



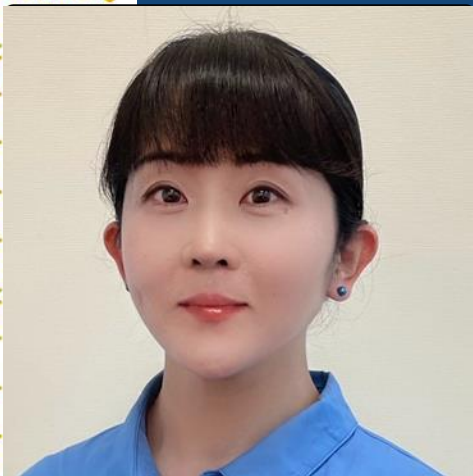
2022

JAPAN
INTERCHANGE

13-14 JUNE | VIRTUAL EVENT

Update on activities of CJUG CDASH sub team

Yuko Tamura, Team Leader, CJUG-CDASH Team
Noriyuki Furuya, Sub-Team Leader, CJUG-CDASH Team



Meet the Speakers

Yuko Tamura

Title: Team Leader

Organization: CJUG-CDASH Team

She has 15 years experience as a clinical trial coordinator, and worked in service planning for an eSource and ePRO service vendor, and has been CJUG CDASH team member since 2017.



Noriyuki Furuya

Title: Sub Team Leader

Organization: CJUG-CDASH Team

He has over 20 years of experience as a data manager working on KISSEI Pharmaceutical, and has been CJUG CDASH team member since 2014.



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.*
- *The author(s) have no real or apparent conflicts of interest to report.*



Agenda

1. Introduction of the CDASH Team
2. Introduction of CDASH Sub team 1 : Investigate needs and advantages for using CDASH
3. Introduction of CDASH Sub team 2 : Utilize CDASH standard using eSource
4. Summary



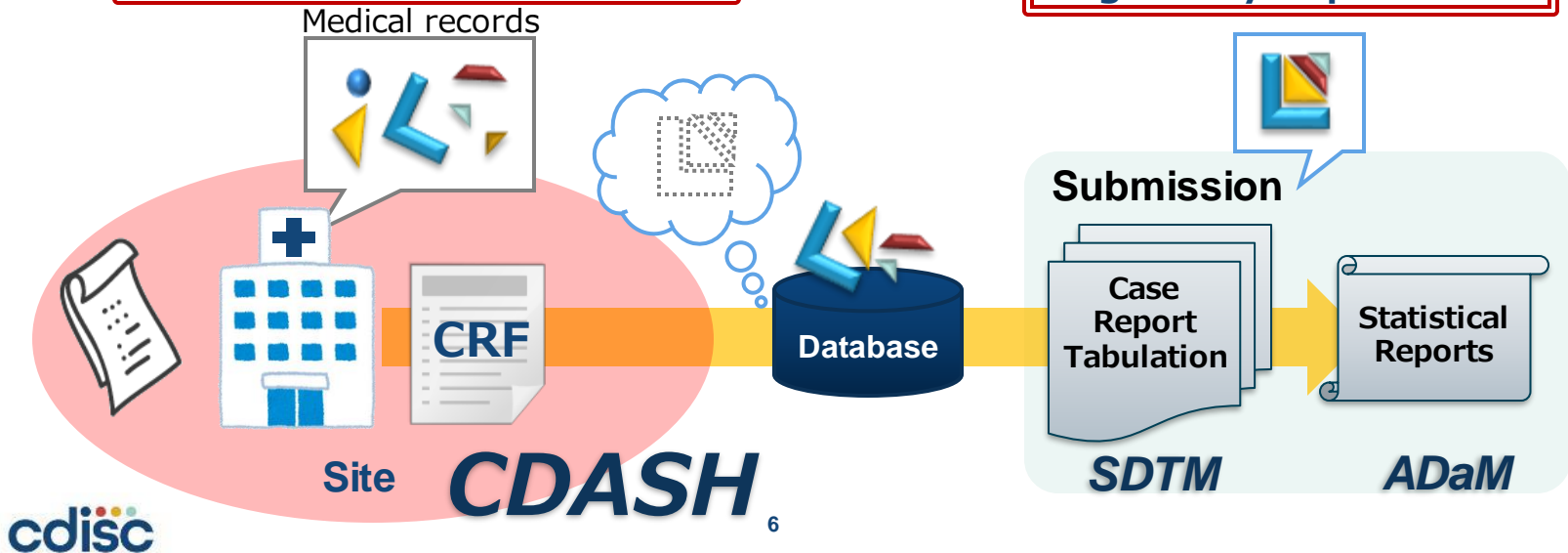
Introduction of the CDASH Team

What is CDASH's value in CDISC?

- ✓ Get which data/data format should be collected in clinical trial
- ✓ Keep traceability for data to be used in subsequent work and consistency from original data to submission

No format in study data collected in sites

Need formatting to meet regulatory requirement



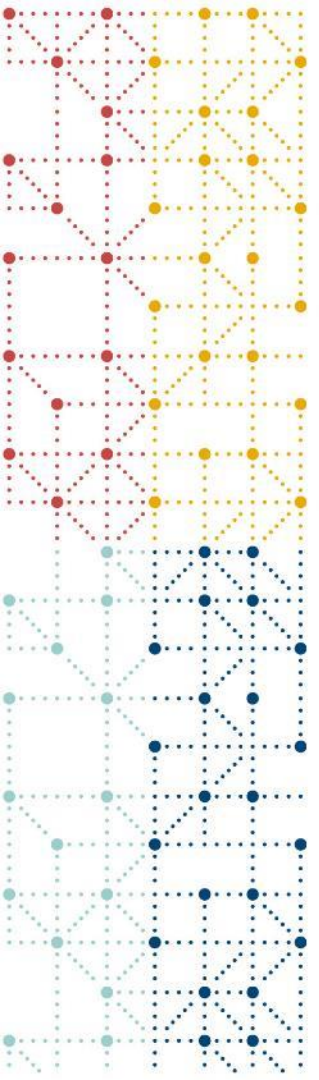


CJUG-CDASH Sub-Team Activities

CJUG CDASH sub team are discussing about following four topics currently:

1. Investigate needs/advantages for using CDASH
2. Utilize CDASH standard using eSource
3. Create sample of CRF library in conformity with CDASH
4. Create sample of standard CRF completion guide in conformity with CDASH

This session will show some more details for topic of 1 and 2.



Introduction of CDASH Sub team 1

Investigate needs and advantages for using CDASH

Subteam Overview

Topic

Investigate needs/advantages for using CDASH

Team structure

Proposer	Team lead	Team members
Yasumitsu Takahashi	Yasumitsu Takahashi	Yuya Ikeda, Noriyuki Furuya and Teruhisa Shiobara

Objective

- To make position of CJUG-CDASH team's position in the industry more specifically and keep us motivated.
- To promote capability of CDASH and make CDASH more popular.

Simplified data conversion from CDASH/CRF to SDTM by Excel based visualization

LOC, LAT, and DIR variables for controlled terminology. While the overlap exists, ensure that this overlap for these variables is not part of database design.

8.2.2 AE - Adverse Events

Description/Overview for the CDASHIG AE - Adverse Events Domain

The CDASHIG Adverse Events (AE) domain includes clinical data describing "any untoward medical occurrence in a patient or clinical investigation subject administered a pharmaceutical product or procedure, whether or not considered related to the product or procedure, including any abnormal laboratory tests, whether or not clinically significant, and whether or not considered preventable or avoidable." (ICH E2A: available at <https://www.fda.gov/regulatory-information/>). In consultation with regulatory authority the scope of adverse event collection (e.g., collecting pretreatment events related to trial conduct, not collecting events assessed as efficacy endpoints). Events included in the AE protocol requirements. Adverse event terms may be captured either as free text or via a prespecified list of terms. The structure of the SDTMIG AE domain is 1 record per adverse event. This definition may vary based on the sponsor's requirements for characterizing and reporting product safety and is usually described in the protocol.

As with all the data collection variables recommended in CDASH, it is assumed that sponsors will add other data variables as needed to meet protocol-specific and other data collection area-specific data elements and others as required per protocol, business practice or operating procedures). Sponsors should define the appropriate collection period for adverse events.

Specification for the CDASHIG AE - Adverse Events Domain

Adverse Events Metadata Table

Observation Class	Domain	Data Collection Scenario	Implementation Options	Order Number	CDASHIG Variable	CDASHIG Variable Label	DRAFT CDASHIG Definition	Question Text	Prompt	Data Type	CDASHIG Core	Case Report Form Completion Instructions	SDTMIG Target	Mapping Instructions	Control Terminology Code List Name
Events	AE	NA	NA	1	STUDYID	Study Identifier	A unique identifier for a study.	What is the study identifier?	(Protocol/Study)	Char	HR	NA	STUDYID	Map directly to the SDTMIG variable listed in the SDTMIG Target column.	N/A
Events	AE	NA	NA	2	SITEID	Study Site Identifier	A unique identifier for a site within a study.	What is the site identifier?	Site (Identifier)	Char	HR	NA	DM.SITEID	Map directly to the SDTMIG variable listed in the SDTMIG Target column.	N/A

Visualize texts and metadata table



Question Text	Prompt	Variable name	Variable Value	CT	Text data	Notes	Variable name	Variable Value	Text data
Were any adverse events experienced?	Any Adverse Events	AEYN	O Yes N No	NY	Yes				
Adverse Event Category:	Sponsor Defined	AECAT	O NA N Sponsor Defined	NA	ADVERSE EVENTS		AECAT		ADVERSE EVENT
Adverse Event Subcategory:	Adverse Event Subcategory	AESCAT	O NA N Sponsor Defined	NA	GENERAL ADVERSE EVENT CLINICAL COMPLAINTS		AESCAT		GENERAL ADVERSE CLINICAL COMP
What is the adverse event identifier?	AE Number	AESPID	→Free text	NA	1 2 3 ...		AESPID	→Free text	1 2 3 ...
What is the adverse event term?	Adverse Event	AETERM	→Free text	NA	White blood cell count increased		AETERM	→Free text	White blood cell co
What is the adverse event start date?	Start Date	AESTDAT	--/--/----	NA	10-Jan-2020		AESTDTC	YYYY-MM-DD T HH:MM	2020:1:10T10:00
Is the adverse event ongoing?	Ongoing	AEONGO	O Yes N No	NY	No		AEENRF / AEENRPT AEENTPT	N; Y; NA; U	No
What was the adverse event end date?	End Date	AEENDAT	--/--/----	NA	20-Jan-2020		AEENDTC	YYYY-MM-DD T HH:MM	2020:1:20T10:00
What is the severity of the adverse event?	Severity	AESEV	O MILD N MODERATE O SEVERE	NA	MODERATE		AESEV	MILD/MODERATE/SEVERE	MODERATE
Was the adverse event serious?	Serious	AESER	O Yes N No	AESEV	Yes		AESER	Y N	Y
Did the adverse event result in death?	Death	AESDTH	O Yes N No	NY	Yes		AESDTH	Y N	Y
What (s/was) the subject's date of death?	Death Date	DM.DTHDAT	--/--/----	NA	20-Jan-2020		DE.DSDTDC DM.DDTHDTC	YYYY-MM-DD T HH:MM	2020:1:20
Was the adverse event life threatening?	Life Threatening	AESLIFE	O Yes N No	NY	No		AESLIFE	Y N	N
Did the adverse event result in initial or prolonged hospitalization for the subject?	Hospitalization (initial or prolonged)	AESHOSP	O Yes N No	NY	No		AESHOSP	Y N	N
Did the adverse event result in disability or permanent damage?	Disability or Permanent Damage	AESDRAB	O Yes N No	NY	No		AESDRAB	Y N	N
Was the adverse event associated with a congenital anomaly or birth defect?	Congenital Anomaly or Birth Defect	AESCONG	O Yes N No	NY	No		AESCONG	Y N	N
Did the adverse event require intervention to	Needs Intervention to Prevent Inocuumt		O Yes N No					Y N	



CDASH advantage and status of utilization

– data from Questionnaire for Team members

SDTM vs CDASH: Why You Need Both!

Abstract

Some think CDASH/CDASH data capture standard is unnecessary. They say it's very similar to SDTM, and the few differences create confusion and extra work. CDASH is similar to SDTM, but it solves other different problems. Used together they positively impact data capture, quality, usability, responsiveness, and traceability.

We explore differences between CDASH and SDTM and why both standards are critical.

The Same or Different?

CDASH and SDTM are in fact very similar.

- 4% of CDASH v2.0 maps directly to SDTM variables, and CDASH v2.0 includes mapping
- 4% of CDASH maps directly with standard response values (e.g., dates)
- 14% are different for a reason

SDTM is optimized for submission, analysis, dataset creation, & data distribution. CDASH is optimized for data capture, investigator site activities, & data quality. Different requirements, different approaches, but with the same end in mind.

SDTM	Why the Difference?	CDASH
Show me the data, not lack of data	SDTM assumes that if there is no record then nothing happened. This works but only if it was checked in data capture, which requires a question and record (e.g., Were there any AEs?).	Absence of evidence is not evidence of absence; must check that missing data is missing
Machine-readable data: -SD (MM) YYYY/Time: 1 -Duration: P3M0D	SDTM machine-readable formats for variables such as dates are good for data reusability but are not user-friendly for data capture. Sites recording data in unfamiliar formats increases risk of errors	Human-readable: -Date/Time: 2 or more variables, DD-MMM/YYYY, (M)MM/SS -Duration: 1 month, 3 days
Variables must be in order by domain, non-standard variables are stored in different datasets (e.g., FA, SUPP)	Domain-driven organization is critical for standard tools, but data must make sense to the site. This can mean to split domains across CRF and CRFs across domains, and not split custom and standard variables	Data structure harmonized with SDTM but variables can be arranged to make data capture easier
Collected relationships between data are represented in RELREC, a separate dataset	RELREC is based on collected data, but data is not captured but that. Entering free numbers in the related dataset is simpler, requiring no derivations (e.g., adding AE line # to related con need)	Links among records are explicit (e.g., this AE related to that CRF), or implicit (e.g., AE events change going into (A) in data collection
Findings data must be in a normalized or vertical structure; answers are already in variables	Normalized structures can store new tests, without changing dataset structures, but most CDISC systems can't do this; also, different tests in a domain may need different controlled terms (e.g., different answers for different questions (e.g. a survey))	Findings data may be horizontal (e.g., question text/prompts, CRF completion instructions)
Metadata centers on tabulators, e.g., variable labels and roles	SDTM labels identify tabulation data. CDASH has question texts and prompts designed to elicit clear responses on CRFs. CRF instructions convey SDTM and CDASH assumptions in a data capture context	Metadata includes capture needs, e.g., question text/prompts, CRF completion instructions

Conclusions

To use SDTM instead of CDASH for data capture, take out derived variables, records and datasets; add in data quality indicator variables; put all custom and FA variables into parent datasets; reformat variables that are not user-friendly; record variable labels to questions; and restructure vertical data to horizontal.

This effectively produces CDASH. Except each organization will do it differently, resulting in reduced data quality and traceability

Whether Regulatory Affairs assembling a submission, FDA reviewers seeking safety signals, or Big Data miners searching for as-yet-unknown reasons, future users must be confident that the data represents the "truth."

Using CDASH facilitates consistent, well-defined data across studies. Without that confidence, at best the data will produce vague associations; at worst, it may kill us.

Authors & Acknowledgments

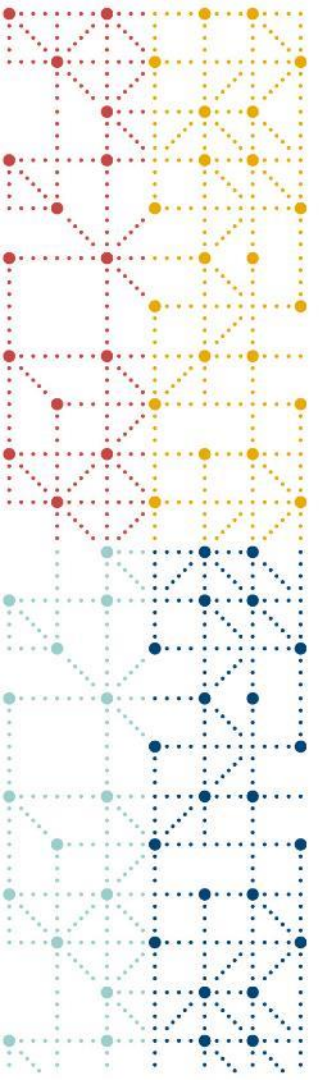
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With thanks to the CDASH and SDTM teams

CDISC EDUCATION

pick up CDASH advantages

CDASH Team questionnaire

#	Advantage	Status (n=19)
1	Able to specify missing data	19
2	Use familiar format for date/time data considering data entry depending on regions	19
3	Place fields in CRF to ensure easy data collection	17
4	Specify relationship of multiple data by corresponding row #, no need to create additional forms like SDTM RELREC	17
5	Provide not only normalized structure but horizontal expansion, since sometimes normalization is not suitable for CRF Create naming rule of variables	15
6	Create 2 CRF labels as Question text / Prompt to clarify data collection details Prepare CRF data entry guide	13

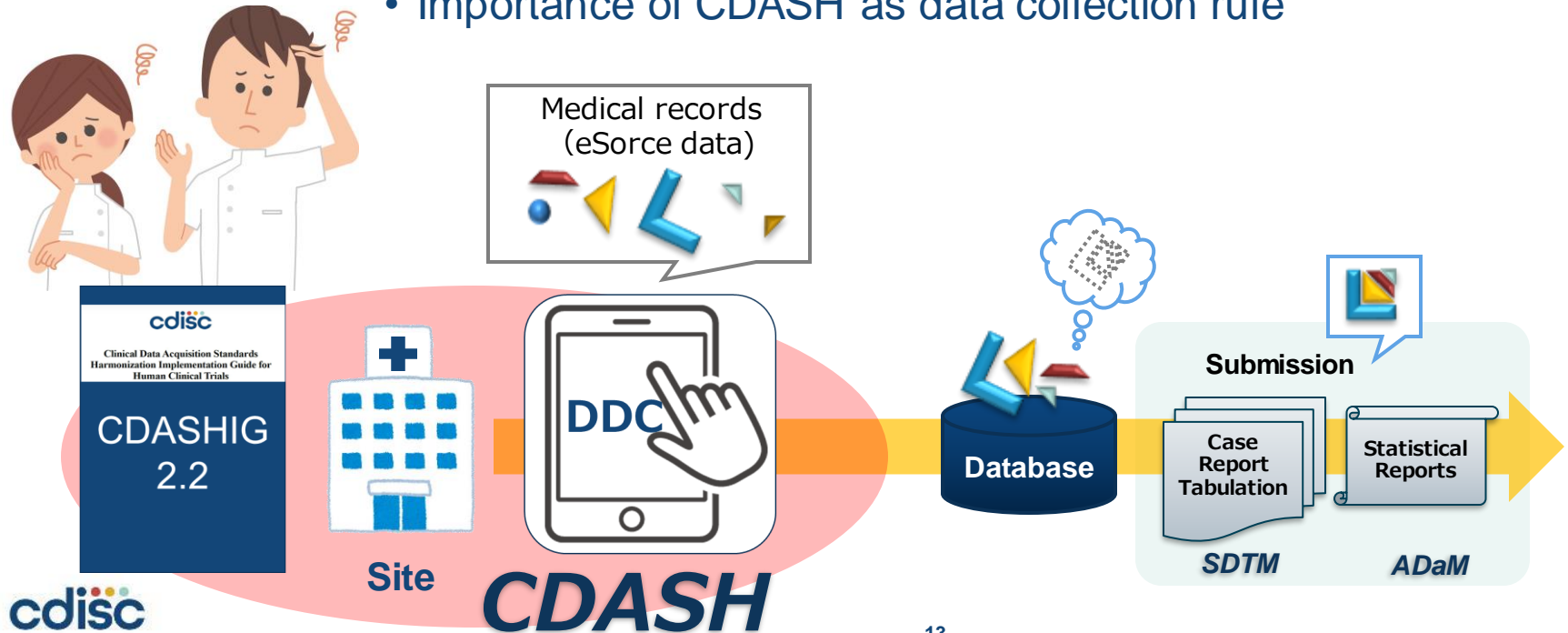


Introduction of CDASH Sub team 2

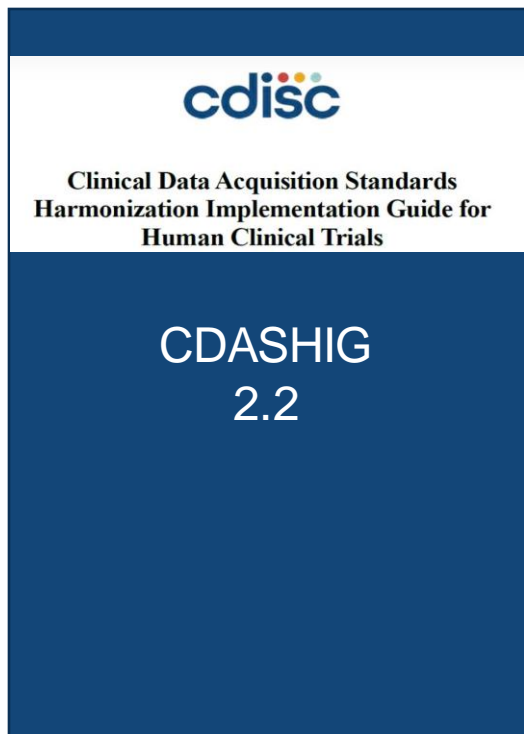
Utilize CDASH standard using eSource

Background of this activity

- Increasing # of case studies of eSource, especially DDC
- Increasing opportunity of using CDASH by site staffs/CRCs
- Importance of CDASH as data collection rule



Activity and Objective



+ α

- ✓ Provide additional information for complicated fields to map, and fields not having CDASH variables
- ✓ Consider appropriate variables/mapping to be suitable with SDTM for fields not having CDASH variables

Create
easy material for site staffs/CRC
(Case studies)



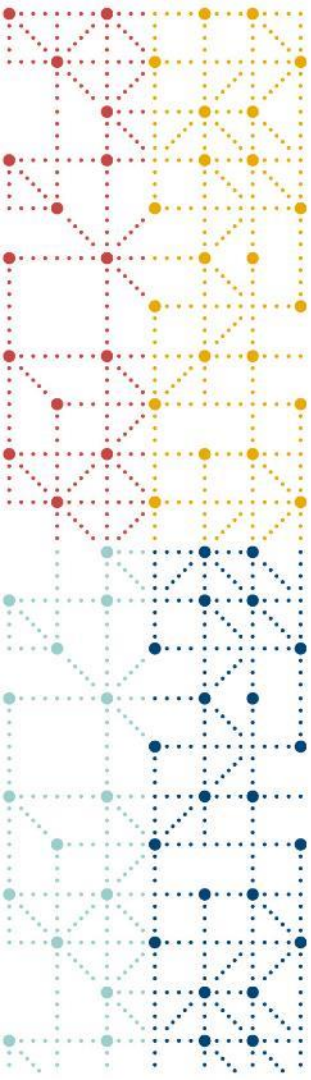
Utilize CDASH standard using eSource

From our current material:

Our considerations:

- No variables in CDASH but available in SDTM
e.g : VS test related :
HEIGHT_VSORRES,
WEIGHT_VSORRES
- No variables in CDASH and SDTM
 - ✓ Required data. Decide Variable based on CDASH rule
 - ✓ Not required. No need to have Variable

説明文(英語)	項目名	CDASHにある場合は、変数名を追記	事例集への補足説明
Height and Weight	Were height and/or weight collected?	VS PERF	YN自体の情報はEDCでの画面遷移等が必要なだけ、実施していいことを明示したい[NOT DONE]場合はYNではなくPERF/STATなど別の変数が必要 (IGの4.2データ収集ツールの作成に対するベストプラクティスを参照) 他に重複する項目がある場合HIGH_WEIGHT_VSPERFでもよいが、システムにより文字数制限で使えないこともある 左記のように1項目で結果を収集する場合は--ORRES変数を利用する。収集された値はSDTMの--ORRESに直接マッピングされる。 所見結果を収集するための質問と、詳細な所見の内容を入力する2項目で結果が収集される場合に、--RES + --DESC が利用される 例: 異常はありましたか? :-RES変数 どのような異常でしたか? :-DESC変数
Laboratory Tests (Urine) / Urine Sediment Test	Crystals/Salts (HPF) Result (○_7)	LBORRES	(※詳細はCDASH IG 8.3.1の 9. 参照) 同一ページに複数の「実施の有無」が存在するため、以下変数の末尾に追加して区別 ・尿検査: _URIN (URINALYSISを省略) ・尿沈澱検査: _URINSED (URINARY SEDIMENTを省略) ・薬物乱用スクリーニング検査: _DU (DRUG USEを省略) ・妊娠検査: _PREG (PREGNANCYを省略)
Laboratory Tests (Urine) / Urine Sediment Test / Drug Screen Test / Pregnancy Test	Was the urine sample (Laboratory Tests (Urine)) collected? (○_8)	LBPERF_URIN	(IG日本語訳より抜粋) 8.3.1 Findings(所見)ドメインに対するCDASHの一般的な前提条件 構型(規格化されていない)の設定で、SDTM変数に類似した--PERF、--LOC、--STATは、構型のレコード全体について1回のみ収集し、その値を当該コードに関するすべての観察に適用できる。あるいは、CDASH変数に類似した<--TESTCD>_--PERFを用いて検査毎に収集できる。SDTM申請データセットを作成する際に、構型のレコード全体で収集したすべての変数を縦型の各レコード(適切な場合)にマッピングしなければならない。 EX_投与内容がオープンの場合、EC_ブラインドの場合 YES_NO の選択の場合は、ECYN NOを選択して、理由を記載する場合は、ECOCCUR CDASHには変数が存在しない。(SDTMへの変換は不要であろう項目) 例として、●●YN ●●は自由につけてよい 規定投与ではない場合には理由を入力: ECREASOC ECDOSADJ (投与量) ECADJ (理由)
Study Drug Administration ●●	Was study drug administered? (EX)	ECYN	
Study Drug Administration ●●	Was the drug administered in the prescribed manner?	●●YN	
Medical History	The points at which this medical history was found	MHSTAT ECSTTIM_●● or EXSTTIM_●●	MHPRIOR(いつ頃からあった?) または、MHDAT(いつ確認したか?) ECSTTIM_●● or EXSTTIM_●● ●●に入るのは、3回目であったり、複数の薬剤がある場合 システムによっては、同じ変数を入れられるものもある 同じようなフィールドを2つ以上発生する場合の変数命名ルールを決めますか? →1+項目名の頭文字をつけるなどで変数を分ける対応が良いのではないかと。繰り返しの項目の場合は数字を付ける対応も考えられる(2008年4月確認済み)
Pharmacokinetics ●● / Biomarker Analysis / Laboratory Tests	Time of dosing just before specimen collection (○R)	PCTIM	



Furuya

Tanaka

Ikeda

Ishikawa

Tomisato

Yamaguchi

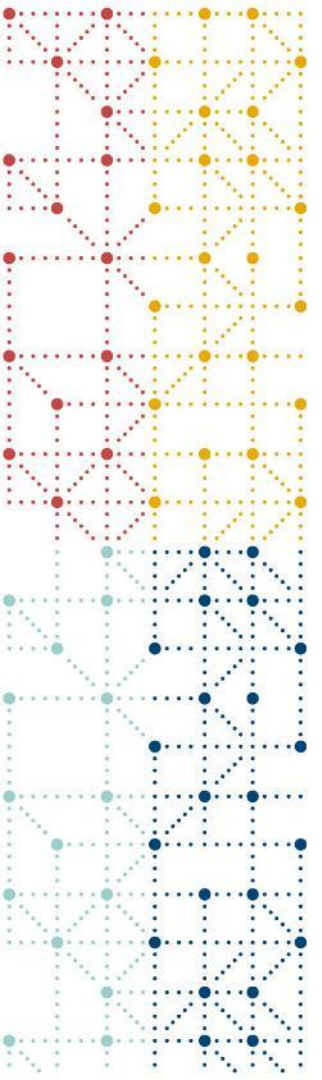
Tamura

Kumagai

Kobayashi

Yashima

Takahashi



Summary

Summary

- The latest information about CDASH

<https://www.cdisc.org/standards/foundational/cdash>

The screenshot shows the CDASH website interface. At the top, there is a navigation bar with the CDISC logo and links for "New to CDISC", "Standards", "Education", "Resources", "Events", and "Membership". Below the navigation bar, the page title is "CDASH". There are tabs for "Description", "Versions", "Education", "Knowledge Base", and "Archive", with "Versions" currently selected. The main content area features a diagram illustrating the CDASH model structure. It shows three main models: CDASH Model v1.0 (20-Sept-2017), CDASH Model v1.1 (07-Nov-2019), and CDASH Model v1.2 (28-Sep-2021). Each model is associated with one or more CDASHIG (Clinical Data Acquisition Standards Harmonization Implementation Guides) and CDASH SAE (Serious Adverse Event) Supplements. CDASH Model v1.0 is linked to CDASHIG v2.0 (25-Sept-2017). CDASH Model v1.1 is linked to CDASHIG v2.1 (07-Nov-2019) and CDASH SAE Supplement v2.0 (21-Apr-2021). CDASH Model v1.2 is linked to CDASHIG v2.2 (28-Sep-2021) and CDASH SAE Supplement v2.0 (21-Apr-2021). Below the diagram, there is a paragraph explaining that the latest versions of the CDASHIGs have been developed in reference to a specific CDASH model, and that the CDASH model is cumulative, meaning each new release builds on the previous model. Finally, there is a table showing the relationship between CDASHIG versions and their corresponding CDASH models and SAE supplements.

Version	Related
CDASHIG v2.2 28 September 2021	CDASH Model v1.2 CDASH SAE Supplement v2.0
CDASHIG v2.1 7 November 2019	CDASH Model v1.1 CDASH SAE Supplement v2.0
CDASHIG v2.0 25 September 2017	CDASH Model v1.0
CDASH v1.1 18 January 2011	CDASH Serious Adverse Event (SAE) Supplement v1.0



Thank You!

We wish to guide everyone for better understanding of CDASH capability!