I would like to thank the Committee for affording me this opportunity to share my views around JASON. As a model, JASON is actually fully thought out, but also impractical. There is no way that this architecture, or any architecture, will be deployed in a patient-centric way, at a level that scale successfully.

I concede this a provocative statement.

However, as background I have also been around health IT for the past 30 years. Have built HL7 and ASTM standards. Was involved in organizing the "Kona Proposal," a privately-funded project which proved the viability of encoding HL7 in then a newfangled markup called XML. Kona was then donated to HL7, eventually giving way to the CDA. I have also been fortunate to found a few consumer health companies, with an IPO and multiple successful exists, all technology which extracted patient data from silo'd clinical systems, to benefit patients. Gliimpse, my most recent consumer health venture has even prototyped a version of JASON, and built services using CDA and FHIR.

So we speak from some nontrivial experience testing reference implementations. But Gliimpse has also developed commercial-grade FHIR servers, as well as tested API extensions to FHIR, to the C-CDA – and therefore we feel qualified to comment on our difficulty implementing heavy structures suggested by JASON.

As example, HL7's Implementation Guide for CDA Rel 2, weighs in at an eye-watering 595 pages of implementation spec, and this is known as a nonstarter due to the imposed allegiance with V3 and a complex RIM. Our experience with numerous CDA document instances also demonstrates the poor level of support mainly around CDA Level 1, as we found most documents improperly formatted. And CDA instances suffer from an impedance mismatch that makes it difficult, if not practically impossible, to map between them. Finally, the FHIR API doesn't even have a simple call to return everything about a single patient, one has to iterate through fine-grained link lists, and developers must reconstruct a patient's object. There are other examples limiting practical uses of JASON, features made complex based on data models around HL7.

The web's success is that it leverages extremely lightweight models and protocols such as HTML and HTTP, simpler platform structures as SMTP and IMAP. These simple constructions can be rapidly implemented, in a way that JASON will not.

Such well-intentioned platforms and their robust APIs misdirect us down a maze of tightly coupled integrations that are costly, fragile and brittle, not at all based on the loosely coupled data exchanges that power email and the Internet, which performs so well.

To quote the JASON document: *"...the current lack of interoperability among data resources for EHRs is a major impediment…"*

EHR vendors have no greater desire to interoperate, than does Target wish to share their customer ERP data with Walmart. It is not reasonable to think that an API or an elegant

architecture will overcome the economic disincentives to sharing patient data.

Could we not rethink to distill down the essence of JASON, severely simplify the API, consider OAuth, put the patient at the center of privacy thus softening JASON's onerous Crypto layer, all to securely export a single SINGLE standardized data document to the patient, allowing them to mediate sharing between caregivers, between apps.

This, then, is an approach we'd very much drive and participate in, one that deserves to be vetted for more than the five minutes this Committee has most generously allowed me to share my views. For which I am grateful.

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