Mariann Yeager
Sequoia Project
8300 Boone Blvd Suite 500
Vienna, VA 22182

November 8, 2022

**Re: Draft TEFCA Facilitated FHIR Implementation Guide**

Dear Ms. Yeager,

On behalf of CommonWell Health Alliance, we are pleased to submit comments on the Draft TEFCA Facilitated FHIR Implementation Guide released on October 7, 2022. We continue to support the RCE as it raises the bar on nationwide exchange, and we fully support the goals and objectives of TEFCA.

As you may know, CommonWell has spent the past year evaluating, writing and testing our own FHIR-based strategy. In an effort to remain aligned with the industry, we referenced the Carequality FHIR implementation guide throughout our work. We are now in a position to create our own implementation guide based on our testing experience for our members to use to exchange FHIR-based data using the CommonWell network.

In February 2020, we launched a FHIR workgroup with 24 of our members and began to outline FHIR at scale, leveraging CommonWell as the FHIR Directory, RLS and MPI—but then moving to a non-brokered approach for registration, authorization and authentication workflows. Out of this effort, we wrote a FHIR Use Case which was formally approved by our Use Case Committee, and then developed a prototype that was demonstrated at HIMSS22 in the Interoperability Showcase called Nationwide Connected Care. Following the success of that HIMSS22 demonstration, we hosted a FHIR Connectathon for our members in May 2022 and were able to test the full workflow (reference the diagram below) with even more of our membership.

It is our intent to share comments that stem from our experience testing FHIR at scale.

We endorse the Facilitated FHIR IG that the RCE has released, but we do have a few areas of comment to share in an effort to help the RCE produce an IG that is set up for success in the near term. We look forward to working with the RCE and other prospective QHINs to test the FHIR IG when it is available next year.

**Section 2: Role Requirements**

Regarding the two defined roles of FHIR Query Initiator and Responding Actor, we also request that the role of the QHIN, participants and subparticipants be clearly defined and differentiated in this section.

**Section 3.1: Provenance**

We believe that the Provenance profile should be based on the implementation that the endpoint supports, and not restricted to US Core 4.0.0. A few additional corrections include updating the link to the "US Core v4.0 Provenance profile," which links to 5.0.1 and that the correct version is 4.0.0. We believe that we should have some flexibility here, as many vendors' capabilities are going to be aligned with ONC CEHRT, which has the current requirement set at 3.1.1 with 4.0.0 as optional. If there is a baseline to be set, then we'd recommend starting with 3.1.1 but then permitting endpoints to also use higher versions, and specifically indicating that within the IG.

**Section 3.2: Patient Matching**

In this section, our primary concern is the lack of description around the brokering of the location information. The RLS/eMPI should play a major role in the patient discovery and patient matching workflows prior to the authentication and authorization steps. We agree with the inclusion of the (?)$match but do not agree with the need to perform the $match at each organization. We feel very strongly that in order to scale FHIR, the RLS/eMPI must be the place where the patient matching question(s) are asked. The QHIN with the RLS/eMPI should be able to tell each FHIR Query Initiator where the patient data is, and then allow the FHIR Query Initiator to go directly to the Responding Actor's FHIR server to gain authorization, register and authenticate to query for resources.

With regard to the setting for (?)onlyCertainMatches, we advise that the client be responsible for setting the number instead of limiting it to 100 potential matches. We advise that the IG use _count instead of indicating a specific number. Allow the FHIR Query Initiator to dictate the maximum.

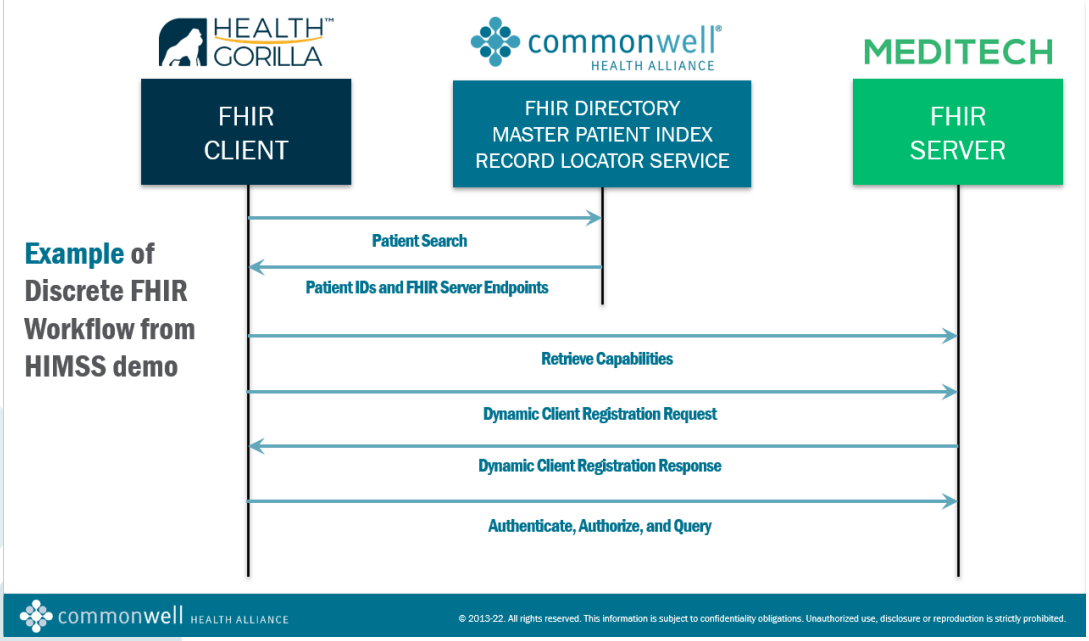
**Section 4.1: Patient Discovery, Authentication, and Authorization**

As we have indicated in our past comments to the RCE, we believe that the use of an RLS/eMPI is central to the success of QHIN-based exchange and TEFCA as a whole.

Therefore, we advise that an initial assumption should be that the QHIN knows the patient identifier and how to utilize that patient ID for subsequent transactions in the flow. It's imperative that the QHIN knows where the patient is, so that we avoid having every client having to register with every FHIR server, just to ask where the patient is. In today's environment with XCPD, we only find patients approximately 3% of the time when we do broad-based queries. It's not scalable to permit exchange to take place in this manner.

Instead, we suggest that the Participants and Subparticipants send patient information to the QHIN's eMPI and register FHIR clients and servers with the QHIN's FHIR Directory, and use that information to allow FHIR Query Initiator's to do a patient search against the QHIN first. From there, the FHIR Query Initiator will receive a list of patient IDs and FHIR server endpoints.

A key component that is missing is how we should expect to handle capability statements. In the CommonWell FHIR workgroup, we debated where the capability statements should live – either at the FHIR server or within the RLS associated to the FHIR endpoint. We decided that the source of truth should be the FHIR server with regard to what it's capable of. Therefore, in the workflow depicted below, once the FHIR Query Initiator has the patient IDs and FHIR endpoints, it then should go directly to the FHIR server to retrieve its capabilities. This will tell the FHIR Query Initiator how to register. We advise that the RCE review the order of the workflows to ensure that the FHIR Query Initiator is able to retrieve the server capabilities (4.2.2) prior to the registration workflow step (4.1.2). This is an important process to get right as the capabilities statement will tell the client what registration capabilities the server has.



In section 4.1.2, #4, note that the client should send an assertion, not an authorization token, to request access, per the UDAP Security IG.

**Section 5.1: FHIR Endpoints & Endpoint Discovery**

We request further definition on what the QHIN's Capability Statement should include, as we expect that the QHIN's role is specifically related to patient and endpoint discovery, and thus should have a limited capability statement.

**Section 5.2: Authentication/Trust**

We recommend pointing to and citing the UDAP Security IG as much as is feasible without rewriting much of the content held within, and then calling out QHIN-specific or role-specific information, such as metadata, that is configurable based on the community. We recommend stating "QHINs, Participants and Subparticipants SHALL support dynamic registration as specified in the Dynamic Registration profile with additional constraints and requirements as defined in this guide." This way it's clear that the source of truth is the UDAP Security IG and the Facilitated FHIR IG adds community-specific information, rather than the other way around.

CommonWell recognizes that we're going to need to partner with a Certificate Authority to issue, manage and revoke certificates so that we can ensure trusted exchange can take place at this scale. We submitted feedback to Carequality that CommonWell, both as a Carequality implementer and prospective QHIN, would partner with a Certificate Authority of our choice and issue certificates to our Participants and Subparticipants under that CA. However, we will need the CA to work closely with the RCE to ensure that the root of those certificates can be trusted across QHINs. We welcome the opportunity to have future discussions with the RCE and subject matter experts to come up with the best plan to satisfy the needs of handling a significant number of certificates while maintaining trust within TEFCA.

**Final Comments**

On behalf of CommonWell Health Alliance, we thank you for the opportunity to submit comments on the Draft Facilitated FHIR IG. We look forward to continuing to work alongside the RCE and others within the industry to ensure that FHIR at scale, via TEFCA, is a success. For any clarifications or comments, please feel free to contact me at liz@commonwellalliance.org.

Sincerely,

Liz Buckle

Director of Product

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