

### CDISC Strategy and Roadmap Focus on Realizing the Long-Term Vision







### **End to End Study Information Lifecycle**







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## **CDISC Roadmap**

## **Roadmap Pillars and Objectives**



### Expand & Connect

- Embrace and adopt digital study design
- Expand and connect standards across the clinical research information lifecycle
- Define clear pipeline for integration of new data sources



### Enable & Automate

- Develop ready to use implementation standards
- Create open-source technology enabled standards
- Establish and manage a conformance framework



### Engage & Adopt

- Establish a continuous feedback loop across the CDISC community
- Shift focus to producers/consumers needs and lower the barrier to use
- · Prioritize communication to enable our stakeholders

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## **Expand & Connect: Digital Study Design**

- Unified Study Definitions Model (USDM)
  - · Holds many aspects of the study design
  - Facilitates interoperability between systems
  - Schedule of Activities = digital backbone of the protocol
    - Link Schedule of Activities to standard Concepts
  - Support study design activities



### • ICH M11

- Provide controlled terminology, aligned with USDM
- Collaborate with ICH and Vulcan to create exchange mechanism
  - Utilizing Digital Protocol (UDP)
- Support use cases and pilots (e.g. FDA PRISM)





## **Connect Design to Results**

- Mapping data from various formats often breaks down
  - The meaning and terminology do not match (e.g. eHR to SDTM)
  - Mapping between common data models is only a part of the solution
- We need well defined Concepts
  - Standardize the meaning and semantics of data
  - Regardless of data representation
- Concepts will
  - Link to the Schedule of Activities
  - Provide consistent implementation
  - Facilitate automation
  - Prevent AI from hallucinating







## **Close the gaps & Expand the standards**

- Ensure standards can represent all data
  - Analysis Results Standards (launched March 2024)
  - Common electronic data transfers (to start)
  - Explore structures to represent objectives & endpoints (to start)
- TMF is now integrated with CDISC
  - Roll out form TMF standards development process
  - TMF Controlled Terminology (in progress)
- Digitalize Trial Master File
  - TMF Art of the Possible to TMF Roadmap
  - TMF systems will integrate digital protocol information
  - Enrich TMF with metadata to support automation







## **Expand & Connect: Integrate Sources**

- Study data is originating from many sources
  - Electronic Data Capture systems and eCRFs
  - Various Data Transfers such as eCOAs, ePROs, eHRs
  - Digital Health technologies
- Provide more standards to ingest data
- Digital Health Technologies initiative
  - Partnership with DiME Library of digital endpoints
  - · Link resources to concepts, device attributes, domains
  - Standardize analysis of DHTs where applicable









## **Expand & Connect: Integrate Sources**

- Real-world data provides valuable insights but...
- Concerns about
  - Data quality
  - Data integration issues (fidelity)
  - Traceability
- RWD Lineage
  - Exchange mechanism to represent lineage, traceability and quality
  - Together with the data
- Continue partnering with NIH, IMI and other SDOs
  - Define core data elements





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## **Enable & Automate: Ready to Use Standards**

- Provide rich resources and examples
  - · normative standards with informative content
  - 'easy' to implement and understand
- eCRF portal
  - https://www.cdisc.org/kb
  - 70 eCRF resources and growing
  - Ready to download and use in eDC systems

### • eTLF portal

- Based on the Analysis Results Standard
- Analysis concept + ADaM metadata + ARS metadata + TFL example
- Ready to download and implement







### **Enable & Automate: Preconfigured example study**

- Complete preconfigured example study
  - Include all components from design to submission
  - Understand the normative gaps between standards

- Demonstrate and test the example study
  - Set-up Connectathon events with technology providers

- Collaborate with Regulatory to define use cases
  - Enabling better use of standards for review







## **Enable & Automate: Open-Source**

- Consider technology and automation upfront
- CDISC Open Source Alliance
  - Support and promote development of open-source software
  - Drive innovation
- Examples
  - Oak Initiative: automate SDTM generation
  - Open Study Builder
  - CDISC Open Rules Engine
  - CDISC Rule Editor







## **Enable & Automate: Technology Enables Automation**

- Modernize data transport: Dataset JSON
  - Technology friendly, future proof
- Standards with logical models
  - Both USDM and ARS are published with logical models
  - Enables technical implementation, demonstrate use cases
  - Includes API specifications

#### CDISC Library

- Relevant standards are digitally available via APIs
- Source for tools and automation







## **Enable & Automate: Conformance Rules**



- Complete conformance rules for all relevant foundational standards
  - SDTM, ADaM, SEND, ARS, ...
- Expand to regulatory business rules
  - Current collaboration with FDA, other agencies to follow

### • Expand to industry quality rules

- Quality rules beyond standard conformance
- Creating conformance rules for USDM to ensure compliance with USDM framework
  - This will enable checking conformance with M11 transport standard

### Going forward

• Establish rules for all CDISC standards



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## Engage & Adopt: Feedback

- Ensure we are solving the right problems
  - Understand the needs of end-users
- Establish a transparent feedback framework
- Reform the CDISC Advisory Council
  - Member input



#### **Continuous Feedback**

Define and manage community feedback loop to ensure understanding of needs



# Engage & Adopt: User Focus

- Focus to enhance and accelerate standards adoption
  - · A standard is only successful when used
- Include impact assessment to significant standard changes
  - Provide a rationale and value for the change
  - Provide implementation considerations where possible

### CDISC education

- Shift from theory to hands-on experience trainings
- I do, we do, you do



#### **User Focus**

Shift from development to user needs to enhance and accelerate standards adoption



## **Engage & Adopt: Communication**

- Evaluate on how we make content and information available
  - Website, Social Media, Github, CDISC Library

- Publish and maintain a dashboard with current CDISC activities and progress
- Publish the Annual Report
  - Summarize progress on strategic objectives
  - How is CDISC using membership fees to create value



#### **Prioritize Communication**

Create frequent and accessible information for CDISC and community alignment





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## We Want Your Feedback!

### **Opportunities:**

- Contact CDISC leadership team
- Survey with QR Code
- Social post to share message with broader CDISC community



