CDISC Standards: Evolving to Meet Submission Needs

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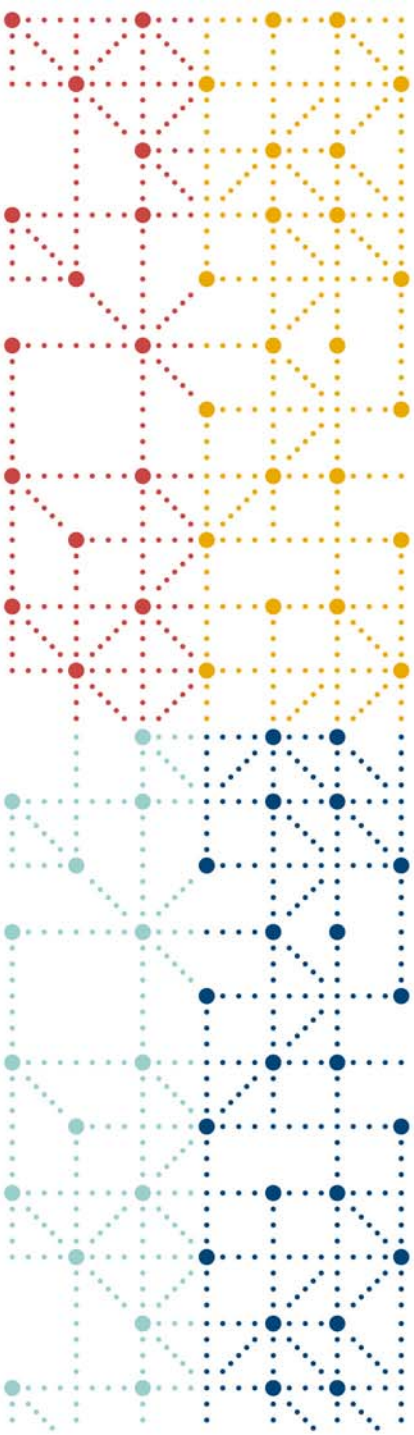
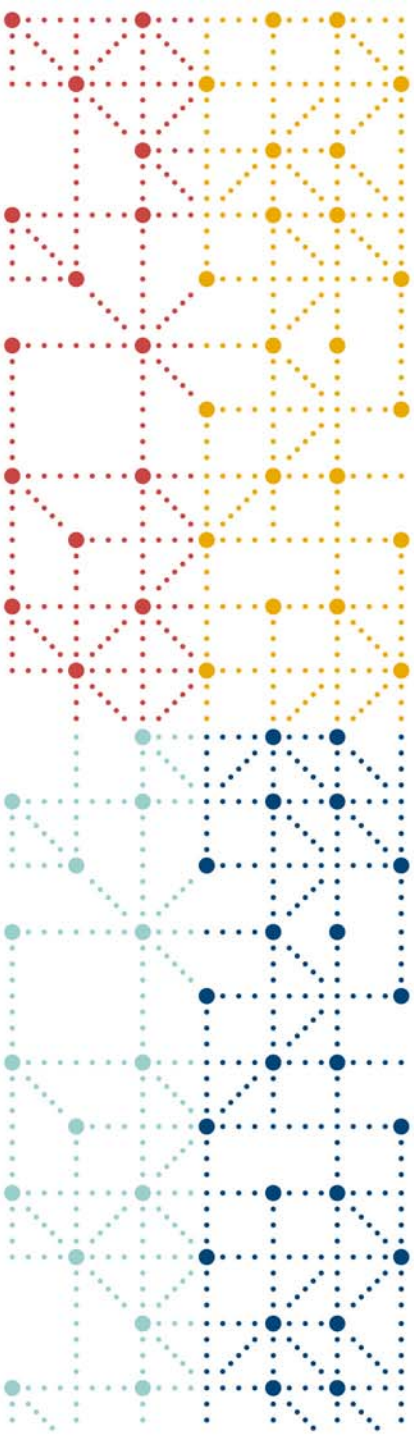


Agenda

1. CDISC and Submissions
2. Improving the Standards
3. Improving Access to the Standards

CDISC and Submissions

- The theme of this meeting is Sharing Solutions for e-Submissions: Making it Matter, Making it Happen
- CDISC generally doesn't produce e-Submissions
  - Exception was SDTM/ADaM pilot reported in 2008, which produced a mock submission
- CDISC develops standards used in e-Submissions
- CDISC is improving access to the standards



Improving the Standards

Additions to the Standards: Therapeutic Areas

- Therapeutic Area Standards drive most addition of content
  - Over 30 published
- Publication upcoming:
  - Clostridium Difficile Associated Diarrhea
  - Colorectal Cancer
  - HIV (Prevention and Treatment)
  - Post Traumatic Stress Disorder
- Currently out for public review:
  - Traditional Chinese Medicine for Coronary Artery Disease – Angina
  - Nutrition
- Starting:
  - Type 1 Diabetes (Pediatrics, Devices, Exercise, Prevention)
  - Psoriasis
  - Coronary Heart Disease
  - Acute Kidney Injury

Additions to the Standards: Controlled Terminology and Questionnaires, Ratings and Scales

- Controlled Terminology
  - Requests from Therapeutic Area projects and from implementers
  - Lab CT team dealing with new complex types of data
    - Antibodies and other immunogenicity tests
    - Flow cytometry tests involving presence or absence of receptors on white cells
  - Variable Definitions: team working on SDTM variables
  - CDISC Glossary team is adding definitions of protocol elements
- Questionnaires Ratings and Scales
  - Requests from Therapeutic Area projects and from implementers
  - Process change: now undergoing public review
  - Development tool highlights instrument-specific text.
  - First ADaM supplement for a questionnaire upcoming

Additions to the Standards: New SEND Implementation Guides

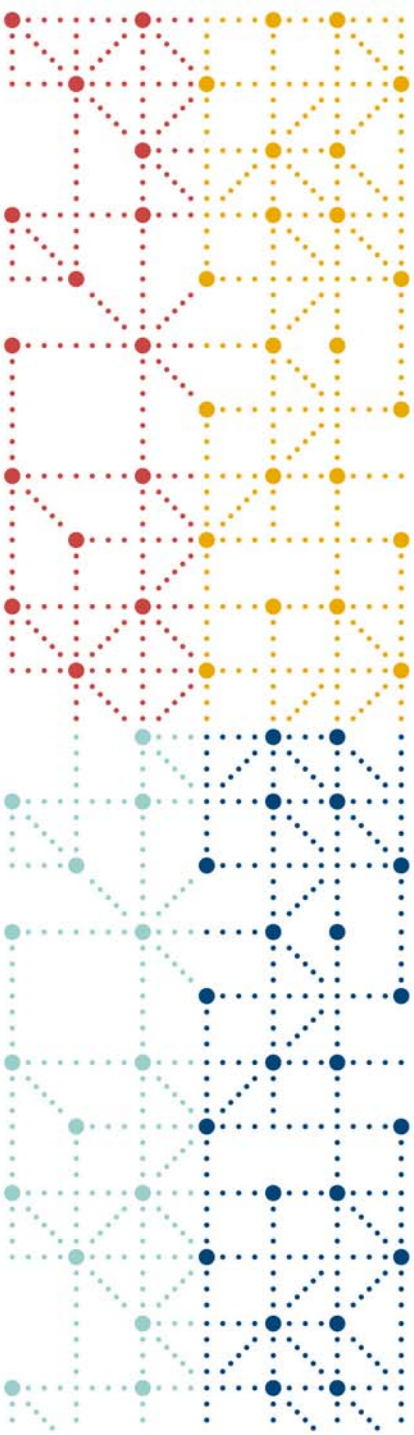
- SENDIG-DART (Developmental and Reproductive Toxicology)
  - Published in 2017 with SDTM v1.6
  - SEND-only Trial Design datasets and new timing variables dealing with reproductive stages
- SENDIG-AR (Animal Rule)
  - Publication in 2019 with SDTM v1.8
  - Animal Rule allows approval of therapies based on animal studies when studies can't be conducted in humans
  - Studies involve administration of a "challenge agent" such as a pathogen, toxic substance or radiation
  - New dataset for challenge agent characterization
  - New demography variables for start and end dates of challenge agent
  - New timing variables for days relative to challenge agent and study treatment

Additions to Standards: New Modeling in the SDTMIG

- Non-host Organism Identifier (in SDTMIG v3.3)
  - Replaces proposed variables Species and Strain from SDTMIG-PGx
  - Study Reference dataset OI allows definition of an identifier using classification appropriate to the organism
  - Variable NHOID used in records for findings where the subject is an organism rather than the host (study subject)
- Disease Milestones (in SDTMIG v3.3)
  - A disease milestone is something unscheduled that triggers collection of data
    - Diagnosis of a disease
    - Adverse events of special interest
    - Test values of special concern
  - Trial Disease Milestones (TM) dataset defines these for a study
  - Subject Disease Milestones (SM) dataset summarizes these for a subject (like SE, SV)
  - Disease Milestones timing variables represent timing relative to a disease milestone
    - Like other timing variables, allows linking of records without the use of RELREC
- SDTM Draft Domains in the CDISC wiki
  - Available to anyone who registers for the wiki: https://wiki.cdisc.org/display/SDD

Clarifications and Corrections

- Errata (corrections to minor errors)
  - Now available in the public area of the CDISC wiki https://wiki.cdisc.org/display/CDISCKIE/Errata
  - Organized by standard, foundational or therapeutic
- Clarifications to the SDTMIG
  - In SDTMIG v3.3
    - Disposition events for both the end of study participation and study treatments
    - Multiple informed consents
    - Representing arm and actual arm for subjects not eligible, not assigned, not treated
  - Planned for 2019
    - Race and ethnicity (catch up with CDASH and new FDA guidance)
    - Changes to SC and SS (to avoid tests whose domain depends on number of times collected)
    - Location variables differentiating between where you looked and where you found something
    - Site summary domain (like TS, but at site level)
  - Beyond 2019
    - Multiple subject instances (e.g., rescreening)
    - Horizontal supplemental qualifiers



Improving Access to CDISC Standards

Access facilitated by SHARE

- Downloads
  - Standards metadata in multiple formats
  - Diff files with changes between versions
- SHARE API
  - Enables systems to interface with SHARE MDI
- SHARE 2.0
  - New MDR release by the end of 2018
  - New “metamodel” which will allow the inclusion of much more metadata and relationships
- SHARE FAQs https://www.cdisc.org/faq/share

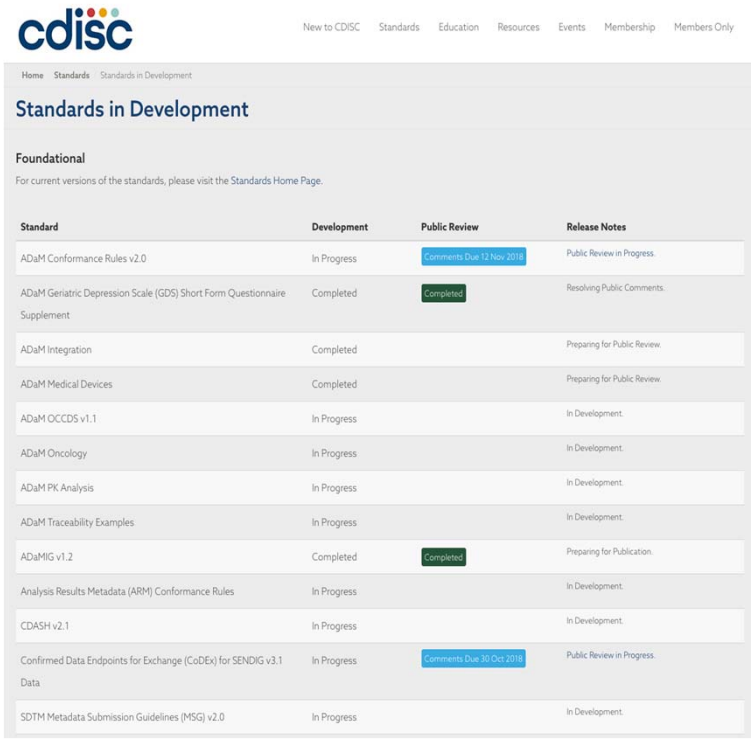
Coming: Example Library

- Proliferation of TA User Guides and Implementation Guides makes it hard to know where to find relevant implementation advice
- CDISC has received an “Innovation” grant from the Helmsley Charitable Trust that will support development of an example library.
- Aim is to be able to access all examples from a central location.
- Examples tagged to enable searching by standard, domain, therapeutic area, etc.
- The example library has been on our wish list for a few years; concrete work on implementation, including processes for curation and maintenance, is just starting.

Coming: End-to-End Pilot

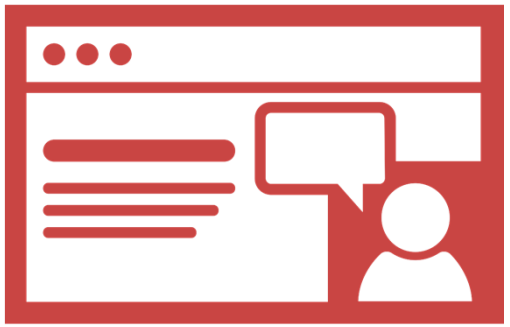
- The innovation grant will also support a pilot to demonstrate end-to-end automation using CDISC standards.
- Three phases:
  - Starting from analysis, specify ADaM to SDTM to CDASH, with Define-XML for traceability
  - Starting from CDASH, build empty CRFs, database, datasets, analysis shells, Define-XML documents
  - Starting from CDASH, populate with sample data
- Use one or two analyses from TAUG-Diabetes to define the scope for this pilot
- Goal: Demonstrate that CDISC standards can drive end-to-end automation and/or find the gaps that need to be filled
- Interested in participating? Watch for announcements via CDISC emails.

Know What's Coming in CDISC Standards

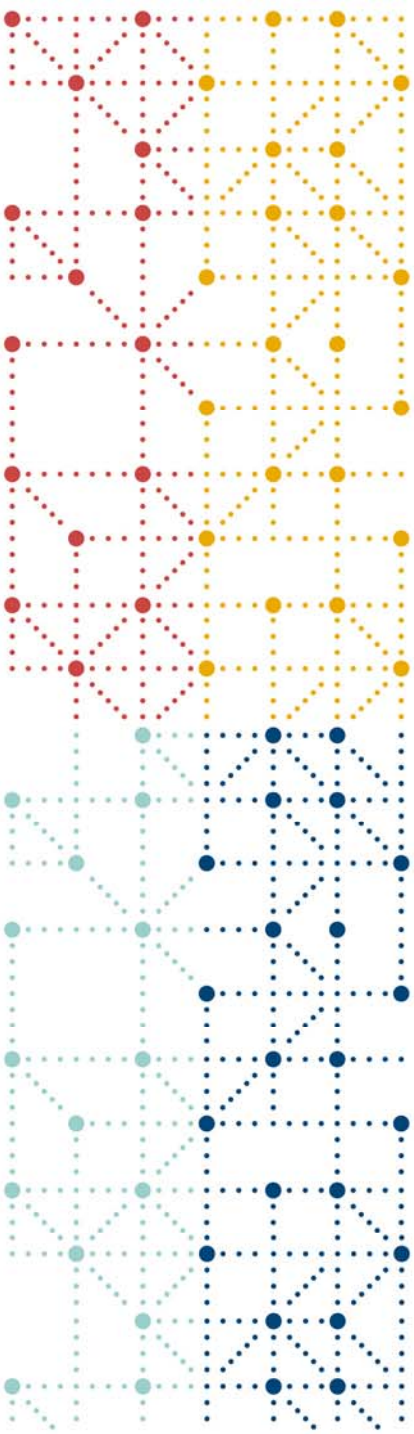


Standards in Development page on CDISC website

Stay Informed button on CDISC website to sign up for emails



Attend our Public Review Webinars



Thank You!

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