



Steering Committee Meeting Minutes

June 7, 2018

Meeting Participants

Committee Members

- ✓ Nancy Beavin, Humana
Bill Beighe, Santa Cruz HIE
- ✓ Hans Buitendijk, Cerner
- ✓ Michael Hodgkins, AMA
- ✓ Kevin Isbell, Kaiser Permanente
- ✓ Leslie Kelly-Hall, Healthwise
- ✓ Andrew Kling, Geisinger
- ✓ Rob Klootwyk, Epic
- ✓ Steven Lane, Sutter Health
- ✓ Kathy Lewis, Surescripts
- ✓ Tushar Malhotra, eClinicalWorks
Geoff Lay, GE Healthcare
Aaron Seib, NATE
- ✓ Ryan Stewart, Dignity Health
- ✓ Steve Bounds, SSA(Ken Pearlstein for Steve Bounds)

Invited Subject Matter Experts and Carequality Support Team

- ✓ Dave Cassel, Director, Carequality
- ✓ Chris Dickerson, Program Coordinator, Carequality
- ✓ Mariann Yeager, CEO, The Sequoia Project
- ✓ Eric Heflin, CTO/CIO, The Sequoia Project
Didi Davis, Testing Programs Director, The Sequoia Project
Jennifer Rosas, eHealth Exchange Director, The Sequoia Project
Dawn Van Dyke, Marketing Director, The Sequoia Project
Kati Odom Bell, eHealth Exchange Implementation Manager, The Sequoia Project
- ✓ Alan Swenson, Kno2
- ✓ Morgan Knochel, OneRecord
- ✓ Bill Mehegan, The Sequoia Project

Meeting Summary

Call to order 12:34pm EST

Discussion Summary: Roll call was facilitated, and a formal quorum was established. The agenda was discussed.

Decision/Outcome: The agenda was reviewed, and nothing was added.

Action/Follow up: None.

Agenda

- *Roll Call*
- *Agenda Review*
- *Admin Items*
 - *Meeting Minutes*
- *Nominating Committee & Steering Committee Composition*
- *FHIR Use Case Progress & Signal of Intent*
- *Push Notifications Use Case Proposal*
- *Production Operations Update*

Administrative Items

Minutes of the Last Meeting

Discussion Summary: The May minutes were introduced, and a motion was made by Kevin and seconded by Hans to approve the May minutes.

Questions/Discussion: All members approved with no objections.

Action/Follow up: The May minutes were approved.

Volunteers Needed

- It's that time again! Terms for half of the Committee end in early September, and we need to constitute the annual Nominating Committee
- Steering Committee members are eligible if their term continues until September 2019, OR if they are not planning on seeking a new term
- Need ~6 members for the Committee
- Members should expect one meeting in June to discuss application details, and 2-3 meetings in August to develop a slate of nominees

- QUESTION: Should we seek participants from outside the voting Steering Committee members? (e.g. Advisory Council Co-Chairs, other Carequality member representatives)

Discussion Summary: Dave commented that last year we ended up having the nominating committee basically entirely composed of Steering Committee members. In the past though we

have reached out to other groups including the Advisory Council representatives of Carequality Member Organizations who maybe otherwise not have much of a voice. Dave asked what the group thinks about seeking participants from these other constituencies.

Questions/Discussion: A member commented that the Advisory Council co-chair is reasonable and they have been very engaged and certainly can represent other Carequality Member Reps. When you open it up beyond would be hard to know whom to include.

- A member asked what would be the criteria that we want to use to identify others.
- Dave responded that the one example that we have from the past was to include some Carequality Member Organizations who were not otherwise represented in either the Advisory Council or the Steering Committee. Now we have a few more such organizations and trying to identify particular ones seems arbitrary. I mean, I'm completely open to leaving it at the Advisory Council co-chairs, but I thought it was important to raise the question.
- A member asked if the goal was to increase participation in their membership.
- Dave responded that was the goal at the time and to find an outlet and give a voice for those who were members that otherwise were not seeing value from their membership without a seat at the table. There are many more opportunities currently as we look into new use case developments and having multiple work groups running.

Action/Follow up: Dave commented he will reach out to the co-chairs and let them know the opportunity and if anyone on the call is interested in volunteering, please reach out to me.

Reminder – Terms Expiring

- The following members have terms that expire in September:
 - Nancy Beavin
 - Bill Beighe
 - Hans Buitendijk
 - Kevin Isbell
 - Andy Kling
 - Steven Lane
 - Kathy Lewis
 - Tushar Malhotra

Discussion Summary: Dave commented that these are the folks who have terms expiring in September. There are eight and one note in particular, Bill Beighe's seat was one that we had characterized actually in last year's updates to the Steering Committee composition as a discretionary seat that could be given to a strategically important stakeholder group. We had looked to make sure that there was HIE representation on the committee and that was a one-year seat. We will need to decide what to do with that seat this year.

Questions/Discussion: n/a

Action/Follow up: n/a

Sequoia Project Updates- FHIR Use Case – Progress and Communications

Current Project Status

- A tiger team is developing a Use Case Proposal, for applying Carequality governance in a FHIR exchange ecosystem
- Discussion has covered stakeholder value propositions, and functional requirements
- We will conclude the functional requirements discussion, and begin discussion of additional topics (related initiatives, legal and regulatory considerations) next week
- Proposal could be finalized in June at our current pace

Discussion Summary: Dave commented that the FHIR use case is moving well but is still in relatively early stages here. It is at a point where we can start talking about a communication plan and timing.

- We have a Tiger Team that is working on a use case proposal for applying Carequality governance in a prior exchange ecosystem. The discussion has focused primarily on stakeholder value propositions and functional, non-functional requirements, requirements in general for a Carequality approach. We are anticipating that we will conclude the requirements discussion and begin some discussion of a few additional topics that we want to cover next week. I think there is a chance that we may be able to finalize the proposal in June or first half of July.

Questions/Discussion: n/a

Action/Follow up: n/a

FHIR Use Case – Big Picture Timelines

- We are still some way from supporting production FHIR exchange – For comparison, development of the initial Query-Based Document Exchange IG took almost exactly a year, from workgroup kickoff to adoption by the Steering Committee
 - There followed another seven months before the first production query actually occurred
 - FHIR may be quicker in some ways, but slower in others, such that a year from workgroup kickoff to Steering Committee adoption seems like a reasonable estimate for very rough planning purposes
 - This would put us very approximately in early Q4 of 2019 for Steering Committee adoption of a Carequality FHIR Exchange Use Case Implementation Guide

Discussion Summary: Dave commented that completing that use case proposal does not mean that we are necessarily very close to the supporting production FHIR exchange. It is useful when considering both this FHIR use case and also as we move onto the next topic, the push notifications use case and is important to keep in mind our experience with developing the implementation guides for query base document exchange, that process took almost exactly a year. We had work groups kicking off in October and November of 2014 and had adoption of the implementation guide by the Steering Committee in December of 2016. That then followed another seven months before the first query actually occurred.

- As you look at the FHIR use case, it could be quicker in some ways. I think having the use case proposal that outlines requirements and can serve as a very useful starting outline for what work groups need to be working on and can help us with the charter. There are some aspects to the FHIR exchange world that differ from the query based document exchange world, which at the time that we were developing the implementation guide, query based document exchange was well established, was occurring in fairly widespread ways with a lot of discontinuities due to network boundaries, which is exactly the challenge that Carequality was brought in to help address. In the case of FHIR, there certainly are embryonic FHIR exchanges occurring, but at the same time there's a lot still being done to develop the standard itself. There are many groups that right now are working on profiling how one does exchange for some specific uses cases with lower case UNC for payers and for providers through EHR vendors; you have DaVinci project, the Argonaut Project, others I'm sure are out there working as well. All of these things are in place and we're going to want to take advantage of some of that work. It puts us approximately in early Q4 of 2019 for the Steering Committee realistically to adopt a Carequality FHIR Exchange Use Case Implementation Guide.
- We haven't had a specific communications plan for publicizing that work. Dave asked the group if we should signal to the industry that we intend to take on a governance role for FHIR exchange and that presumably at some point would involve a press release, but there may be other elements to a communications plan that this committee doesn't necessarily have to decide on the details. We can work on that as Carequality staff what are the groups thoughts on a communication strategy along these lines and specifically if we do decide as the committee to move forwards in relatively short order with developing the implementation guide per the use case proposal, is that something that we want to publicize.

Questions/Discussion: A member commented that we have HL-7, which is acting as the technical body that has governance over the standards. This is really just stating that the governance role is for FHIR based query exchange under the Carequality umbrella. Is there a bright line between the HL-7 role and the Carequality role?

- Dave responded that we are in the query based document exchange world in terms of the SOP-based IHE profile, but those ultimately rely on HL-7 standards as well. There is an intermediate profiling there of IHE, who adds some more onto it. There is a separate somewhat parallel profiling there from the NHIN standards and then there's some additional relatively lightweight layer on top where Carequality puts even further constraints on what IHE and the NHIN specs have done. This is very similar. There is a base FHIR standard and there is profiling of that standard done by groups like Argonaut and the DaVinci Project. We would not want to add a layer on top of what they have done, but we would be open to that possibility. That tells you when you do these types of exchanges, here is how you do it, but does not address the same governance questions that Carequality addresses in query based document exchange. A big part of what we have talked about in the introductory part of the use case proposal is that FHIR is a new technology or a new technical approach. It does not fundamentally change the game of query based exchange. The use case proposal envisions that query and push based exchange could all be covered here, but just specifically address the query based

exchange aspect of it, you still have a transaction that is coming into you in the most generic sense that you need to decide whether to trust and what is the basis for trusting and whether to send information to this person who is behind this transaction in response to it. The need to establish legal governance over that process, establish the rules, establish the policies, and establish some baseline for having an obligation to a hereto technical standard, that is the governance role that Carequality plays and it really is the identical role in many ways in what we envision for the FHIR world that we play in the doc exchange world where the standards are maintained by others and we just reference them in the rules that we provide.

- A member commented that given the attractiveness of FHIR and the technical strength that it supports use cases that could be complimentary to query based exchange, we should develop a press release and the communication plan. When we actually pull the trigger on those and going public is a question to be determined. It would strengthen our initiatives as we move forward in this adventure here.
- Another member agreed and commented that the question raised is one in my mind also. Putting some words in a document, a press release would be a great way to alleviate confusion and getting that to the folks that are working on Argonaut, that are working on DaVinci, that are smart on FHIR, that is a big community that does not overlap with this community. That may support us having more dialogue with some leaders in those other groups and pull out that differentiation between technical standards and governance lacking in the FHIR world at his point.
- A member commented that with HL7, there is some overlap in organizations in both that participate in Argonaut including Sure Scripts, but it does seem like an opportunity to have conversation with HL-7 and with other groups about the importance of governance framework as FHIR starts to become more adapted and there are a lot of different use cases being talked about, whether for payers or clinical exchange. There will be some interest that could align and an opportunity to do some relationship building.
- A member commented that this is brilliant because right now the majority of benefits from FHIR have been received by organizations using it inside their firewall. It is a way to cross pollinate information across the SIMS that are under the same HIPAA control or covered entity control. By having Carequality step forward and say that they want to take this on, the nature of the need of how to use query based exchange with FHIR across organizations and the credibility that we bring to the table will bring more interest in FHIR use cases moving faster when between organizations. It will generate more business.
- A member commented that communication is important and warranted. When talking governance role, are we saying governance as it relates to transactions happening under the umbrella of Carequality? Or governance at more of an industry level?
- Dave responded that is practical operational governance that Carequality provides and connect universally in contracting and establishing known technical guidelines that are contractually backed up. It plays the same role that we play in query based document exchange. We are not implying a more fundamental industry role than the one that we would have in the query based doc exchange world.
- A member commented there is an alignment with DaVinci because DaVinci is another group that is trying to take this outside the internal uses that are really prominent today. They are doing it a bit differently, but they are looking at use cases and at cross-organization use cases.
- Dave agreed and added that this is going to be somewhat simplistic by necessity, but I look at the world for the IHE profiles, and the SOAP-based exchange that we use for

clinical documents and there is an underlying layer of standards that is largely come from HL-7. There is a profiling from IHE, the actual authors of the XCP and XCA profiles that we use. Then there is a Carequality layer where we are largely not focused on trying to change or improve on the technical specs. We are mainly saying these are the specs you use and here is a larger policy framework of requirements around how you use them. I would envision the same kind of hierarchy here. Underneath it all there is HL-7, that is the developer of the FHIR standard. Then I see groups like DaVinci and Argonaut and others who do this as well, who do very useful profiling that is roughly conceptually equivalent to what IHE is doing, taking the HL-7 standard and removing ambiguity, explaining how you roll it together in terms of these resources that are raw data and how you implement them. Then you have the Carequality layer of different people using the profiles, here is how you can do it in a unified cohesive approach that allows you to connect in to an industry ecosystem.

- A member commented that FHIR is moving more and more quickly in more directions and while we too have mostly used it internally and we are starting to use it externally, we are enthusiastic about getting involved in DaVinci. What is going on with Apple Health is huge and also the announcements made at their developer's conference earlier this week. We need some governance around FHIR.
- A member commented that we don't want to limit that. At the HHS and ONC level there is huge enthusiasm for using APIs, for using FHIR, for getting data into the hands of patients, but in our provider community there is still a lot of anxiety and the privacy concerns. We need to be doing better communication around this. There is a long timeline involved and think there is a need for a mature organization like Sequoia and Carequality to get involved.
- Dave responded that we need to be realistic about the timeline and about the ability of the industry and the enabling work. We don't want to reinvent the wheel and be working across purposes with DaVinci. We also don't have the resources to spend necessarily on doing the profiling that they are doing. We need their work to be at a point where we can point to it before we can move this forward. There is a need for the industry as a whole to move forward. I am hearing plenty of support for a communications plan. We can run forward with that internally and we do have some time. We don't want to get ahead of the use case proposal being completed, but think it will come together at around the right time there for us to work on those elements.

Push Notifications – Identified Requirements

Carequality's Use Case must:

- Provide a definition for a set of "notification types"
 - Technical and policy parameters outlining what data is being pushed, when, and why
- Define the concept of a "subscription" to a notification
 - Defining what is a user and an endpoint along with concepts of requested start/end date
- Define the following Roles that can be played by participants, in ensuring that the proper notification is being routed to the correct recipient at the right time:
 - Subscription Service
 - Notification Recipient
 - Notification Routing Service
 - Notification Generator

- Ensure non-discriminatory practices are being utilized by entities who may support more than one role
 - Carequality will ensure consistency is maintained by its Implementers
- Support neutrality and value parity with respect to Subscription and Notification Routing Services
- Specify technical solutions for patient identification, directory services, transaction security, and auditing
- Align with The Carequality Principles of Trust

Discussion Summary: Dave commented that we are looking for recommendation/question for the committee around the push notifications use case proposal. We have really largely completed that proposal.

Questions/Discussion: n/a

Action/Follow up: n/a

Key Recommendations

- Notifications should be lightweight and not attempt to convey full clinical details
 - Receipt of a notification could trigger a query to retrieve full details
- There should be no assumption of service identity based on geography
 - i.e. the approach can't assume that every subscriber in zip code X will automatically use service Y
- Notifications always go to subscribed parties; "unsolicited" notifications are out of scope and not addressed by the Use Case
- Subscribed parties are expected to typically be systems, rather than specific users. The "last mile" of ensuring that the notifications are seen by an appropriate user, will generally be out of scope for Carequality

Discussion Summary: Dave commented that we envision a push notifications use case needing to adhere to.

Questions/Discussion: n/a

Action/Follow up: n/a

Bottom Line

- Development of the Use Case is feasible, at a cost and over a timeline that could be slightly lower/shorter (although not significantly) than what we experienced for Query-Based Document Exchange
 - An external technical consultant would ideally be engaged, although we may be able to limit such a person's role and the attendant costs
- There is clearly value in having such a Use Case, for an assortment of stakeholders
There is general interest from the implementer community
- We have NOT received definitive commitments from implementers that they would complete the development required to support the Use Case

- A truly definitive commitment is unrealistic given the many unknowns that still exist
- Recommendation: we seek good faith statements of intent (or lack thereof) from implementers
 - including a realistic assessment of timing/prioritization
 - assuming “reasonable” development requirements and fees

Discussion Summary: Dave commented that you will get the document itself, which lays this out in more detail. We are going to be reviewing this with the Advisory Council and getting their more complete feedback next week, but it looks like the development of a push notifications use case is feasible. The cost and timeline could actually be somewhat lower/shorter than what we had for query based document exchange. We would be able to engage in external technical experts who can play a role similar to the one that Joe Lamy did with query based document exchange. We could have some creative ways maybe to limit the cost. We have also identified that there is value in having such a use case. There is also general non-specific interest from the implementer community. The one piece that we are missing, is getting definitive commitments from implementers that they would do the development required and support such a use case.

- Dave commented that my recommendation is that we seek good faith statements from implementers.

Questions/Discussion: A member commented that we are interested in this use case proposal for the push notifications. We would utilize this ourselves.

Another member also agreed they will be using this.

Action/Follow up: Dave commented that we will review the use case proposal with the Advisory Council on next Wednesday and then we will distribute in advance of the July meeting and talk about in more detail then and we will hopefully have some good information from implementers to round out the conversation.

Meeting was adjourned at 1:59pm EST