

WITH STANDARDS – UNLOCK THE POWER OF DATA



2022
US
INTERCHANGE
26-27 OCTOBER | AUSTIN





Meet the Speaker

Amy Palmer

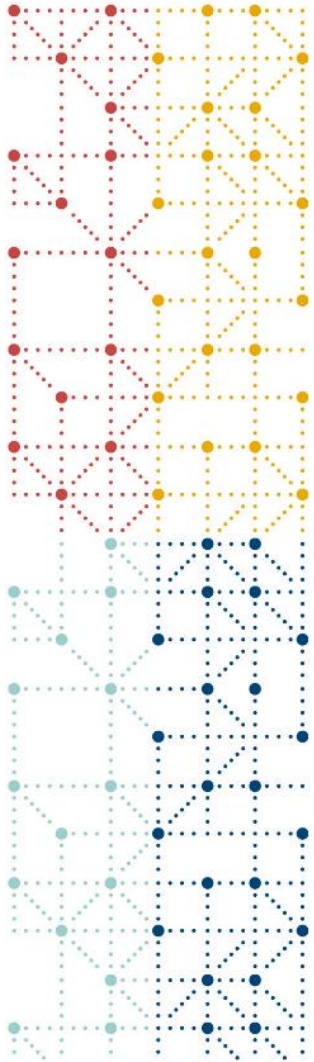
Title: Head of Standards Development Operations

Organization: CDISC

Amy Palmer is the Head of Standards Development Operations at CDISC. Amy has been with CDISC since 2013. She is a member of the CDISC Technical Leadership Team and leads the Global Governance Group. Amy has over 28 years' experience working in clinical research. She has been involved in the development of multiple therapeutic area user guides as well the foundational standards and has been working with CDISC standards since 2010.

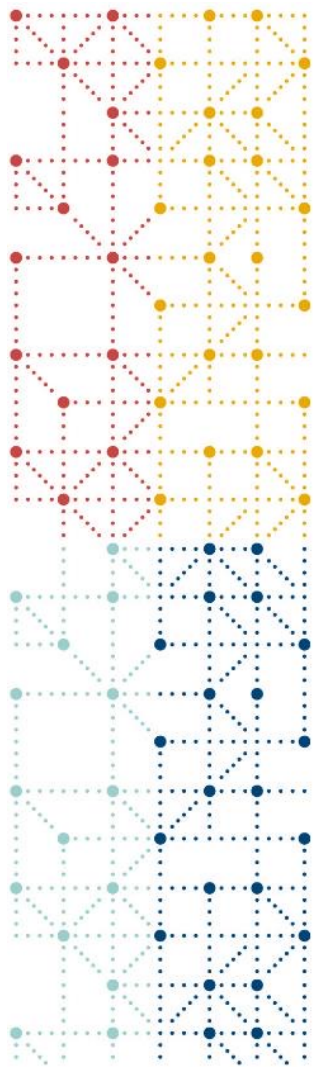
Amy has a BS from Mary Washington College and an MPH from the University of Montana.





Agenda

1. CDISC Standards Development Publications
2. New and Ongoing Standards Development Activities



**CDISC
Standards
Development
Publications**





Foundational Standards Publications

SDTM v2.0 and Conformance Rules

SDTMIG v3.4 and Conformance Rules

ADaMIG v1.3 and Conformance Rules

ADaMIG OCCDS v1.1 and Conformance Rules

ADaMIG Medical Devices v1.0 and Conformance Rules

ADaMIG Non-compartmental Analysis v1.0 and Conformance Rules

All documents simultaneously
published 29 November 2021 on
CDISC Website and in CDISC Library



TAUGs and Other Publications

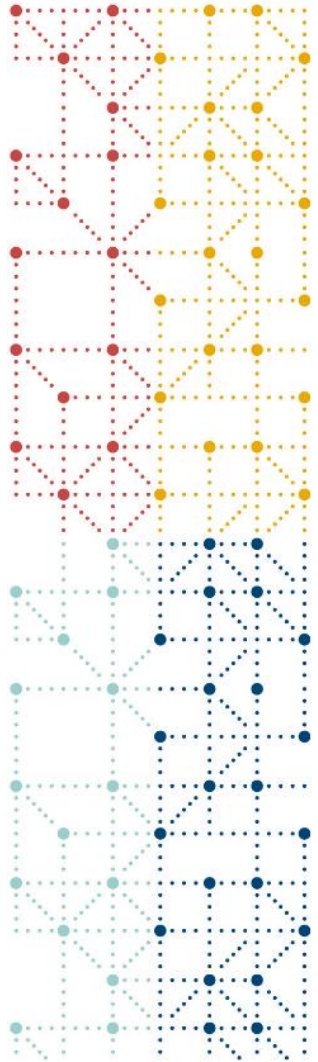
**Type 1 Diabetes –
Screening, Staging and
Monitoring of Pre-clinical
Type 1 Diabetes**

**ADaM Examples of
Traceability**

**Quarterly Controlled
Terminology
Releases**

QRS Supplements

**CDISC Glossary
v16.0**



New and Ongoing Standards Development Activities



Standards and Therapeutic Area User Guides in Development

ADaM Oncology Examples	ADaM Metadata Submission Guidelines	ADaM popPK Implementation Guide	ODM v2.0	SENDIG – DART v1.2
SEND Tumor Combinations	SENDIG - Dermal Ocular v1.0	SENDIG – GeneTox v1.0	SDTMIG- Medical Devices Conformance Rules	Tobacco Implementation Guide v1.0
Safety User Guide v1.0	Pediatrics User Guide v1.0	Rare Diseases TAUG v1.0	COVID TAUG v2.0	TCM – Acupuncture TAUG v1.0

<https://www.cdisc.org/standards/in-development>



Foundational Standards Development Highlights

ADaM – Planning for a consolidated ADaMIG

SDS – Multiple Subject Participations – DM and DC domains

CDASH – Aligning with SDTMIG v3.4 including GF and CP domains

SEND – Implementing new domains including IS, CP, PI, OE, and SX

Medical Devices – Addressing how to represent multiple device components

Domain Scope Changes Across SDTMIG v3.2 through SDTMIG v3.4



IGv3.2

- **IS** domain scoped for study therapy-induced subject immune response.
- **LB** domain scoped to include other non-host microorg and subject immune response assessments.
- **MB** domain scoped to include some non-host microorg identification tests only.



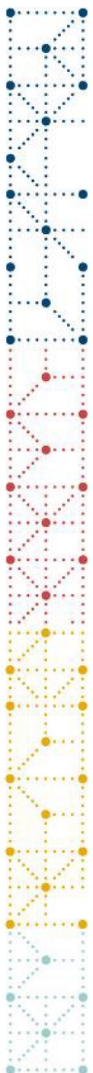
IGv3.3

- **IS** domain scoped for study therapy-induced subject immune response.
- **LB** domain scoped to include other subject immune response assessments but no non-host microorg tests.
- **MB** domain scope broadened to include all detection, identification, quantification, and other characteristics assessments of non-host microorg, via direct detection methods and indirect, induced-host/subject immune response.



IGv3.4

- **IS** domain scoped for any antigen (incl. therapy and microorg) induced subject immune response.
- **LB** domain no longer contains non-host microorg or subject immune response assessments.
- **MB** domain contains “direct” detection, identification, quantification, and other characteristics assessments of non-host microorg. It no longer contains microorg induced-subject/host immune assessments.



Domain Scope Changes Affect CDISC CT

- The change in the LB, MB, and IS domain scope will result in the deprecation of approximately 400 antibody TEST and TESTCD values from both the LB and MB domains, and instead,
- These terms will be remodeled in the IS domain, using IS domain standard variables including but not limited to: ISTEESTCD, ISBDAGNT (Binding Agent), and ISTSTDTL (Test Detail)
- Changes announced at the CT Webinar on 2022-10-04
 - <https://www.cdisc.org/events/webinars>
- Announcements/presentations at public meetings
- Topic integration into CDISC education courses

Note: There is no plan to immediately deprecate the affected antibody LBTEST-CD/MBTEST-CD terms. Deprecation will happen in December 2023.



Collaboration with National Organization for Rare Disorders (NORD)

Document scope includes cross-cutting concepts, endpoints, questionnaires, terminology

Public Review anticipated Q1 2023



Topics of interest:
Diagnosis – Genetic Testing; Family History; in vivo and ex vivo gene therapies

Pediatrics User Guide

Publication planned December 2022



Areas of Focus

- Information about the subject (e.g., demography, vital signs, diet and nutrition, body system assessments)
- Information about the subject's family (e.g., medical conditions, medications, substance use)
- Pregnancy and Birth
- Study Conduct
- QRS

DRAGON: An IMI-Funded Project

Develop AI-enhanced tools for evaluating COVID patients' *CT scans* and *clinical data* to provide accurate diagnoses and predict patient outcome.

cdisc's Role



EHR data harmonization design and mapping support to feed data to AI

COVID-19 User Guide v2.0 Imaging Guide

Considerations for using CDISC standards for observational research

CDISC Basic: abridged CDASH & SDTM for non-submission research



CDISC eCRF PORTAL

- The eCRF Portal provides machine readable eCRFs
 - Visual representation of CRF layout with CDASH annotations
 - Machine-readable ODM format
- Includes CRFs from:
 - CDASH Implementation Guide v2.1
 - Crohn's Disease Therapeutic Area User Guide
 - Upcoming – COVID-19 Therapeutic Area User Guide
 - 54 eCRFs to date (Oct 2022)
- Formedix offers the Ryze platform at no cost
- Used as a base to create OpenClinica and REDCap CRFs



Tobacco Implementation Guide (TIG) v1.0

- Proactively designed to reflect use cases unique to tobacco studies
- A single, comprehensive implementation guide for tobacco studies



An overview of standards and general implementation

With guidance by topics and use cases; e.g.

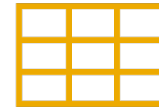
- Product Description
- Nonclinical
- Clinical Studies



Key scientific concepts and maps



Data Collection (CDASH eCRFs, ODM-XML)



Data Tabulation (SEND, SDTM Human Clinical, Define-XML)



Analysis (ADaM, Define-XML)



Common Language (*Controlled Terminology*)



Measures of Adherence (*Conformance Rules*)



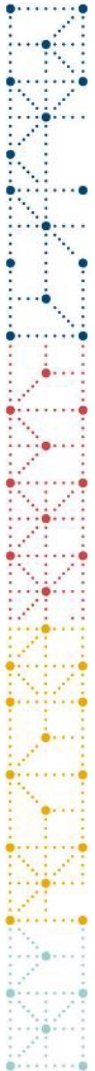
Accessible in platforms which optimize use (including CDISC website, CDISC Library)



Education and Outreach (including webinars, formal training)



cdisc





Learn More About the Tobacco Implementation Guide

Session 8: Closing Plenary, Global Regulatory Presentations and Panel Discussion

Thursday, 15:30 – 17:30

Ballroom A

FDA-CTP and CDISC Project to Develop Tobacco Related Standards to Achieve Efficiencies for All Stakeholders

16:00 – 16:30

Christine Connolly, CDISC; and Amy Malla, FDA-CTP



Digital Data Flow Phase 2 Overview

- Enhancements/bug fixes from DDF Phase 1
- Updates to accommodate Biomedical Concepts to facilitate EDC Automation
- Updates to add additional structured elements enabling export and population of the TransCelerate Common Protocol Template
- Updates to the model in order to cater for more complex study designs
- Updates from Connectathon feedback (still being collated)

Deliverable	Development Format(s)	Final Format(s)	Official CDISC Standard
1. User Stories	WIKI	Integrated into Implementation Guide as user narratives	No
2. Visual Diagram: Relationships Among Standards	.cmap, .pdf	.pdf	No
3. Unified Study Definition Model (USDM) Class Diagram	.png, .eapx, .xmi	.png, .eapx, .xmi	Yes
4. CDISC Controlled Terminology	.xls	NCI EVS vocabulary formats (.OWL, .html, .pdf, .txt, .xls)	Yes
5. Application Programming Interface (API) Specification	.json, .yaml	.json, .yaml	Yes
6. USDM Implementation Guide	WIKI	.pdf	Yes



Digital Data Flow Phase 2

Session 5: Track B - Trial Design

Thursday, 8:30 – 10:30

Ballroom B

TransCelerate Digital Data Flow: An Update on DDF Phase 2

8:30 – 9:00

Mikkel Traun, Novo Nordisk A/S and Vijay Reddi, Roche Products Ltd

COSMoS Conceptual & Operational Standards Metadata Services

Pragmatic Implementation of Biomedical Concepts

- Reduce variability by extending foundational standards
 - explicit variable relationships
 - improved semantics
 - operational metadata
- Light-weight curation and governance process
- Biomedical Concepts available via CDISC Library APIs
- End goal is to reduce variability in standards implementations, increase metadata-driven automation



Biomedical Concepts and COSMoS Presentations

Session 2: Second Opening Plenary - CDISC Looking Ahead

Wednesday, 11:00 - 12:30

Ballroom A

Biomedical Concepts Vision and Value for the Community

Bess Leroy and Jon Neville, CDISC

Session 6, Track B - Business Optimization & Technical Topics

Thursday, 11:00 – 13:00

Ballroom B

COSMoS Technical Implementation, API Layer and Use Cases

Lex Jansen & Linda Lander, CDISC



CORE To Date



2022 - SEP

Transition to Open-Source

- Start of CORE Roadmap Board
- CORE in GitHub
- Initiation of SDTMIG 3.2, 3.3, SENDIG, ADaMIG

2022 - JUL

Next Phase

- Virtual Private Cloud Evaluation Deployment
- End Microsoft engagement

2021 – APR

EU Interchange

- First notice

2021 - JUL

Kick-off

- Kick-off meeting
- Start Microsoft engagement
- Sprint 0

2022 - APR

EU Interchange

- CDISC-Provided Cloud Evaluation Deployment
- Rules Authoring Tool
- 210 of 336 executable rules in SDTMIG 3.4

5 sprints

19 sprints



Learn More About CORE

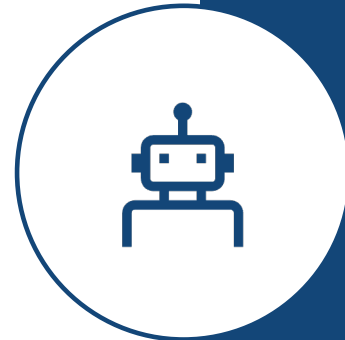
Session 2: Second Opening Plenary - CDISC Looking Ahead

Wednesday, 11:00 - 12:30

Ballroom A

CDISC Conformance Rules and the CORE Engine
Progress and Roadmap

Peter Van Reusel, CDISC Chief Standards Officer





Analysis Results Standards



Unnecessary variation in analysis results reporting



Limited CDISC standards to support analysis results and associated metadata



CDISC has been working towards creating standards to support, consistency, traceability, and reuse of results data



We anticipate that the CDISC work will support sponsor submissions of analysis results in a standard format that aligns with the FDA effort to standardize safety tables and figures

Analysis Results Standards Presentations

Session 5: Track C - CDISC Fundamentals

Thursday, 8:30 – 10:30

Bluebonnet

CDISC Analysis Results Standards - Approach and Development Update

Bhavin Busa, Independent; and Andrew Miskell, Eli Lilly and Company

Session 7: CDISC Special Topics

Thursday, 14:00 - 15:00

Ballroom A

Advancing Pre-Market Safety Analytics

14:30 – 15:00

Dr. Vaishali Popat, FDA-CDER; and Bess LeRoy, CDISC



RWD and the Regulatory Environment

China's NMPA

国家药品监督管理局药品审评中心
CENTER FOR DRUG EVALUATION, NMPA
国家药品监督管理局药品审评中心
国家药品监督管理局药品审评中心

关于公开征求《真实世界证据支持药物研发的基本考虑》意见的通知

发布日期: 20190529

为贯彻落实《关于改革药品医疗器械审评审批制度的意见》(国发〔2015〕44号)以及中共中央办公厅、国务院办公厅印发的《关于深化审评审批制度改革鼓励药品医疗器械创新的意见》(厅字〔2017〕42号)精神,鼓励并支持药物研发过程中,存在临床试验不可行或难以实施等情形,利用真实世界证据用以评价药物研发的一种策略和路径。

为了促进各方对真实世界证据的理解,探讨其在药物研发中的应用场景,探究其评价原则,经广泛征求意见,形成了《真实世界证据支持药物研发的基本考虑(征求意见稿)》。

我们诚挚地欢迎社会各界对征求意见稿提出宝贵意见和建议,并及时反馈给我们,以便后续完善。本意见稿自发布之日起3个月。

您的反馈意见请发送到以下联系人的邮箱:
联系人: 赵斌、高丽娜
联系方式: zhaobin@cdde.org.cn, gaoln@cdde.org.cn
感谢您的参与和大力支持。

附件 1: 《真实世界证据支持药物研发的基本考虑(征求意见稿)》中文版.docx
附件 2: Key Considerations in Using Real-World Evidence to Support Drug Development(Draft for Public Review).docx
附件 3: 《真实世界证据支持药物研发的基本考虑(征求意见稿)》起草说明.doc

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<http://www.cde.org.cn/news.do?method=IargInfo&id=23a2b4cbe0807fe2>

US FDA

U.S. FOOD & DRUG ADMINISTRATION

FRAMEWORK FOR FDA'S REAL-WORLD

December 2018
www.fda.gov

<https://www.fda.gov/media/120060/download>

EU EMA

EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

Regulatory Science 2025 Strategic Reflection

https://www.ema.europa.eu/en/document/s/regulatory-procedural-guideline/ema-regulatory-science-2025-strategic-reflection_en.pdf

https://www.ema.europa.eu/en/document/s/regulatory-procedural-guideline/ema-regulatory-science-2025-strategic-reflection_en.pdf

Japan's PMDA

Pharmaceuticals and Medical Devices Agency (PMDA)
独立行政法人 医薬品医療機器総合機構

Utilization of Real World Data
- PMDA's approaches -

23rd March, 2021

Health-related data are gathered and accumulated in the clinical practice day by day. These data are called Real World Data (RWD), and they include electronic health record, claims data, patient registry data, etc. RWD still provide valuable information related to the outcomes of using medical products, while RWD are not obtained in the same manner as well-designed clinical trials conducted to evaluate medical products.

At PMDA, we have already had some experiences of utilizing such existing data for evaluating benefit-risk balance in the regulatory process. For example, in the case of tacrolimus, RWD was utilized in its approval for an indication supplement of initial treatment for interstitial pneumonia associated with polymyositis/dermatomyositis. The indication was approved in 2013. Not only above case, but RWD has been utilized in some of new drug applications so far.

Although the PMDA has been making good use of RWD, it applied a case-by-case basis approach until recently. It might not be widely known RWD can be utilized for regulatory submission. In order to promote RWD utilization further by product developers, the PMDA has recently developed and finalized two guidelines below:

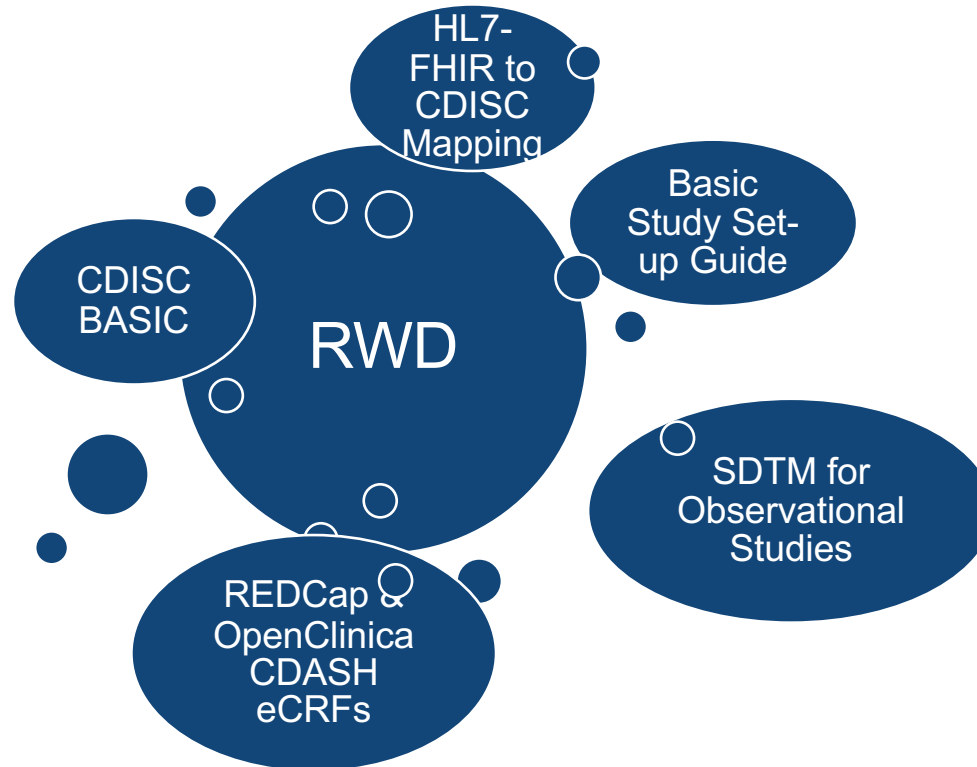
<https://www.pmda.go.jp/english/about-pmda/0004.pdf>

Exploring and promoting the use of high-quality RWD in decision-making as a strategic goal





CDISC Real World Data Resources





Why CDISC BASIC?

Shared data is hard to use if it is not in standard format

CDISC Standards were developed specifically for clinical research

Barriers to adopting CDISC standards

- Overwhelming (sheer volume)
- Siloed (separate standards for collection, tabulation, analysis, metadata)
- Originally written for those who worked with data in the pharmaceutical industry full time

Aim of CDISC BASIC: Lower Barriers to Using CDISC



Reduce volume by concentrating on most common data



Present collection and tabulation in an integrated manner



Write for an audience new to CDISC and less immersed in data handling



Link to other resources

REDCap and OpenClinica CRFs

CDISC resources such as

- eCRF Portal
- Knowledge Base
- Free educational courses and webinars

Specific CDISC Standards for more detail, when needed



Learn More About CDISC Basic

Session 4: Track B - Real World Data

Wednesday, 16:00 – 17:30

Ballroom B

CDISC BASIC Introduction

17:00 - 17:30

Diane Wold and Gary Walker, CDISC



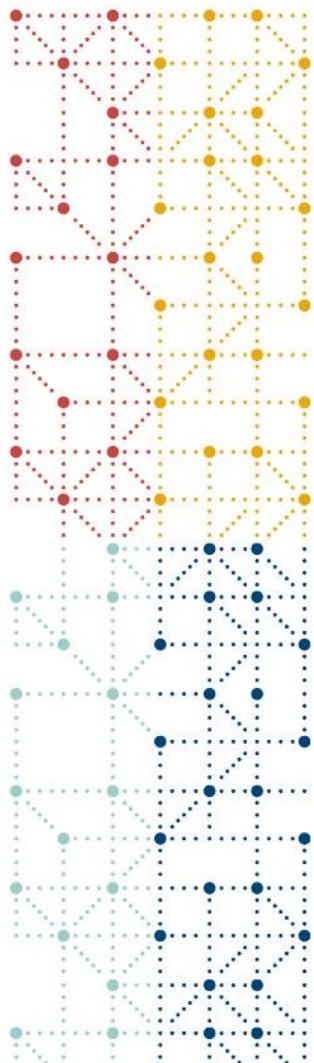
CDISC Volunteer Spotlight

CDISC's strength derives from the diverse perspectives of our community of volunteers

- Interviewed by CDISC Communications
 - Why volunteer?
 - Tips for those using CDISC Standards
 - What did you want to be when you grew up?
- Published monthly

<https://www.cdisc.org/volunteer/spotlight>





Thank You!

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