Deviation Management in a Clinical Research Facility

Introduction

A deviation management system is used to identify, record and correct areas and activities that do not meet specified requirements. Reporting deviations is an essential part of a Clinical Research Facility quality system to ensure that clinical research studies are conducted, documented and data generated in compliance with the protocol, Good Clinical Practice and all applicable regulatory requirements.

These guidelines are intended to be used as a guidance document upon which to base a facility's procedure. These guidelines have been developed by the QA Workstream of the UK CRF Network to assist both newer CRFs that may not have a deviation procedure, and more established CRFs that may wish to review and evaluate their existing systems.

SOP Guidelines

- Purpose – The purpose of the Deviation Report (DR) procedure is to define the process and the responsibility for generating, handling and investigating DRs; taking action to mitigate risks associated with them and for initiating and completing corrective and preventative action in the CRF.
- Scope – DR process should apply to all clinical research and the associated processes surrounding clinical research in the CRF.
- Definition – DR reporting needs to be defined for the unit, for example:
  A deviation is any discrepancy or non-conformance that demonstrates non fulfilment to specified requirements of either a task or a process. DR process is used to document any
  discrepancy or non-conformance from a protocol or written instruction, in order to record the
  extent of the deviation and the subsequent remedial action. Other local policies and procedures may apply in addition to the DR process e.g. Trust Incident Reporting policy.
  - Examples of deviations include the following, this list is not exhaustive
    - Protocol Deviation
    - Use of incorrect version of any controlled documents
    - Incorrect labelling
    - Deviations from SOP instructions
    - Internal audit findings

        - Third party audit findings
        - Complaint
        - Observations
        - Near-misses
- Responsibilities –
    - Responsibility of all staff to report any deviations identified in a timely manner to the appropriate person.
    - Responsibility of the quality representative to ensure that the requirements of the DR procedure are carried out.
    - The DR log is maintained by the quality representative, or equivalent role, who tracks all related DR milestones to completion.
    - It is the responsibility of the quality representative to ensure that all issues are escalated to relevant external parties as required.
- Procedure –
    - Quality representative will maintain the DR log, see Appendix 2, and will facilitate the completion of the DRs.
    - DR log will define the DR numbering system and will assist the quality representative in tracking the DR milestones to completion.
    - The DR log should be reviewed regularly to ensure all milestones are met.
    - Any member of staff can raise a DR.
    - When a deviation is suspected the employee must bring the DR to the attention of their line manager and to the quality representative.
    - Quality representative will assign the DR number and owner and update the DR log.
    - Quality representative will assist the completion of the DR form, see Appendix 1.
    - The DR Log will serve as a tool to assist the quality representative track the DRs throughout the various phases.
    - DR Form – the form will be structured to allow documentation of the following by the DR owner:
    - <u>Define the problem</u>
        - Give clear description of the deviation listing the applicable protocol, SOP, document number etc.
        - The DR should be categorised so as to identify the risk associated with the deviation and subsequent corrective and preventative actions required, i.e. Major or Minor, for example:
            - Major – severe or potentially severe impact on the quality of service or patient care i.e. protocol violation. Interim, corrective and preventative actions will need to be discussed with senior management immediately and consideration given to third party

communication (MHRA/IMB). A number of minors may result in a major.

- Minor – Deviations that are not likely to have a significant impact on the quality of service or care. Staff member who identified the DR can initiate the interim, corrective and preventative actions.

- Interim Actions
  - Initiator must then detail any interim actions required to minimise the immediate risk of the deviation, prior to the long term corrective actions being completed. Quality or the full list of signatories can be requested at this point to acknowledge the deviation and interim actions.
- Root Cause
  - Investigation is completed to identify the root cause of the deviation.
  - Root cause is where a retrospective review of the deviation is undertaken in order to identify how and why the deviation occurred.
  - It is advised that personnel attend any Root Cause Analysis training that is available to assist in the investigation.
  - Various Root Cause Analysis tools can be used to get to the root cause of the deviation. These should be filed with the DR as attachments.
  - As required the investigation can be carried out by an individual or by a team of people.
  - Once defined, the root cause should be documented.
  - The root cause should be categorised i.e. Method, Material, Human Error, Equipment.
- Corrective Action:
  - Once the root cause has been identified appropriate corrective actions (CAs) should be listed to ensure permanent resolution of the deviation/Root Cause.
  - These actions should be listed in the DR form along with people responsible and proposed completion dates.
  - Dates should be tracked until all CAs are completed.
  - Evidence of CAs should be provided where-ever possible, refer to attachments as required.
- Preventative Actions:
  - Some deviations may require preventative actions.
  - Preventative Actions (PAs) are actions undertaken to ensure that the deviation is not repeated.
  - PAs should be listed in the DR form along with people responsible and proposed completion dates.
  - Dates should be tracked until all PAs are completed.

        - Evidence of PAs should be provided where-ever possible, refer to attachments as required.
    - Implementation Effectiveness:
        - In some instances an Implementation Effectiveness plan may be required after all CAs and PAs have been completed, and after a pre-defined period of time, to demonstrate after that the CA and PA actions have been effective in correcting the deviation.
        - The actions associated with the plan should be listed in the DR form, along with people responsible and proposed completion dates.
        - Evidence of effectiveness should be provided where-ever possible, refer to attachments as required.
        - If the deviation is repeated at this stage then the CAs and PAs, and possibly the Root Cause, will need to be re-investigated and re-defined. The above cycle repeated until the subsequent actions have been proven to be effective.
    - Regular, minuted meetings should be organised with the relevant team members, by the owner, to ensure timely closure of the various stages.
    - Once completed the DR form should be signed by the Owner, their line manager and the quality representative.
    - The signatories are responsible for reviewing the DR and approving the actions completed with the various stages of the DR process.
    - Completed DR forms should be filed appropriately by the quality representative.
    - DR log should be updated once the DR is complete.
    - DR categories can be should be tracked and trended on a regular basis to review the categories of DRs and address negative trending.

Appendix 1: Deviation Report

Deviation Report **Number # DR /**	**Protocol / Document / SOP no. and revision and effectivity date.**
Initiated By:	**Date:**
Define the problem: **Categorization:** **(Please circle) Major Minor**	
Interim Action: (List any actions completed to minimise risk)	
Root Cause: (State the Root Cause of the problem, and any analysis completed to get to the Root Cause) **Categorization:** **(Please circle) Method Material Human Error Equipment**	
Correction Action: (List all corrective actions required, people responsible and dates completed	
Preventative Action: (List any preventative actions required, people responsible and dates completed)	
Disposition: (State the disposition of problem post corrective action)	
Implementation Effectiveness: (list the actions required to ensure corrective and preventative action effectiveness, people responsible and proposed dates to be completed and document subsequent results)	
Attachments: (list attachments)	

Approvals

Title	Print name	Signature	Date
Owner			
Line Manager			
Quality			

Appendix 2: Deviation log

DR #	Department	Owner	Date Initiated	Category	Interim Action Complete Y/N/ n/a	Root Cause Complete Y/N	Root Cause Category	CA Complete Y/N	PA Complete Y/N/ n/a	Implementation Effectiveness Due Date	Date DR Completed