

COVID-19 Pandemic and Clinical Data Management

- ▶ Presented by:
Society of Clinical Data Management
COVID-19 Taskforce



DATA DRIVEN

Society of Clinical Data Management COVID-19 Taskforce

Initial response from Industry to COVID-19

Patrick Nadolny, Allergan

Demetris Zambas, Pfizer

Peter Stokman, Bayer



SCDM COVID-19 Webinars

- ✓ **April 30th**, Overview of Changes in Regulatory Guidelines
 - Set the stage by simply summarizing COVID-19 related guidelines
 - 2 sessions (600+ Live participants)
- ▶ **May 14th**, Initial response from industry to COVID-19
- ▶ **TBD**, Peer-to-Peer Discussions
 - Panel discussion with industry leaders



Summary from April 30th Webinar

Topics	US FDA	EMA PTC	EMA Guidance to sponsors	UK MHRA	Germany BfArM	India	China	Japan PMDA / MHLW
1 Safety of clinical trial participants	X	X	X	X	X	X	X	X
Compliance with GCP	X						X	
Clinical trial integrity	X	X	X				X	
Clinical trial eligibility				X				
3 Study Participant continuation/discontinuation	X	X	X	-	X	X	X	-
Safety assessments	X	-	X	X	X	-	X	X
Access to IP - home delivery	X	-	X	X	X	-	-	X
Access to IP - home health care administration	X	-	X	X	X	-	-	X
New or modified processes	X		X		X		X	
Protocol amendments	X	-	X	X	-	X	X	-
Missing information/data	X		X				X	
Efficacy endpoint assessment	X							
2 Protocol deviations	X	X	X	X	-	X	X	X
3 Study monitoring	X	-	X	X	X	-	X	X
Data management plans	X							
Statistical Analysis plans	X	X						
COVID-19 screening	X							
Consent process	X		X		X			X
CSR- COVID-19 impact and study analyses	X		X					
Patient privacy					X			
Restart of clinical trials after suspension				X				
Risk-assessment of the impact	X	X	X	X	-	X	-	-
1 Interaction with Authorities	X	X	X	X	X	X	X	X
Communication with sites	X		X			X	X	
Audits			X					
Reimbursement			X					
Trials to test treatments for COVID-19			X	X	X			



Initial response from Industry to COVID-19

- ▶ Share reactions of organizations to COVID-19 and related Guidelines
- ▶ 14 Organizations
- ▶ US and EMA Based
- ▶ Mainly Sponsors
- ▶ Small to Large
- ▶ Feedback collected around 8 areas:
 1. Trials Conduct
 2. Subject Management
 3. Site Management
 4. Data Management
 5. Clinical Supplies (Incl. IP)
 6. Protocol Deviation
 7. Safety Reporting
 8. Clinical Study Report



1 - Trial Conduct

Feedback from **MOST** companies on **Protocol Amendment**

- ▶ **NOT** requiring systematic Protocol Amendment due to COVID-19
- ▶ Protocols amended case by case:
 - ▶ Allow for Home Visits
 - ▶ Extend visit windows
 - ▶ Update Time & Events
 - ▶ Amend IC/EC
 - ▶ NOT for capturing additional information
- ▶ **EMA: Changes should be proportionate, taking into account interest of trial sites in avoiding further burden during the COVID-19 pandemic as well as the subjects' well-being & best interests.**
- ▶ **EMA: Prospective protocol waivers remain unacceptable**



1 - Trial Conduct

Feedback from **MOST** companies on **Risk and Impact**

▶ Complete a **risk assessment**

1) Patients/Study participants are unable to travel to the sites, resulting in-

- ▶ Missed visits - need to flag visits due to COVID-19 and associated Protocol Deviations
- ▶ Missed procedures - need to flag assessments missed due to COVID-19 and associated Protocol Deviations
- ▶ Unable to use the central lab
- ▶ Compliance with site-based Clinical Outcome Assessment (COA) measures
- ▶ Use of Telehealth to perform parts of the patients visits
- ▶ Needing to ship IP to the Patients' home
- ▶ Overall enrollment and screening impacts - option to screen-fail now and rescreen later in the year an option?
- ▶ Potentially higher number of discontinued patients

Risk-areas and potential impact to clinical data

1) Patients/Study participants are unable to travel to the sites, resulting in-

- Missed visits - need to flag visits due to COVID-19 and associated Protocol Deviations
- Missed procedures - need to flag assessments missed due to COVID-19 and associated Protocol Deviations
- Unable to use the central lab
- Compliance with site-based Clinical Outcome Assessment (COA) measures
- Use of Telehealth to perform parts of the patients visits
- Needing to ship IP to the Patients' home
- Overall enrollment and screening impacts - option to screen-fail now and rescreen later in the year an option?
- Potentially higher number of discontinued patients
- ...

2) Site staff unable to commute to work or need to go on leave, resulting in-

3) CRAs unable to perform site visits, resulting in-

4) Vendors (Labs, eCOA, ECGs, IxRS etc.) face staff shortage or facilities shutdowns, resulting in-

<https://scdm.org/covid-19-risk-areas-and-potential-impact-to-clinical-data/>



1 - Trial Conduct

Feedback from **MOST** companies on **Risk and Impact**

▶ Complete a **risk assessment**

2) Site staff unable to commute to work or need to go on leave, resulting in-

- ▶ Delays in data entry into EDC
- ▶ Delays in data queries resolution
- ▶ Delays in site initiations and enrollments
- ▶ Delays in processing of lab samples
- ▶ Unable to receive IP shipment - bulk dispensation an option?

Risk-areas and potential impact to clinical data

1) Patients/Study participants are unable to travel to the sites, resulting in-

- Missed visits - need to flag visits due to COVID-19 and associated Protocol Deviations
- Missed procedures - need to flag assessments missed due to COVID-19 and associated Protocol Deviations
- Unable to use the central lab
- Compliance with site-based Clinical Outcome Assessment (COA) measures
- Use of Telehealth to perform parts of the patients visits
- Needing to ship IP to the Patients' home
- Overall enrollment and screening impacts - option to screen-fail now and rescreen later in the year an option?
- Potentially higher number of discontinued patients
- ...

2) Site staff unable to commute to work or need to go on leave, resulting in-

3) CRAs unable to perform site visits, resulting in-

4) Vendors (Labs, eCOA, ECGs, IxRS etc.) face staff shortage or facilities shutdowns, resulting in-

<https://scdm.org/covid-19-risk-areas-and-potential-impact-to-clinical-data/>



1 - Trial Conduct

Feedback from **MOST** companies on **Risk and Impact**

▶ Complete a **risk assessment**

3) CRAs unable to perform site visits, resulting in-

- ▶ Unable to perform traditional on-site SDV
- ▶ Delays in cohort-data reviews
- ▶ Impact on milestones such as DB Lock.

4) Vendors (Labs, eCOA, IxRS etc.) face staff shortage or facilities shutdowns, resulting in-

- ▶ Delays in sample analysis
- ▶ Delays in data transfers and reconciliations
- ▶ Delays in shipment of eCOA - paper and web-backup an option?

Risk-areas and potential impact to clinical data

- 1) Patients/Study participants are unable to travel to the sites, resulting in-
 - Missed visits – need to flag visits due to COVID-19 and associated Protocol Deviations
 - Missed procedures – need to flag assessments missed due to COVID-19 and associated Protocol Deviations
 - Unable to use the central lab
 - Compliance with site-based Clinical Outcome Assessment (COA) measures
 - Use of Telehealth to perform parts of the patients visits
 - Needing to ship IP to the Patients' home
 - Overall enrollment and screening impacts – option to screen fail now and rescreen later in the year an option?
 - Potentially higher number of discontinued patients
 - ...
- 2) Site staff unable to commute to work or need to go on leave, resulting in-
- 3) CRAs unable to perform site visits, resulting in-
- 4) Vendors (Labs, eCOA, ECGs, IxRS etc.) face staff shortage or facilities shutdowns, resulting in-

<https://scdm.org/covid-19-risk-areas-and-potential-impact-to-clinical-data/>



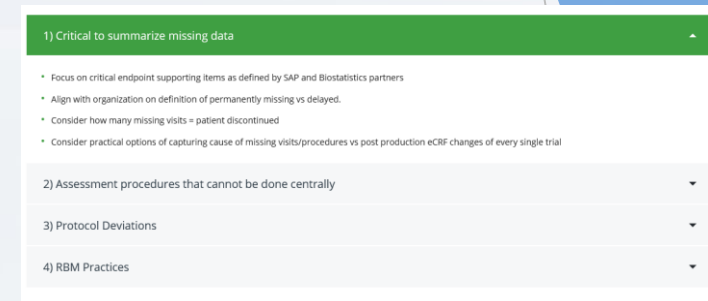
1 - Trial Conduct

Feedback from **MOST** companies on **Risk and Impact**

► Complete an **impact assessment**

1) Critical to summarize missing data

- Focus on critical endpoint supporting items as defined by SAP and Biostatistics partners
- Align with organization on definition of permanently missing vs delayed.
- Consider how many missing visits = patient discontinued
- Consider practical options of capturing cause of missing visits/procedures vs post production eCRF changes of every single trial.



<https://scdm.org/covid-19-risk-areas-and-potential-impact-to-clinical-data/>



1 - Trial Conduct

Feedback from **MOST** companies on **Risk and Impact**

► Complete an **impact assessment**

2) Assessment procedures that cannot be done centrally

- For non-specialty labs, local lab options may be more feasible or a local branch of a central lab
- Additional work for confirmation of local lab qualification, but may be necessary
- While same approach could apply for imaging, however in cases when Imaging is a primary endpoint, assess the scientific validity of the trial if the image is not captured, how many missed images would cause impact to the analysis.
- Study EDC designs need to be flexible to account for manual local lab data capture vs central lab collection

1) Critical to summarize missing data	▲
• Focus on critical endpoint supporting items as defined by SAP and Biostatistics partners	
• Align with organization on definition of permanently missing vs delayed.	
• Consider how many missing visits = patient discontinued	
• Consider practical options of capturing cause of missing visits/procedures vs post production eCRF changes of every single trial	
2) Assessment procedures that cannot be done centrally	▼
3) Protocol Deviations	▼
4) RBM Practices	▼

<https://scdm.org/covid-19-risk-areas-and-potential-impact-to-clinical-data/>



1 - Trial Conduct

Feedback from **MOST** companies on **Risk and Impact**

▶ Complete an **impact assessment**

3) Protocol Deviations

- ▶ Existing edit checks/derivations will report extremely high number
- ▶ Advisable to leave these in place to capture all, however more intelligent filtering as well as flagging of COVID-19 related PDs via reporting may be necessary

4) RBM Practices

- ▶ Consider increasing the frequency of the cross-functional data review
- ▶ Standard KRIs can remain in place and monitored but additional ones should be identified based on current risks
- ▶ Organizational-wide updates to KRI's can mitigate how many trial-specific ones may be necessary
- ▶ A decision tree to filter high volume of “false positives” and follow up actions needed

<https://scdm.org/covid-19-risk-areas-and-potential-impact-to-clinical-data/>

1) Critical to summarize missing data	▶
• Focus on critical endpoint supporting items as defined by SAP and Biostatistics partners	
• Align with organization on definition of permanently missing vs delayed.	
• Consider how many missing visits = patient discontinued	
• Consider practical options of capturing cause of missing visits/procedures vs post production eCRF changes of every single trial	
2) Assessment procedures that cannot be done centrally	▼
3) Protocol Deviations	▼
4) RBM Practices	▼



POLL Question #1

As a result of COVID-19, did you company?

Select all applicable answers:

- A - Halt Enrollment (Globally or in impacted countries)
- B - Delay new studies (Unless critical-e.g. study on COVID-19)
- C - Leverage Telehealth Visits
- D - Allow IP Shipment to Patient' Home
- E - None of the above

POLL



1 - Trial Conduct

Feedback from **MOST** companies on **Decentralized Clinical Trials (DCT)**

- ▶ Assess DCT process and technologies that could be implemented on ongoing studies
- ▶ Consider scaling-up use of DCT processes and technologies on up-coming studies

Join SCDM My SCDM Search... Get in touch Jobs Join mailing list f t in

Home WHO WE ARE WHAT WE DO GET INVOLVED OFFICES CONTACT

Clinical Data Science

SOCIETY FOR CLINICAL DATA MANAGEMENT (SCDM) - CLINICAL DATA SCIENCE

WHAT IS CLINICAL DATA SCIENCE? PUBLICATIONS ABOUT THE INNOVATION COMMITTEE X CLOSE

Reflection papers (Topic Briefs)

Section is under Construction:
Topic Briefs will be gradually added over the next 6 to 12 months and their release broadcasted through traditional SCDM Channels (e.g. e-mail, LinkedIn, etc.).

Basket, Umbrella and Platform Designs	SVs of Clinical Data	Decentralized Clinical Trials
Master Protocol Design	Intelligent CDMS	Regulatory Expectations
Adaptive Design	AI And Automations	Risk-based Approaches
Synthetic Arms	Sensors & Wearables	CDM Role Evolution

Society for Clinical Data Management
DATA DRIVEN

Decentralized Clinical Trials (DCTs)

Version: #1
Release: April 2020
Author(s) and Reviewer(s)

- Patrick Nadolny
- Josh Wilson

Background

The Society for Clinical Data Management (SCDM) Innovation Committee seeks to provide Thought-Leadership to our industry and support the SCDM vision of "leading innovative clinical data science to advance global health research and development".

The SCDM Innovation committee strives to demystify what Clinical Data Science (CDS) is and support the development all Clinical Data Management (CDM) professionals, from subject matter experts (SMEs) working on clinical studies to CDM leaders setting the direction of their organizations.

The Innovation Committee will be publishing short briefs intended to serve as orientation guides on specific topics which are contributing directly or indirectly to the evolution of CDM toward CDS. The content of those topic briefs is primarily an extract from the previously published SCDM Reflection Papers¹⁻⁴ which collectively provide a cohesive and comprehensive overview of CDS.

Copyright © 2020 Society for Clinical Data Management. All rights reserved.



1 - Trial Conduct

Decentralized Clinical Trials (DCT)

- ▶ DCT is **NOT** a different study design category like Adaptive, Umbrella, Basket, etc.
- ▶ DCT is essentially decoupling clinical research activities from a physical site location



Example of a fully Patient Centric / Decentralized Clinical Trials



1 - Trial Conduct

Other feedback from **SOME** companies on **Trial Conduct**

- ▶ Consider to create a Business Continuity Plan for each trial
- ▶ Implement Telehealth and Home nursing when feasible
- ▶ Some companies halted study enrollment (Globally or most impacted countries)
- ▶ Some companies delayed start of new studies (unless critical / study COVID-19)
- ▶ Providing guidance on how to re-start study activities on halted studies post COVID-19
- ▶ Mandate documented training on COVID-19 related process changes



2 - Subject Management

Feedback from **MOST** companies on **Subject Discontinuation**

- ▶ Use standard Exit/Disposition form,
- ▶ If discontinued due to being infected by COVID-19,
 - ▶ Report infection as an AE
 - ▶ Reason for discontinuation is AE
- ▶ If discontinued due to other COVID-19 reason (e.g. Patient not able to go to sites, physician decision, etc.)
 - ▶ Reason for discontinuation is Other
 - ▶ Specify exact reason as Text and mention COVID-19



2 - Subject Management

Other feedback from **SOME** companies on **Subject Discontinuation**

- ▶ For Deaths in Long Term Follow Up trial phases (common in Oncology) which may not collect standard AE forms:
 - ▶ Leverage either Exit/disposition form or specific death form
 - ▶ Cause of death is either direct text or option of Other
 - ▶ Specify exact cause as text attributing COVID-19



2 - Subject Management

Other feedback from **SOME** companies on **Subject Management**

- ▶ Allow patient to use local labs for standard safety lab instead of central labs
- ▶ Consider alternative modalities for eCOA (i.e., phone interviews)
 - ▶ Generally recommended to not “mix” modalities
 - ▶ If team determines it is unavoidable there needs to be a method of differentiating (vis data or metadata) results generated via alternate method/modality
 - ▶ In site based ePRO scenarios, if completion is not tethered to a procedure it may be possible to modify system to allow completion at home, however supply chain of devices to patients is a challenge
 - ▶ **Do not take shortcuts:** Site users are not allowed to use a subject’s credentials to enter data in the eCOA system. This would constitute a major breach of data attributability !
 - ▶ All vendors do not provide identical data collection platforms and each study has different constraints; therefore, understanding the limits of data collection for each assessment is key to determine alternatives



3 - Site Management

Feedback from **MOST** companies on **Data Capture**

- ▶ No change to the eCRF
- ▶ Update CRF Instructions (e.g. Missed Visits / Procedures, Patient disposition),
- ▶ Still use the eCRF for telehealth visits (i.e. Source data capture process changed)
- ▶ Update Source Management Guideline (e.g. Source management for telehealth/remote patient visits),



3 - Site Management

Feedback from **MOST** companies on **Monitoring**

- ▶ Onsite monitoring stopped or significantly reduced
 - ▶ Assess impact of stopped SDV on DB Lock Process
- ▶ Increase remote and Risk-Based monitoring
- ▶ Increase centralize data reviews
- ▶ **Some companies** considering remote SDV using Source copy / remote EMR Access
 - ▶ **EMA: Remote SDV in general is not allowed, but may be considered for trials on COVID-19 treatment, and for final data cleaning in pivotal trials on serious conditions with no satisfactory treatment options**
 - ▶ Many source document have personnel identifiers
 - ▶ Those are mainly in local languages
- ▶ Must document changes in Monitoring Plan
- ▶ Track impacted and non-impacted sites (Site closed due to lockdowns, etc.)
- ▶ Document/flag non-data driven COVID-19 related PDs in Monitoring Visit Report



POLL Question #2

As a result of COVID-19, did your Clinical Data Management function?

Select all applicable answers:

- A - Increase risk-based approaches to focus on Critical Data
- B - Increase surveillance of known risks (e.g. Missing Data)
- C - Change SDV setting in EDC
- D - Develop COVID-19 related checks, listings & dashboards
- E - None of the above

POLL



4 - Data Management

Feedback from **MOST** companies on **Data Handling**

- ▶ No Change to eCRF (i.e. Use existing data capture tools)
- ▶ **Most companies** would primarily rely on site to flag missing data as COVID-19 related using existing EDC functionalities (e.g. Form & Item Level comments)
- ▶ Update CRF Completion Instructions for
 - ▶ Missed Visits and Procedures
 - ▶ Patient Disposition
 - ▶ Interruption of study treatment



4 - Data Management

Feedback from **MOST** companies on **Data Reviews**

- ▶ Focus on critical data for patient safety and clinical efficacy (rb-CDM)
- ▶ Increase frequency of data review
- ▶ Increase data surveillance of
 - ▶ Critical data
 - ▶ Missing data
 - ▶ Delayed data entry
 - ▶ Missed Visit Windows
 - ▶ Protocol Deviations
 - ▶ Compare data trends **before, during and after** Pandemic (Country and Site Level)
- ▶ **Less than 50%** of companies would query for missing visits and critical procedures
- ▶ Add a COVID-19 section in DMP for impacted studies (i.e. Inspection ready DMP)

*Edit Checks
Dashboards
Reports (incl. Exception reports)
rb-X like tools*



4 - Data Management

Other feedback from **SOME** companies on **Data Management**

- ▶ Add a code to code list on the “missed visit reason” for flagging missed visits for COVID-19 related reason
- ▶ Align SDV configuration in EDC with changes to the on-site monitoring process
- ▶ Provide guidance for handling studies and sites closed prematurely



POLL Question #3

As a result of COVID-19, did your company?

Select all applicable answers:

- A - Change the AE reporting process
- B - Change the SAE Reporting process
- C - Change the Protocol Deviation (PD) Process
- D - None of the above

POLL



5 - Clinical Supplies (incl. IP)

Feedback from **MOST** companies on **Investigational Product**

- ▶ Allowing sites to ship IP to patient case by case
 - ▶ Created an IP Direct to Patient shipment guidance
 - ▶ Authorize only when drug stability is not at risk and patient is able to self-administer
 - ▶ Site expected to have a documented process
 - ▶ **Same IP related requirements still expected by regulator (e.g. Temperature control, Drug Accountability)**
- ▶ Track temporary or permanent IP discontinuation due to COVID-19 in eCRF
- ▶ Consider impact on IP Management in IxRS



6 - Protocol Deviations

Feedback from **MOST** companies on **Protocol Deviations (PDs)**

- ▶ Provide guidance to enter a standard language (such as “COVID-19 pandemic circumstances”) when creating a new PD in CTMS
- ▶ Enable Biostatistician to report COVID-19 related PD in CSR
 - ▶ Add a new category / flag in PD Management tool
- ▶ Extract Missed Visits and Procedure comments from EDC with COVID-19 being mentioned to enable PD Creation



7 - Safety Reporting

Feedback from **MOST** companies on **AE/SAE reporting**

- ▶ Use standard AE and SAE form to report patients infected by COVID-19
- ▶ Applying new MSSO MedDRA version with updated codes for COVID-19
A COVID-19 SMQ is anticipated to be included in MedDRA version 23.1 (Sep 2020)
- ▶ Provide additional guidance on capturing positive COVID-19 tests as well as COVID-19 like signs and symptoms.

NOTE: In the absence of a COVID-19 positive test, it may not be possible to 100% diagnose all COVID-19 cases. Some AEs may remain more generically coded as oppose to COVID-19.

Some Medical Physician may elect to query site to confirm diagnosis when the pattern of symptoms and time of event strongly suggest the potential of a COVID-19 infection.



7 - Safety Reporting

MedDRA SOC / Preferred Term (Version 23)

Infections and infestations	Asymptomatic COVID-19 Coronavirus infection COVID-19 COVID-19 pneumonia Middle East respiratory syndrome N/A SARS-CoV-2 carrier Severe acute respiratory syndrome Suspected COVID-19
Injury, poisoning and procedural complications	Exposure to SARS-CoV-2 Occupational exposure to communicable disease Occupational exposure to SARS-CoV-2
Investigations	Coronavirus test Coronavirus test negative Coronavirus test positive MERS-CoV test MERS-CoV test negative MERS-CoV test positive SARS-CoV-1 test SARS-CoV-1 test negative SARS-CoV-1 test positive SARS-CoV-2 test SARS-CoV-2 test false negative SARS-CoV-2 test negative SARS-CoV-2 test positive
Surgical and medical procedures	COVID-19 immunisation COVID-19 prophylaxis COVID-19 treatment Patient isolation Quarantine



8 - Clinical Study Report (CSR)

Feedback from **MOST** companies on **CSR**

- ▶ Documentation of COVID-19 Impact on Clinical Trial in CSR
 - ▶ List PD related to COVID-19
 - ▶ List of patients impacted by COVID-19
 - ▶ Describe how the individual's participation was altered (e.g. Discontinued due to any COVID-Reason)
 - ▶ Summarize COVID-19 missing data and missing visits
- ▶ For critical endpoints where method/modality of procedure or data capture was **purposely** altered or if missing data rules are applied
 - ▶ Team should consult their statistician to consider sensitivity analyses



8 - Clinical Study Report (CSR)

Other feedback from **SOME** companies on **CSR**

- ▶ Exclude safety local lab values from Statistical Analysis and CSR?
- ▶ Summarize AE reporting before and after Pandemic onset as well as specific AE reporting of Infections
- ▶ Develop a “boilerplate” CSR Template to be used by teams to document COVID-19 related mitigations and impact



POLL Question #4

As a result of the changes implemented to respond to COVID-19, do you anticipate your company to:

Select all applicable answers:

A - Scale-up DCT processes and systems (All or Partially)

B - Adjust business continuity strategies moving forward

C - Scale-up risk-based CDM Strategies

D - Scale-up Centralized Monitoring Strategies

E - None of the above

POLL



THANK YOU

Q&A

