effort in this area to sustain momentum
    b. Importance of action in the next year on new use cases to maintain interest from politicians and policymakers
    c. Several federal groups interested in collaborating with Digital Bridge
    d. Health IT community has limited awareness of Digital Bridge; need to raise awareness among this stakeholder group
    e. Potential for Digital Bridge to become part of the HL7 FHIR implementation

D. Importance of public-private national problem-solving, inclusive of local and broader perspectives
   a. Consider how to maintain the local perspective and commitment as Digital Bridge welcomes larger entities; how to enable local participation in new organizational structure
   b. Offer for RWJF to stay engaged in Digital Bridge after sponsorship transition; aligns with their focus area of public-private national problem-solving efforts
   c. Consider how to accommodate, welcome and serve needs of guest organizations at Digital Bridge meetings

Outcomes

A. All meeting objectives were met
B. Endorsement of guiding principles for the enhanced charter and bylaws
C. Decision to form four workgroups, including representation from all sectors, to develop project scope statements for four use cases:
   a. Newly Reportable Conditions
   b. NHSN HAI SNF
   c. Immunizations
   d. Cancer Registries
D. Decision to form one additional workgroup to develop a national public health API white paper

Outputs

A. Motivational successes and aspirations for future achievements (Tables 1-2)
B. Revisions to charter and bylaws (Appendix 2)
C. Validated use case criteria (Appendix 3)
D. Use cases for continued exploration and potential implementation
   a. Initial assessment of Digital Bridge role and potential impact
   b. Workgroup members for use cases and API white paper (Appendix 6)
E. Actions governance body members will take by April 2020 to support Digital Bridge (Appendix 7)

Appendix

Meeting Outputs

Appendix 1: Inspirational Proverbs

If you want to go fast, go alone ...	...but if you want to go far, go together.	Unknown
Technology is nothing. What's important is...	...that you have faith in people...	Steve Jobs
When someone says 'no' to a request...	...they usually mean "not right now" or "not in that way.	James Clear
Draw water from the new well...	...but do not spit in the old one.	Bulgaria
It's not shameful not to know...	...but it's shameful not to ask.	Azerbaijan
When you wait for tomorrow, it never comes...	...when you don't wait for it, tomorrow still comes.	Guinea
Nature, time, and patience...	...are the three great physicians.	
Plant only one seed of virtue...	...much fruit will be harvested.	Mongolia
The new broom sweeps clean...	...but an old broom knows every corner.	
Having a good discussion...	...is like having riches.	Kenya
Nothing is so difficult...	...that diligence cannot master it.	Madagascar
We start as fools...	...and become wise through experience.	Tanzania
No matter how full the river...	...it still wants to grow.	Congo
The person who is being carried...	...does not realize how far the town is.	Nigeria
When elephants fight...	...it is the grass that suffers.	Mozambique
When you drink the water...	...think of the well-digger.	Russia
A leaky house may fool the sun...	...but it cannot fool the rain.	Haiti
Until lions have their own historian...	...tales of the hunt will always glorify the hunter.	Nigeria
People who do not break things first...	...will never learn to create anything.	Philippines
A chattering bird...	...builds no nest.	Cameroon
Starting is easy...	...persistence is an art.	Germany
Think before acting...	...and whilst acting, still think.	Dutch
Even though you know a thousand things...	...ask the woman who knows one.	Turkey
Make happy those who are near...	...and those who are far will come.	China
She who returns from a journey...	...is not the same as she who left.	China
An invisible thread...	...connects those who are destined to meet.	China

Appendix 2: Feedback on Draft Charter

Section	Proposed Revision
Throughout	◊ Revise "PMO" to "Secretariat" throughout document ◊ Replace term "vendor" with "industry partner"
Article 1	◊ Remove history section from charter and instead create a Wiki tool that members can contribute to fully document organizational history and update over time ◊ Include/keep founding or starting date in the Charter introduction
Article 2	◊ Add one brief sentence to describe key functions of the Incubator Organization for clarification
Articles 5, 8, 9	◊ Include description of process for when a current representative from a member organization leaves that organization
Article 9	◊ Address what happens if the collaborative body disagrees with the executive committee's decision or action ◊ Include redress for if the collaborative body does not like how an executive committee member is functioning – needs to be a means by which a member can be removed (or vice versa) ◊ Include clarification that executive committee can act at interim ◊ Consider including an appeals process ◊ Question about recourse for membership ◊ Take a stronger look at the bylaws section regarding representation from different industries (i.e., public health, health care, IT, etc.)
Article 11	◊ Review and revise the threshold for approval of amendments by vote (e.g., 2/3, 4/5, or something lower); thinking about the evolution and future growth of Digital Bridge membership

Appendix 3: Digital Bridge (DB) Validated Use Case Criteria

Necessary for DB suitability

- Promotes standards-based approach
- Bi-directional exchange
- Benefits healthcare and public health
- Sponsorship support for nationwide use and Digital Bridge partnership

Keys to gauge DB collaborative impact

Trait	Aspects	DB Priority
Significance	Social and economic for care delivery, patient health, public health	Benefits healthcare; advances social determinants; connects registries; non-infectious disease
Feasibility	Technology, organizational capacity, legal	Builds DSI and RCKMS; federal incentives
Sustainability	Stakeholders, stewardship	Insurers/payers, patient advocates, additional federal stewards

Appendix 4: Projects Explored during Use Case Assessment Framework Development

Existing Bi-Directional Data Exchange Projects Reviewed
A. National Healthcare Safety Network (NHSN) Healthcare[1] Associated Infection (HAI) in Skilled Nursing Facilities (SNF)[1]
B. National Program of Cancer Registries[1]
C. mCODE (Minimal Common Oncology Data Elements)
D. Clinical Guidelines
E. eCR (Electronic Case Reporting)
F. ETOR (Electronic Test Orders and Results)
G. ELR (Electronic Laboratory Reporting)
H. FDA Sentinel
I. Immunization
J. MENDS
K. MEDMorph (Making EHR Data More Available for Research and Public Health)
L. NCCARE360
M. NSSP (National Syndromic Surveillance Program)
N. SHIELD

[1]Selected for example project presentation to Digital Bridge Governance Body

Appendix 5: Use Case Small Group Participants

Newly Reportable Conditions that Fit eCR Model	Cancer Registry and mCODE /Registry Architecture and Strategy
• Bob Harmon • Michael Iademarco • Becky Lampkins • Judy Monroe • Priyanka Surio	• Wendy Blumenthal • James Doyle • Adi Gundlapalli • John Lumpkin • Joe Rogers • Vivian Singletary • Jay Schnitzer • Pallavi Tummala
NHSN HAI SNF	**National Public Health API Model**
• Oscar Alleyne • Scott Becker • Nedra Garrett • Margaux Haviland • Dan Pollock • John Stinn • Patina Zarcone	• Rachel Abbey • Laura Conn • Kirsten Hagemann • Hilary Heishman • Christine Kudrav • Indu Ramachandran • Walter Suarez
Immunizations	**Social Determinants Of Health (SDOH)[1]**
• Rob Brown • Andrea Garcia • Shan He • Paul Jarris • Thomas Kottke • Tushar Malhotra • Mylynn Tufte • Andy Wiesenthal	• Christopher Alban • Jeff Engel • George Hobor • Richard Hornaday • Patrick O'Carroll • Brandon Tally • Mark Thomas

[1]Members of SDOH small group determined on Day 1 that use case was not ready to move forward at this time. Group members selected one of the remaining five use case small groups to join on Day 2.

Appendix 6: Use Case and White Paper Workgroup Sign-Ups (As of Meeting Adjournment, Jan 22, 2020)

<table>
<tr><th colspan="2">Use Cases</th><th>White Paper</th></tr>
<tr>
<td>Newly Reportable Conditions that Fit eCR Model
Laura Conn (CDC)
Bob Harmon (Cerner)
Richard Hornaday (Allscripts)
Becky Lampkins (CSTE)
Mylynn Tufte (ASTHO)
Patina Zarcone (APHL)</td>
<td>NHSN HAI SNF
Chris Alban (Epic)
Oscar Alleyne (NACCHO)
Jeff Engel (CSTE)
John Stinn (Deloitte)
Patina Zarcone (APHL)
Laura Conn (CDC) (cc:)</td>
<td>National Public Health API Model
Rachel Abbey and/or Dan Chaput
Christopher Alban (Epic)
Kirsten Hagemann (or other Cerner representative)
Richard Hornaday (Allscripts)
Jim Jellison (PHII)
Indu Ramachandran (Kaiser Permanente)
Walter Suarez (Kaiser Permanente)
ASTHO (internally decide; POC: Priyanka Surio)
Patina Zarcone (APHL)</td>
</tr>
<tr>
<td>Cancer Registries and mCODE /Registry Architecture and Strategy
Oscar Alleyne (NACCHO)
Wendy Blumenthal (CDC)
James Doyle (Epic)
Kirsten Hagemann (Cerner)
Judy Monroe (CDC F.)
Jay Schnitzer (MITRE)
Vivian Singletary (PHII)
Walter Suarez (Kaiser Permanente)
Brandon Talley (CDC F.)
Patina Zarcone (APHL)
Laura Conn (CDC) (cc:)</td>
<td>Immunizations
Rachel Abbey and/or Dan Chaput
Christopher Alban (Epic)
Andrea Garcia (AMA)
Kirsten Hagemann (Cerner)
Shan He (Intermountain)
Richard Hornaday (Allscripts)
Jim Jellison (or other PHII rep)
Tom Kottke (HealthPartners)
Indu Ramachandran (Kaiser Permanente)
Priyanka Surio (ASTHO)
Andy Wiesenthal (Deloitte)
Patina Zarcone (APHL)</td>
<td></td>
</tr>
</table>

Appendix 7: Commitments – "I will _____ for our Digital Bridge by April 2020"

Name	Commitments
Rachel Abbey[1]	● Continue to share the success stories of Digital Bridge, particularly with health IT community ● Push the use of standardized data to ensure standards being used are interoperable and cut across systems ● Coordinate efforts of Digital Bridge and TEFCA
Christopher Alban	Advocate…communicate…publicize
Oscar Alleyne	I will be able to answer how a five-ounce bird can possibly carry a one-pound coconut (maintain local commitment and perspective)
Scott Becker	● I will commit to publicizing our efforts—past, present and future ● I will commit to supporting AIMS to be efficient and reusable as possible for Digital Bridge and public health
Wendy Blumenthal[1]	● Contribute as much as I can to the cancer project scope statement and bring other folks in from my group to participate
Laura Conn[1]	● Push, push, push for implementation of ECR ● Conduct a successful demonstration of Parkinson's ECR at HIMSS
James Doyle	Figure out the best way to move forward with the cancer registries use case
Jeff Engel	● Ensure CSTE executive director transition to Digital Bridge ● Work on NHSN use case ● Lead national onboarding of eCR of NMD
Adi Gundlapalli	● Assigning team members to workgroups ● Learn more about Digital Bridge ● Work with CDC leadership to move eCR scale-up ● I will learn more about my role
Kirsten Hagemann[1]	I will recruit more Cerner resources
Bob Harmon[1]	● Lead the charter and bylaws approval at next governance body meeting ● Move Kansas eCR project along more rapidly
Kirsten Hagemann	I will bring in more specialized resources to new workgroups
Margaux Haviland	I will support all action items we are charged
Shan He	I will work with my team to finish the infrastructure for RCTC updates so we can implement new diseases rapidly
Hilary Heishman	I will be in touch with CDC Foundation about transitioning funders for project management
Richard Hornaday	I will work internally to clarify and advocate and collaborate within Digital Bridge to (1) clarify status of eCR and (2) further the new use cases
Michael Iademarco[1]	● Accommodate, welcome and serve the needs of guests who have not yet committed to Digital Bridge membership ● Maintain program engagement through partners and internally
Paul Jarris	Explore and engage MITRE in appropriate role in Digital Bridge community
Jim Jellison[1]	Work closely with Charlie Ishikawa and others in the PMO to document this event, document to-dos and commitments, and make sure we don't lose momentum
Thomas Kottke	Talk with our immunization leads to determine how HealthPartners will participate
Becky Lampkins	I will support the eCR expansion workgroup or ask a dedicated CSTE member to support

Name	Commitments
John Lumpkin	● Assure charter and bylaws are ready for February meeting ● Identify leadership for each workgroup ● Work with workgroup leads to get scope documents done
Judy Monroe	● Meeting with potential donors ● I will share success stories for Digital Bridge by April 2020
Indu Ramachandran	I will participate in multiple workgroups to work on new use cases for our Digital Bridge by April 2020
Jay Schnitzer	I will help with the cancer registries statement white paper and provide mCODE input
Vivian Singletary	I will honor my commitment to participate in the cancer registries group's effort to complete the project scope by March 2020
John Stinn[1]	● Help align Deloitte's efforts across CDC and data modernization ● Find new partners to bring new perspectives and new energy
Walter Suarez[1]	● Continue to bring API and FHIR to Digital Bridge ● Help build the digital bridge to the future ● Help with API white paper ● Consider Digital Bridge becoming part of HL7 FHIR acceleration program ● Continue to advocate for policies
Priyanka Surio	● I will connect ASTHO's Roundtable work with our Digital Bridge efforts ● I will support coordinating ASTHO efforts in workgroups ● I will support the API white paper effort by April 2020 and beyond ● I will support the immunization project scope statement work by April 2020
Brandon Talley	I commit to continuing to learn deeply in service to Digital Bridge
Mylynn Tufte	● I will bring one additional SHO to Digital Bridge by April 2020 ● I will support and propose eCR policy for ASTHO by April 2020 ● I will share autism eCR example with Digital Bridge by April 2020
Andy Wiesenthal	● Assure eCR scaling ● Make 2nd-Nth use case happen
Patina Zarcone	I will contribute time and information and collaborate on all white papers

[1]Shared verbally during closing activity; no written Post-It note from participant.

Appendix 8: Bike Rack Items

Items or ideas raised during the meeting, but not discussed to resolution:

- Have an attorney present at future Digital Bridge in-person meetings
- Think about how to address the balance of partners over time, as public health representation will likely remain consistent, while health care and industry partners, and other future partners will likely have more dynamic representation over time as use cases evolve and change
- Consider adding community-based organizations as future members of Digital Bridge
- Monitor the turning point at which eCR enables providers to turn off other feeds; be ready to think about communications strategy to prepare implementers on what to expect during transition
- Consider developing a more formal process for determining what Digital Bridge will focus on next – whether it be a use case, or an additional activity on an existing use case

- Include gates and milestones to determine whether to continue or fold
- Revisit the use case criteria to determine what to consider when making a final decision to determine which use cases move forward

Meeting Materials

Preparation

Appendix 9: Charter and Bylaws Recommendations

Principles: Findings and Recommendations

Issue	Findings	Recommendation
1. Incorporation and document format	The Digital Bridge is not, at this time, positioned with the resources needed to incorporate and form a 501(c)(3) organization.	Digital Bridge should continue to pursue financial and other resources sufficient for incorporation and reserve the right to incorporate if and when circumstances change. It is recommended that an executive committee be formed and charged to pursue such matters.
2. Executive functions and transparency	Charter is vague or does not describe certain realities of how the Digital Bridge currently works and what it takes to operate and assure its funding. Out of necessity and in the interests of the collaborative, some executive functions occur without complete governance body awareness.	Clarify and describe in revised proposed governing documents the key business relationships. Describe how executive functions can be more efficiently and transparently carried out; i.e., provide for an executive committee that is responsible to the larger body.
3. Purposes	As anticipated, while the Digital Bridge succeeded in its first use case and grew, the initiative's purposes and effective strategies grew clearer. However, identifying the next use cases for Digital Bridge has been challenging.	Articulate the vision, mission, and strategies that are core in governing documents. Use these to engage new partners in communications. Refine criteria for identification and selection of next use cases
4. Membership	Qualifications, rights, privileges and expectations were unclear and dispersed in the Charter. Processes for application, resignation and removal were absent or ambiguous. The need/wish to expand the partnership to include other critical stakeholder groups was not described.	Address ambiguities in membership and describe necessary processes.
5. Inefficiencies in governance	While necessary to start, monthly governance meetings are now not necessary. The size of the full body (22 representative) may unnecessarily slow critical future decisions or complex discussions. In-person meetings of the full body, annual or semi-annual, are crucial to the Digital Bridge.	With an executive committee, the full membership should meet quarterly, and a report from the executive committee should be a consent agenda item for those meetings. Digital Bridge should have at least one annual in-person meeting. For the future, consider forming a Board that represents the membership, and an Executive Committee of the officers of the Board. The Board can meet every other month, and the executive committee in between.
6. Compliance with Federal Advisory Committees Act (FACA)	Governing documents need to be explicit that the Digital Bridge does not advise the federal government.	Articulate this within governing documents.

Meeting Handouts

Appendix 10: Meeting Roster

Last Name	First Name	Position Title	Organization	Email Address
Abbey	Rachel	Public Health Analyst	ONC	Rachel.Abbey@hhs.gov
Alban	Christopher	Clinical Informaticist	Epic	christopher@epic.com
Alleyne	Oscar	Chief of Programs and Services	NACCHO	oalleyne@naccho.org
Anderson	Brian	Chief Digital Health Physician	The MITRE Corporation	briananderson@mitre.org
Beaufort	Nosipho	Senior Informatics Analyst	PHII/TFGH	nbeaufort@taskforce.org
Becker	Scott	Executive Director	APHL	Scott.becker@aphl.org
Blumenstock	James	Chief of Health Security	ASTHO	jblumenstock@astho.org
Blumenthal	Wendy	Epidemiologist, Health Scientist	CDC	wfb6@cdc.gov
Brown	Rob	Senior Specialist	Deloitte	robbrown5@deloitte.com
Bruss	Katherine	Public-Private Partnerships, Office of the Director	CDC	wnz9@cdc.gov
Cardo	Denise	Director, Division of Healthcare Quality Promotion (DHQP)	CDC	dbc0@cdc.gov
Conn	Laura	Associate Director for Informatics	CDC	lbk1@cdc.gov
Cyphert	Aubrey	Project Manager	PHII/TFGH	acyphert-temp@taskforce.org
Doyle	James	R&D Product Lead	Epic	jdoyle@epic.com
Engel	Jeff	Executive Director	CSTE	jengel@cste.org

Last Name	First Name	Position Title	Organization	Email Address
Garcia	Andrea	Director, Science, Medicine, & Public Health	AMA	andrea.garcia@ama-assn.org
Garrett	Nedra	Senior Advisor for Informatics	CDC	ndg3@cdc.gov
Gundlapalli	Adi	Chief Public Health Informatics Officer	CDC	ibk8@cdc.gov
Hagemann	Kirsten	Sr. Solution Strategist, State and Public Health	Cerner	Kirsten.Hagemann@Cerner.com
Hale	Piper	Communications Manager	PHII/TFGH	phale@taskforce.org
Harmon	Bob	Senior Physician Executive	Cerner	Bob.harmon@cerner.com
Haviland	Margaux	Analyst, Data Analytics and Public Health Informatics	ASTHO	mhaviland@astho.org
He	Shan	Senior Medical Informaticist	Intermountain Healthcare	Shan.He@imail.org
Head	Heather	Consultant	Kahuina Consulting	heather.head@kahuina.com
Heishman	Hilary	Senior Program Officer	RWJF	hheishman@rwjf.org
Hobor	George	Program Officer	RWJF	ghobor@rwjf.org
Hornaday	Richard	Senior Solutions Manager	Allscripts	Richard.Hornaday@allscripts.com
Iademarco	Michael	Director, Center for Surveillance, Epidemiology, and Laboratory Services	CDC	mai9@cdc.gov
Ishikawa	Charlie	President and Principal Consultant	Kahuina Consulting	charlie.ishikawa@kahuina.com

Last Name	First Name	Position Title	Organization	Email Address
Jarris	Paul	Chief Medical Advisor	The MITRE Corporation	pjarris@mitre.org
Jellison	Jim	Director of Practice Support	PHII/TFGH	JJellison@taskforce.org
Jones	David	Health Scientist (Informatics)	CDC	pvl1@cdc.gov
Kottke	Thomas	Cardiologist and Epidemiologist, Medical Director for Well-being	HealthPartners	Thomas.E.Kottke@healthpartners.com
Kudrav	Christine	Director of Finance and Operations	de Beaumont Foundation	kudrav@debeaumont.org
Lampkins	Becky	Surveillance and Informatics Team Manager	CSTE	blampkins@cste.org
Lowe	Jelisa	Communications Manager	PHII/TFGH	jlowe@taskforce.org
Lumpkin	John	President	BCBSNC Foundation	John.Lumpkin@bcbsncfoundation.org
Malhotra	Tushar	Director, Interoperability Strategy and Business Development	eClinical Works	tushar.malhotra@eclinicalworks.com
Monroe	Judith	President and CEO	CDC Foundation	jmonroe@cdcfoundation.org
O'Carroll	Patrick	Head, Health Systems Strengthening Sector	PHII/TFGH	pocarroll@taskforce.org
Pollock	Dan	Medical Epidemiologist, Surveillance Branch Chief	CDC	dap1@cdc.gov
Quina	Andre	Principal Investigator, Electronic Health Records	The MITRE Corporation	aquina@mitre.org

Last Name	First Name	Position Title	Organization	Email Address
Ramachandran	Indu	Senior IT Consultant	Kaiser Permanente	Indu.X.Ramachandran@kp.org
Richards	Chesley	Deputy Director for Public Health Scientific Services	CDC	cir6@cdc.gov
Rogers	Joseph	Team Lead: Informatics, Data Science, and Applications Team (IDSAT)	CDC	jdr0@cdc.gov
Ross	Dave	Chief Executive Officer and President	PHII/TFGH	dross2@taskforce.org
Schnitzer	Jay	Vice President, Chief Technology Officer	The MITRE Corporation	jschnitzer@mitre.org
Singletary	Vivian	Director, Public Health Informatics Institute	PHII/TFGH	vsingletary@taskforce.org
Stinn	John	Managing Director	Deloitte	jstinn@deloitte.com
Suarez	Walter	Executive Director, Health IT Policy and Strategy	Kaiser Permanente	walter.g.suarez@kp.org
Surio	Priyanka	Director, Data Analytics & Public Health Informatics	ASTHO	Psurio@astho.org
Talley	Brandon	Vice President for Noninfectious Disease Programs	CDC Foundation	btalley@cdcfoundation.org
Thomas	Mark	Executive Director, Population	The MITRE Corporation	mdthomas@mitre.org

Last Name	First Name	Position Title	Organization	Email Address
		Health and Wellbeing		
Tufte	Mylynn	North Dakota State Health Officer	ASTHO	MylynnTufte@nd.gov
Tummala	Pallavi	Director of Integration at eClinicalWorks	eClinical Works	pallavi.tummala@eclinicalworks.com
Tumpey	Abbigail	Associate Director for Communication Science	CDC	atumpey@cdc.gov
Turner	Kathy	Deputy State Epidemiologist & Chief, Bureau of Communicable Disease Prevention	CSTE	TurnerK@dhw.idaho.gov
Wiesenthal	Andy	Managing Director	Deloitte	awiesenthal@deloitte.com
Zarcone	Patina	Director, Informatics Program	APHL	Patina.Zarcone@aphl.org