

The image features a blue and green gradient background with abstract geometric patterns, including circles, lines, and the word "data" repeated in a light font. The Carequality logo, consisting of the word "carequality" in a white sans-serif font and a stylized white graphic of three intersecting lines, is prominently displayed in the upper left.

**carequality**

## Carequality Monthly Information Call

*September 26, 2019*

# Agenda

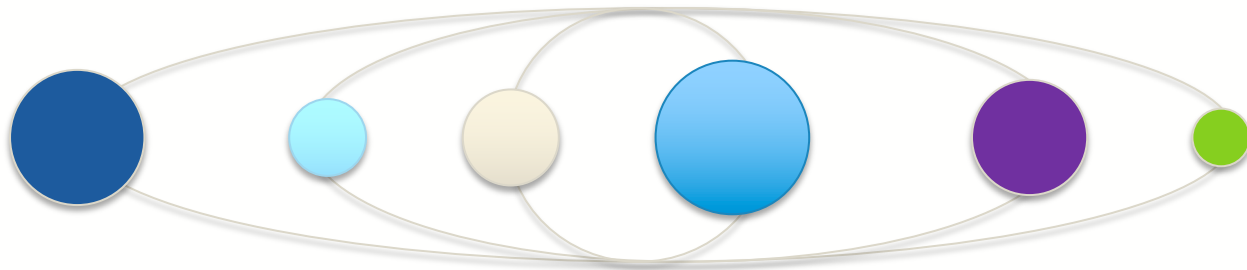
- Carequality Intro
- Participation Opportunity – Advisory Council
- Carequality Connected Agreement Amendment Process
- Project Updates
  - FHIR Policy and Technical Workgroups
  - Query-Based Document Exchange Enhancements
  - Push Notifications
  - Image Exchange
- Production Operations Update
- Your Questions



# Carequality Overview

## The Situation

Communities of data sharing partners have formed, brought together by specific needs.



**Some are geographically based, but many other types of data sharing communities also exist.**

## The Solution

Carequality creates a standardized, national-level interoperability framework to link all data sharing networks



**Carequality** is creating a web of interconnected communities



# The Power of Connecting Communities

*How do you get nationwide connectivity?  
Clinic by clinic, hospital by hospital?*

Data sharing networks have already connected many participants. The connections grow exponentially by connecting these user communities to one another, as groups.

➡ If you connect six clinics, you might reach a few dozen physicians.

➡ If you connect six networks, you can reach thousands of physicians.

# Carequality Framework

- The Carequality Framework includes a number of elements:
  - Carequality Connected Agreement
  - Carequality Connection Terms
  - Dispute Resolution Process
  - Technical Trust Policy
  - Query-Based Document Exchange Implementation Guide
- Documents are available for reference on the Carequality website:  
<https://carequality.org/resources/>  
<https://carequality.org/wiki/carequality-framework/>

## What Does This Mean For Providers?

- Health IT interoperability connections can be a lot of work
  - Legal teams sign off on contracts
  - Technical staff negotiate standards
  - Compliance and privacy officers weigh in on policy
  - Users complete acceptance testing
- Carequality has standardized these elements at a nationwide level, with buy-in from across the industry
- Complete one implementation – often very straightforward – and connect as a result into a broad nationwide ecosystem with a large local footprint

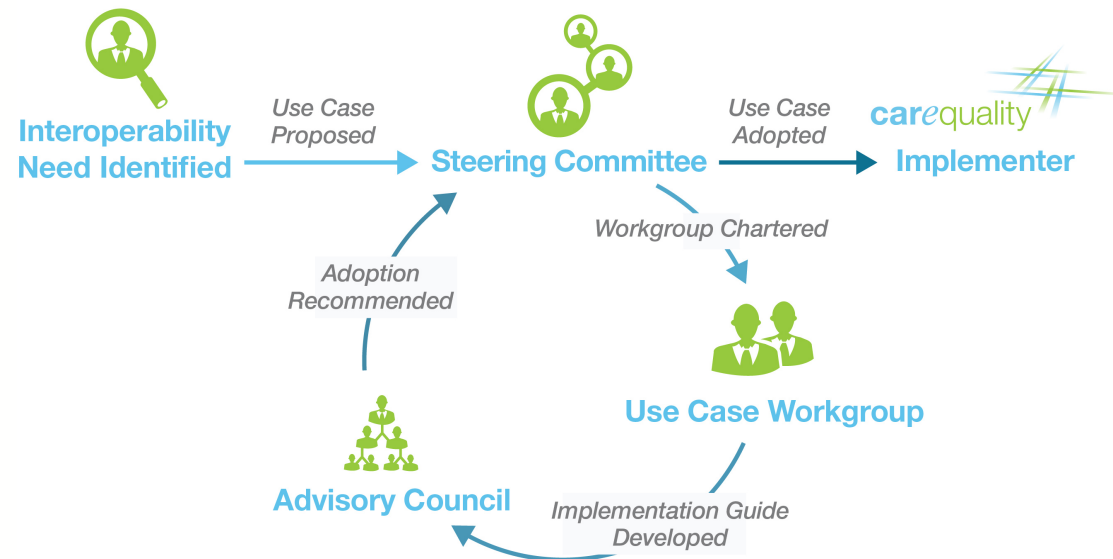


# Participation Opportunity

## Advisory Council - Background

- Up to 15 Advisory Council seats will be filled this Fall
- The Council plays a critical role by providing broad stakeholder input into our work
- Council members don't need to be Implementers or have any previous participation with Carequality

## The Carequality Process





# Advisory Council Application Process Now Open!

Learn More

**Join Carequality's Advisory Council to be part of the growth in health data sharing.  
Application is open to everyone!**

**Deadline: Monday, October 14**

[https://www.cognitoforms.com/TheSequoiaProject1/\\_2019CarequalityAdvisory  
CouncilApplication](https://www.cognitoforms.com/TheSequoiaProject1/_2019CarequalityAdvisoryCouncilApplication)

Include your resume or CV

# Carequality Connected Agreement Amendments

# CCA Updates – Background and Timelines

- The Carequality Connected Agreement (CCA) is the legal contract that serves as the foundation of the Carequality Framework
- We have been working for some time on version 2.0 of the CCA
- We put forward a proposed version 2.0 for final objections in March
- Three Implementers did raise objections
- We have made further revisions to address these objections, after consultation with the objecting parties and the community as a whole
- The updated version 2.0 has now been adopted by the Steering Committee, and will go into effect on **Monday, November 4<sup>th</sup> 2019**
- There are parallel changes to the Carequality Connection Terms, which will go into effect on the same date
- Carequality Connections have been notified by their Implementers of the upcoming changes



# Project Updates

## General Background

- Carequality has five currently active workgroups, with a sixth set to begin work in the near future
- Participation is open to all; if you're interested in joining one or more workgroups, contact us at [admin@carequality.org](mailto:admin@carequality.org)
- Our workgroups develop drafts of Carequality work products, including Implementation Guides, and operating policies
- These work products are then further reviewed and refined by the Advisory Council and the Steering Committee, with input throughout the process from the Implementer community

# FHIR Workgroups

- In the Fall of 2018, the Carequality Steering Community gave its blessing for us to create another clinical transaction based ecosystem, much like the one that exists today for our Implementers around Query Based Document Exchange
- The difference being, we'd be leveraging a new & more flexible standard, known as FHIR
- This new HL7 standard will allow Implementers to transact using very similar message/document based architecture that they are accustomed to. But FHIR also allows for transactions to be at the data element level (such as medications or allergies, for example) by leveraging something known as a FHIR Resource
- In Nov of 2019, two workgroups were commissioned for this project:
  - Technical Workgroup: focused on creating an “implement once, connect universally” ecosystem
  - Policy Workgroup: focused on the “rules of the road” for the ecosystem
- A Draft Implementation Guide is being crafted by both workgroups that will be merged into one final document once the work is complete
- Progress for each workgroup are broken out on the next two slides

# FHIR Technical Workgroup Update

- We had a Connectathon over the weekend of Sep 14-15 at HL7 in Atlanta
- Our goal was to move beyond our 1<sup>st</sup> Connectathon in May of this year whereby Participants were able to read/write to Carequality Directory using a FHIR API
- More specifically, we wanted to test scalable ecosystem trust models for security and privacy, enabling cross-organization queries and reusable credentials
- The outcome for the event was that multiple parties used JWT-based authentication in their FHIR clients to successfully authenticate to FHIR servers while also supporting evaluating the JWT in a token request
- We also successfully tested dynamic client registration. Multiple parties were also able to accompany JWT-based authentication in a complete trusted workflow. This flow also included a validation certificate on the server side
- As a next step, we'll be performing additional development of more specific Certificate and Dynamic Registration workflows into the Draft IG:  
<https://docs.google.com/document/d/1iOour1orfMpYS30L2AU2wajZRXl7p6YWlk5F61TcZ1M/edit>

# FHIR Policy Workgroup Update

- The first 1st draft of the Policy Implementation Guide Outline is available here:
  - <https://docs.google.com/document/d/1e-6sjXnze0kIndJ-ZRYQw0sY6LYa8KxIhPc1Ao71OpQ/edit>
- Our weekly meetings currently consist of working sessions whereby we are actively reviewing comments/feedback submitted by the group, and making any necessary updates to the document
- This will continue for approximately the next month
- After this, we will determine what the next steps are



# Query-Based Doc Exchange Enhancements

- The Query-Based Document Exchange Implementation Guide supports our current live production exchange activity
- A draft redline is currently under review by the IG Updates workgroup
- The core areas of focus were to create or update:
  - An operational approach for verifying compliance with any document content requirements
  - Updates to the Query-Based Document Exchange Implementation Guide based on the recommendations of the Advancing Patient Queries Working Group
  - Additional policy specifications around patient queries that will facilitate adoption
- Additionally, the group was authorized to examine:
  - Evaluation of the current required reporting measures to determine if any changes should be made in the form of policy updates
  - Policy updates in support of Operations, Coverage, and Payment queries.

## Push Notifications Project – Background

- Today, patients access healthcare services and products and non-health services in a fragmented way across multiple organizations and geographic jurisdictions.
- Carequality is ideally suited to bring added value beyond simple point-to-point notification services, and can instead enable stakeholders to implement consistent approaches to notifications that are only possible at a national, cross-platform, multi-service scale.
- Ideally, we will develop a fairly general approach that will enable different types of notification services to interact with each other.
- Two workgroups were formed to address this need. One workgroup focused on technical considerations, and the other, on policy considerations.
- As with the FHIR project, the two workgroups will draft complementary portions of an Implementation Guide

# Push Notifications Workgroups

- Current discussion topics
  - Technical Workgroup
    - Technical approaches to subscriptions and notifications
    - Considering how we will align with Argonaut and Davinci Project where appropriate
  - Policy Workgroup
    - Draft IG
      - Collaborative work on a rough draft Push Notifications Implementation Guide
    - Notification Trigger Events and Definitions

## Image Exchange

- Work also is underway to enable exchange of DICOM images under Carequality governance, in collaboration with RSNA
- We received a number of public comments on our draft Implementation Guide supplement:  
<https://carequality.org/wp-content/uploads/2019/06/Imaging-Exchange-IG-20190620-DRAFT-v1.pdf>
- We are currently reviewing and dispositioning these comments, and will update the draft accordingly
- We are targeting adoption by the Steering Committee of a final version, in late Q1 2020

# Production Operations Update



# Current Carequality Connected Agreement Signees

## HIEs



## CONSUMER APPS



## TECHNOLOGY VENDORS



## SERVICE PROVIDERS



## OTHER



## In Production:



36M documents per month (as of April 2019)

Estimated 370 million clinical documents exchanged since July 2016

# Your Questions

Thank You!