KLAS Cornerstone SUMMIT INTEROPERABILITY

Interoperability 2017

EXPANDING INSIGHTS ON THE JOURNEY TO INTEROPERABILITY

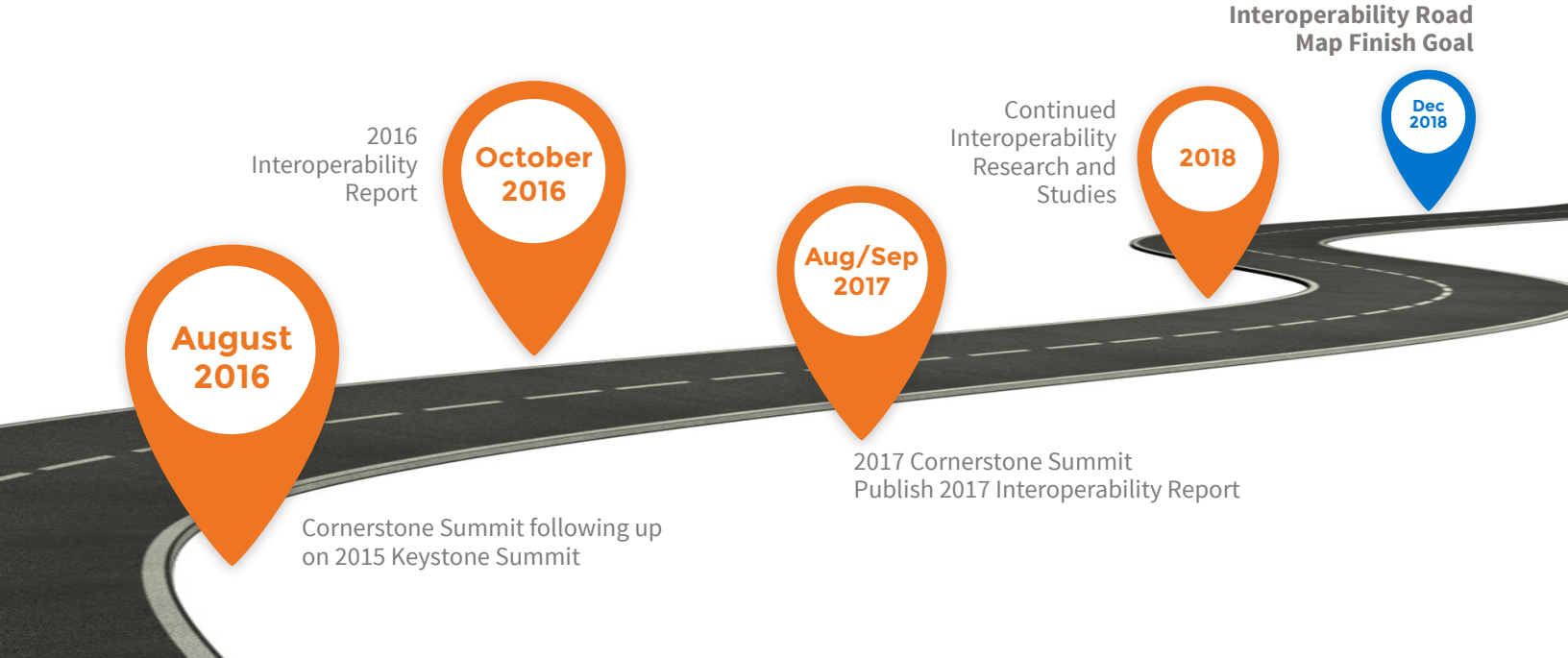
The results of this summit are being publicly shared in an effort to provide transparency into the discussions and decisions of a select group of healthcare IT experts that have a significant impact on driving interoperability advancement.

Objective

On August 23, 2017, executives from 24 healthcare provider organizations, 14 vendor organizations, and 13 healthcare associations convened in Salt Lake City, UT, for the third annual interoperability measurement conference. The Cornerstone Summit on Interoperability represents an ongoing desire of provider organizations to work together across care settings, side by side with vendors, industry groups, and regulatory partners to learn from past interoperability measurements and offer recommendations to better assess our progress and needs into the future.

The conversation at this year's summit moved us forward along the road map created by many returning attendees from prior years' events. Goals for the Cornerstone Summit on Interoperability included the following:

- Strengthen and improve the interoperability measurement tool.
- Create measurement tools to assess data sharing in the post–acute care setting and with medical devices.
- Assess the need for more direct insights from end users based on their experiences with and benefits from the use of external clinical data.



Enhancing Insights: Refining the Interoperability Survey

Current interoperability measurement provides important insights into the enablers, barriers, and progress of data sharing, but it requires significant time for providers to participate, effort for KLAS to collect, and expense for vendors and other partnering organizations to support. The objective of this session was to consider changes to the measurement approach that would increase the value (efficiency and impact) of the research.

Key Takeaways

Although this was the third interoperability summit, KLAS' 2017 research effort represents the first time a year-to-year comparative measurement allowed for recognition of progress. In preparation for attendee discussion, KLAS presented 2017 research results. Attendees then worked in groups to review portions of the interoperability survey to build a consensus on the following questions:

- Which study questions deliver less value toward driving industry improvement and thus might be considered for removal?
- Which study questions are important but would deliver more actionable insight if modified or approached differently?
- What important topics are not currently covered by the questionnaire but could significantly advance interoperability progress if measured?
- What other changes to the research methodology should be considered (e.g., scope, frequency of measurement, targeted respondents, etc.)?

Proposals were numerous and varied. Key themes, or broad recommendations, included:

- Shift the survey approach toward more objective measurements in place of current subjective measurements where meaning varies depending on individual provider expectations. For example, rather than asking whether locating patient records is "easy" or "requires significant effort," options might quantify how long it takes for data to become available (e.g, <15 seconds, 15–30 seconds, 30–60 seconds, or 60+ seconds). More-concrete measures would facilitate greater transparency into why a specific vendor's performance improves or declines.

- Provide more detailed definitions of survey elements, including the four stages of interoperability progress (access, locate-ability, clinical view, and impact) as well as the ideal "deep interoperability" scenario. As survey respondents have different expectations of interoperability, more-concrete definitions would ensure more consistency in how vendors are rated by providers. Other terms that could benefit from definitions include "public HIE," which could be aligned with descriptions used by other industry groups, such as the ONC.

- Break down some survey elements into more-detailed components that would provide more clarity when analyzing the data. For example, referring to "insufficient industry standards" as an interoperability barrier was considered too vague to draw conclusions.

- Give more specific attention to industry initiatives, such as CommonWell and Carequality, rather than relying on providers to bring them up on their own. More informal or conversational approaches could result in leading questions and biased results.

- Change the survey question from "optimal" to "required" that allows providers to rate their organization's efforts to support interoperability the same way they rate vendors. Attendees felt this question provided an important perspective on gaps between provider and vendor efforts and recommended it become a permanent survey question.

- Revisit a suggested approach to place EMR vendors on one of five "levels" based on customer achievement of "deep interoperability." Some attendees felt the measurement was premature, while others saw potential value in the measurement if it were modified. KLAS, working with IMAT, will consider alternative options.

Measuring the Usefulness of Data Breakout Session Recap

KLAS research has shown that shared patient data often fails to significantly benefit patient care. Summit participants engaged in conversations regarding how to best measure the usefulness of shared data to drive future improvement.

Three healthcare leaders undertook the task of moderating discussion about the use of the KLAS EMR Improvement Collaborative to gain additional end-user insights into interoperability:

- Howard Landa, MD, VP Clinical Informatics of EHR, Sutter Health
- Will Rice, VP Community Health Partnerships, Premise Health
- Micky Tripathi, President and CEO, Massachusetts Health Collaborative

Key Takeaways

KLAS introduced the EMR Improvement Collaborative research as a possible vehicle for monitoring end-user feedback regarding interoperability and the usefulness of data that is being shared.

Summit participants made the following recommendations:

- The EMR Improvement Collaborative is very likely an effective method of measuring end-user feedback regarding the success of data interoperability.
- The Collaborative's current satisfaction measure of data interoperability between organizations and how well it meets user expectations is a helpful question that should be kept.
- Participants recommended that an additional question be added to the Collaborative questionnaire, asking users to report one of the following:
    - Percentage of patient encounters in which outside data better informs the delivery of care;
    - Percentage of patient encounters in which users have access to needed data from outside their organization.

For more information on the Collaborative, please click HERE.

EMR Improvement Collaborative
a KLAS initiative

Medical Device Interoperability Breakout Session Recap

The objective of the medical device interoperability breakout session was to increase Summit attendees' mutual understanding of the challenges and opportunities related to enhanced medical device interoperability. The goal was to refine a problem statement surrounding medical device interoperability and determine the best survey measurements for assessing the current state of medical device interoperability and the performance of vendors involved in this sharing.

The task of initially defining this questionnaire was undertaken by three healthcare leaders:

- Captain James Ellzy, MC, USN, MD; Deputy Program Executive Officer, Department of Defense
- Ed Cantwell; President & CEO, Center for Medical Interoperability
- Stan Huff, MD; CMIO, Intermountain Healthcare

Key Takeaways

The following problem statement reflects the combined input of breakout discussion groups:

The KLAS Interoperability Measurement Advisory Team (IMAT) is working with others to better identify and measure challenges, significant barriers, high-performing vendor organizations, and areas of opportunity. Largely for reasons of patient safety, providers, vendors, consumers, and government regulators have expressed a desire to improve the ability to integrate and interoperate medically prescribed devices and medical equipment both between devices/equipment and with all other enterprise software (e.g., EMRs, population health solutions, clinical decision support solutions). Challenges include security, technology limitations, usability, unclear government regulations, variability of standards, costs, misaligned incentives, conflicting priorities, and patient safety, among others.

Additional suggestions were made regarding the problem statement:

- Use the FDA's definition of medical devices found HERE.
- Do not include unprescribed medical devices, such as personal wearables.

Proposals for improving the medical device interoperability survey:

- Break out the survey results by the type/category of medical device in addition to the vendor/product being measured
- Consider a 5-point Likert scale in place of the 1–9 ratings
- Differentiate between the variety of care settings (e.g., acute care, ambulatory, home-based, ICU)
- Consider tying EMR ratings to the specific devices being integrated
- Add clarity around bidirectional interfaces. They are not always applicable or needed. Also, remove the specific prompt from the commentary field that asks about bidirectional interfaces.
- Consider making the question regarding middleware more general. Potentially ask how medical device data is being shared. For example, is there built-in functionality from the vendor, is third-party middleware needed, or is the healthcare organization doing the integration themselves?
- Add the following to the list of potential interoperability barriers:
    - FDA regulation
    - Liability/patient safety
    - Collaboration

- Replace the final question with “What other high-value device integration would you like to achieve, and what is preventing you from achieving it?” (basically, “What is next on your list?”)
- Consider a question that goes beyond integration to workflow and usability.
- Recommended best source for the conversation was nursing and/or biomedical respondents.

Discussion was lively and healthy in all three sessions. Recommendations will allow KLAS to create a more impactful survey document. We may need more conversation and direction about who is best to answer these questions and timing of the study (where does this fit in our priority of interoperability measurement?). KLAS will incorporate recommendations into a modified statement and study and review with IMAT for advice on both updated content and timing of the study.

Post–Acute Care Interoperability Breakout Session Recap

Post–acute care interoperability comes up consistently in discussions about the national healthcare interoperability road map and was a key topic during the 2017 Cornerstone Summit on interoperability. The objectives of the post–acute care interoperability discussion were . . .

- To produce the next iteration of the post–acute care interoperability framework/questionnaire
- To establish a potential measurement road map and time frame for the questionnaire's use

As an introduction, the following data was shared: (1) there are 15,600 nursing homes and 12,400 home health agencies in the United States; (2) 800,000 patients/residents receive their care from nursing homes, and 4.9 million patients receive their care from home health agencies; and (3) there are an average of 11 unique prescribed medications per patient in the post–acute care settings.

The task of initially defining the post–acute care questionnaire was undertaken by four healthcare leaders:

- John Albright, VP of Information Technology, VNA Health Group
- Bob Latz, CIO, Trinity Rehabilitation Services
- Joyce Miller, CIO, Ohio Living
- Brian Peters, CIO, CarDon & Associates

Key Takeaways

Discussion key takeaways, feedback, and potential next steps included the following:

Post–Acute Care Interoperability Measurement Framework

- Rather than the post–acute care interoperability questionnaire using the term "critical exchange partners," it was proposed to use the term "referral partners" or "referral sources."
- A key theme discussed was the timeliness of the data that is being shared with post–acute care facilities.
- There were key discussions around whether behavioral health and HME (home medical equipment) should be incorporated into the post–acute care interoperability measurement. It was agreed that this topic needs further discussion.
- It was proposed that pharmacies be potentially viewed as a key partner when it comes to post–acute care interoperability.
- There was a discussion around the effectiveness of interoperability capabilities that exist between post–acute care systems and hospital systems and which synergies amongst those entities should or should not exist (e.g., Is it possible for a hospital's emergency department system to query an HIE to identify whether the admitted patient is currently receiving home health services? And if so, can the home health record/patient information be incorporated into the emergency department system?)

All participants agreed that the post–acute care interoperability measurement tool/questionnaire needs further refinement and discussion before it is ready for research interviews and market application. The Post–Acute Care Interoperability Planning Committee has agreed to be a part of these future discussions, as well as the IMAT (Interoperability Measurement Advisory Team).

Post–Acute Care Interoperability Road Map

- The majority of Summit participants agreed that a measurement needs to take place and that benchmarking efforts/insights would only help the industry move forward and progress.
- The majority of the feedback indicated that the post–acute care interoperability measurement tool/questionnaire needs further refinement before its use (as previously stated).

This document is a summary of the feedback shared and captured during the post–acute care interoperability breakout session.

In addition to creating and refining measurement tools, two panel discussions engaged Summit participants in energetic discussions.

ONC Listening Session

Office of the National Coordinator Panel Participants:

- Don Rucker, MD; National Coordinator for Health IT, ONC
- John Fleming, MD; Deputy Assistant Secretary for Health Technology Reform, ONC
- Genevieve Morris; Principal Deputy National Coordinator, ONC
- Steve Posnack; Director, Office of Standards and Technology, ONC

Key Takeaways

The ONC panel encouraged Summit participants to share concerns and insights from industry experience.
The conversation included the following:

- One of the greatest challenges to successful nationwide interoperability is interorganizational trust. Provider organizations do not trust that the incoming data is accurate and worry about the liability of outgoing data not being securely used or guarded.

- Another of the greatest challenges to successful nationwide interoperability is coordination between organizations when data is being shared. Especially with CCDs, the norm for record sharing is to share a messy load of data, without focus on what the receiving organization is asking for or needs. Different users will need very different data elements.

- Getting data into the hands of patients will be critical in coming years, and it will be up to patients how they use that data. Patients can help bridge interoperability gaps. The healthcare industry needs to trust patients more by making this data more available.

- Regulations across states can often be crippling for vendor development of EMR technology. Two examples include regulations regarding the opioid epidemic and Medicare homecare regulations. As EMR vendors work to meet regulatory requirements for each state, overall product development is crowded out.

- Interoperability gaps in transitions of care are a significant market oversight to date. Many pointed to the need to better share data with post–acute care organizations.

- The congressional mandate for the ONC to define information blocking was also discussed, including the challenge of defining what actually is information blocking when honest struggles to share data can appear to be information blocking from the outside. ONC leaders expressed a desire to define this appropriately so as not to saddle the industry with undue regulation.

Interoperability Faciliators

Facilitator Panel Participants:

- Chuck Christian, VP Technology and Engagement, Indiana Health Information Exchange
- Jitin Asnaani, Executive Director, CommonWell Health Alliance
- Dave Cassel, Director, Carequality Initiative

Key Takeaways

Representing public HIEs, CommonWell Health Alliance, and The Sequoia Project Carequality initiative, panel participants took questions from Summit participants regarding the evolution of interoperability in the US and the role their organizations might play. The conversation included the following:

- Interoperability is an extremely wide endeavor and will not be solved by any one organization. Just as email, websites, and a host of other data-sharing activities comprise the internet, many activities will compose the future of interoperability.

- Rather than being looked at as competing, it is important that the market realize that in most ways, public HIEs, CommonWell, and Carequality are complementary activities.

- Publicized efforts to connect CommonWell and Carequality—specifically for CommonWell to be an implementer of the Carequality Framework—are expected to roll out from late 2017 into early 2018. This effort will be gradual as it is tested and rolled out participating organizations.

- For public HIEs, the number of total HIEs is decreasing but the total lives covered by all HIEs is increasing. The contrast in these trends is driven in large part by HIE consolidation.

- Efforts surrounding record-location services continue to be varied and often messy. Carequality and CommonWell will be working to coordinate their efforts in this area.

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Conclusion

While exciting progress toward deeper interoperability is clearly being made, the road ahead requires significant work. The feedback and information gathered from the Summit will guide efforts by the IMAT (Interoperability Measurement Advisory Team) to update the interoperability road map and shape future interoperability measurement efforts.

Based on the results of our collaborative sessions, we will be incorporating changes to our existing interoperability measurement tool. In addition, there was a stated desire to move ahead with two new road map surveys for 2018. New measurement tools will be crafted for the post–acute care setting and medical devices. The IMAT will further consider the timing and capacity to undertake these recommendations.

The usability recommendations will be submitted to the KLAS EMR Improvement Collaborative for inclusion in their measurement instrument.

There was a stated desire to continue the interoperability discussion. KLAS remains committed to continuing to work with the IMAT and industry provider and vendor conference participants to advance meaningful and actionable interoperability measures.

A special thank-you to all who participated and graciously shared their feedback and insights!

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Summit Attendees

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Barb Sivek, VP, Business Services, CHIME

BJ Boyle, Director, Product Management, PointClickCare

Bob Latz, CIO, Trinity Rehabilitation Services

Bob Barker, Vice President of Community Connectivity, NextGen Healthcare

Brent Snyder, CIO, Adventist Health System

Brian Patty, MD, VP/CMIO, Rush University Medical Center

Brian Peters, CIO, CarDon & Associates

Bruce Grover, Physician, Mountainlands Community Health Center

Bruno Nardone, SVP Solutions, Population Health, NextGen Healthcare

Christine Chapman, Vice President, TrakCare, InterSystems

Chuck Christian, VP, Technology & Engagement, IHIE

Chuck Jaffe, CEO, Health Level 7

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