Interoperability MATTERS

an initiative of The Sequoia Project

Data Usability Work Group

June 10, 2021

the sequoia project

Agenda

- Welcome, Introductions, Membership, Agenda - David Camitta
- Workgroup Logistics – David Camitta
- Data Usability Workgroup Collaborative Forum – Bill Gregg
- Data Usability Workgroup Phase 1 Recap & Charter Changes – Bill Gregg
- Phase 2 Implementation Guide Development Process – Bill Gregg
- Workshop Recap and Discussion – Q&A – David Camitta & Bill Gregg
- Questions/Next Steps

David Camitta, Co-chair
CommonSpirit Health

Bill Gregg, Co-chair
HCA Healthcare

Mariann Yeager, CEO
The Sequoia Project

Didi Davis, VP
The Sequoia Project

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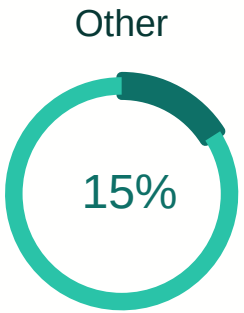
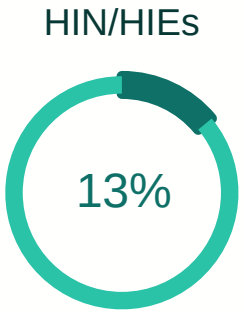
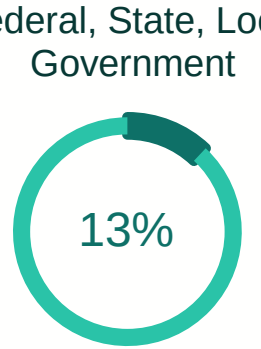
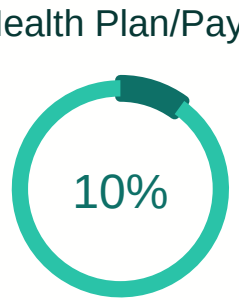
Workgroup Members

193 Organizations | **298 Participants**









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The Sequoia Project's Members

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- Audacious Inquiry
- CA Emergency Medical Services Association
- ConSensys Health
- Cureous Innovations
- Hawaii HIE
- Health InfoNet
- Innovaccer
- CVS Health
- Mayo Clinic
- Virginia HIE

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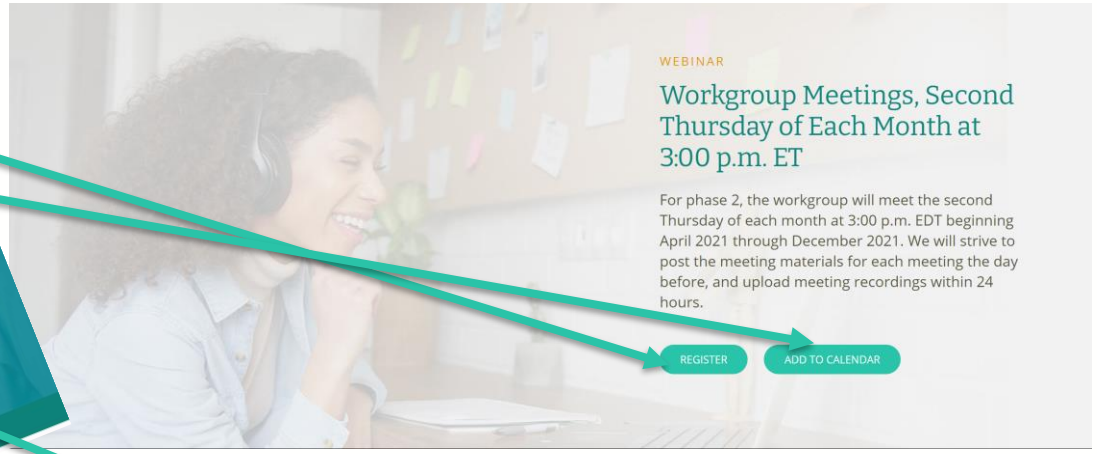
Website Update and Meeting and Workgroup Logistics

- Register for the Workgroup
- Calendar Downloads
- Meeting Notes



https://sequoiaproject.org/interoperability-matters/data-usability-workgroup/

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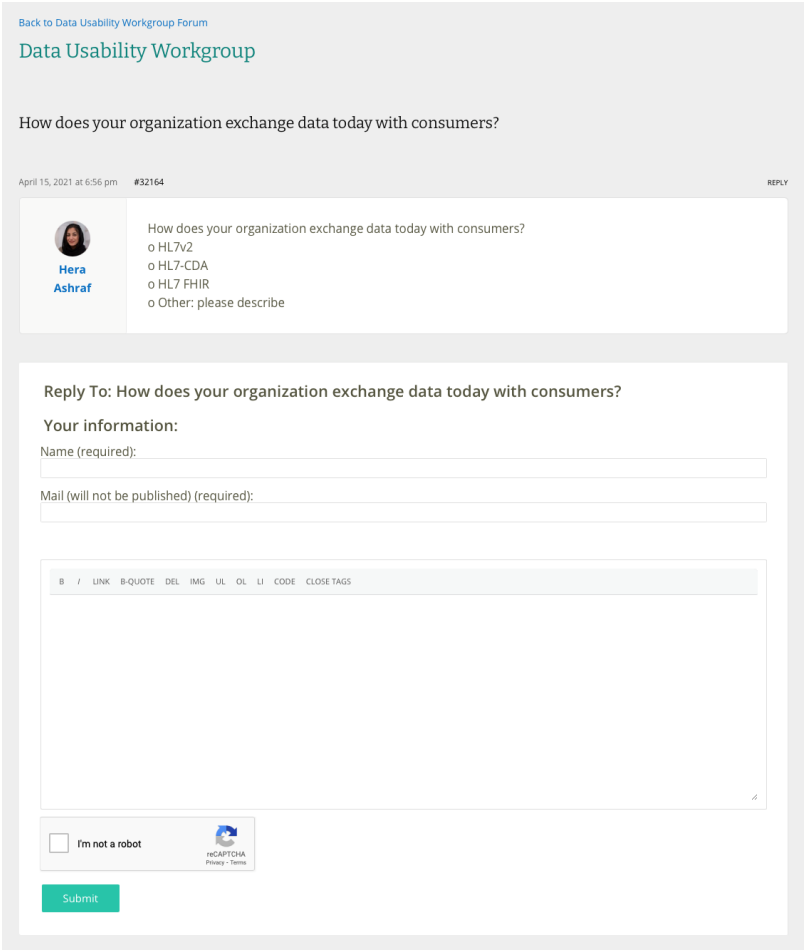
Data Usability Workgroup Forum – Please Respond

Data Usability Workgroup Forum

Let's keep the discussion going! After each workgroup meeting, the co-chairs will suggestion discussion topics to keep the conversation going. Please contribute your thoughts in the below message forum.

Topic	Posts	Last Post
How does your organization exchange data today with consumers?	3	2 weeks ago
How does your organization exchange data today with providers?	1	1 month, 1 week ago
How does your organization exchange data today with public health ?	1	1 month, 1 week ago



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Data Usability Workgroup Links/Materials

- The Leadership Council was updated on the Workgroup efforts on 6/9/21
- Reference Links to Work Completed to Date
  - Data Usability Google Folder
  - Proposed Work Items
  - Category Prioritization Responses Google Spreadsheet
  - 48 Responses Received Ranked
- The Charter was updated to focus on one implementation guide to cover three use cases instead of the three IGs originally proposed

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Phase 2 Implementation Guide Development Process

- 1st. Workshop held June 1, 2021 1:00pm - 2:30pm EDT
  - Goal to gather input from practicing clinical users
  - 23 attendees (provider/clinicians) provided input to the priority categories
- Co-chairs and staff will start to organize and gather the content for the 7 topic areas
  - Identify existing specs/tools that are "in the portfolio" already
  - Document other aspects to be considered for the solution
  - This will be documented in the existing Google docs for the work items
  - Agendas will be formulated in advance to enlist participation
  - Community Collaboration space to be added to the website
    - Polling and other threads to enlist member input between monthly meetings (please engage)

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Data Provenance and Traceability of Changes

There are many things that can happen between a clinician documenting a piece of clinical data in one system, and you seeing that data in your own system. "Provenance" refers to the origin of a piece of data and what has happened to it as it has been transmitted between systems, which may include the name of the clinician who originated a piece of data, their organization, or modifications that have been made to the data.

Questions:

- Is it important for you to know all users who have touched/reconciled the information, only the originator or only the most recent?
  - Does this requirement change for different types of data -- e.g. labs vs. Problems/diagnoses
  - What do you consider important provenance information: the clinician's name, credentials, specialty, the name of the hospital or clinic?
- Which situations are the most important for receiving an updated piece of clinical data?

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Effective Use of Codes

When a system sends clinical data to another system, it can include references to external "Code Sets", such as LOINC, CPT, or CVX. This allows the receiving system to map the data, a medication for example, to the local representation of that element, which in turn allows the data to be "understood" by the receiving system. Coded data can be more easily incorporated into clinical decision support and may make reconciliation, tracking, trending and searching easier.

Questions

- **As a recent use case:** What has been the most difficult part of integrating outside COVID data - tests, diagnosis, and/or immunizations, etc., into your workflow?
- What data types(e.g. Labs, radiology, PAMI) from *outside sources would be* most useful in your practice if they could be used in automated decision support, graphing for trend or other data visualization tools and medical decision making within workflow.
- Is it valuable to prioritize specific data elements to be more reliably encoded (e.g. common lab tests), if it means getting Clinical Decision Support for those elements more quickly and for easier integration and use at the point of care within clinical workflow?

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Reduce the Impact of Duplicates

When clinical data is exchanged between multiple systems duplicate information is a frequent occurrence. Commonly this is the result of receiving the same information from more than one external organization. Unidentified duplicate information takes clinician time to filter and reconcile and can make it harder to find the most up to date information about a patient.

Questions:

- Where do you see the most significant problems with duplicate data -- Problems, Meds, allergies or labs? Other data types, e.g., Immunizations, social or other historical elements?
- Balancing reduction in duplicates with risk of information loss and patient safety concerns can be a challenge -- would you prefer automation to remove specific duplicate data types altogether or collapsing them together and showing number of instances (e.g. Diabetes mellitus Type 2 (10 instances)?
- Do you see duplicate information as a universal problem or variable from one organization to another?
- Are there specific data types or scenarios in which safety concern is the highest when considering automated de-duplication?

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Data Tagging/Searchability

- The Longitudinal Record, defined as a patient summary and one encounter summary per encounter, is a valuable artifact for understanding the chronology of a patient's care journey. The default content, however, can contain more information than is applicable to the clinical goals of the requestor. The quantity and quality of content can make it difficult to understand the context around particular pieces of data that are of interest and the connection between pieces of information in different sections of the document.

Questions:

- What important types of information are easily available, searchable and filterable in your current EMR but you find hard to find or understand when looking at data from other systems?
- Is there data that you would like to be able to temporarily filter out when looking at Patient Summaries or Encounter Documents?
- How would you envision optimal filtering and searching of external summary data to incorporate and improve clinical usability at the point of care?

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Specific Domain Guidance for Usability

We send different types of documents in different clinical scenarios. These different documents contain different types and quantities of information. For instance, in a clinical summary we might only include labs that were resulted within a certain time frame.

Questions:

- Have you encountered ‘gaps’ in information received in which a standard minimum amount of information would be useful?
- Are there situations you’ve noticed where excessive information is included in a document and summarized data would be more useful? For instance, averaged or summarized vitals measurements for an inpatient stay, or admission and discharge labs?

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Effective Use of Narrative for Usability

Current document formats tend to prioritize ‘discrete’ data elements that are easy to store and understand individually over longer format narrative information that better captures the ‘story’ of the patient. Improving our ability to send and include that information in ways that are easily digestible by receiving organizations and clinicians can significantly improve patient care.

Questions:

- If it is available, should a clinical narrative always be included when primarily discrete information is shared (e.g. automated summaries of care)
  - Are there specific scenarios where this is more useful?
  - In what ways can context between narrative and discrete data be improved in external summaries/documents to easily tell the patient’s story, integrate and support clinical decision making within workflow?

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Data Integrity and Trust

Differences in quality and interpretation of data coming from different sources lower the level of trust in data. For example, differences in lab methodology can make interpreting values and reference ranges from external sources difficult. Even for values received with codes, different organizations might interpret codes differently or context may be lost in mapping to concepts internal to an organization.

Questions:

- What factors cause you to mistrust data?
- Are there scenarios where you have strong trust for external data?
- How do you weigh the value and trust of data from different sources? Payers / Clinical? HIEs? Registries?
- Does trust vary by data type?
- Would it be helpful to know that data had been previously reviewed by a clinician at another org?

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Data Usability Work Group

For more information:
www.sequoiaproject.org/interoperability-matters/data-usability-workgroup/

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Convene

Collaborate

Interoperate

Thank You for your support of Interoperability Matters!

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