



# Pre-Workshop Webinar for Digital Data Flow (DDF): Mastering USDM

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## USDM is a foundational aspect of TransCelerate's Digital Data Flow Initiative which aims to break the document paradigm

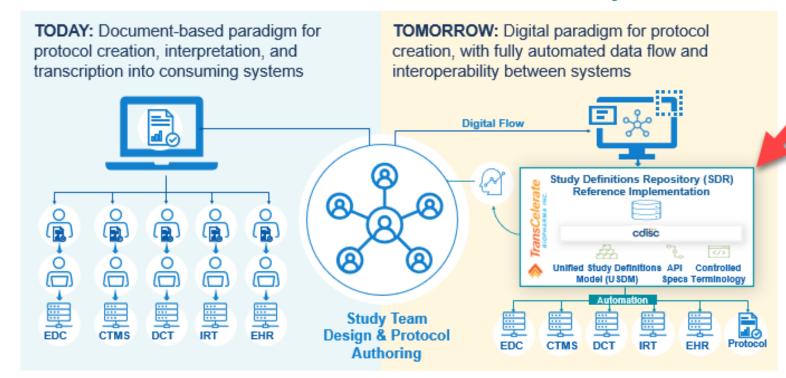
Documents to Data / Write Once, Read Many

**Digital** - standard representation of study protocol

- √ structured
- ✓ machine readable
- √ executable

**Data Flow** – industry-wide interoperability

- √ exchange of data
- √ non-cooperating organizations
- √ minimal effort



Eliminate non-value added activities, work smarter not harder Enable automation of downstream study startup and conduct processes Create foundation for study design analytics insights

#### The DDF Initiative consists of two main technical solutions

The standards component of the DDF solution is provided by the USDM





Unified Study Definitions Model (USDM) v2.0 – developed with CDISC; this is an industry standard for specifying and structuring study definitions (design & protocol information) in a digital, machine-readable format promulgated and maintained by CDISC.

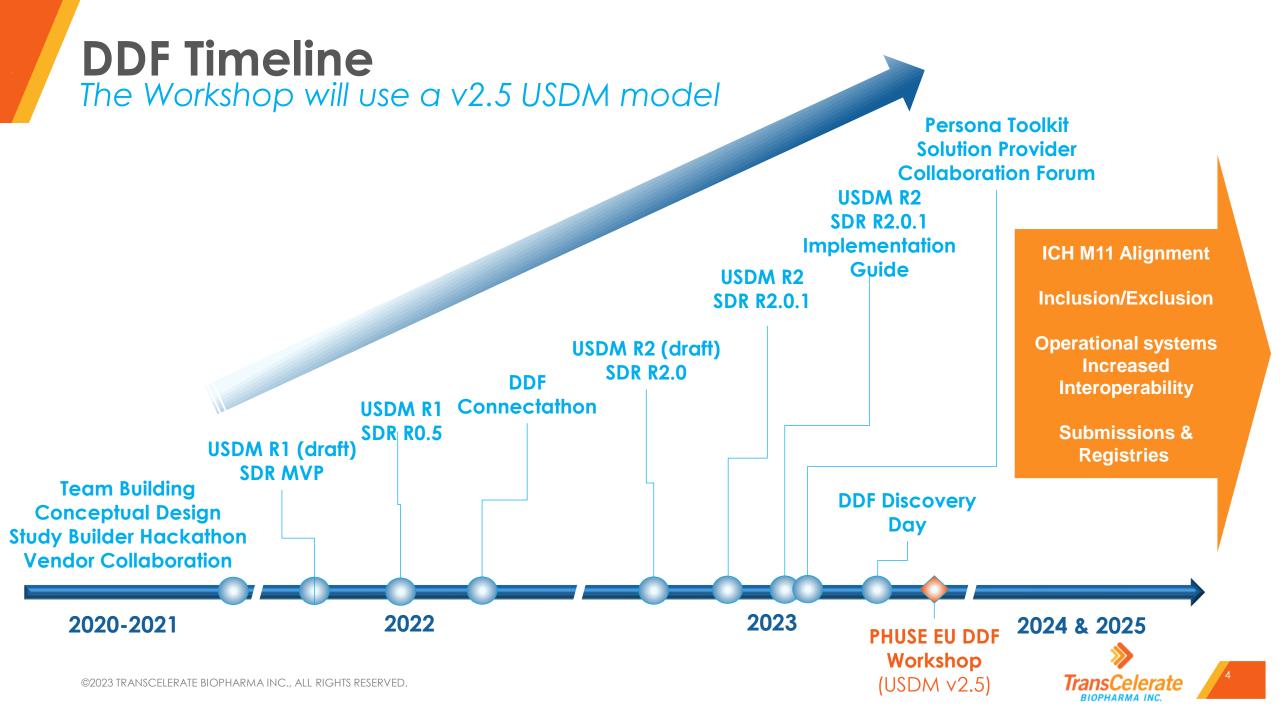


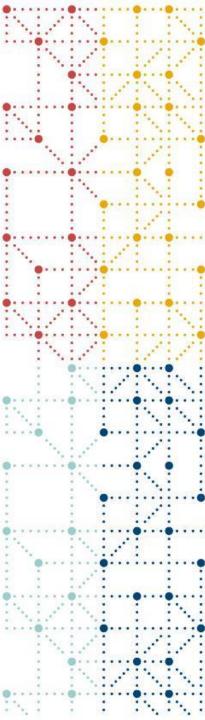
**Study Definitions Repository (SDR) v2.0.1** – Type of repository that is conformant with USDM and acts as a functioning, example approach to store protocol information and connect other producing and consuming systems to achieve interoperability. Source code is available under an open-source license.



https://transcelerate.github.io/ddf-home/





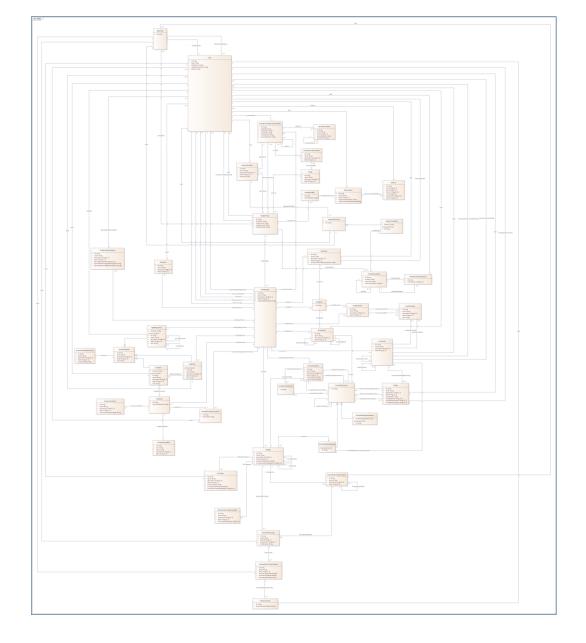


#### Agenda

- 1. Purpose
- 2. Focus Areas
- 3. Pre-reads
- 4. Tools
- 5. Protocol

#### Purpose

- Provide an understanding of the USDM model
- To do this we will use a MS Excel tool to "make it real"
- Not the purpose of this workshop to give you all the detail on using the MS Excel tool





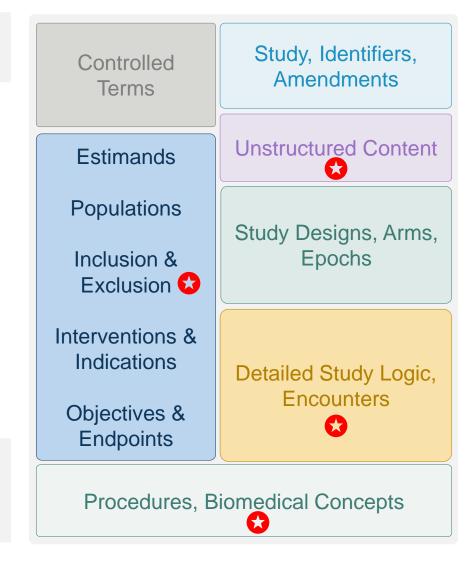
#### **Focus Areas**

Cannot cover every aspect in detail in an hour and a half. We will provide an overview and focus on some of the interesting aspects of the model

- Overview of model
- Inclusion / Exclusion Criteria
- SoA & Timelines
- Biomedical Concepts
- Footnotes
- Unstructured text & the ICH M11 document template
- Hands-on exercises & discussion

We will try and give you the most up-to-date information. We will be looking at release 2.5 of the USDM.

Remember this is "work in progress".





#### **Prereads**

Materials to look at prior to the workshop if you wish to. NOT compulsory!

Item	Link	Notes
Model (UML)	https://github.com/cdisc-org/DDF- RA/blob/main/Deliverables/UML/USDM_UML.png	Release 2.5
Controlled Terminology (XLSX)	https://github.com/cdisc-org/DDF-RA/blob/main/Deliverables/CT/USDM_CT.xlsx	Release 2.5
Implementation Guide (PDF)	https://github.com/cdisc-org/DDF-RA/blob/main/Deliverables/IG/USDM-IG.pdf	Work in progress
Informative Diagram (PNG)	https://github.com/cdisc-org/DDF- RA/blob/main/Documents/DDF%20USDM%20Model%20Informative.png	Release 2.5
Miro Board (Web)	https://miro.com/app/board/uXjVPI5X2AY=/	P: CDISC-DDF-SME  Currently as per release 2.0  Will be updated in the coming week to release 2.5

**Tools For The Workshop** 

- Laptop!
- Tools on Laptop
  - MS Excel
  - Text editor (e.g. VS Code)
- Web tools
  - USDM Web Tool
  - Web Text/JSON Comparison





#### **Web Tools**

No need to install any tools on your laptop other than MS Excel

Item	Link	Notes
Excel To JSON Tool	https://usdm-service.fly.dev/	Currently supports release 2.3.  Will be updated to release 2.5 this coming week
		U: PHUSE P: learning_usdm
Excel to JSON Tool readme	https://github.com/data4knowledge/usdm	Will be updated prior to the workshop (to release 2.5)
Excel to JSON Tool Infographic	https://github.com/data4knowledge/usdm/blob/main/docs/sheets.png	Will be updated prior to the workshop (to release 2.5)
JSON Comparison	https://www.textcompare.org/json/	Useful to see changes in the resulting JSON outputs

#### **Excel to JSON Utility**





#### **Example Protocol**

- We will use the CDISC Pilot Study Protocol for the workshop
- This was donated by Eli Lilly many years ago
- It has served CDISC well
- Download from here
  - https://github.com/cdisc-org/DDF-RA/blob/main/Documents/Examples/CDI SC\_Pilot/CDISC\_Pilot\_Study.pdf

The information contained in this clinical study protocol is Copyright © 2006 Eli Lilly and Company.

Xanomeline (LY246708)

Protocol H2Q-MC-LZZT(c)

Safety and Efficacy of the Xanomeline
Transdermal Therapeutic System (TTS) in Patients
with Mild to Moderate Alzheimer's Disease



#### **Next Steps: Summary**

### Prior to the workshop, be sure to complete the following

- □ Download the workshop materials from the dedicated CDISC Wiki page
- ☐ If you run into issues: arrive early! The workshop team will be available in the room starting at 14:00 to help resolve any issues
- □ Team will be available for approx. 1 hour following formal session conclusion to work through any specific examples or questions you want to bring

## For More Info: Scan QR Code to explore the DDF GitHub



https://transcelerate.github.io/ddf-home/

