

# Bringing the USDM Model to the Catwalk

Julie Jacobsen Bryndum, Clinical Project Lead & Anja Lundgreen, Standards Director

14-May-2025





# Meet the Speakers

## Julie Jakobsen Bryndum

**Title:** Clinical Project Lead

**Organization:** Novo Nordisk A/S, Trial Management

10 years at Novo Nordisk A/S within trial management. 20+ years of experience with Clinical Research in various job roles and therapeutic areas. SME in the StudyBuilder Team.



## Anja Lundgreen

**Title:** Standards Director

**Organization:** Novo Nordisk A/S, Submission Standards & Implementation

12+ years at Novo Nordisk A/S within e2e standards, metadata setup, mapping, repository, SDTM and currently SME in the StudyBuilder Team.

# Disclaimer and Disclosures

- *The views and opinions expressed in this presentation are those of the authors and do not necessarily reflect the official policy or position of CDISC.*
- *The views and opinions expressed in this presentation are those of the authors and do not necessarily reflect the official policy or position of Novo Nordisk A/S.*





# Agenda

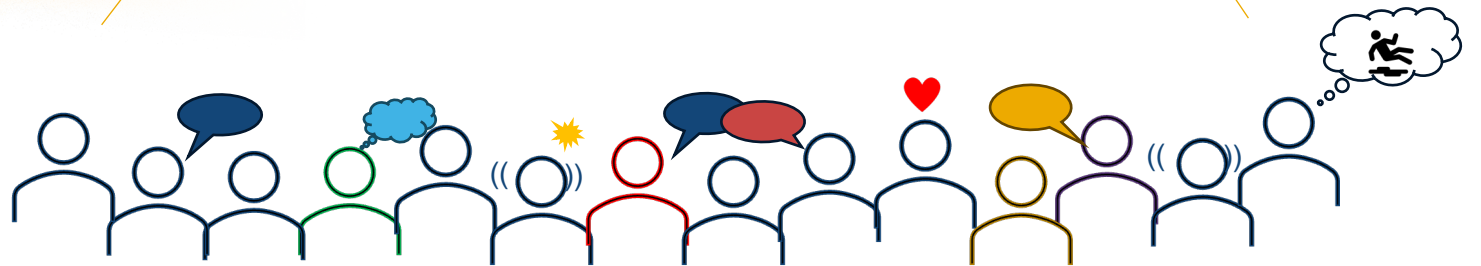
1. Scope
2. The Protocol Process and the History
3. The Amendment Challenge
4. Pros and Cons when utilizing USDM
5. Same but different

# What happens when we bring USDM to the Catwalk

- With no requirement for ICH M11 yet, but a system based on USDM

## Unified Study Definitions Model Implementation Guide (USDM-IG)

Version 3.0 (Final)



# Scope of this presentation

- To connect and build a common understanding of the different worlds we work in

Data follows process or the opposite?

Defining the datapoint first (*protocol authoring*) vs Definition of the datapoint first (*USDM*)

We are all working with data but with different perspectives

We are interdependent on each other

Ensure that the protocol process can support the data standards

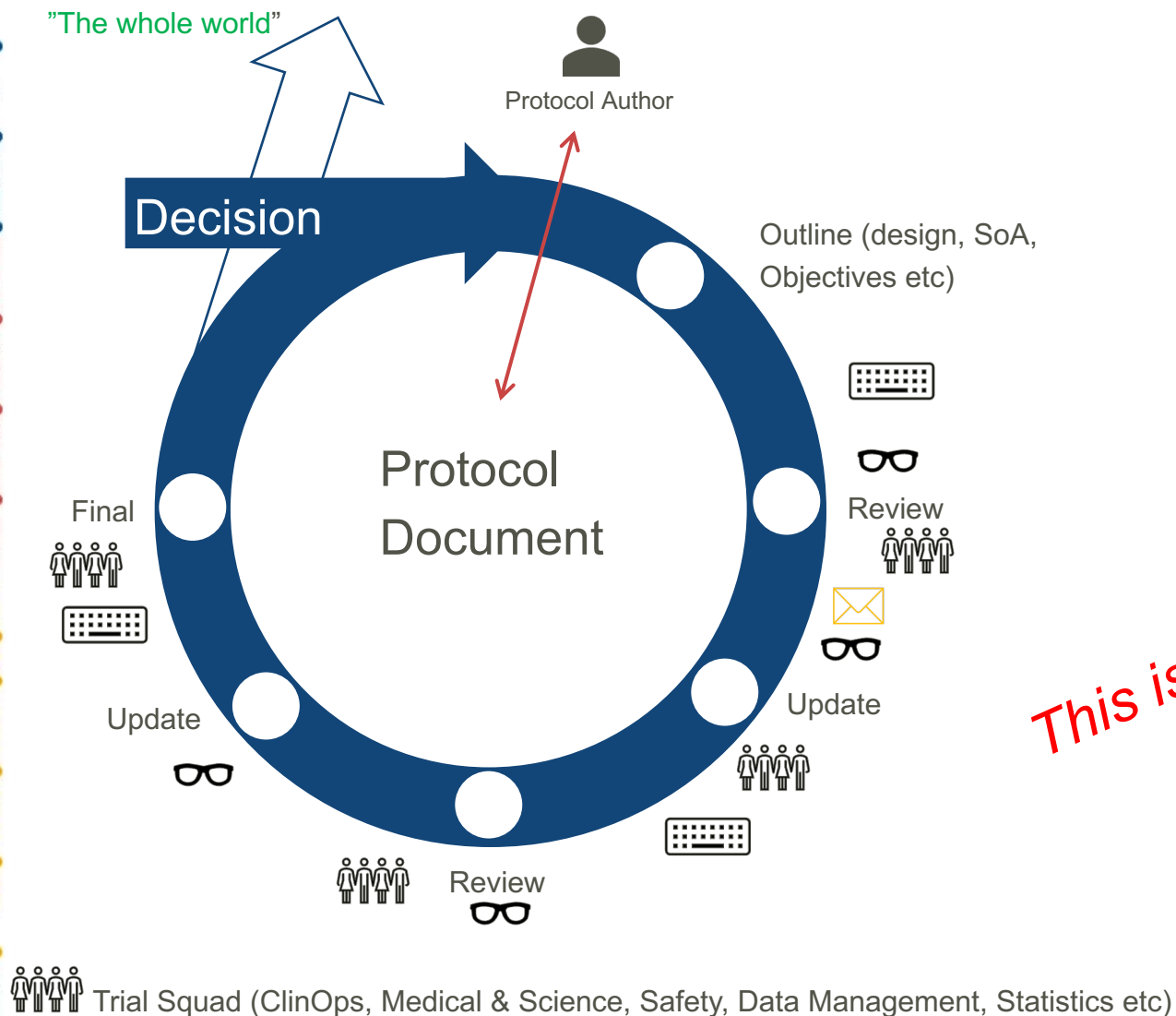
What is mandatory and what is nice in the USDM model?

Models should take into considerations impact covering economy, product supply, labelling, site needs etc

The scope of the USDMIG

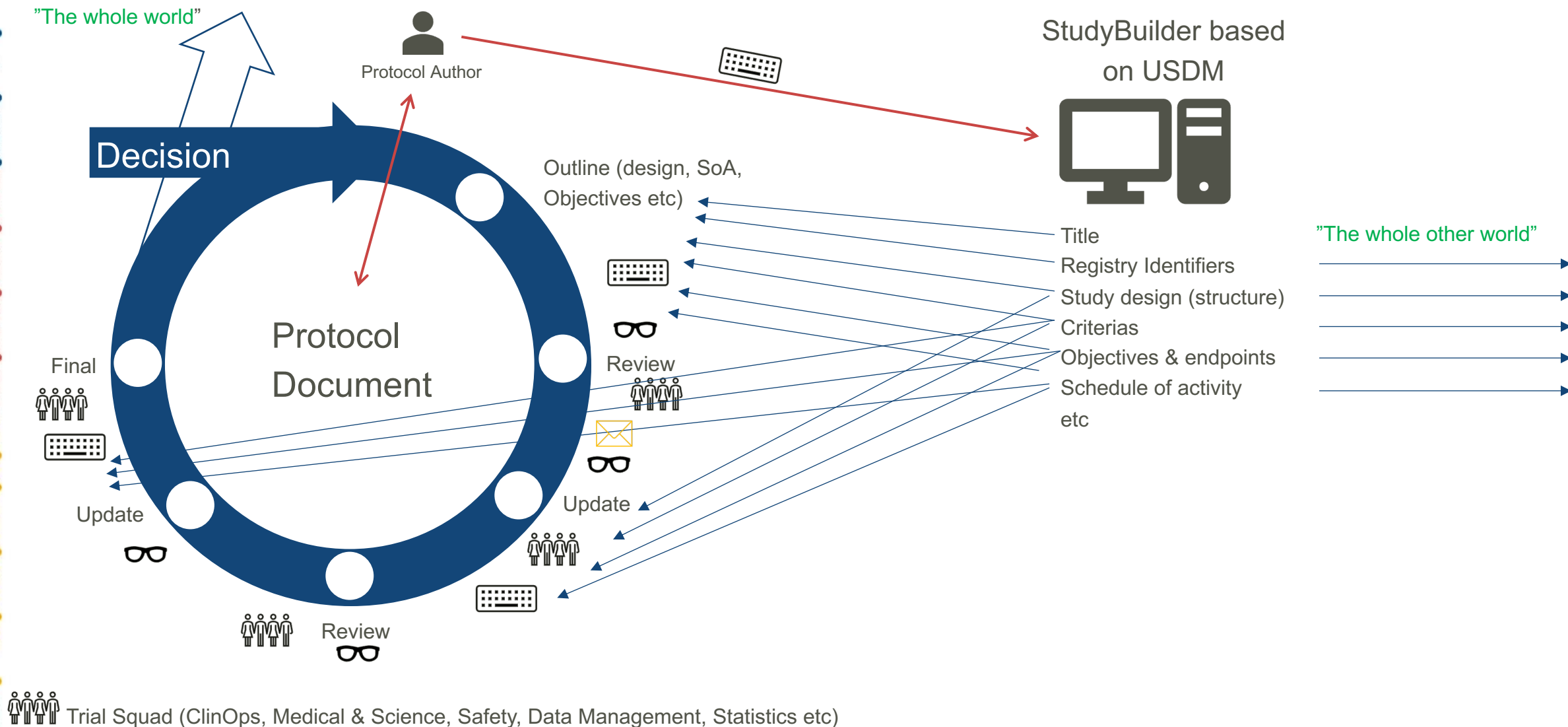
The USDM Implementation Guide (USDM-IG) is intended for companies and individuals involved in the set-up of clinical studies—sponsors or stakeholders involved in upstream (protocol and content authoring tools)—and downstream consumers of system (e.g., electronic data capture (EDC), clinical trial management, trial master file) and document (e.g., protocol, clinical study reports, statistical analysis plans) standardized digitized study definitions.

# The Existing Protocol Process – an Intro



*This is not a data process*

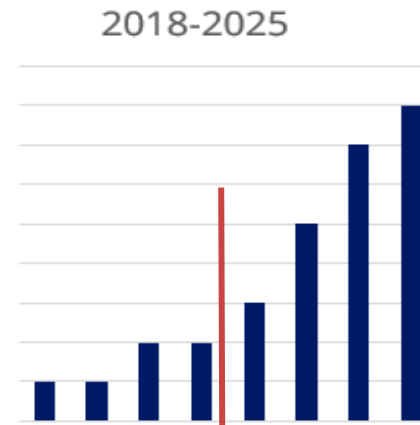
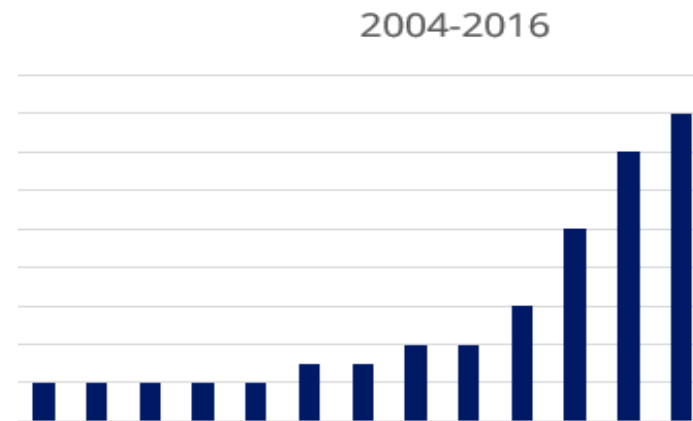
# The Protocol Process with Metadata Support



Trial Squad (ClinOps, Medical & Science, Safety, Data Management, Statistics etc)



# The History



First mention of SDTM  
1999

SDTM v1.0  
2004

SDTM required in submissions  
2016

First mention of ICH M11  
2018

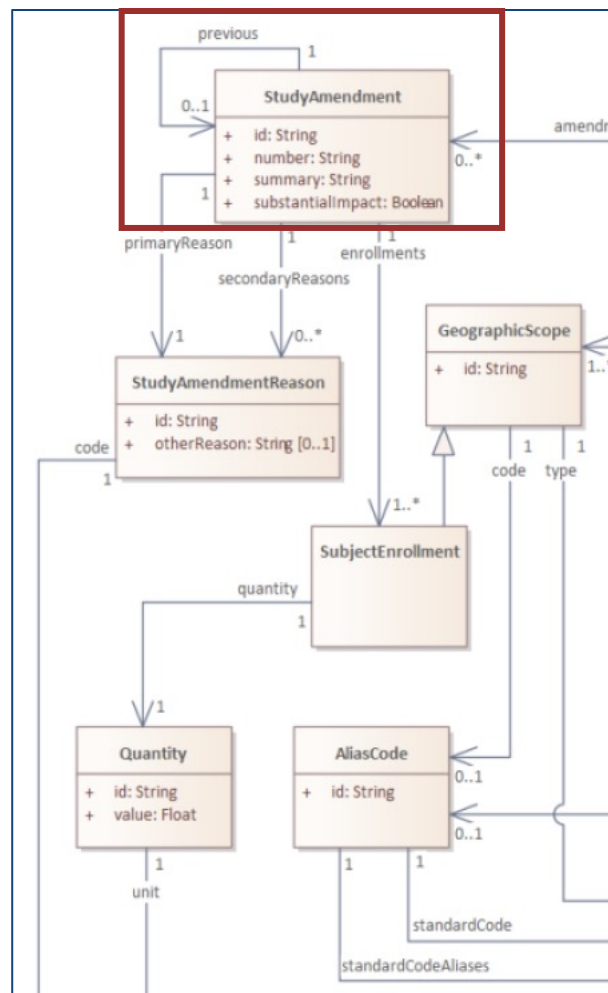
DDF launched  
2020

First mention of USD  
2021

First USD version  
2022

Let's see  
2025

# The Protocol Amendment Challenge



“The overarching study and the study protocol document each have their versioning with corresponding governance dates.”...

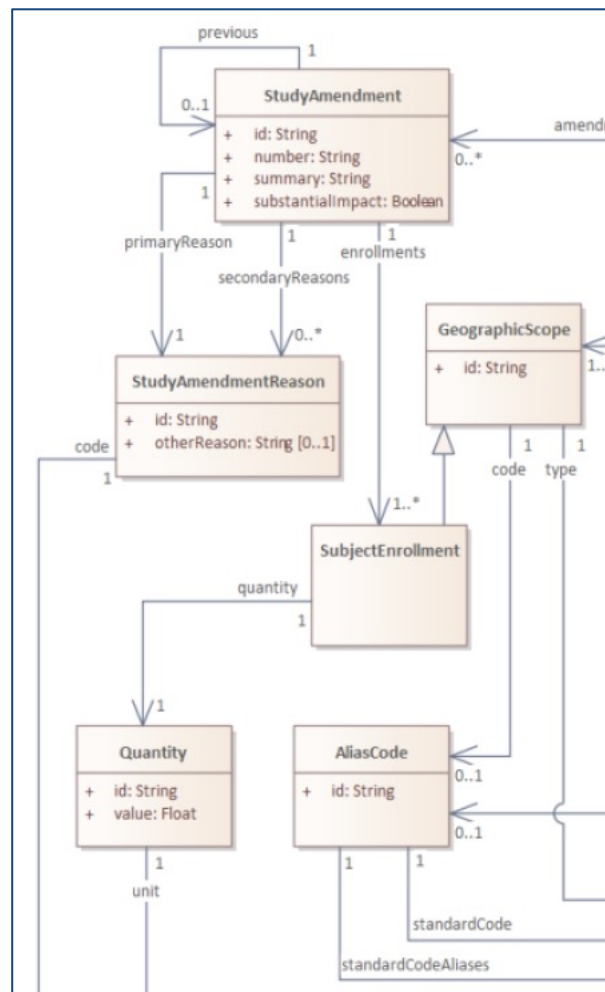


CTMS\*

What is the ‘selling point’ for adding all amendments to a tool based on USDM? Why should Trial Management do double book-keeping?

# The Protocol Amendment Challenge

An update to the Section 9: Statistical considerations is required for the handling of missing data in the trial.  
No change to data definitions



Action	StudyVersion	Date	StudyProtocolDocumentVersion
Draft	0.1	01-jan-24	
Lock	1.0	07-jan-24	1.0
Draft	1.1	01-sep-24	
Timestamp	1.2	19-sep-24	
Lock	2.0	14-okt-24	3.0



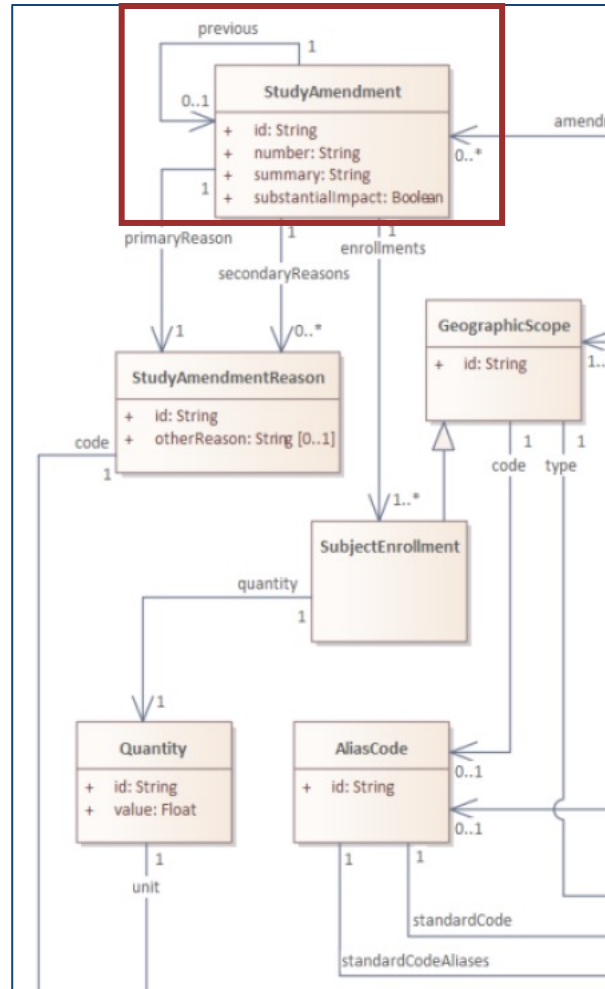
Add manual protocol version

Action	StudyVersion	Date	StudyProtocolDocumentVersion	Manual version	Manual date
Draft	0.1	01-jan-24			
Lock	1.0	07-jan-24	1.0		
Draft	1.1	01-sep-24			
Timestamp	1.2	19-sep-24			
				2.0	01-OCT-2024
Lock	2.0	14-okt-24	3.0		

Hello Trial Manager, which study metadata version should we link to?

Hi USDM expert!  
We are flexible as long as there are no changes to the protocol.

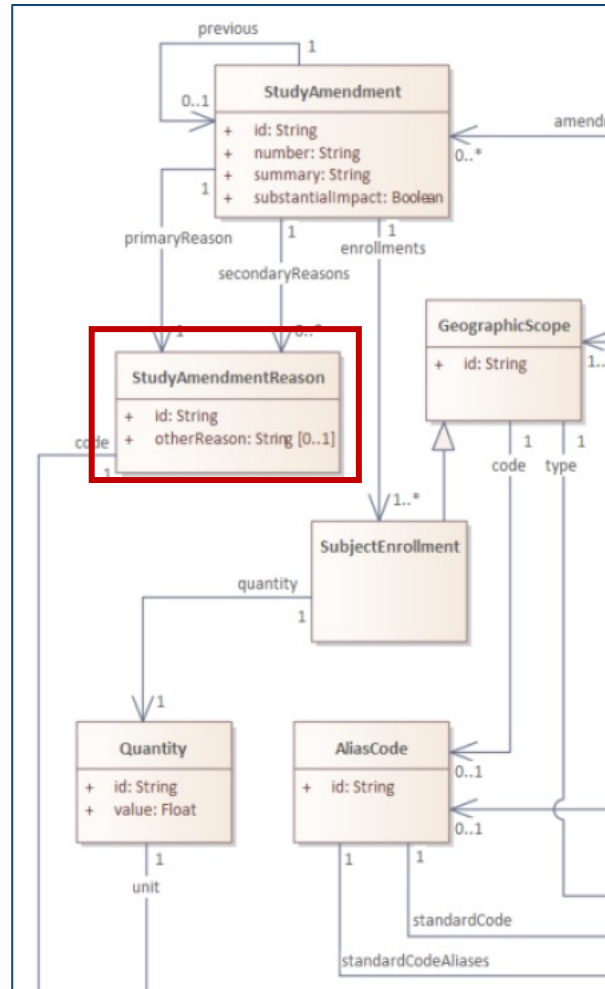
# The Protocol Amendment – data life vs. real life



The relevant stakeholders of your internal trial team has agreed to an update to the protocol.



# The Protocol Amendment – data life vs. real life



According to the USDM model primary reason(s) and all secondary reasons must be selected

# The Protocol Amendment – data life vs. real life

## Example 1

Protocol 3.0 was prepared to include the potential risk 'dysaesthesia' in the study protocol.

This amendment is considered to be substantial based on the criteria set forth in Article 2(13) of Regulation (EU) No 536/2014 of the European Parliament and of the Council of 16 April 2014.

are adequate, as precise enrollment figures will likely be changing while an amendment is being prepared. For a country/region, the enrollment figures will likely be changing while an amendment is being prepared. For a country/region, the enrollment figures will likely be changing while an amendment is being prepared.

Primary: [Primary Reason for Amendment]	Other:
<p>Select from the following (multiple selections allowed):</p> <ul style="list-style-type: none"><li>Regulatory agency request to amend</li><li>New regulatory guidance</li><li>IRB/IEC feedback</li><li>New safety information available</li><li>Manufacturing change</li><li>Adaptive clinical trial IMP addition</li><li>Change in strategy</li><li>Change in standard of care</li><li>New data available (other than safety data)</li><li>Investigator/site feedback</li><li>Recruitment difficulty</li><li>Inconsistency and/or error in the protocol</li><li>Protocol design error</li><li>Other:</li></ul> <p>[Describe]</p>	<p>Select from the following (multiple selections allowed):</p> <ul style="list-style-type: none"><li>Risk</li><li>New</li><li>IRB/IEC</li><li>New</li><li>Manufacturing</li><li>Adaptive</li><li>Change</li><li>Change</li><li>New</li><li>Investigator</li><li>Recruitment</li><li>Inconsistency</li><li>Protocol</li><li>New</li><li>Other</li></ul> <p>[Describe]</p>

[Summary of Amendment]

Specify on the primary reason for the amendment with details specific to the trial. If multiple amendments are included in the amendment but unrelated to the key characteristics of the trial, specify the primary reason for the amendment with details specific to the trial.

# The Protocol Amendment – data life vs. real life

## Example 1

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This amendment is considered to be substantial based on the criteria set forth in Article 2(13) of Regulation (EU) No 536/2014 of the European Parliament and of the Council of 16 April 2014.

## Example 2

Protocol 2.0 was prepared to adjust the dose levels. The doses in this protocol are based on the highest safety-cleared dose and additional information related to exposure gathered to date from the study XXXX

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[Describe]	[Describe]
[Summary of Amendment]	
Specify on the primary reason for the amendment with details specific to the trial. If multiple amendments are included in the amendment but unrelated to the key changes, specify on the other reasons for amendment.	

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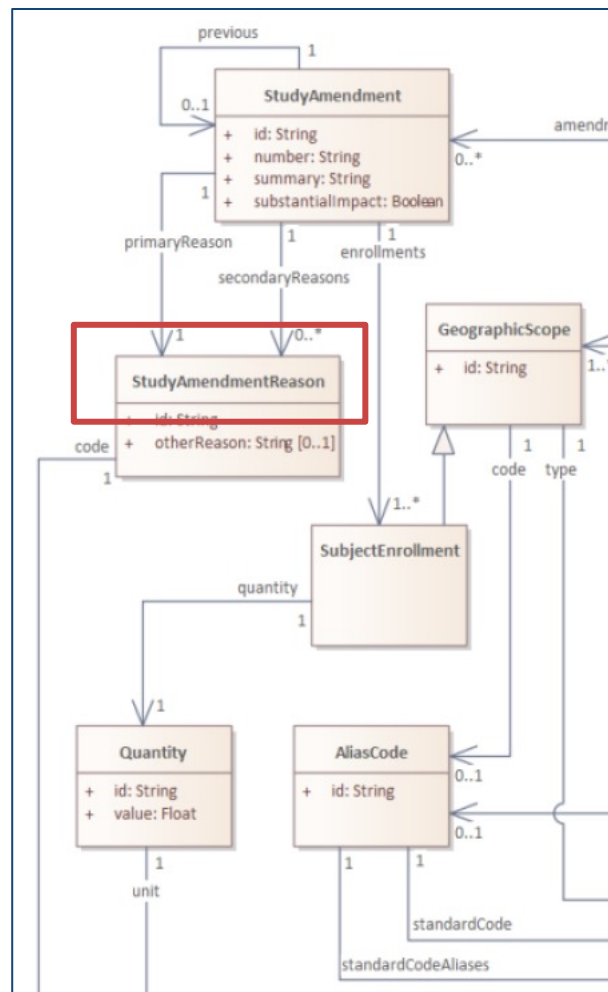
## Example 3

Protocol version 3.0 has been updated to ensure that the total blood volume does not exceed 550 mL, to add flexibility in the clamp procedure and correct minor inconsistencies and inaccuracies.



# The Protocol Amendment - data life

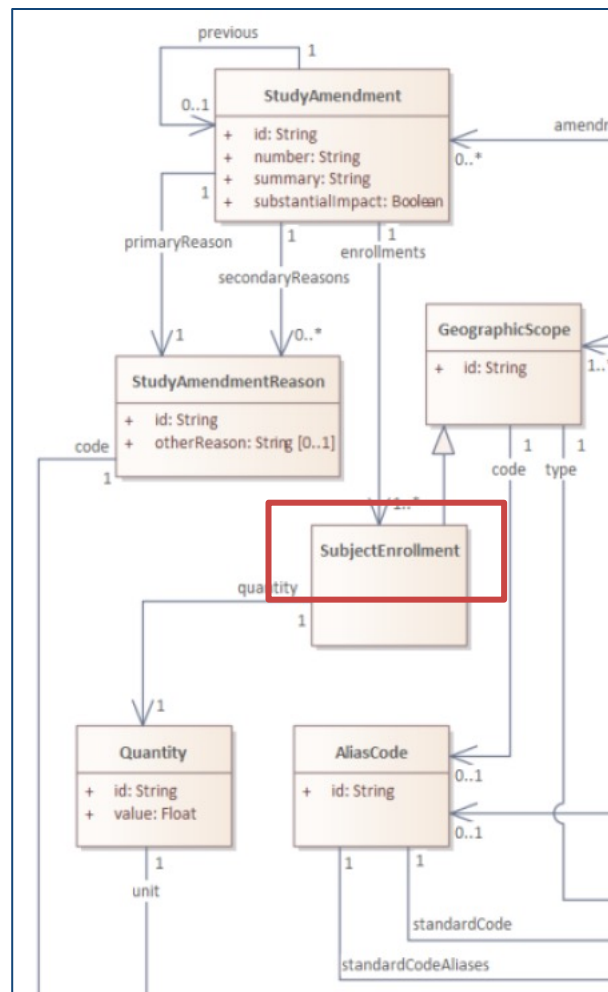
Trial Management Team



- Reason for Amendment?
- Subject Enrollment
- Quantity
- Geographical Scope

# The Protocol Amendment - data life

Trial Management Team

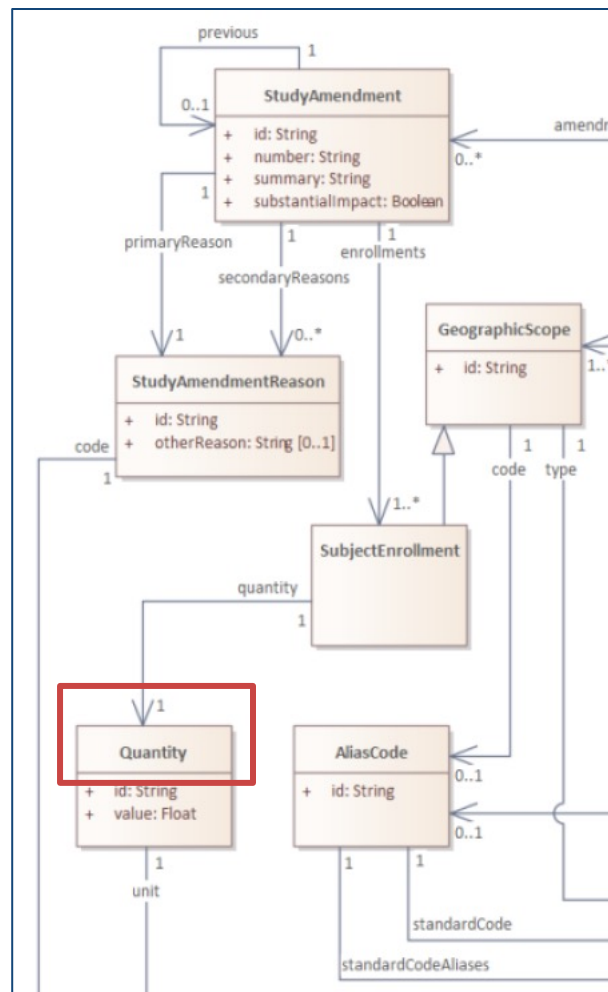


- Reason for Amendment?
- Subject Enrollment
- Quantity
- Geographical Scope

Hi USDM expert,  
When do you want the enrolment  
number?  
Amendment initiation or finalisation?

# The Protocol Amendment - data life

Trial Management Team



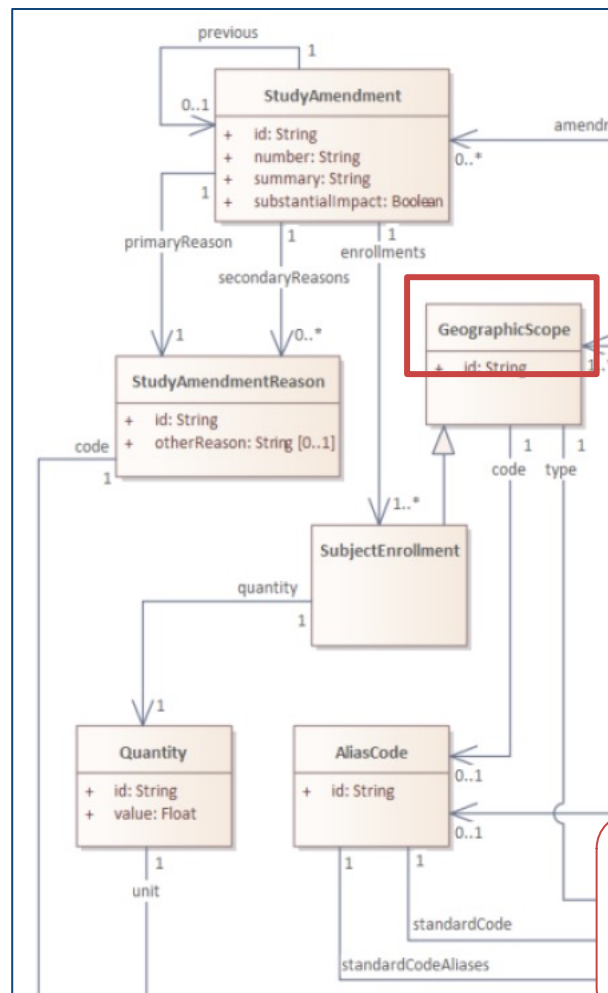
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Hi USDM expert,  
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Hi again USDM expert,  
What do you mean with quantity?

# The Protocol Amendment - data life

Trial Management Team



- Reason for Amendment?
- Subject Enrollment
- Quantity
- Geographical Scope

Hi USDM expert,  
When do you want the enrolment  
number?  
Amendment initiation or finalisation?

Hi again USDM expert,  
What do you mean with quantity?

Hi again again USDM expert,  
We are doing the amendment due  
to recruitment issues. Do you want  
to know subject re-allocation or  
rescue countries?

Sorry for disturbing again again again  
but ...  
yet another thing. Are there any  
deadlines for when I need to update?

... one more thing. If we get a  
rejection from a country – should I  
then re-update again?



# CON's and PRO's – because USDM mindset makes a difference

## Where there are challenges.....

- Lost in translation
  - Are we losing the submission of protocol to ICH M11 → US
- Are we aligned
  - Flexibility and consistency
- Can we set the standard
  - API integration

## ...there are also opportunities.

- Protocol/amendment Submissions to Regulatory Agencies via OPEN-SOURCE portals across all countries
  - Shortening approval timelines
- ALIGNMENT on Protocol sections, e.g. section 8\* in the protocol across industry:
  - improve site training
  - minimizing number of Protocol Deviations
  - Improve data quality
- CDISC 360i etc

\*Study Assessments and Procedures

# It's the same – but yet different

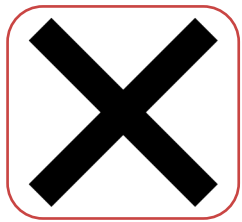




It's the same – but yet different

RED FLOWER

Yes



No





# Thank You!

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Julie Jacobsen Bryndum [ujb@novonordisk.com](mailto:ujb@novonordisk.com)

