Date: September 20, 2019

To: Office of the National Coordinator for Health Information Technology

Subject: 2019 Interoperability Standards Advisory

Lantana Consulting Group, Inc. (Lantana) is pleased to provide comments on the 2019 Interoperability Standards Advisory (ISA). Lantana provides services and software for standards-based health information exchange. We have built our expertise through more than a decade of involvement in standards development and deployment. We focus on design and implementation of Clinical Document Architecture (CDA) and Fast Healthcare Interoperable Resources (FHIR) compliant systems, including validation, document management, authoring, data conversion, and web services for information exchange.

Please find our comments on Sections I through III below.

Section I: Vocabulary/Terminology

- Functional Status/Disability
    - Recommendation: Point to the CMS Data Element Library (DEL) (https://del.cms.gov/DELWeb/pubHome) as an additional resource to obtain codified terms that represent a patient's functional status and ability.
    - Update the assessment instrument in the "applicable value sets and start sets" to the latest version of the instruments (e.g., MDS 3.0 to V1.17.1) and point to the CMS sites where the instruments may be found.
- Add Mental Status/Cognitive Status
    - Recommendation: Cognitive status is distinct from Functional Status. We recommend an additional category to represent this. Under "applicable value sets and start sets" consider pointing to the post-acute care instruments and the C-CDA value sets.
- Health Care Providers, Family Members, and Other Caregivers
    - Recommendation: Add a subcategory to represent standard value sets for patient preference and types of patient consent
- Representing Level of Education
    - Recommendation: Add post-high school diploma to LOINC panel 63504-5 What is the highest grade or level of school you have completed or the highest degree you have received [NHANES]. Rationale: some nursing programs are 1 to 3-year diplomas; vocational or trade school programs.
- Representing Patient Electronic Cigarette Use (Vaping)
    - Recommendation: Add smoking status criterion for vaping as this is quickly becoming a significant health issue, especially among teens. Severe lung disease and death have been associated with vaping. Reference: https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html

Section II: Content/Structure Standards and Implementation Specification

- Care Plans
  - Sharing Medication-Related Care Plans by Pharmacist
    - Recommendation: Consider adding an additional resource – The Pharmacist Care Plan FHIR IG http://www.hl7.org/fhir/us/phcp/history.cfml
  - Diet and Nutrition Orders Across the Continuum of Care
    - Recommendation: Consider adding an additional resource as a standard - HL7 CDA® R2 Implementation Guide: C-CDA R2.1 Supplemental Templates for Nutrition, Release 1 - US Realm. These supplemental templates to Consolidated CDA also cover the nutrition Care Process and nutrition interventions. https://www.hl7.org/implement/standards/product_brief.cfm?product_id=478

Section III: Standards and Implementation Specifications for Services

- PUSH exchange
  - Recommendation: Include FHIR R4 everywhere FHIR DSTU2 is mentioned. FHIR R4 is the first release containing normative content.
- Clinical Decision Support Services
  - Why are FHIR and CDS hooks not mentioned in "Retrieval of Contextually Relevant, Patient-Specific Knowledge Resources from Within Clinical Information Systems to Answer Clinical Questions Raised by Patients in the Course of Care"?
- Consumer Access/Exchange of Health Information
  - Recommendation: Change references to FHIR STU3 to FHIR DSTU2 or FHIR R4. Very few EHRs implemented FHIR STU3.
- Healthcare Directory, Provider Directory
  - Recommendation: Reference FHIR; specifically look at the FHIR at Scale Taskforce (FAST) work for recommendations.
- Public Health Exchange
  - Recommendation: Include items beyond immunization data, e.g., electronic case reporting, healthcare-associated infection reporting, mortality reporting, etc.
- Publish and Subscribe
  - Recommendation: Include FHIR Subscription from FHIR R4 and track the Argonaut redesign of FHIR Subscriptions that will be the basis of the FHIR R5 Subscription model.
- Query
  - Recommendation: Include US Core for FHIR R4 in addition to the Argonaut Data Query IG