Comments from Wolters Kluwer on the Proposed
United States Core Data for Interoperability, Version 4

Below are Wolters Kluwer’s comments on proposed Version 4 additions to the United States Core Data for Interoperability (USCDI). We appreciate the opportunity to share our views.

As way of background, Wolters Kluwer is a leading global provider of clinical technology and evidence-based solutions that drive effective decision-making and outcomes across the healthcare continuum. Key solutions include UpToDate®, Medi-Span®, Lexicomp®, Sentri7®, Lippincott® Solutions, Ovid®, Health Language®, Emmi®, and POC Advisor®. Wolters Kluwer had annual revenue in 2021 of €4.8 billion.

Our comments reiterate several of the recommendations we previously made to the Office of the National Coordinator for Health Information Technology (ONC) on earlier versions of the USCDI. These recommendations address data elements that represent critical information essential to patient care, and that are already widely used in various settings across the care continuum. More detail is below.

Clarification on Encounter Type

With the pending adoption deadline for Fast Healthcare Interoperability Resource (FHIR) standard fast approaching, we again raise the issue of how critical it is that ONC provide clarification on the proposed Encounter Type data element. In FHIR, there are two different elements: Encounter.type and Encounter.class. USCDI describes this element as the classification for an encounter, such as inpatient or outpatient. This description more closely reflects the Encounter.class element in FHIR. To avoid confusion and create more accurate alignment when USCDI is translated to FHIR, we suggest changing the name of this element from Encounter Type to Encounter Class. We also recommend that Encounter Class have a set of standardized values, which will better promote interoperability. We recommend ONC adopt the HL7 v3 Value Set called ActEncounterCode (http://www.hl7.org/fhir/v3/ActEncounterCode/vs.html).

Recommended Additional Data Elements for Version 4

Laboratory Data Class - Given the importance of lab data elements to clinical decisions, we strongly recommend ONC include additional data elements to express more granular information related to test results. This would include:

- laboratory results: date and time stamps
- laboratory test performed date
- laboratory test/panel code

The first two of these elements are Level 2 because of their widespread adoption and utility. The Interoperability Standards Task Force previously supported inclusion of the date and time stamps and
We also agree with the Task Force’s request that ONC charge it with developing recommendations to support interoperability of discrete lab test results and include additional applicable data elements in the future.

**Immunizations Data Class** – Building out the *Immunizations* class of constituent elements is vital to help prepare the health system to address the next pandemic. As such, we recommend adding Level 2 data elements related to *Vaccine Administration Date, Immunization Code and Immunization Status*.

**Medications Data Class** – Like labs, it is critical to provide attending clinicians with granular data on their patient’s medications, not only to facilitate smooth continuity of care but to safeguard patient safety. We were pleased ONC commenced a modest build-out of the data elements of the Medication Data Class in Version 3, and urge the staff to continue adding new elements to Version 4. Specifically, we recommend adding Level 2 elements related to:

- *Medication Date Administered*
- *Medication Date Prescribed*
- *Medication Administered Code*
- *Medication Administration Dose*
- *Medication Prescribed Code*
- *Medication Prescribed Dose*
- *Medication Prescribed Dose Units*

**Procedures and Vital Signs Data Classes** – Consistent with our other comments that emphasize the addition of data elements that address date and timing, we recommend the Level 2 data element for *Procedure Timing* be added to the Procedures data class. Similarly, the *Vital sign results: date and timestamps* should be added to the Vital Signs data class.

We conclude by noting that several of the data elements recommended above are not only part of Level 2, but are also supported by US Core STU 3.1.1, which, as ONC is aware, is the implementation specification for the FHIR Release 4 standard. Specifically, *Laboratory Test/Panel Code, Vaccine Administration Date, Immunization Code, Immunization Status, Procedure Timing, Vital Sign Date and Time, Medication Date Prescribed and Medication Prescribed Code* are all data elements required by US Core. Other elements such as *Laboratory Results Value* and *Laboratory Test Performed Date* are both considered “must support” by US Core if available. Given that FHIR adoption is required by December 31, 2022, we urge ONC to be more ambitious in building out the USCDI, particularly if that build-out includes data elements also supported by FHIR/US Core.

Thanks again for the opportunity to share our views. If you have questions or want to discuss our response in more detail, please contact Bob Hussey at bob@bobhussey.com or (612) 281-8741 who can connect you with the appropriate staff at Wolters Kluwer.