CRF Completion Guidelines

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Abstract

Accurate completion of case report forms (CRFs) is paramount to the quality of data that are captured during a clinical trial. This chapter covers guidelines for training sites to complete CRFs correctly, and includes discussion of the proper format, design, and content of completion instructions provided with CRFs. Suggestions for the given content of general instructions and CRF- or page-specific instructions are also given.

Introduction

Case Report Forms (CRFs) should be completed as fully and accurately as possible, with the aide of complete, concise and logical guidelines. Well prepared CRFs should provide instruction and guidance on how the sponsors are expecting forms to be completed at the investigative site.[1] CRF completion guidelines should help ensure that all required fields are completed, and that the data provided within these forms are logical within the scope of the study protocol. The guidelines should not provide guidance or suggestions that could be considered leading the user.

The CRF completion guidelines document is a tool that should be available to all members of the multidisciplinary team participating in a clinical trial, and should be referenced to ensure accurate and consistent entry and interpretation of data. These guidelines help train site staff on proper form completion, and also aide Clinical Research Associates (CRAs) on how to review data on the completed forms.

A complete and accurate CRF will result in fewer queries being generated by data management for site staff to resolve. Accurate CRF completion and

review will also result in more meaningful data analyses[2], quicker validation of data, and will ensure a timelier database lock.

CRF completion includes paper-based transcription as well as direct entry into an electronic system. Therefore, CRF completion guidelines should take into consideration the particular mode of data collection for the study, such as paper CRFs, electronic data capture (EDC) systems (both local electronic data capture systems and central Web-based systems), or interactive voice response systems (IVRS). It is important that the guidelines address each mode with appropriate instructions.

For traditional paper CRFs, the CRF completion guidelines are either printed as part of the CRF or as a separate document. For electronic CRFs or EDC systems, the guidelines may be provided as separate instructions on the screens, an online help system, or system prompts or dialogs generated relative to the data being entered.[3]

Scope

The scope of this section is to describe how CRF completion guidelines are to be created and used to aid in the precise and logical capture of clinical study data.

Minimum Standards

- Document the process by which CRF guidelines are created, reviewed, approved, updated, and distributed.
- Create CRF completion guidelines for at least every multiple site protocol.
- Provide site coordinators and CRAs with CRF completion guidelines, and train the users on the function of these guidelines prior to first patient visit or enrollment. Document training and forward this documentation to the appropriate study team member for retention.
- Provide data management, biostatistics, medical writing and other clinical research team members with CRF completion guidelines so these groups are aware of how sites are instructed to complete CRFs.

- Design CRF completion guidelines from the perspective of site coordinators and CRAs who will be using these guidelines, taking into account clinical treatment procedures at the site, such as the organization of medical records and methods being used to obtain measurements.

- Include a general instructions section and a page-by-page instructions section.

- Ensure guidelines are readily and easily available to the user. Ensure instructions are concise, easy to understand, and do not suggest answers to users completing the forms.

- Update CRF completion guidelines if any changes are made to the CRFs that affect CRF completion. Include version control on the updated documents.

Best Practices

- Develop guidelines in collaboration with representatives from clinical research, programming, data management, biostatistics, safety, and medical writing.

- Establish a formal written approval procedure for CRF completion guidelines consistent with or included as part of the actual CRF approval process. Document any changes and maintain version control of the document.

- Present CRF completion guidelines at an investigators' meeting (or similar forum) with data management team members leading the review and training. Provide site staff and CRAs with a correctly completed sample CRF and CRF completion guidelines at the time of training.

- Stress the importance of completing all mandatory fields—if a data item is unavailable or unknown, instruct users to enter an acceptable notation to account for the missing value (e.g., N/A or UNK). Clearly define notations to be used as well as the circumstances in which to use them (e.g., delineate between the use of UNK as opposed to N/A).

- Include a list of acceptable abbreviations (if any), with definitions that can be used in completing the CRF.

- Include detailed instructions on proper completion for every CRF page. For paper studies, printing CRF completion guidelines on facing pages of a blank CRF (the page's CRF completion guideline is on the back of the preceding CRF page) for a given protocol proves to be most beneficial.

- Review data quality periodically, re-educate site personnel as needed, and revise CRF completion guidelines as necessary, particularly for long-term studies.

- Make CRF completion guidelines for EDC studies available (for example, as an online file, a hard copy, or a printed version) even though CRF completion guidelines for EDC studies may be included as part of the programming and available on the screen.

- Develop standard CRF completion guideline modules that can be used across studies.

Format and Content of CRF Completion Guidelines

CRF completion guidelines can be instructions within a specific section of a given CRF page, such as "check only one box", "record all medications taken within the last 7 days", etc. Additional instructions can be included within the CRF, such as instructions printed on facing pages, or they can be maintained in a separate document providing detailed instructions (e.g. CRF completion manual).

Following is a suggested format for CRF completion guidelines which are created as a separate document. CRF designers should determine the format of CRF completion guidelines that are integrated throughout the actual CRF pages.

General Instructions Section

The general instructions section of CRF completion guidelines should include information that applies to completing the entire CRF and submitting completed CRFs.

General instructions for completing CRFs include, but are not limited to the following:

EDC and Paper CRF Studies (all CRFs):

- Ensure that all required fields on each CRF are completed.
- Provide contact information if questions arise while completing the CRF.
- Describe study convention for visits or assessments that are not performed.
- Ensure that all free text entries are spelled correctly and are clinically appropriate.
- Provide a list of acceptable abbreviations, which may vary between studies or indications.

Paper CRF Studies Only:

- Ensure the use of permanent media (blue or black ink).
- Ensure that all items captured in the CRF are legible.
- Specify procedures for making corrections to data. For example, "Corrections to data should be made by drawing a single line through the incorrect entry, writing the correct response above or near the original entry, and initialing and dating the change. Scratch outs and/or correction fluid or tape should never be used."
- Provide instructions for the process flow of completed documents, including shipping address, which copies of the CRF to ship, courier service to be used, etc.

EDC Studies Only:

- Do not share user IDs or passwords with anyone.
- Do not record and/or store user IDs and/or passwords in non-secure locations. Try to remember user IDs and passwords without recording the information on paper.

Page/Screen-specific Instructions

Every page or screen should have specific instructions on how data should be captured according to the protocol. Keep these instructions brief and focus on critical fields or those that may be interpreted in a variety of ways.

Page-specific instructions include, but are not limited, to the following:

- Indicate mandatory fields and appropriate notation for information that is not available.
- Note any instructions for subject-completed forms, such as assessments completed at visit by the patient.
- List and explain procedures for clearly reporting:
  - any visits that a subject fails to make (e.g., specific instructions on completion of information on blank visit pages)
  - tests that are not conducted, examinations that are not performed
  - all withdrawals and dropouts of enrolled subjects from the trial
- Provide any special instructions for completing unscheduled visit pages.
- Provide instructions for recording Adverse Events and Serious Adverse Events (e.g., record diagnosis instead of symptoms whenever possible).
- Instruct personnel to only capture data in specified CRF fields and to not write in margins.

Recommended Standard Operating Procedures

- Preparation, Review, Revision and Distribution of CRF Completion Guidelines
- Study Start and Other Investigators' Meetings
- Training Records
- Study Initiation Process

References

1. Spilker B. Guide to Clinical Trials and Developing Protocols. New York: Raven Press; 1984.

2. International Conference on Harmonisation. *CH Harmonized Tripartite Guideline for Good Clinical Practice*. 2nd ed. London: Brookwood Medical Publications; 1996.

3. Spilker B, Schoenfelder J. *Data Collection Forms for Clinical Trials*. New York: Raven Press; 1991.

Further Reading

McFadden E. 1997. *Management of Data in Clinical Trials*. New York: John Wiley & Sons.

Chapter Revision History

Publication Date	**Comments**
September 2002	Initial publication.
May 2007	Revised for style, grammar, and clarity. Substance of chapter content unchanged.
June 2008	Revised for content, style, grammar, and clarity.

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