

Principles of CRF Completion Including Source Data, Data Locks, Queries and worksheets

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Background

Data management is the process of taking clinically important data (Source data) of patients (at site) taking part in a research study and transcribing it into a format that a sponsor can easily read then add to a database or analyse.

The purpose of this document is to provide instruction and process to ensure the data included in the clinical trial report or the trial results are accurate and in accordance with the approved clinical trial protocol and that the data entered is accurate. The aim is to provide clear guidance to ensure that source data is correctly entered on to electronic and paper Case Report Forms (eCRFs) and CRFs), ensuring all clinical records are complete and accurate with regards to the information they contain, and is consistent with what is recorded in the source data. This is to ensure compliance with the Trust's Clinical Record Keeping Policy. <http://nuth-intranet/apps/policies/operational/ClinicalRecordKeepingPolicy201511.pdf> in order to ensure the collection of information about the care of a patient provided by a range of healthcare professionals in one organisation and that the correct data is in adherence with trial protocol.

For reference purposes the source data will by default be the clinical case notes of the patient, source data captured outside the clinical case notes will be identified in the Study Site File under the protocol section.

General

It is common practice for data managers to transcribe clinical data into an eCRF/CRF. It is essential that this data transcription is accurate and consistent with the source data.

There are a number of different pathways for viewing source data including: e-record, clinical records, source data sheets, and electronic laboratory reports among others.

The way in which source data is validated will be dependent on the method used and the specific requirements of the study protocol.

Source data can only be added to clinical records by staff with clinical contracts

Recording of Data

It is essential that staff transcribing the data into the eCRF/CRF are familiar with the specific study protocol.

Staff transcribing data must be aware of the importance of entering data accurately and of flagging any inconsistencies and be aware of Trust Policies regarding Data Protection and Confidentiality.

Where there is inconsistency between source data and eCRF this will be checked by a appropriately qualified member of staff who has been delegated this activity

Where any amendments are made to the source data, this must be recorded and signed by an appropriate staff member in line with the Trust's Clinical Record Keeping Policy.

Only data that has been agreed through Caldicott approval (link to Caldicott guidance) should be entered on to the eCRF/CRF and any amendments to eCRF/CRF should be notified through the appropriate Research Ethics Committee (REC) and reviewed by the Trust Caldicott Guardian.

All entries will be dated and timed (using 24 hours clock)

All entries will be signed

All entries should be accurate, legible and verifiable by the person responsible for making the data entry.

Corrections to source data will be crossed through with a single line, signed, dated and timed. Correction fluid will not be used. Any sheets containing errors must not be removed from the clinical record.

It is common practice for worksheets (pro-forma templates) (see example 7.1) of source data required per visit to be printed on the research history sheets in clinical records. All such worksheet documents, when produced, will comply with SOP creation of worksheet version 3 March 2019 NJRO

From November 2019, all completed worksheets and associated visit documentation (e.g. central lab reports, study drug prescriptions forms etc.) will be scanned by medical records and uploaded to Document Store on PowerChart as per NUTH Paperlite policy.

Data Locks

Data Lock is a term to describe a date where all up to date visits must be entered into the CRF/eCRF and all queries answered. This is generally at the end of a study or prior to a Data Monitoring Safety Committee (DMSC).

What is a DMSC?

A Data Monitoring Safety Committee is a committee agreed by the Research Ethics Committee (REC), to review all Adverse Events, Serious Adverse Events and drug interactions. The DMSC then recommends to the REC whether the study should continue, change or stop.

Because of the serious nature of the requirement to have clean data prior to a DSMC meeting a deadline will be set by the sponsor to enter the clean data, this is the data lock. Data locks are one of the most time consuming and stressful times therefore it's important that if you are aware of a data lock you prepare for this by scoping time or escalating to a line manager if you think there will be an issue.

Data Query Resolution

Once data is entered in to a CRF it is presumed clean (has no mistakes), Sponsors have a requirement to ensure the data is correct and do this by monitoring a study. Monitoring is simply reviewing the CRF and checking this information matches the information in the source data document.

The frequency of monitoring reflects the nature of the study and its complexity. Interventional commercial CTIMP studies will usually be monitored every 4-6 weeks whereas academic epidemiological studies may never be monitored.

If the CRF information differs from the source data information this generates a data query. Such queries are generally corrected during the visit or afterwards when listed in a monitoring visit letter. Queries can be generated for a number of reasons;

- Transcription error
- Missing source data
- Coding difference (using the term high blood pressure instead of hypertension)
- Sponsor error, system error

It is important that queries are resolved in a timely manner and the general rule of thumb is 5 working days from receipt. However it is important that several rules are observed regarding data query resolution:

- Resolve queries within the agreed timeline as captured in the Trial Agreement.
- If there is a theme of missing data either by person or team discuss this with the team involved and escalate to a line manager if not resolved.
- Ensure the correct terminology/coding is used.
- Often sponsor representatives are junior and inexperienced, do not be afraid of professionally challenging erroneous requests or pointing out system errors or

unusual pedantry. An example of pedantry is a request to confirm a piece of correct data is correct.

- If you feel any of the above rules are being ignored it is expected you will escalate to a line manager.

Worksheet Creation

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What are Worksheets?

Worksheets are tools to act as an aide memoire for collecting accurate source data ready for transcription to e-CRFs / paper CRFs. However some organisations use worksheets to encourage site staff to carry out sponsor level work, others to capture data not required and others to transcribe source data that is already in the relevant source data documents (i.e. lab results). The purpose of this document is to describe the correct use of worksheets and how they should be created and who is responsible for creation and authorisation prior to use.

Background

The purpose of this document is to provide instruction for the design and implementation of Clinical Research worksheets. A worksheet is defined as a pre-printed history sheet or sheets for specific research study visits designed to ensure that research data is collected in a way that ensures that the data is accurate, complete, is in adherence with the latest study protocol and is in compliance with the Trust Clinical Record Keeping policy. <http://nuth-intranet/apps/policies/operational/ClinicalRecordKeepingPolicy201511.pdf>

For the purpose of this document the term “study” refers to all research projects including clinical trials and non-clinical trials. The use of a worksheet is not mandated.

Scope

The use of a research data collection worksheet is at the discretion of individual research team and PI and may not be appropriate for use with all research studies undertaken by the research team.

This document is applicable to research teams and individual research studies where the use of a workbook (described below) has been deemed appropriate by the research team as the method of recording research clinical data for an individual research study.

General

A workbook is defined as a single research clinical history worksheet or a number of worksheets and is dependent on the amount of clinical data required to record a patient visit. An example is given 'worksheet example appendix 2'

Workbooks shall be designed to collect only the information that is essential to meet the requirements set out in the study protocol schedule of events.

Worksheets must be version controlled and dated to identify protocol number and amendment number / date. All workbooks must be approved by a research nurse Band 6 or senior. Master copies must be retained and filed for the duration of the study including archiving period with the date and signature of the author (data manager / nurse) and checker (Band 6 or senior research nurse) next to the relevant protocol or amendment.

Design

Worksheet design should ensure that all data sets reflect accurately the requirements of the schedule of events and each sheet clearly identifies the clinical member of staff completing the sheet with name, job title, date and time (in accordance with NUTH Clinical record keeping policy).

Accurate worksheet design can be achieved easily by study teams obtaining a pdf copy of the study CRF from the sponsor as early in the study set-up process as possible to ensure that worksheets are created in a timely manner as well as .

The worksheet should clearly indicate the study short title, R&D number and version number.

Consideration should be given to Research workbook layout in terms of compatibility with database entry.

Each research history worksheet will include the following core patient information as per the Trust Clinical Record Keeping Policy

- The patient's name
- Identification number (NHS number)

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- Location in the hospital

All worksheets should be printed on Trust approved Research History sheet (which is identifiable by yellow border).