Standard Operating Procedure CCTU/SOP013

Case Report Form Design

1. Scope

This Standard Operating Procedure applies to staff of the Cambridge Clinical Trials Unit, Chief Investigators and their trial teams working on Cambridge Sponsored CCTU Led Clinical Trials.

2. Purpose

The purpose of this SOP is to standardise the procedure for designing CRFs for recording patient data collected during the course of a clinical trial in conjunction with a database on which the clinical trial data is stored.

3. Definitions and Abbreviations

The headings below contain the definitions of terms and meaning of abbreviations used within the document.

3.1. Definitions

Term	Definition
Cambridge Sponsored	Sponsored by Cambridge University Hospitals NHS Foundation Trust (CUH); or the University of Cambridge (UoC); or jointly by CUH and UoC or Cambridgeshire & Peterborough NHS Foundation Trust (CPFT) or CPFT jointly with the University of Cambridge
Case Report Form	A printed, optical, or electronic document designed to record all the required information to be reported to the sponsor on each trial participant.
Trial Team	A combination of CI, PI, Coordinator, Data manager , Statistician, etc.

3.2. Abbreviations

Abbreviation	Meaning
CI	Chief Investigator
e-CRF	Electronic Case Report Form
ISF	Investigator Site File
pCRF	Paper Case Report Form
PI	Principal Investigator
REC	Research Ethics Committee

4. Undertaken by

Members of the trial team trained to this SOP and involved in the design of a Paper or Electronic Case Report Form.

5. Items Required

- Final version of the trial protocol
- Trial specific data management plan
- Trial specific CRF completion guidelines
- Approved variables list
- Approved visit schedule
- CCTU/FRM074 Trial Data Capture Design Approval Form
- CCTU/TPL024 Revision Log

6. Summary of Significant Changes

Removal of reference to CRF Generator

Reformatting

Inclusion of the variables list and visit schedule

Inclusion of electronic CRF

7. Method

The following sections provide a description of the processes to be followed when implementing this document's procedures.

7.1. CRF Requirements and specifications

The CRF must be designed to:

  - Ensure compliance with the associated protocol and regulatory requirements
  - Collect sufficient data to support analysis of the protocol's outcome measures
  - Avoid collection of unnecessary, unimportant information
  - Be well structured for optimal collection of data and user friendly
  - Be version controlled
- A signed variables list and visit schedule represent the basis to the design of the CRF, in terms of data fields e.g. type, format, conditions for collection and time-points for collection
- Minimum necessary personal identifiable data as approved by the Research Ethics Committee can be recorded on CRF to reduce the risk of the dataset becoming identifiable

7.2. CRF Design

All CRF pages must be designed with:

- The same format to provide consistency
- A standard header and footer on each page

- Adequate amounts of free space on the CRF page to aid readability
- A consistent and linear format to ease completion

Design format should:

- Avoid collecting free text, where possible
- Ask explicit questions
- Avoid double negatives in the questions
- Provide pre-coded answer options for ease of analysis e.g. "Yes"/"No"/ "Not applicable"/" Not known"
- If response options are coded then use them consistently throughout the CRFs pack (e.g. Yes = 1; No = 0
- Indicate if a question can have one answer or multiple answers
- Use absolute, rather than comparative, questions, e.g.: None, Mild, Moderate, Severe; rather than Better, Same, Worse
- Avoid requesting unnecessary calculations: collect raw data rather than calculated data, e.g. for age, collect date of birth
- Collect dates in a uniform agreed fashion e.g. dd/mmm/yyyy
- Include fields for "time" if the time of assessments/interventions or sampling is essential
- Collect time in a uniform agreed fashion e.g. hh:mm
- Pre-specify the choice of units wherever possible e.g. mg, ml, cm etc.
- Avoid duplication of data
- Include the option to report 'not done' or 'unknown' to avoid questions being left blank
- Include questions to record the reason why data is missing, particularly if missing data is anticipated for key questions (e.g. primary endpoint)
- Include an 'other' option where a list is not exhaustive, with space for free-text comments if appropriate

7.2.1. Main Page Content

- All inclusion/exclusion criteria questions must be exact quotations from the approved protocol
- The CRF should be approved by the CI, Statistician and Programmer (as appropriate) using CCTU/FRM074 Trial Data Capture Design Approval Form

7.3. Guideline of Contents

Depending on the data required by the clinical trial protocol, a standard CRF document might include, but is not limited to, the following pages:

- Front cover sheet (basic instructions)
- Visit cover and visit sign off forms
- Randomisation/registration form
- Eligibility form
- Baseline/screening form
- Treatment form (treatment, doses, administration routes, reductions)

- End of trial form (documenting the date, reason and circumstances for the cessation of visits or data collection due to withdrawal, death, progression or other)
- Medical history form (including relapse/recurrence form)
- Concomitant medication log
- Adverse events log
- Follow-up forms
- Patient withdrawal/death form
- Serious Adverse Event form

7.3.1. Header

When designing an e-CRF repetitive data in the header will automatically populate all the other pages.

The header should include:

- Short title or number of the trial and logo (if applicable)
- Title and/or unique ID number of the CRF section
- Site reference code (name is optional), if not already part of the participant unique identifier
- Participant identifiers as stated in the protocol, may be a combination of:
    - The participant unique ID (mandatory)
    - Full or partial date of birth. (day and/or month and/or year of birth), as agreed by the REC
    - Participant initials

7.3.2. Footer

When designing an e-CRF repetitive data in the footer will automatically populated all the other pages.

The footer should include:

- Space for Investigator and/or designee's signature (the signatory must be on the delegation log for that site)
- Space for the date of signature
- CRF version number and date of release
- Page number and total page number for the form if applicable (unless provided in the header or body of the document)

7.4. Approval

- The CRF must be finalised and approved prior to the start of the trial and before any site is opened for recruitment
- The CRF must be approved by the CI, Statistician and Programmer as appropriate as part of the data design approval process. Use CCTU/FRM074 Trial Data Capture Design Approval Form
- The database design process will only start once form CCTU/FRM074 has been signed and received by programming team

7.5. CRF Completion Guidelines

- According to the complexity of the trial, CRF completion guidelines may be required as detailed in the trial data management plan
- A copy of the completed CRF completion guidelines should be maintained in the appropriate section of the TMF and ISF
- These guidelines should be version controlled
- Details of how and when CRFs should be returned should be included
- CRF completion guidelines should be provided to site personnel to promote accurate data entry, alternatively simple guidelines can be included in the trial procedure manual

7.6. CRF Amendments

- After finalisation of the CRF, any changes deemed necessary must be identified in collaboration with the trial team, listed in the CCTU/TPL024 Revision Log
- The CI, Statistician and Programmer as appropriate should approve the changes
- The new version of the CRF must be consistent with the protocol
- If applicable the trial specific data management plan and the CRF completion guidelines must be updated to reflect any changes
- Updated documents must be version controlled
- If problems arise with a CRF
    - New guidelines or a memorandum should be issued to all those using the form to ensure that the completion requirements are clear
    - Any problems and corrective actions should be recorded in the TMF

7.7. CRF Filing

- All approved versions of the CRF and CRF approval forms must be filed in the TMF

8. Monitoring Compliance with and the Effectiveness of this Document

a. Process for Monitoring Compliance and Effectiveness

As part of routine monitoring visits, audit and inspection

b. Standards/Key Performance Indicators

This process forms part of a quality management system and is reviewed according to CCTU procedures. Standard Operating Procedures are reviewed every two years.

9. References

The Institute of Clinical Research, Abbreviations used in Clinical Trials.

MHRA, Good Clinical Practice "Grey Guide"

10. Associated Documents

CCTU/INF024 Data Management Processes Map

11. Equality and Diversity Statement

This document complies with the Cambridge University Hospitals NHS Foundation Trust service equality and diversity statement.

12. Disclaimer

It is the user's responsibility to check against the electronic library that this printed out copy is the most recent issue of this document.

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