

March 20, 2015

The Office of the National Coordinator for Health Information Technology
200 Independence Avenue, S.W. Suite 729D
Washington, D.C. 20201

Submitted electronically via <http://www.healthit.gov/policy-researchers-implementers/interoperability-roadmap-public-comments>

Re: Connecting Health and Care for the Nation: A Shared Nationwide Interoperability Roadmap Draft Version 1.0; Request for Public Comments

Dear ONC,

Zynx Health recognizes the excellent work that has been summarized in the Shared Nationwide Interoperability Roadmap. As a provider of evidence-based clinical decision support (CDS) and quality improvement solutions since 1996, we appreciate the opportunity to provide input to the roadmap.

Regarding vocabulary and code sets (semantics), there is a gap in standards for non-medication orders. This is an important gap to close because CDS cannot become interoperable without semantic standards that represent orders and order details. It was a gap that was identified in two S&I Framework initiatives: Health eDecisions and Clinical Quality Framework. However, to our knowledge it is not currently being addressed through any standards development efforts. From a CDS perspective, much great progress is being made on syntax/data models (eg, FHIR, QUICK) and expressions (eg, CQL), but if a CDS system outputs a recommendation (eg, to order an intervention), there is currently no way for the CDS system and an EHR system to exchange that information in a standards-based interoperable manner.

Consider the recommendations from the Health IT Standards Committee Architecture, Services, and API Workgroup from March 18, 2015 where a proposal for “remote CDS” was presented, using the following orchestration sequence:

- [EHR uses internal tools to detect action requiring remote CDS]
- EHR authenticates to the remote CDS service (peer to peer)
- EHR and CDS service use Core-FHIR to exchange any data needed for decision
- If additional provider interaction is needed, CDS asks EHR to invoke a SMART App
- SMART App captures any missing data
- CDS then generates suggested orders, suggested problems, etc.
- CDS may also generate documentation of decision-making
- CDS returns the above data to EHR using Core-FHIR

These actions could be interoperable if either (1) an automated terminology transformation service could be plugged in between the external CDS service and the EHR or (2) there existed a national standard for both medication and non-medication orders. There may be other theoretical approaches, but to our knowledge none of them exist today. Therefore, today a manual transformation between the external CDS service and the EHR is required which results in poor implementation scalability.

The ability to have standard interoperable terminology for medication and non-medication orders is foundational to CDS interoperability. While RxNorm and medication-related value sets largely address medication orders, we believe there is a standards gap in non-medication orders that would need to be addressed if CDS interoperability continues to be a national priority.

Please feel free to contact me directly for additional dialog on this topic if desired.

Sincerely,



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