

The Office of the National Coordinator for
Health Information Technology



Public Feedback on Exchange Specifications

Feb, 2012

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Agenda

- Background
- List of Responders
- Summary of Feedback
 - Exchange Coordinating Committee
 - Organizational Responses

Background

- HITSC transmittal letter (Sept 28, 2011) requested ONC perform additional investigation on **Exchange** Specifications, specifically in following areas:
 - Assessment of specification complexity, adoption, deployment
 - Implementation Challenges
 - Alternatives used for exchanging health information across enterprises
- ONC posted questions on HIT FACA Blog
 - <http://healthit.hhs.gov/blog/faca/index.php/2011/11/09/hitsc-seeks-comments-on-exchange-specifications-by-december-15-2011/>
 - Deadline for blog responses: **Dec 15, 2011**
- ONC received **20** responses, including 5 from vendors, 11 from HIEs, 2 individual responses, 1 from EHRA and 1 from the Exchange Coordinating Committee Chair (on behalf of Exchange Coordinating Committee)
- The Individual responders did not have any specific feedback on Exchange Specifications and hence were not considered in the analysis

List of Relevant Responders

1. ApeniMED (vendor)
2. Axolotl (vendor)
3. CDC
4. CMS
5. EHRA (Association)
6. EPIC (vendor)
7. IBM (vendor)
8. Inland Northwest Health Service
9. KP
10. New Mexico Health Collaborative
11. Regenstrief Institute
12. Social Security Administration
13. Southeast Michigan Health information Exchange
14. Siemens Health Services (vendor)
15. Utah Health Information Network
16. Dept of Veterans Affairs
17. Wright State HealthLink
18. *Exchange Coordinating Committee*

Note: 2 individual responses were eliminated because they did not address the questions asked in the blog

Summary of Feedback from Exchange Coordinating Committee

- Implementations of the core Exchange specifications (Messaging, Auth Framework, Patient Discovery, Query, Retrieve) are currently operational within a limited production context and demonstrating value to participants, including:
 - Federal agency benefit determination is expedited (shortened turnaround time by 45%)
 - Expedited benefit payments to disabled
 - Improved benefits in clinical decision making, including avoiding prescribing multiple narcotics based on information shared
 - Little evidence of implementations significantly deviating from the specifications
- As of Sept 2011, 20 organizations are exchanging data in limited production, representing:
 - 500 hospitals
 - 4,000+ provider organizations
 - 30,000 users
 - 1 million shared patients
 - Population coverage~65 million people
 - 90,000 transaction as of Sept 2011, and growing dramatically each month
- Exchange CC is developing business and transitional plan to guide the Exchange to a sustainable, scalable and efficient public-private model
- The core Exchange specifications can serve as basis for HIE innovation and critical element in nationwide health information infrastructure
- Some respondents seemed to be registering their support of the IHE profiles rather than commenting on the attributes of the Exchange specifications

Summary of Feedback from Organizations and vendors

- All implementations of the Exchange specifications are for exchanges with **federal agencies** and one large organization (KP)
- All of the current implementations of the Exchange specifications are in **limited production** mode and have not been used for large scale production exchange
 - SSA was the lone exception, stating that it had deployed the Exchange specifications in large scale production, for the disability determination program
 - Some implementations of the IHE profiles from which the Exchange specifications were derived are in broader production, primarily for exchange within community HIE (EHRA)
- **Complexity seems more related to specifications** themselves than to the Exchange architecture,
 - substantially more **optionality** and **layers of references to other specifications (indirection)** than comparable specifications
 - Optionality increases ambiguity
 - Having multiple layers cause difficulty in implementations
 - No respondent registered any complaints about Exchange's SOAP transport (vs. REST)
- Lack of scalability of **Identity Management** limits the use cases for which Patient Discovery is applicable
 - VLER program

Summary of Feedback from Organizations and Vendors (cont)

- The core Exchange specifications (**Messaging, Authentication Framework, Patient Discovery, Query, Retrieve**) have the robustness required to meet needs for comprehensive health information exchange but require substantial efforts to
 - Reduce optionality and indirection
 - Reduce ambiguity
 - Improve Scalability
 - Improve testing
 - Reduce cost of implementation
- Suggestions included
 - Simplification of specifications by reducing optionality and indirection
 - Consolidating all the core specification documents into a single document (or repository)
 - Improving testability of specifications

Appendix

Specification Implementation details - Vendors

Org.	Messaging Platform	Web Service Registry	Auth Framework	Patient Discovery/Query/Retrieve Document	Access Consent	Health Information Event Messaging	Document Submission	Administrative Distribution
Aspeni Med	Y	N	Y	Y	Y	Y	Y	Y
Axolotl	Y	N	Y	Y	N	N	N	N
EPIC	Y	Y	Y	Y	N	N	N	N
IBM	Y	N	Y	Y	Y	N	N	N
Siemens	Y	N	N	Y (maybe using IHE profile)	N	N	Unclear (maybe using IHE profile)	N
EHRA	Y	Y	Y	Y	Y	N	Y	Y

Specification Implementation details - Organizations

Org.	Messaging Platform	Web Service Registry	Auth Framework	Patient Discovery/Query/Retrieve Document	Access Consent	Health Information Event Messaging	Document Submission	Administrative Distribution
CDC	N	N	N	N	N	N	Y	N
CMS	Y	N	Y	Y	Y	N	Y	N
INHS	Y	N	Y	Y	N	N	N	N
KP	Y	Y	Y	Y	Y	N	N	N
New Mexico	Y	N	Y	Y	N	N	Y	N

Specification Implementation details - Organizations

Org.	Messaging Platform	Web Service Registry	Auth Framework	Patient Discovery/Query/Retrieve Document	Access Consent	Health Information Event Messaging	Document Submission	Administrative Distribution
Regenstrief	Y	Y	Y	Y	Y	Y	Y	Y
SEMHIE	Y	Y	Y	Y	N	Y	Y	N
SSA	Y	Y	Y	Y	Y	N	N	N
VA	Y	Y	Y	Y	N	N	N	N
Wright state	Y	Y	Y	Y	Y	N	N	N