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GUF CDISC
Comment communiquer positivement sur les Standards

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Introduction

Quel est l'intérêt d'être expert CDISC si vous êtes le seul dans votre société à en connaitre les avantages?

A votre avis, quelle est la proportion de personnes travaillant sur les essais cliniques connaissant CDISC?

Question subsidiaire: qui comprend ce qu'est la Controlled Terminology? ☺

Quelle est la perception de votre société sur les Standards cliniques?

Arrivez vous à convaincre le Management pour avoir du budget et des ressources pour le développement des Standards?

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CONTEXT IN SANOFI

CDISC History in Sanofi

- **Before 2015**
  - CDASH not really implemented
  - All SDTM / ADAM / CT activities were under the accountability of the Biostatistics and Programming department (B&P)
  - Lately implemented within a clinical project
    Generally after Go for entering phase3

-> CDISC well known only by statistical programmers & statisticians

Very limited audience within Research & Development
Perception of very technical work, very rigid, only for experts

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CDISC History in Sanofi

- **Since 2015, major reasons to change the organization**
  - FDA & PMDA CDISC requirements for end 2016
  - Huge workload for B&P on a very limited timeframe
  - Initiative to converge processes between entities coming from several merges, with some of them anticipating CDISC compliance
- **Decision to anticipate implementation of CDISC**
  - CDASH as much as possible in eCRF

  -> involvement of Database designers and Data-managers
- **SDTM / ADAM / CT for all studies from phase1 to phase3**
- **Governance of Standards by a dedicated group (CIG)**
  - Development of Global Standards (Data collection, edit checks, SDTM, ADAM, CT, data review reports, stat outputs…)
  - Support to study teams as metadata reviewers - for each study

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Needs

- **Develop CDISC Knowledge for people external to Biostatistics and Programming**
  - Trainings
- **Convince of the CDISC / Sanofi Standards adherence, for internal as well as outsourced studies**
  - Define metrics for Efficiency (timelines, resources) and Quality

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Scope

- **How to convince Top Management to invest resources and time on the Standards Governance?**
- **How to regain "prestige" on clinical data Standards?**
- **Pieces of investigations**
  1. Break the image of constraints -> Standards are useful for everyone in the real life
  2. Break the image of no innovation / science -> show all TAUGs developments!
  3. Break the image of rigidity -> Try to be a little bit funny, change the support, create a modern logo

=> Useful / Scientific / Modern

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CIG Presentations

- **Objectives**
  - To explain benefits / improve the perception of Standards
  - To reassure on the focus Innovation / To avoid sentences like « Less of flexibility », « Brake on Innovation »
  - To collect needs / feedbacks

- **Terminology adapted to the Audience**
  - Top Management: Cost & resources effectiveness, Set-up improvements in case of partnership / outsourcing thanks to an international Standards
  - Stat: Facilitate the pooling within a clinical project
  - Quality: Compliance to Health Authorities requirements
  - Best interaction between data-managers & programmers in using the same vocabulary …

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Promotion / Communication within the Company

- **Presentations to various teams were made as follows:**
  - Jan 21st: Clinical Data Management forum Sanofi-Pasteur
  - Feb 3rd: Medical Operations Staff meeting
  - Feb 11th: Workshop with Heads of functions (TOP Management)
  - Feb 16th: IS Staff Meeting
  - Feb 18th: Trial Operations Staff meeting (DBD, Data-Managers, Trial Managers)
  - Mar 10th: Programming (B&P) Management Meeting
  - Mar 16th: Clinical, Scientific & Operational Leadership team meeting
  - Mar 29th: Poster in the IS group meeting day in Chilly (France)
  - April 7th: Video in the Clinical, Scientific & Operational Forum
  - June 16th: Organization of Pinnacle21 Demo
  - June 23rd: Poster in Sanofi-Pasteur clinical corner
  - June 30th: Clinical Documentation Manager meeting
  - Sep 29th: Poster in the IS group meeting day in Bridgewater (US)
  - Oct 6th: Town Hall R&D in Sanofi-Pasteur
  - Nov 22th: Biostatistics & Programming French department meeting

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EXAMPLES

General interest of Standards

Video

- **Presented on a forum organized twice a year for the Clinical, Scientific & Operational platform responsible for implementation of clinical studies**
  - Clinical Project Leaders
  - Physicians
  - Database developers
  - Data-Managers
  - Trial Managers
  - ARC managers within Corporate
  - Statistical programmers
  - Statisticians
  - Medical writers
  - IS analysts
  - Budget & Time-tracker analysts

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STANDARD: FRIEND OR ENEMY?

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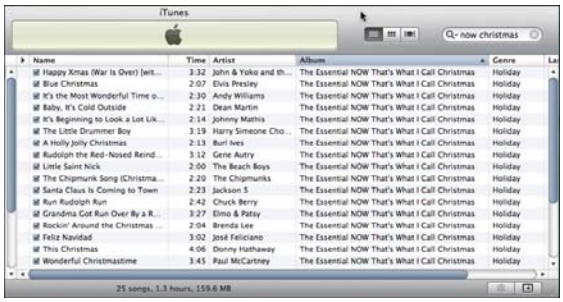
Standardization is not a brake on Innovation

- Think to your music in phone, computer, radio…
- How to find your favorite song?
- Thanks to STANDARD Classification
  - Singer / Band name
  - Song Title
  - Album name
  - …



- Easy sorting, filter… using these standard fields

- Does it STOP musical innovation?

… Of course not ☺…

- Same principle for Clinical data and Scientific/Medical Innovation !

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Poor Standardization IS a brake on Efficiency

(CNN) -- NASA lost a $125 million Mars orbiter because a Lockheed Martin engineering team used English units of measurement while the agency's team used the more conventional metric system for a key spacecraft operation, according to a review finding released Thursday.

September 30, 1999
Web posted at: 4:21 p.m. EDT (2021 GMT)

Mars Orbit Insertion Burn	**M/D/Y HH:MM:SS PDT (Earth Receive Time, 10 min. 49 sec. Delay)**	**Distance (miles)**	**Speed (miles/hr)**	**Force (Pounds)**
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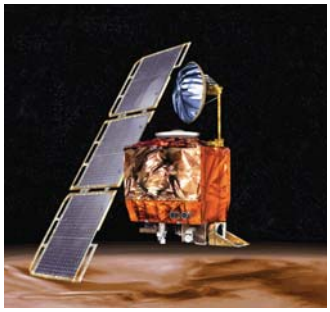

- No Standard in metric units => A scientific failure and $125,000,000 lost for NASA…
- Would you take this risk in your Clinical Projects?

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Benefits from Standards in the Submission

Audience: Top Management

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What are the Benefits for the Regulatory Authorities of Using Standards?

To perform a quick and efficient review process

To spot patterns and trends in data across treatments of a similar class

To look for causal effects or public health signals that need to be addressed by further research

FDA

pmda JAPAN

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What are the Benefits for Sanofi of Using Standards?

To save time

To improve data quality

To create efficiencies

To allow Study Teams to focus only on what is study specific

SANOFI

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Evolution of Standards Also source of innovation!

Audience: Top Management

Transcelerate Clinical Data Standards overview

Program Overview – May 2016

Therapeutic Area	Charter Approved	Check of Concepts Completed	Posted for Internal Review	Posted for Public Review	Projected Publication
Breast Cancer v1	Oct 2014	Oct 2014	Mar 2015	Nov 2015	*May 16, 2016*
Rheumatoid Arthritis v1	Jun 15	Oct 15	Jan	May	*Q3 2016*
CV Imaging v1	May 15	Jul 15	Dec 15	May	*Q3 2016*
Diabetic Kidney Disease v1	May 15	Aug 15	Jan	May	*Q3 2016*
Ebola v1*	Sep 15	Mar	Mar	Jun	*Q3 2016*
Kidney Transplant v1	Jan	Mar	Apr	Jun	*Q3 2016*
Prostate Cancer v1	Nov 15	Mar	May		*Q3 2016*
Major Depressive Disorder v1**	Dec 15	Feb	May		*Q3 2016*
Vaccines v1*	Q4 14	Oct 15	May	Q316	*Q4 2016*
Malaria v1*	Oct 15	May	Jun	Jul	*Q4 2016*
Nutritional Standards v1*	Mar 15	Q216	Q216	Q316	*Q4 2016*
Coronary Heart Disease – TCM v1*	Apr	Q216			*Q4 2016*
Acupuncture – TCM v1*	Apr	Q216			*Q1 2017*
Colorectal Cancer v1	May				*Q4 2016*

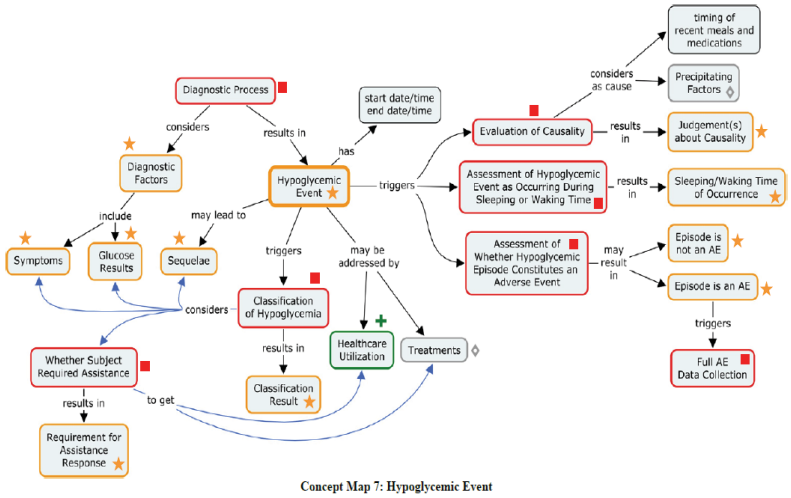
Key| Stage completed | Stage ongoing | All months reflect when stage is, or is projected to be, completed

*Project duration dependent on volunteer resourcing

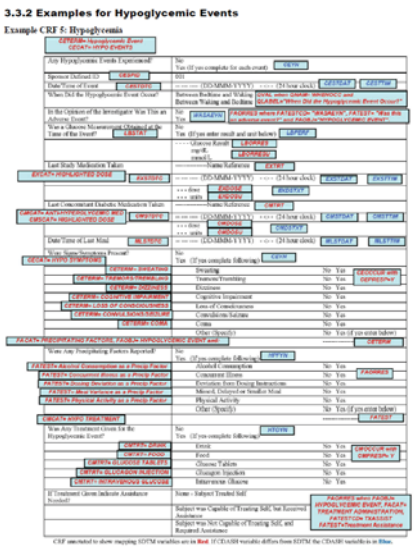
**General Anxiety Disorder and Bipolar Disorder pending resource availability

Example of a Transcelerate TAUG

- **TAUG: Therapeutic Area User Guide**
- **Example for Hypoglycemia in the Diabetes TAUG:**



Concept Map 7: Hypoglycemic Event



Involvement of Top Management

Audience: Top Management

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Your Role

- **Don’t forget that Default is to use standards but… Standards could help you!!!**
- **Support Standards Governance Processes and Teams**
- **Collaborate to improve the standards reach and content**
- **Think about Standards from the very start (Target Product Profile, Protocol)…**
  … To the very end (submission, publication, label)

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Education on CDISC

CDISC Overview module

- **Developed for all members of the study team (including physicians) 25 mn**
  - To understand Health Authorities vocabulary
  - To improve communication between functions
  - Includes SHARE video

Standards definition

After a mapping of data collected in **CRF** and stored using **CDASH** format,
SDTM and ADaM including appropriate **Controlled Terminology**, as well as **defines.xml**
defining metadata, must be provided to Health Authorities in the submission file,
in compliance to **CDISC** recommendations.

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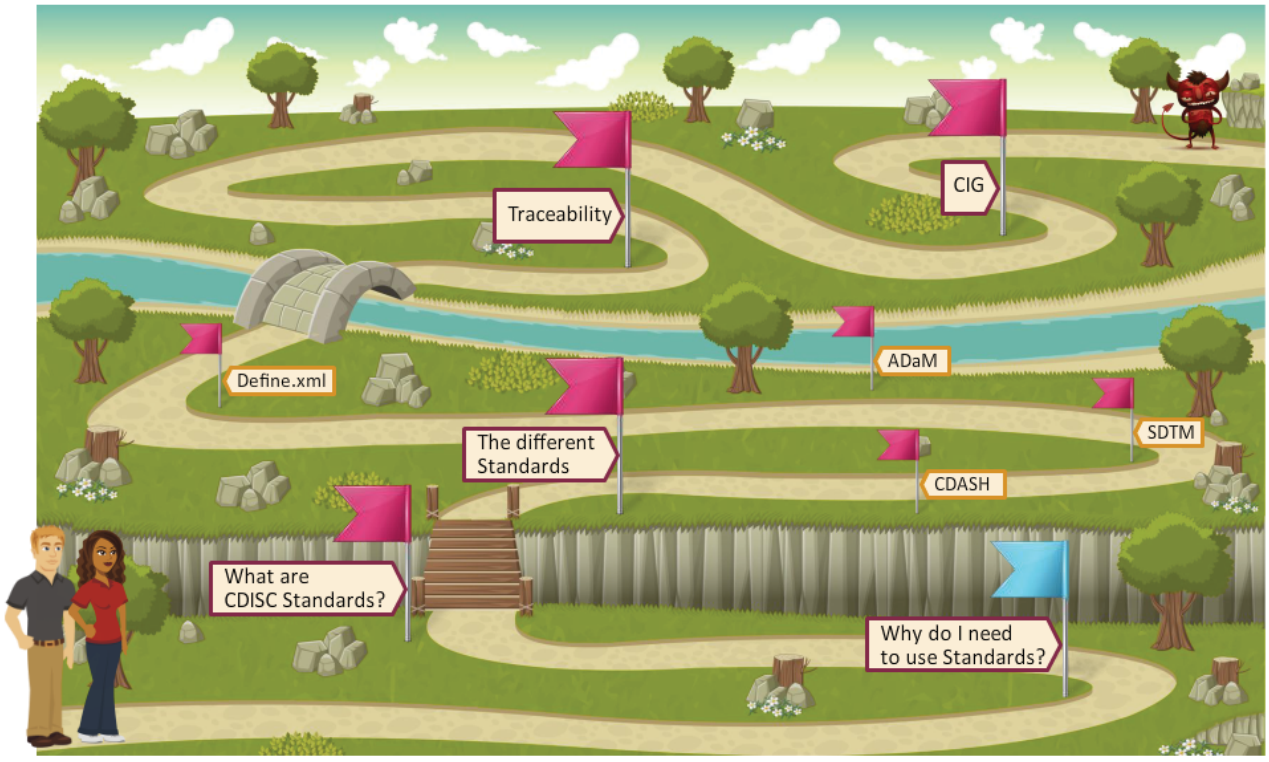
CDISC Standards



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Benefits of Governance

Audience: Top Management & Operational teams

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Interest of Standardization

- **Efficiency: A to Z Standards**
  - **Overall data process is validated, using routines**
    - Extended Synopsis / Protocol
    - Data Collection for eCRF and External Data / annotated CRF
    - Database Structure-> SDTM -> ADAM -> Submission database
    - Data Validation: Edit checks / Validation listings
    - Data review / Data surveillance outputs
    - Statistical analysis (SAP) / derivations and outputs (TLFs)
    - Clinical Study Report / CTD writing
  - **More time to focus on Study-specific data (often the primary endpoint(s))**
- **Robustness**
  - **Developed and updated Standards according to regulatory changes (CDISC) and technique development**
- **Reduce Money, Workload / Increase Time for Innovation**

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CIG group: Benefit

- **Centralize**
  - Facilitate the use, reuse, maintenance, exchange & sharing
  - No inconsistency between multiple sources of Information
  - Link with all functions to review and comment CDISC guidances
- **Support**
  - Advice study teams with innovative designs to respect Health Authorities Data Structure requirements
- **Govern / Control**
  - **"Golden rules" definitions**
    - Data collection should be focused on what is relevant for the final analysis
  - **Adherence**
    - Reject study requests not compliant to Golden Rules
    - Or if approved, Evaluate the Change Impact

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CIG Mindset -> translation in the LOGO

- **Standard conventions defined by Health Authorities : NO CHOICE!**
  - Pieces of puzzle in a pre-defined shape
- **Cross-functional team spirit for entering data in pre-defined boxes**
  - People building the puzzle together
- **Even if the shape is defined, Innovation and Energy are injected**
  - Colored pieces of puzzles

= >Funny and successful game!

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Thank you

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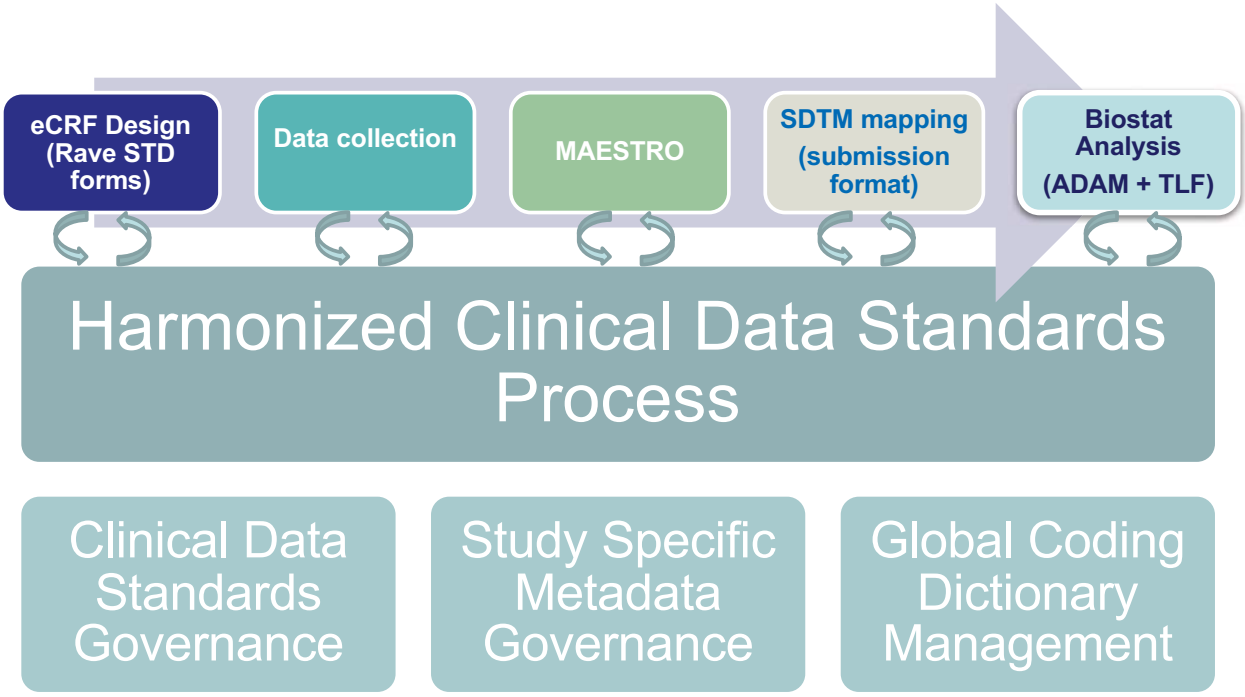
Back up

Harmonized Clinical Data Standards Process



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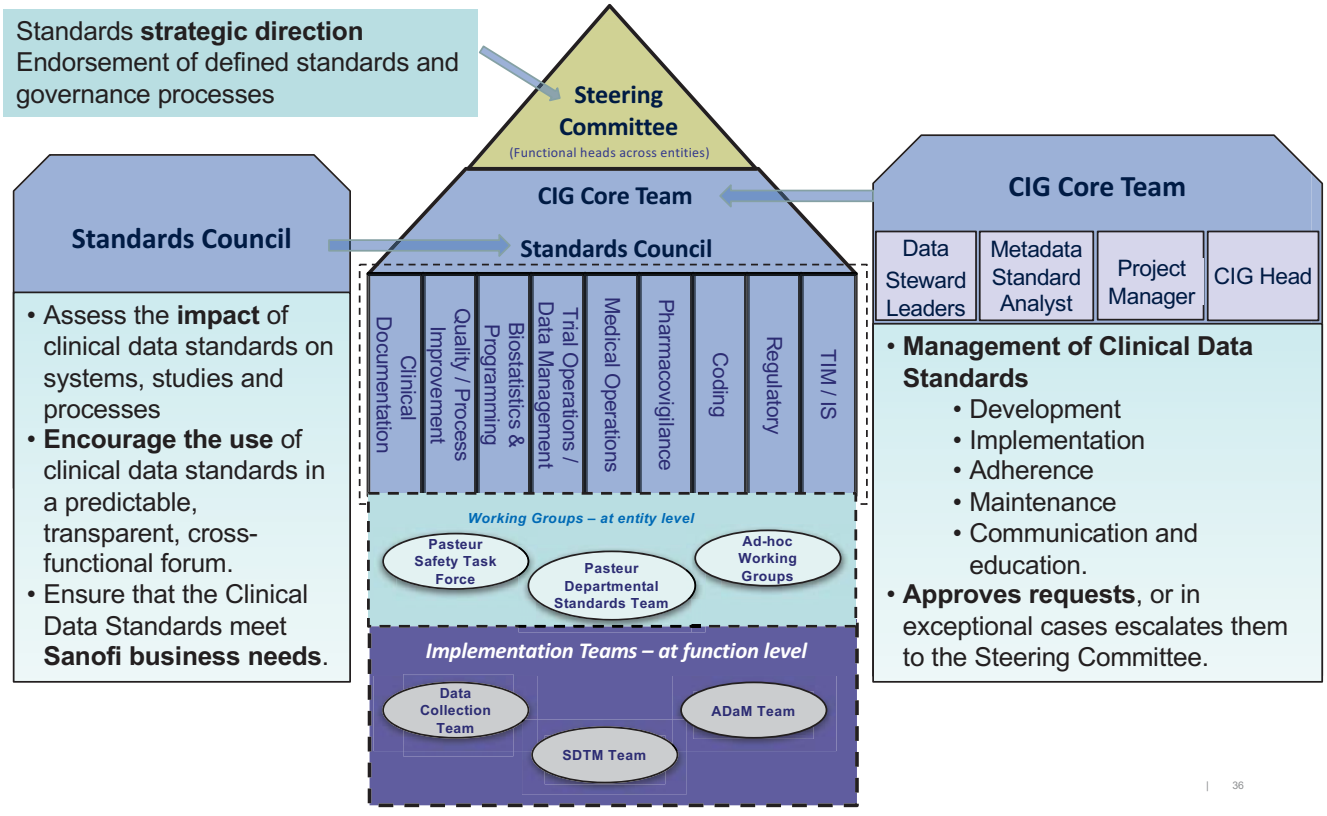
Clinical Information Governance Network



Network

- **External network**
  - CDISC
  - Transcelerate Clinical Data Standards Stream

- **Within Sanofi, Liaising with all internal initiative with impacts on standards**
  - Missing data
  - CRF Golden rules
  - Data Quality
  - Risk Based Monitoring
  - Master Data Management
  - IDMP
  - Outsourcing…

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