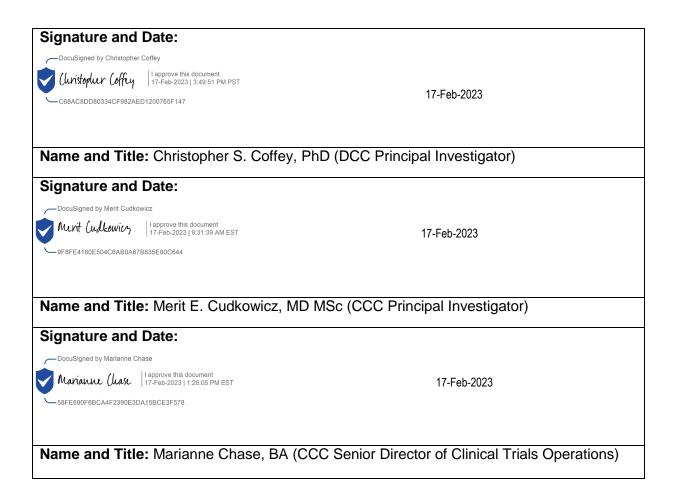
NeuroNEXT Network

Standard Operating Procedure (SOP)

Data Management Plan Development Version 3.0 SOP NN DM 1002

Originators: NeuroNEXT CCC and DCC Personnel

Reviewed and Approved by:



Signature and Date:

DocuSigned by DIXIE ECKLUND



─7006AF622EFC40B6A067A08EC02591B6

17-Feb-2023

Name and Title: Dixie J. Ecklund, RN MSN MBA (DCC Associate Director)

Signature and Date:

-60CC52B0747A44E6B2208D8D880698C0

DocuSigned by Stacey Grabert



Starry Grahert | I approve this document | 22-Feb-2023 | 11:08:31 AM EST

22-Feb-2023

Name and Title: Stacey Grabert, Pharm.D, MS, (CCC Director of Quality Assurance)

Signature and Date:

—DocuSigned by Joan Ohayon



21-Feb-2023

Name and Title: Joan Ohayon, RN, MSN, CRNP, MSCN (NINDS, NeuroNEXT Program Official)

NN DM 1002

NEURONEXT NETWORK STANDARD OPERATING PROCEDURE FOR DATA MANAGEMENT PLAN DEVELOPMENT

1. POLICY

A comprehensive Data Management Plan will be created for the NeuroNEXT Network that describes areas of Data Management (DM) oversight and activities that will be conducted for the Network. The NeuroNEXT Network comprehensive Data Management Plan may include, but is not limited to, the following components:

- Overview
- Website development
- Database model
- Database and website environments
- Electronic CRF (eCRF) development and testing
- Save-audit testing
- Subject identification system
- Clinical data entry procedures
- Reports
- Data backup and archiving
- Data sharing
- Electronic data transfer
- Adverse event tracking and management
- MedDRA coding system
- Data quality assurance
- Glossary
- Appendices, including all study-specific Data Management Plans

The NeuroNEXT Data Coordinating Center (DCC) DM Team will collaborate with the NeuroNEXT Clinical Coordinating Center (CCC) to develop the comprehensive Data Management Plan. The Plan will be maintained by the DCC DM Team, and may be updated (as needed) in collaboration with the CCC.

Study-specific Data Management Plans

A study-specific Data Management Plan will be developed by the DCC DM team for each study protocol, in collaboration with the CCC, the Protocol Principal Investigator (PPI) and study team, and others as needed. The study-specific Plan will be included as an appendix to the NeuroNEXT comprehensive Data Management Plan. The study-specific Plan is established at the beginning of the study, and will be maintained as a living document.

The primary purpose of the study-specific Data Management Plan is to convey website details, protocol information, and data entry application details to the IT application developers at the DCC. While the Plan may contain informational materials related to the project, certain information provided in the Plan may be considered to be written specifications. Components that may be included in the study-specific Data Management Plan are described in section 8.C.

2. SCOPE

This SOP has been developed to be in alignment with federal regulations and Good Clinical Practices (GCP) as set forth in the 2016 Integrated Addendum to ICH E6(R1): Guideline for Good Clinical Practice E6(R2). The policies and procedures described in this SOP apply to the NeuroNEXT CCC and DCC within the context of their oversight and advisory roles for the NeuroNEXT Network, and to all NeuroNEXT investigators, staff, subcontractors, or other entities associated with the NeuroNEXT Network who manage, oversee, and conduct research regulated by FDA and/or applicable review committees.

3. ROLES AND RESPONSIBILITIES

The DCC DM Team is responsible for creating a comprehensive Data Management Plan for the NeuroNEXT Network with an appendix for each study protocol, in consultation with the CCC and NeuroNEXT Leadership (CCC PI and DCC PI).

The DCC DM Team will maintain the comprehensive Data Management Plan, and will update the Plan as needed in collaboration with the NeuroNEXT CCC.

Individual Study-Specific Data Management Plans will be created and maintained by the DCC Data Management Team as appendices to the main Data Management Plan in collaboration with, but not limited to, the NeuroNEXT CCC, the Protocol Principal Investigator (PPI) and study team, and others as needed.

The responsibility to conduct any or all of these activities may be delegated at the discretion of the Sponsor to the DCC. Those individuals and entities also take on responsibility for meeting regulatory requirements on behalf of the Sponsor, but the Sponsor has the ultimate responsibility, and must therefore supervise those delegated activities effectively.

4. APPLICABLE REGULATIONS AND GUIDELINES

ICH E6, 2.10 The Principles of ICH GCP

ICH E6, 6.0 Clinical Trial Protocol and Protocol Amendment(s)

ICH E8 General Considerations for Clinical Trials (December 1997)

Decument Development and Change Central

5. REFERENCES TO OTHER APPLICABLE SOPS

NINI OA 400

NN GA 103	Document Development and Change Control
NN GA 107	Data Sharing
NN CS 702	Application Development and Validation
NN CS 703	IT Environments
NN CS 704	System Security Measures and Website Access
NN CS 705	Data Backup, Recovery, and Contingency Plans
NN QA 801	Quality Assurance Audits
NN QA 802	Quality Management
NN BIO 904	Generation and Validation of Analysis Data Sets
NN BIO 905	Validating Statistical Programs and Deliverables
NN BIO 906	Presenting Statistical Results for a Final Study Report
NN DM 1001	Clinical Data Management
NN DM 1003	Case Report Form Development
NN DM 1004	Specifications Development, Testing Plans, and Validation Documentation
NN DM 1005	Data Collection and Data Handling
NN DM 1006	Adverse Event Coding

6. ATTACHMENTS AND REFERENCES

NN DM 1002 - A Document History

7. TERMS AND ABBREVIATIONS

The following terms and abbreviations are used in this document:

AE Adverse Events

CCC	Clinical Coordinating Center at Massachusetts General Hospital
CFR	Code of Federal Regulations
DCC	Data Coordinating Center at The University of Iowa
DM	Data Management
FDA	Food and Drug Administration
GCP	Good Clinical Practices
ICH	International Conference on Harmonisation
PPI	Protocol Principal Investigator
QA	Quality Assurance
SAE	Serious Adverse Events

8. SPECIFIC PROCEDURES

A. Maintaining the NeuroNEXT Network Comprehensive Data Management Plan

The DCC DM Team will create the NeuroNEXT Network comprehensive Data Management Plan as described in the Policy section, and will maintain the Plan as described below:

#	Who	Task	Attachment/ Reference	Related SOP
1.	DCC DM Team Lead	Determine who is responsible for reviewing and modifying the comprehensive Data Management Plan.		NN DM 1001
2.	DCC DM Team	As needed, update the Data Management Plan to reflect changes in DM procedures.		
3.	DCC DM Team	After all revisions are complete, update the version date and increment the version number to the next whole number (1.x to 2.0).		NN GA 103

B. Creating and Maintaining a Study-Specific Data Management Plan

#	Who	Task	Attachment/ Reference	Related SOP
1.	DCC DM Lead	Assign a Data Management Team member to create and maintain the study-specific Data Management Plan.		
2.	Assigned DCC Team Member	Create the study-specific Data Management Plan, and include applicable components described in section 8.C.		
3.	DCC DM Lead	Review the study-specific Data Management Plan and offer feedback, if necessary.		
4.	DCC DM Team Lead	Include the final study-specific Data Management Plan as an appendix in the NeuroNEXT Network comprehensive Data Management Plan.		
5.	DCC DM Team Leader	Periodically review the study-specific Data Management Plan, and track any major changes on a document change log.		

C. Components of a NeuroNEXT Study-Specific Data Management Plan

Each Study-Specific Data Management Plan may include, but is not limited to, the components described in this section.

#	Who	Task	Attachment/ Reference	Related SOP
1.	DCC DM Team	Study Overview Describe the rationale, intervention, and study design.		
2.	Study Team	CRF Development Describe all CRFs that are developed for the study, and the process for developing, finalizing, and approving paper CRF templates for the study.		NN DM 1003
3.	DCC DM Team	Electronic CRF Availability Describe the availability of eCRFs including, but not limited to, the order of events and CRF visits.		
4.	DCC DM Team	Subject Identification Describe the subject ID system, if different than the NeuroNEXT customary system.		NN CS 704
5.	DCC DM Team	Access to Subject Enrollment and Data Entry Describe these processes in detail.		NN CS 704
6.	DCC DM Team	Website Describe any additional necessary information about the website that is not included in the comprehensive Data Management Plan.		NN CS 704
7.	DCC DM Team	Reports Describe basic reports that the Data Management team may produce that are not already mentioned in the comprehensive Data Management Plan.		NN BIO 904 NN BIO 905 NN BIO 906
8.	DCC DM Team and DCC QM Team	Data Quality Assurance Describe any QA processes and QC metrics that are specific to the NeuroNEXT study.		NN QA 801 NN QA 802
9.	DCC DM Team	Glossary Define any study-specific terms		
10.	DCC DM Team	Incorporate additional sections, as appropriate.		

Certificate Of Completion

Envelope Id: D4E2570022B84BB9B2E18053D916C873

Subject: Complete with DocuSign: NN DM 1002 Data Management Plan Development v3.0.docx

Source Envelope:

Document Pages: 6 Certificate Pages: 6

AutoNav: Enabled

Envelopeld Stamping: Disabled

Time Zone: (UTC-05:00) Eastern Time (US & Canada)

Status: Completed

Envelope Originator: Tania Leeder

TLEEDER@PARTNERS.ORG

IP Address: 73.123.188.5

Sent: 2/17/2023 8:31:09 AM

Viewed: 2/17/2023 6:49:41 PM

Signed: 2/17/2023 6:49:54 PM

Sent: 2/17/2023 8:31:09 AM

Viewed: 2/17/2023 7:19:34 PM

Signed: 2/17/2023 7:20:03 PM

Record Tracking

Status: Original

2/17/2023 8:29:31 AM

Holder: Tania Leeder

TLEEDER@PARTNERS.ORG

Location: DocuSign

Timestamp

Signer Events

Christopher Coffey

christopher-coffey@uiowa.edu

Security Level: Email, Account Authentication

(Required), Login with SSO

Signature

Signatures: 6

Initials: 0

Christopher Coffey

Signature Adoption: Pre-selected Style

Signature ID:

C68AC8DD-8033-4CF9-82AE-D1200765F147

Using IP Address: 128.255.113.139

With Signing Authentication via DocuSign password

With Signing Reasons (on each tab):

I approve this document

Electronic Record and Signature Disclosure:

Accepted: 2/17/2023 6:49:41 PM

ID: ce4c26b9-8f4e-47da-b957-dab61b449ac5

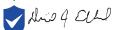
DIXIE ECKLUND

dixie-ecklund@uiowa.edu

Security Level: Email, Account Authentication

(Required), Login with SSO

-DocuSigned by DIXIE ECKLUND



I approve this document

-7006AF622EFC40B6A067A08EC02591B6

Signature Adoption: Drawn on Device

Signature ID:

7006AF62-2EFC-40B6-A067-A08EC02591B6

Using IP Address: 128.255.112.230

With Signing Authentication via DocuSign password

With Signing Reasons (on each tab):

I approve this document

Electronic Record and Signature Disclosure:

Accepted: 2/17/2023 7:19:34 PM

ID: 598bacde-84b7-4996-9556-fb9a5509639a

Signer Events Signature Timestamp Joan Ohayon Sent: 2/17/2023 8:31:10 AM Joan Oliayon ohayonj@ninds.nih.gov Resent: 2/21/2023 8:25:11 AM Security Level: Email, Account Authentication Viewed: 2/21/2023 9:35:37 AM (Required) Signed: 2/21/2023 9:35:53 AM Signature Adoption: Pre-selected Style Signature ID: 72C6AAFD-8CC4-4855-82AC-A0700072901A Using IP Address: 156.40.137.188 With Signing Authentication via DocuSign password With Signing Reasons (on each tab): I approve this document **Electronic Record and Signature Disclosure:** Accepted: 2/13/2023 2:03:22 PM ID: 385a0a53-0f0c-4395-88f6-d5700c36e050 Marianne Chase Sent: 2/17/2023 8:31:09 AM Marianne Chase MCHASE@mgh.harvard.edu Viewed: 2/17/2023 1:25:45 PM Sr Director, Clinical Trial Operations Signed: 2/17/2023 1:26:08 PM Insight OBO The Massachusetts General Hospital Signature Adoption: Pre-selected Style Security Level: Email, Account Authentication Signature ID: (Required), Logged in 58FE690F-6BCA-4F23-90E3-DA15BCE3F578 Using IP Address: 73.114.253.109 With Signing Authentication via DocuSign password With Signing Reasons (on each tab): I approve this document **Electronic Record and Signature Disclosure:** Not Offered via DocuSign DocuSigned by Merit Cudkowicz Merit Cudkowicz Sent: 2/17/2023 8:31:10 AM cudkowicz.merit@mgh.harvard.edu Viewed: 2/17/2023 9:31:29 AM Merit Cudkowicz 17-Feb-2023 | 9:31:39 AM EST Signed: 2/17/2023 9:31:41 AM Chief of Neurology Security Level: Email, Account Authentication 9F8FE4180E504C6AB0A67B835E80C644 (Required) Signature Adoption: Pre-selected Style Signature ID: 9F8FE418-0E50-4C6A-B0A6-7B835E80C644 Using IP Address: 68.239.56.73 With Signing Authentication via DocuSign password With Signing Reasons (on each tab): I approve this document

Electronic Record and Signature Disclosure:

Accepted: 2/17/2023 9:31:29 AM ID: 9d08fd79-152e-40bb-b1d0-34c611bbdcf6

Signer Events	Signature	Timestamp
Stacey Grabert sgrabert@mgh.harvard.edu Director QA Stacey Grabert Security Level: Email, Account Authentication (Required)	Statey Grabert Signature Adoption: Pre-selected Style Signature ID: 60CC52B0-747A-44E6-B220-8D8D880698C0 Using IP Address: 132.183.56.49 With Signing Authentication via DocuSign passwor	Sent: 2/17/2023 8:31:10 AM Resent: 2/21/2023 8:25:11 AM Viewed: 2/22/2023 11:08:17 AM Signed: 2/22/2023 11:08:34 AM
Floring December 10 months and District	With Signing Reasons (on each tab): I approve this document	

Electronic Record and Signature Disclosure: Accepted: 7/20/2020 8:50:14 AM ID: 5ebadf74-e399-40fd-be82-9c7ca902061b In Person Signer Events Signature

In Person Signer Events	Signature	Timestamp	
Editor Delivery Events	Status	Timestamp	
Agent Delivery Events	Status	Timestamp	
Intermediary Delivery Events	Status	Timestamp	
Certified Delivery Events	Status	Timestamp	
Carbon Copy Events	Status	Timestamp	
Witness Events	Signature	Timestamp	
Notary Events	Signature	Timestamp	
Envelope Summary Events	Status	Timestamps	
Envelope Sent Certified Delivered Signing Complete Completed	Hashed/Encrypted Security Checked Security Checked Security Checked	2/17/2023 8:31:11 AM 2/22/2023 11:08:17 AM 2/22/2023 11:08:34 AM 2/22/2023 11:08:34 AM	
Payment Events	Status	Timestamps	
Electronic Record and Signature Disclosure			

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, Insight OBO The Massachusetts General Hospital (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

Getting paper copies

At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. You will have the ability to download and print documents we send to you through the DocuSign system during and immediately after the signing session and, if you elect to create a DocuSign account, you may access the documents for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a \$0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact Insight OBO The Massachusetts General Hospital:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

To contact us by email send messages to: jhenrique@mgh.harvard.edu

To advise Insight OBO The Massachusetts General Hospital of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at jhenrique@mgh.harvard.edu and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

If you created a DocuSign account, you may update it with your new email address through your account preferences.

To request paper copies from Insight OBO The Massachusetts General Hospital

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to jhenrique@mgh.harvard.edu and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with Insight OBO The Massachusetts General Hospital

To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to jhenrique@mgh.harvard.edu and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

Acknowledging your access and consent to receive and sign documents electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify Insight OBO The Massachusetts General Hospital as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by Insight OBO The Massachusetts General Hospital during the course of your relationship with Insight OBO The Massachusetts General Hospital.