

Questions for Jeff Duncan

How will we gain access to the CSD underlying database?

You will have to create a test db in your hosting environment with synthetic data.

How will we host the FHIR interface for CSD and any other software we develop?

Development should be hosted at GA Tech.

What is the CSD tech stack?

The current CSD is in Microsoft SQLServer Enterprise hosted on Windows Server 2012. However, for purposes of this project you may use PostgreSQL or MySQL if that is easier.

What is the complete CSD database schema?

I will try to get a complete schema to you.

How do we reconcile auditing and authentication between CSD and UMED? SSO?

User rights to the CSD query resource will be controlled entirely from within UMED. That is to say, authorized UMED users are able to perform a CSD query. As a result, access to query the CSD API is system-specific, not user-specific. (This is one aspect of FHIR that I am hoping to learn.)

How can we ensure OME can only access CSD data for the deceased?

Only OME and investigators have access to the UMED system. A query from UMED should be generated from an actual UMED record (i.e. someone deceased), and not allow OME to randomly query names.

Are there any other institutional security considerations we should be taking into account?

URL encryption?

Yes. Is this typically a requirement for FHIR?

How much information in the URL is too much? Patient ID? Patient Name?

No identifying information should appear in the URL.

Will we use public or synthetic data?

No public data are available, so we will have to generate synthetic data.

If synthetic, how shall we generate the data?

I will provide test data.

Will you be able to provide a test environment where we will run our software during development?

I can provide test data, but cannot provide a dev or test environment.

May we use anonymized production data?

Yes, I will provide.

How shall we handle non-unique identities? (i.e. two John Smiths with the same birthdate.)

A query should return all possible matches, with enough information for the end-user to disambiguate, if possible.

What are the performance expectations of the system?

As both UMED and the CSD are hosted in the UDOH VMware private cloud, performance should be real-time, e.g. 1-2 seconds per query/response.

How many transactions per day/hour/minute are expected?

There are approximately 16,000 deaths per year in Utah, averaging out to 41.1 per day. Only 20% or so of deaths will be queried by OME staff, so the total could be as low as 10 per day. Even if every death were queried, the maximum would only be 41 per day or so to start. In the future, other systems such as Medicaid claims might be added to the interface, in which case the number of transactions would increase to 300 per hour or more.

How will the system be maintained after the project is handed over to the customer?

Technical staff from the Utah Department of Technology Services (DTS) will manage hosting, networking and software issues.

What applications will use the proposed FHIR CSD API?

Initially, only the UMED application will use the FHIR CSD API. Other use cases for the API may be developed in the future, such as Medicaid claims described above.