

WITH STANDARDS – UNLOCK THE POWER OF DATA

cdisc

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**Clinical Data Standards, Governance Process: How Far We've Come and
Where We're Going**

Presented by: Donna Sattler, Associate Director, Clinical Data Standards, Bristol-Myers Squibb
Sharon Hartpence, Associate Director, Clinical Data Standards, Bristol-Myers Squibb

Meet the Speakers

Donna Sattler

Title: Associate Director, Clinical Data Standards

Organization: Bristol-Myers Squibb

I've worked in various Data Management and Programming roles for over 25 years. I made a career change 20 years ago which brought me into the world of clinical research and data standards. I am deeply motivated by helping to influence, educate, and communicate Data Standards, through process improvements and best practices across the enterprise.



Sharon Hartpence

Title: Associate Director, Clinical Data Standards

Organization: Bristol-Myers Squibb

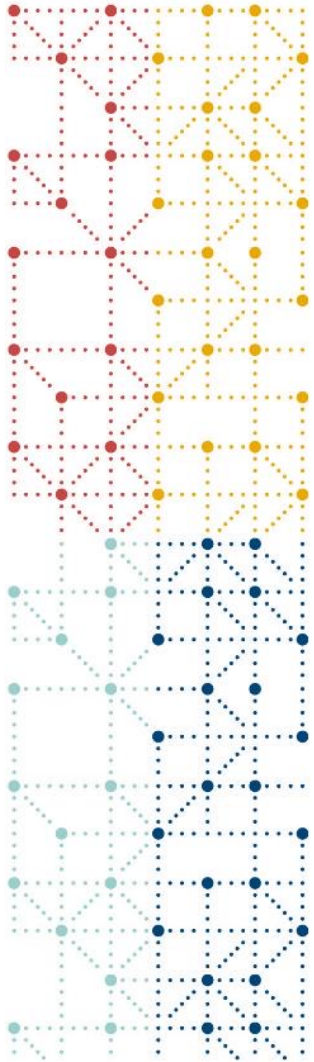
As an RN, BSN, MBA who has worked in Pharmaceutical Research and Development for over 25 .As an eDC data collection specialist; I've developed clinical trial processes to streamline efficiencies for end-users. I continue to increase my knowledge of CDISC implementation best practices by engaging in opportunities with CDISC collaboration initiatives





Disclaimer and Disclosures

- *The views and opinions expressed in this presentation are those of the author(s) and do not necessarily reflect the official policy or position of CDISC.*
- *Additionally, the presenters are expressing their opinions on how the industry has utilized data standards over the years and not representing the processes of BMS but rather best practices for all end users of data standards.*



Agenda

1. Data Standards, History...
2. Standards Governance and Guardrails
3. What's next...
4. Best Practices & Key Takeaways



“How are you going to analyze this new data?”

Which Domain?

“What does your Protocol Say”

SDTM

CDASH

“...my request is for a high priority study”

“Did you review the TAUG”

“..my team has a Change Request”

“Is your Study Team in agreement”

Subject Matter Experts

“Didn’t we already discuss this?”

“What does the SAP say?”

Impact analysis

“Did they include the Specifications?”



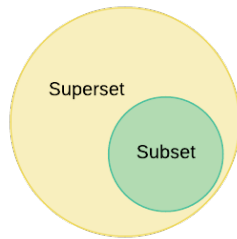
Decisions, Decisions, Decisions

CDISC 2022 US Interchange | #CDISCUS #ClearDataClearImpact

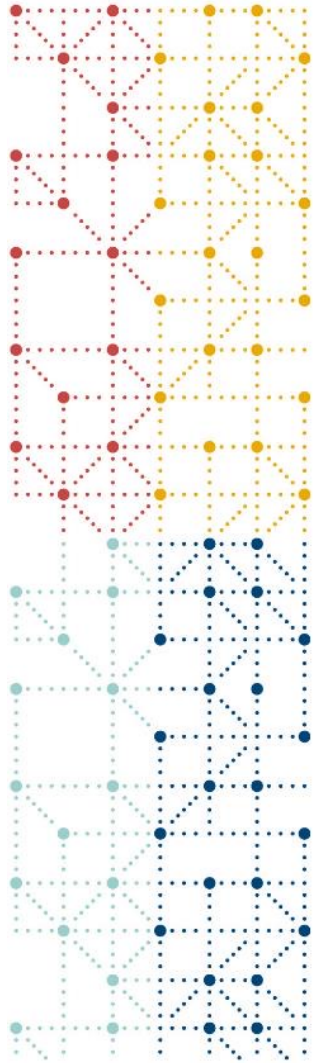
How will this impact ADaM?



Initiate DB Build with established standard libraries.



If collection is not appropriate for your study, you can request a change through a change request governance process



Remember When....



... Data Standards consisted of whatever study you last worked on ...in any disease area and use that as your starting point...

- ✓ You were given a table mock-up with raw data annotations
- ✓ When there was a mismatch from QC you relied on quick fixes in the SAS code like: if then do; logic for updating any value in the final dataset to pass compliance. Each study had its own unique mapping spec which was always updated to match the code to the final output. But that was it...
- ✓ Standards SDTM Mapping specs were not the norm; we borrowed mapping templates from previous studies....by running a comparison between study metadata to then obtain a % close match.

Make this table.....

Table 14.4
Headache History

Study Population: Safety

Characteristic	Placebo (N=XX)	6 mg (N=XX)	12 mg (N=XX)	Total (N=XX)
Onset of Headache (weeks)				
N	XX	XX	XX	XX
Mean	XX.X	XX.X	XX.X	XX.X
SD	XX.X	XX.X	XX.X	XX.X
Range (Min, Max)	(XX,XX)	(XX,XX)	(XX,XX)	(XX,XX)
Onset of Current Headache Episode (weeks)				
N	XX	XX	XX	XX
Mean	XX.X	XX.X	XX.X	XX.X
SD	XX.X	XX.X	XX.X	XX.X
Range (Min, Max)	(XX,XX)	(XX,XX)	(XX,XX)	(XX,XX)
Number of Headaches n (%)				
1	XX (X.X)	XX (X.X)	XX (X.X)	XX (X.X)
2-5	XX (X.X)	XX (X.X)	XX (X.X)	XX (X.X)
>5	XX (X.X)	XX (X.X)	XX (X.X)	XX (X.X)
Family History of Headaches n (%)				
Yes	XX (X.X)	XX (X.X)	XX (X.X)	XX (X.X)
No	XX (X.X)	XX (X.X)	XX (X.X)	XX (X.X)

Handwritten notes:
 - Above table: *rand. PLACEBO*, *rand. 6MG*, *rand. 12 MG*
 - Next to Mean: *head hist. HHSTDTc*
 - Next to Mean: *head hist. HHSTDTc*
 - Next to 1: *head hist. HHTOT*
 - Next to No: *head hist. H#FAMcD*
 - Bottom: *Proc Sort data = raw. headhist out = hh;*
date headhist; raw. rand out = rand;
merge rand hh;
by invno patrid;
run;

PHILAU PHARMACEUTICAL, INC.
 PROTOCOL NO. ABC-123 **studyid** DATASET: HEADHIST.xpt

Investigator No. [][] invid	Screening No. [][][][]	Patient Initials [][][][] subjinit	Patient No. [][][][] subjid	visit
---	-------------------------------	--	---	--------------

HEADACHE HISTORY

Headache Onset
 Date of Onset of the patient's headaches **hhstdtc**
 Date of Onset: [][][][][][]
 m m d d y y y y

Current Headaches
 Date of Onset of the CURRENT episode of headaches **hhcstdtc**
 Date of Onset: [][][][][][]
 m m d d y y y y

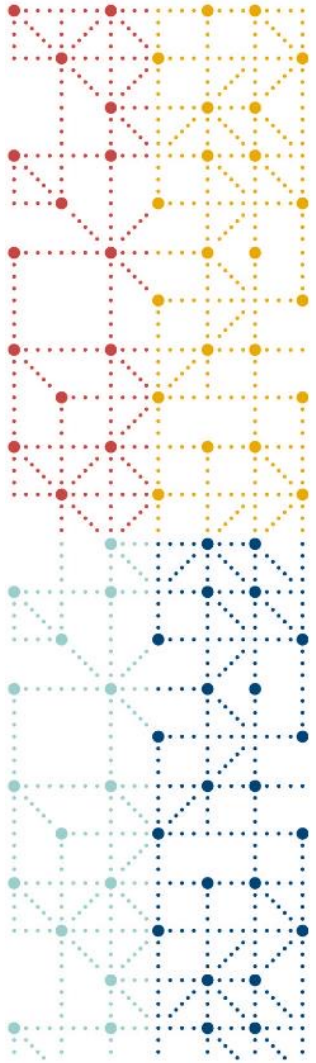
Total Number of Headaches
 Including the current headache, what is the total number of individual headaches the patient has had since diagnosis?
 1 **hhtot**
 2-5
 5+

Does this patient have a family history of headaches? **hhfamcd**
 0 No 1 Yes



...You first heard of CDISC?

- ✓ 20 years ago there was no understanding of the sustainability of CDISC standards, there was still a lot of hesitancy to put the long-term investment into standardizing
- ✓ Tables and listings were **company standards** based on raw data metadata. SDTM was still a concept.
- ✓ USUBJID was the first standards variable I ever created.
- ✓ No SDTM mapping specs, no SDTM Annotated CRFs



Governance Guardrails...



Governance Guardrails...

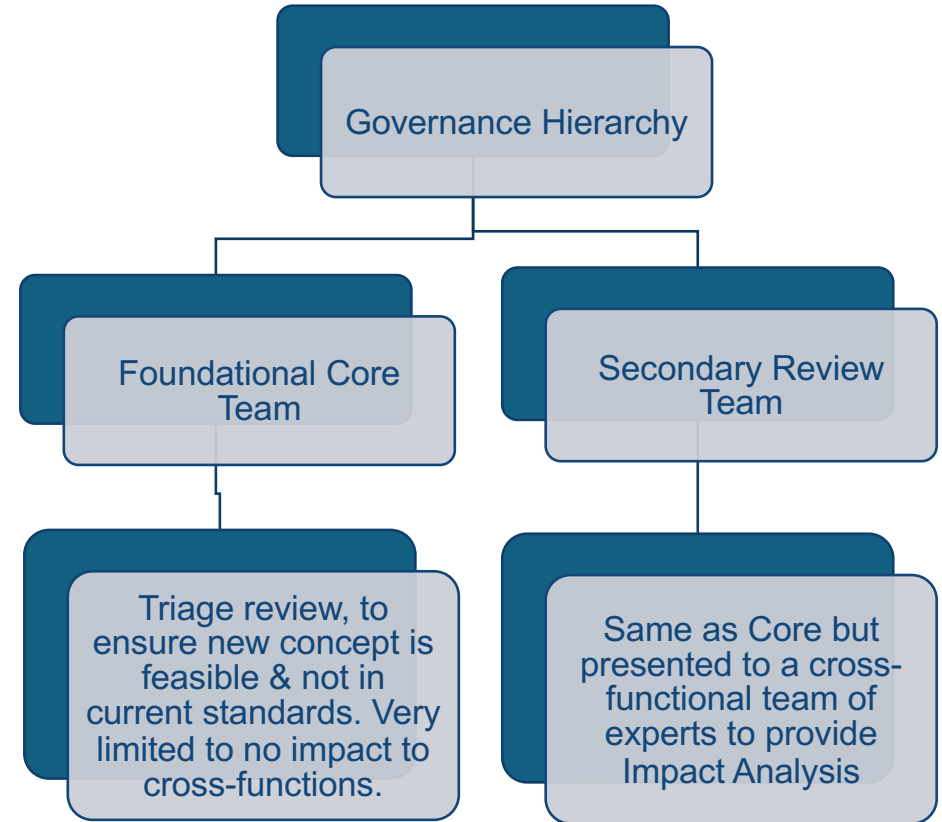
- Many different functions are a part of the content creation in addition to when changes can and should be made. No one function “owns” the standards. The same holds true for Governance. It is a collaborative effort to maintain standards and limit the changes to existing forms once they are considered universal or global.
- Many groups have a stake in the reusability of the standards; therefore, they too get to impart their function’s needs for what should not change or what must change to align to business needs.

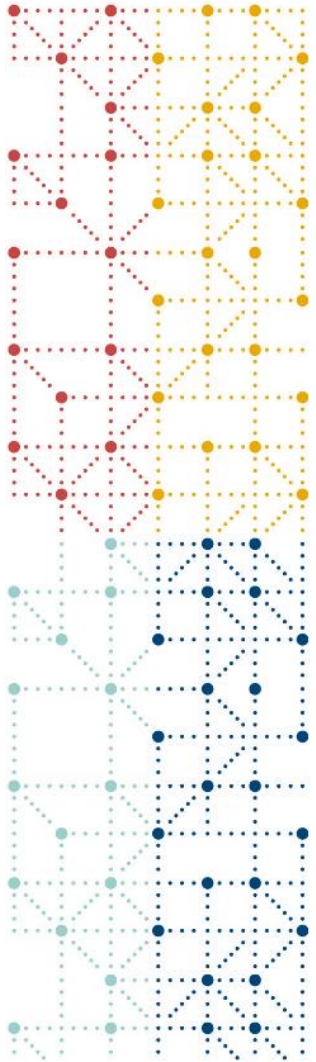


Governance Team Charter Example

The primary responsibility of the Clinical Data Standards Governance Organization is to implement effective governance in the development and maintenance of clinical data standards.

This governance organization will enable standards implementation, ensure the necessary resources to implement clinical data standards, and create processes that support and facilitate the use of consistent evolving global clinical data standards.





Change Request Example

STANDARDS CHANGE REQUEST SCENARIO

The Clinical Team identified a need for modification of an existing eCRF (indication-specific change)

Request:

Add new options to the CMINDC code list (#1) plus Other, Specify field. (#2)

Rationale:

The team would like to know the specific type of Prostate Cancer each systemic therapy was used for. Currently the CMINDC dictionary only includes **Prostate Cancer**. The team would like to add additional types of prostate cancer as well as an **Other** option and a question to specify the other type of prostate cancer.

APPROVED

1

2

Form: Prior and Concomitant Medications

For what indication was the medication/therapy taken? *SEE LIST BELOW for choices* **PROSTATE CANCER** 1

Category for Medication

<i>Indication list for field #1:</i>	HORMONAL ANTI-CANCER THERAPIES FOR DISEASE UNDER STUDY <input type="radio"/> 2
- localized prostate cancer	ANTI-MYELOMA THERAPIES <input type="radio"/>
- castration-naive prostate cancer	BISPHOSPHONATE <input type="radio"/>
- non-metastatic hormone sensitive prostate cancer	HORMONAL ANTI-CANCER THERAPIES FOR DISEASE NOT UNDER STUDY <input type="radio"/>
- non-metastatic castration-resistant prostate cancer	CARDIOVASCULAR INDICATION <input type="radio"/>
- metastatic hormone sensitive prostate cancer	CEREBROVASCULAR INDICATION <input type="radio"/>
- metastatic castration-resistant prostate cancer	DIABETES <input type="radio"/>
- other	DISEASE UNDER STUDY <input type="radio"/>
<i>Add field for if other, specify</i>	GENERAL <input type="radio"/>
	GROWTH FACTORS <input type="radio"/>

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REJECTED

1

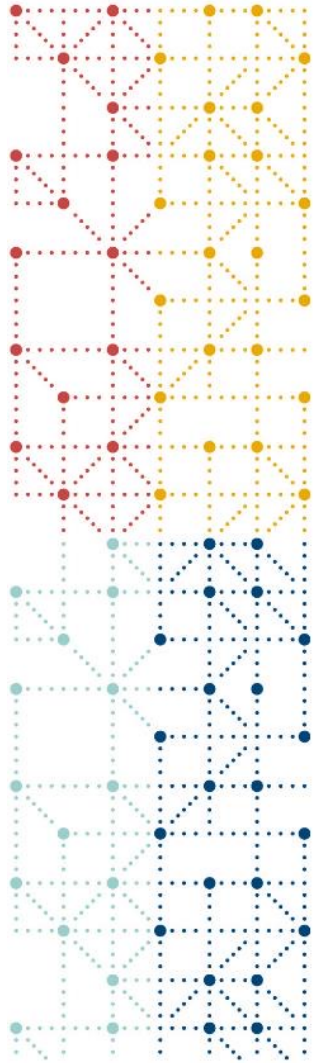
2

Form: Prior and Concomitant Medications

For what indication was the medication/therapy taken? *SEE LIST BELOW for choices* **PROSTATE CANCER** ①

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<i>Indication list for field #1:</i>	HORMONAL ANTI-CANCER THERAPIES FOR DISEASE UNDER STUDY <input type="checkbox"/> ②
- localized prostate cancer	ANTI-MYELOMA THERAPIES <input type="checkbox"/>
- castration-naive prostate cancer	BISPHOSPHONATE <input type="checkbox"/>
- non-metastatic hormone sensitive prostate cancer	HORMONAL ANTI-CANCER THERAPIES FOR DISEASE NOT UNDER STUDY <input type="checkbox"/>
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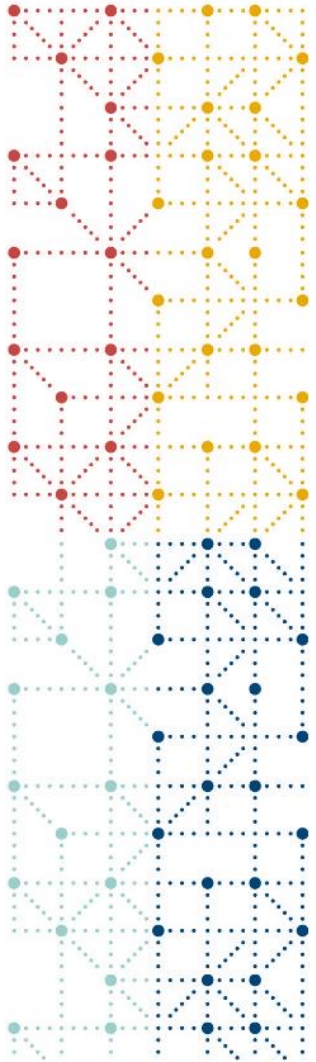


What's Next...



New ways of managing collection and reporting Standards....

New Ways	Pros	Cons
MDRs	Traceability, the promise of being one source of truth for all company Standardization, ie: when one concept/object changes, it's relationships are also updated.	Unexpected glitches Requires a lot of training and process workarounds for accommodating tool
External Data Collection Processes	Standardization SMEs are necessary to manage vendor expectations while keeping true to internal BMS standards. (i.e tablet, CGM, watch, etc)	Requires additional resources to manage external data requirements
eCOA/ePRO Processes	One data specification for all eCOA/ePRO data collection	Requires additional resources to manage external data requirements
Decentralized Study Data Considerations	Faster start-up, cleaner data, fewer resources	Requires systems to talk with one another

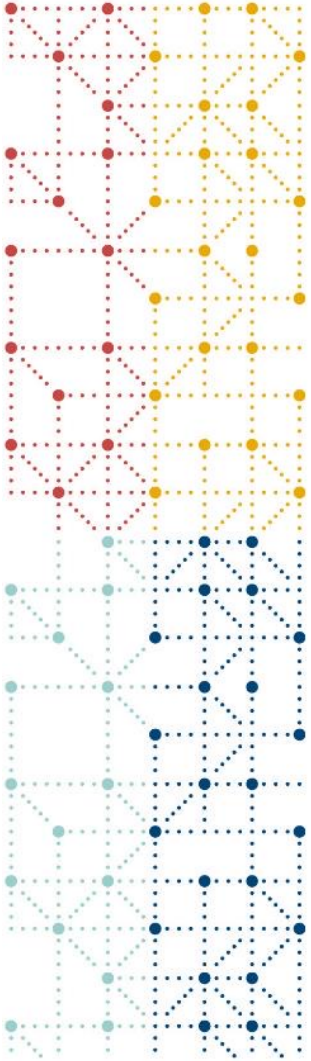


Consider these Best Practices & Key Takeaways....

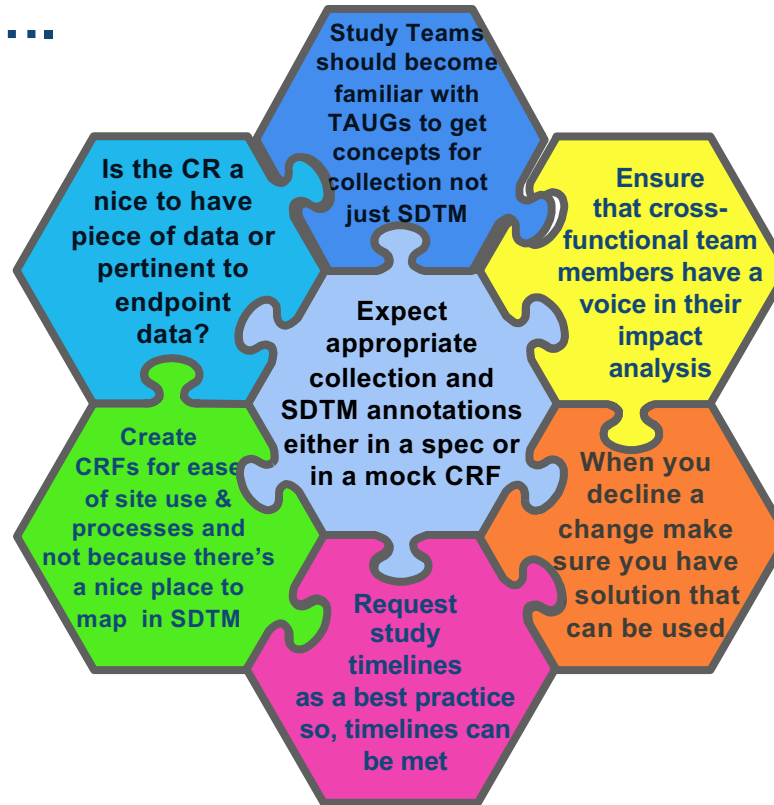


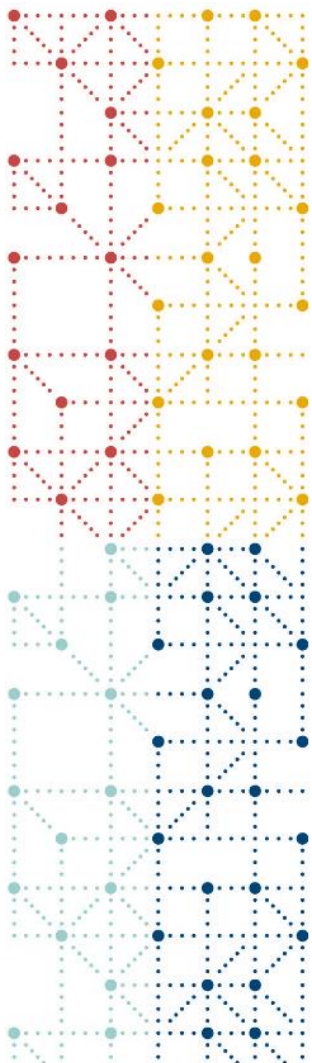
Best Practices....

- Ensure Alignment for E2E Impact Assessment by training all users on the standards metadata
- Create Change Request Checklists and use a Change Request Template when changes need to be requested
- Do not assume what is being asked for is already in the protocol or that the requester is fully aware of all the possibilities in existing standards
- Front-load discussions and impact analysis prior to implementing a new change request.



Takeaways....





Thank You!

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