401 West 15th Street
Suite 800
Austin, TX 78701

Office +1.512.363.5826
cdisc.org

21 April 2025

Steven Posnack, MS, MHS
Acting Assistant Secretary for Technology Policy
Acting National Coordinator for Health Information Technology
Assistant Secretary for Technology Policy (ASTP)
Department of Health and Human Services
Hubert Humphrey Building, Suite 729
200 Independence Avenue SW Washington, DC 20201

Submitted electronically to:
https://www.healthit.gov/isa/ONDEC

RE: ONC's Draft United States Core Data for Interoperability (USCDI) Version 6.0

Thank you for the opportunity to review and provide comments on the draft USCDI V6.0, the standardized set of health data classes and constituent data elements for nationwide, interoperable health data exchange. As USCDI data elements increase in granularity and precision, greater opportunities arise to support the use of real-world data (RWD) for clinical research.

CDISC recommends the following data classes and data elements be added to USCDI v6.0:

- Research Study
  - Name
  - Status (enrolling, completed, etc.)
- Research Subject
  - Identifier

We suggest, in addition to the various terminologies present within the USCDI data elements, that the NIH NCI Enterprise Vocabulary System (EVS) C-Codes be added where appropriate. The NCI Metathesaurus (NCIm) is a wide-ranging terminology database that covers most terminologies used by NCI for clinical care, translational and basic research. Its core reference terminology and biomedical ontology maps 7.5 million terms from more than 100 sources into 3.2 million concepts. Adding NCI C-Codes will facilitate clinical research from the point of care and beyond. The EVS C-Codes are required for regulatory submissions to FDA and Japan's PMDA and are currently used by researchers around the world.

RWD plays an increasingly important role in clinical research and health care decision making. CDISC supports the development of ASTP/ONCs USCDI Common Data Elements, which facilitate the use of rich electronic health data from sources outside the regulatory submission use case while ensuring consistency and reliability of the data.

It is well-known that, because RWD is not collected with research as its primary purpose, there are significant challenges in using and representing these data for research purposes. These

401 West 15th Street
Suite 800
Austin, TX 78701

Office +1.512.363.5826
cdisc.org

challenges include bias, data variability and heterogeneity, which can make analysis of RWD difficult and resource consuming. There are numerous benefits of connecting RWD to CDISC Standards: structuring the data in a format compatible with regulatory review tools, fostering data sharing, facilitating cross-study and metadata analysis.

CDISC began as a volunteer grass roots initiative in 1997 in response to the need to better structure and improve the quality and consistency of data in clinical research. Today, CDISC is a small but global non-profit standards development organization (SDO) with over 1100 volunteers across the research spectrum contributing their time and expertise to developing CDISC standards.

Required by the FDA and Japan's Pharmaceuticals and Medical Devices Agency (PMDA), recommended by the China National Medical Products Administration (NMPA) and adopted by the world's leading research organizations, CDISC Standards enable the accessibility, interoperability, and reusability of data. With the help of CDISC standards, the entire research community can maximize the value of data for more efficient and meaningful research that has invaluable impact on global health. Additionally, CDISC collaborates with fellow SDOs to develop standards that are synergistic to support a learning health system based upon high-quality research.

CDISC has been involved in several successful initiatives that have leveraged RWD in clinical research supporting the conversion and aggregation of RWD with the standard CDISC study data. These initiatives pave the way for bridging the worlds of healthcare and clinical research to facilitate creation of the learning health system:

- The Code Map Services for Interoperability of Common Data Models and Data Standards (a collaborative project among NIH/NCATS, NIH/NCI, ONC and FDA, funded through the PCOR Trust Fund) is solving the problem of multiple common data models (CDMs), including CDISC SDTM, that are critical for patient-centered outcome studies using real world data; because these CDMs are not interoperable, mappings are being catalogued and conversions automated. Code Map Services will provide researchers with an automated tool such that data stored in one CDM format can be automatically converted into another CDM format (similar to "Google Translate").
- xShare project is a collaborative initiative funded through the European Commission with forty consortia members, six of which are standards development organizations. Similar to the ONC goals, xShare is working towards enabling individuals access to their data in a user-friendly format to facilitate cross-border healthcare and data access, streamlined clinical research and public health through standards. Clinical research is global, as are its standards. The vision is enabling seamless sharing of health data through a minimum core data element set and an agreed upon format based on the International Patient Summary.
- The following published HL7 Vulcan Implementation Guides facilitate bridging the worlds of healthcare and clinical research, aligned with CDISC standards: Retrieval of Real World Data

401 West 15th Street
Suite 800
Austin, TX 78701

Office +1.512.363.5826
cdisc.org

for Clinical Research, Adverse Event Clinical Research, and Clinical Study Schedule of Activities.

- Through collaboration with TransCelerate Biopharma on the Digital Data Flow Project, CDISC has been working with stakeholders including ICH M11, and Vulcan HL7 FHIR towards enabling clinical trial digitalization, from the protocol through the entire research process to analysis and reporting. This will facilitate clinical content and data reuse across the continuum of care.
- To facilitate the use of Real-World Data in the CDISC format, CDISC published the Considerations for SDTM Implementation in Observational Studies and Real World Data.
- The PHUSE Research on FHIR collaboration included participants from CDISC, FDA, and industry to produce several pilots and associated papers demonstrating the use of FHIR to provide RWD to populate CDISC datasets and CRFs. The papers produced as part of this program are listed on the CDISC website.
- CDISC completed the FDA BAA (HHSF223201510105C), which demonstrated eSource using HL7 FHIR resources and the CDISC ODM Data Exchange standard. This research used FHIR to retrieve EHR data to pre-populate ODM-based case report forms for a multi-center study with sites from different health systems. Novel middleware software was developed to arbitrate the exchange.
- CDISC worked with the HL7's Biomedical Regulation & Research (BR&R) Work Group to develop a FHIR to CDISC Laboratory Data Mapping Overview with the goal of facilitating the flow of data into submission data sets. CDISC and PHUSE are working with the BR&R group to develop the CDISC ODM to FHIR Mapping to map the entirety of ODM and its extensions (SDM-XML, Define-XML, CTR-XML) to FHIR resources.
- CDISC participated in the OHDSI Clinical Trials Working Group to publish the "Clinical trial conventions for the OMOP Data Model," which mapped data formatted in CDISC's Study Data Tabulation (SDTM) to OMOP. A summary of this work can be found on the OHDSI web site.
- CDISC published the FHIR to CDISC Joint Mapping Implementation Guide v1.0, which provides a mapping to extract EHR data into the SDTM. The Implementation Guide is also posted to the HL7 website and provides the same content in a format similar to other FHIR implementation guides.
- CDISC has launched the 360i initiative to add an additional semantic layer (i.e. biomedical concepts) to connect the CDISC content and enable standards driven automation across the study information lifecycle from study design through analysis results. These biomedical concepts leveraging existing standards and terminologies (e.g. NCI/EVS, MedDRA) are much broader than a single data element linking the information to its use (e.g. design, collection, analysis). As part of 360i, CDISC and industry plan to define a holistic framework to stream RWD into the clinical research process.

401 West 15th Street
Suite 800
Austin, TX 78701

Office +1.512.363.5826
cdisc.org

Thank you for your consideration of our comments. We welcome the opportunity to engage in further discussion on this important topic.

Sincerely,

Chris Decker, CEO & President
Rebecca Baker, MS, MHA, BSN, RN, Standards Development

References:

- https://evs.nci.nih.gov/
- https://www.nlm.nih.gov/research/umls/index.html
- https://ncim.nci.nih.gov/ncimbrowser/