

Office of the National Coordinator for Health IT  
HIT Policy Committee and HIT Standards Committee  
JASON Task Force Hearing

July 31, 2014

The following remarks were submitted by Jitin Asnaani on behalf of the CommonWell Health Alliance in connection with a hearing on the JASON Report. We thank ONC and the Federal Advisory Committees for the opportunity to provide testimony.

## About CommonWell

The CommonWell Health Alliance is an independent, not-for-profit trade organization devoted to the simple vision that health data should be available to individuals and providers regardless of where care occurs. We believe that provider access to this data must be built into health IT at a reasonable cost for use by a broad range of healthcare providers and the people they serve. The Alliance currently consists of ten health technology vendors who collectively represent more than 40% of the acute EHR and 20% of the ambulatory EHR markets, as well as participants in the laboratory, pharmacy and post-acute care markets.

The Alliance plans to define and promote a national infrastructure with common standards and policies. The early core components of this infrastructure include:

- **Identity Management services** to accurately identify patients as they transition through care facilities.
- **Record Locator services** to help providers locate and access their patients' records, regardless of where the encounter occurred.
- **Consent Management services** to deliver a patient-authorized means to simplify management of data sharing consents and authorizations.
- **Trusted Data Access to provide authentication and auditing services** that facilitate trusted data sharing among member systems.

We believe that our approach will help solve the longstanding industry problem of interoperability among the fragmented health IT landscape, enabling a patient's data to be available in a secure, trusted manner to the patient and the patient's care providers regardless of where care occurs. This approach can improve care quality and foster innovation by creating an open vendor-neutral platform to break down the technological and process barriers that currently inhibit effective health care data exchange.

## CommonWell and JASON

**The CommonWell Health Alliance can fulfill the vision of interoperability as outlined by the JASON report**, in terms of both intent and architecture.

From the "intent" perspective, CommonWell provides a practical, piloted solution that enables a query approach across thousands of healthcare IT systems. While the writers of the JASON report were more oriented to research and population health than to direct patient care, such focus requires data of sufficient granularity and an interoperability platform of sufficient quality to facilitate improved patient care, and as such that is the use case that CommonWell is first addressing.

From an "architecture" perspective, CommonWell is already enabling JASON-like functionality among its member companies. For example, CommonWell provides a set of centralized services that are designed to interact through APIs with technology systems in a variety of healthcare settings, including hospitals, ambulatory clinics, post-acute care facilities, laboratories, and pharmacies. Vendor

systems in these environments are “opening up” their systems to data exchange and providing accessible, authorized data access using both course-grained and fine-grained requests for data. This architecture is highly flexible; it can, for example, be incrementally extended for “pub-sub” functionality, whereby the CommonWell Service could capture subscription requests (including but not limited to patient consent) and then automatically “publish” new data to authorized subscribers.

**The CommonWell Service can also be very naturally extended to enable aspects of the JASON vision**, and in fact it is already expected to do so. Specifically, the JASON report zeros in on the concept of discrete data. We note that the today’s document-centric “chart” data approach certainly leaves a number of use cases inadequately addressed, as the JASON report stipulates. However, taken to the other extreme, a discrete “atomic” data approach can create unnecessary performance overhead and needless rip-and-replace in use cases where documents are actually sensible, not to mention that a low level of atomicity can easily result in lost clinical context and so pose a higher patient safety risk.

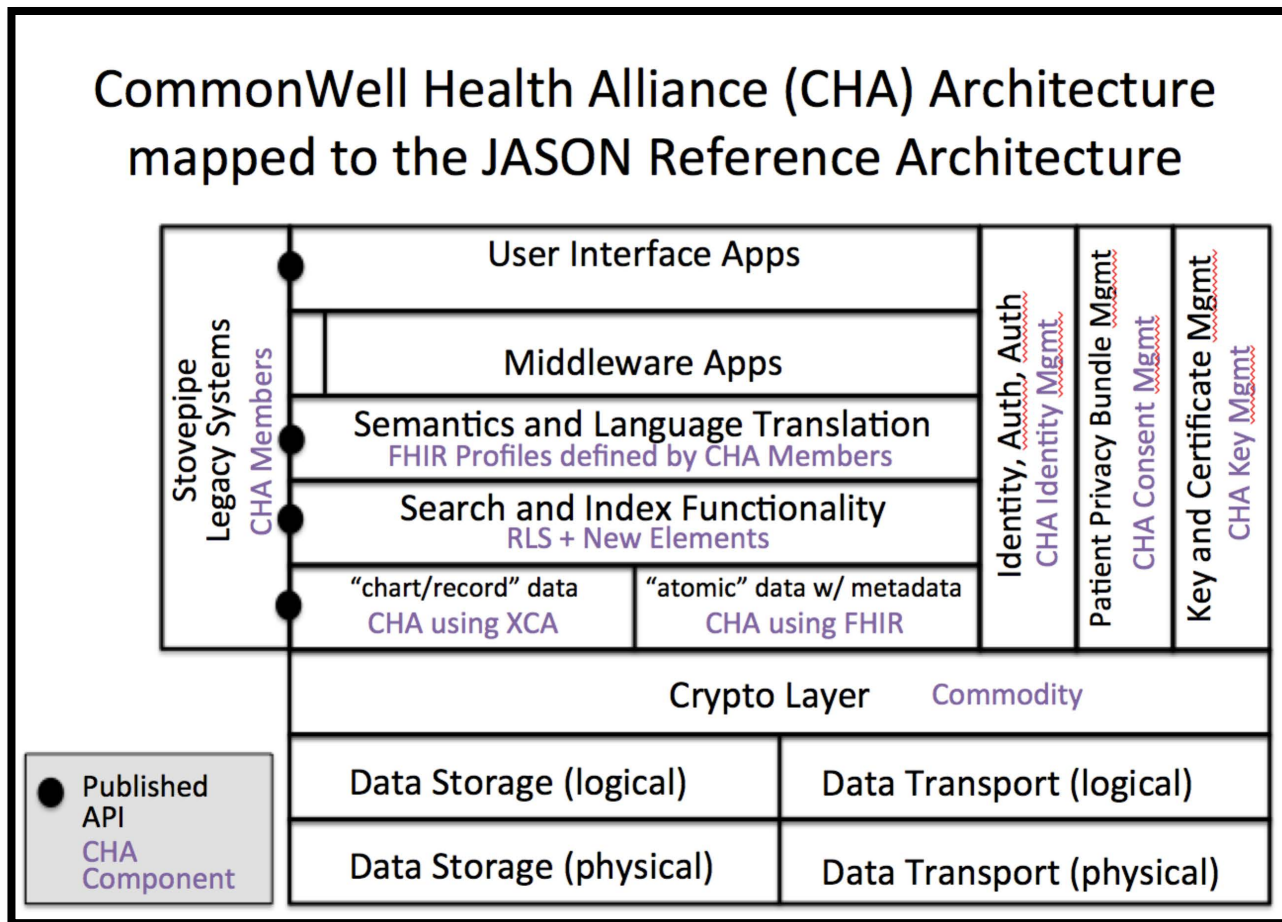
The CommonWell approach is to leverage the existing Consolidated CDA document specification to facilitate meaningful exchange today. From a technical perspective, CommonWell currently exposes an XCA service endpoint, but could just as easily add a FHIR service endpoint, which in practice will enable both document level access and discrete data access. The key will be to get multi-vendor agreement on the profiles of the FHIR/discrete data to expose, but there is work already starting to occur across the industry in this regard.

**CommonWell also solves some of the real-world implementation issues that the JASON report did not address.** For example, the challenge of patient matching and disambiguation is a pre-requisite for the JASON vision, and in reality it is not solved today and will not be solved by the government. CommonWell contributes a scalable solution to patient identification, patient matching, patient consent management, and record location. And CommonWell does so in a discerning practical manner that goes beyond the JASON report, i.e., it centralizes certain capabilities (e.g., patient matching and record location) that are more efficiently instantiated and delivered in a centralized manner, while appropriately de-centralizing the data stores, middleware, and user interfaces that are expensive, impractical and unnecessary to address the fluid exchange and use of data across providers, patients, payers, researchers, and other stakeholders.

Another implementation issue that JASON (rightfully) stipulates is that encryption is a critical component to healthcare transactions; but of course encryption is not by itself sufficient for patient privacy protection. CommonWell provides secure and encrypted record locator services and only exchanges information as appropriately authorized, either under HIPAA or by patient consent.

**The key difference between CommonWell and JASON is that CommonWell explicitly employs a modular (non-monolithic) architectural approach** by providing elements of the stack that are amenable to deployment in multiple configurations. For example, the JASON Report suggested creation of centralized data stores to be queried and/or enabled via APIs, which may not be acceptable to a range of affected stakeholders, including both providers and consumers; we think that a practical glide-path to the learning healthcare system separates the way the data should be structured for interchange (which is salient to interoperability) from the way the data is stored internally by the EHR/HIT implementation (which is not relevant). As such, CommonWell’s identity, discovery, authorization, and secure transport are separate from the storage layer. Whereas today these services access EHR-centered records, in the future they may be connected with other authorized sources of data.

## CommonWell Health Alliance (CHA) Architecture mapped to the JASON Reference Architecture



### Conclusion and Recommendations

The CommonWell Health Alliance is focused on bringing together the right set of software, services and architecture that will enable search and index of both coarse-grained ("chart") and fine-grained ("atomic") data, starting today with patient identification, patient matching, consent management and record location services. These of course go hand-in-hand with privacy, security, and key management policies that enable our modular API-based architecture to work across vendors, providers and patients.

ONC should practice "watchful waiting" as industry innovation like CommonWell, eHealthExchange, CCC and others are complete, while paving the way for the JASON vision by convening and encouraging complementary efforts, particularly the development of the FHIR standard (and FHIR profiles) to meet new use cases enabled by atomic data.

Best regards,  
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