

DIFFERENT WAYS TO MONITOR CLINICAL TRIALS

Monitoring ensures



The trial is performed according to the protocol, SOPs*, GCP, and regulatory requirements



The whole study team is appropriately trained and resourced to run the clinical trial



The safety, rights and well-being of the participants are protected



The data recorded as part of the trial is accurate, complete and true (i.e. it's not fake!)



Source Data Verification (SDV) monitoring

Trained reviewers (monitors) check the quality and accuracy of the information entered in the case report form (CRF) or trial database against the raw data (source). The monitor also ensures the essential documentation supporting the trial is accurate and complete. SDV can be done on-site where the monitor visits the participating site and reviews data points in a targeted manner. This means focusing on the parts of the trial that are the most important. See below for a detailed definition of this method. A risk assessment should be completed in the planning stage of a trial to determine the important data points and the extent of SDV and CRF review required. The details of how this is to be done is then documented in a Clinical Monitoring Plan (CMP) for the monitor to understand what they need to look at.

What does a monitor SDV at a minimum?

Check that Informed Consent has been completed



Confirm only eligible participants are enrolled



Confirm assessments related to the objectives are completed



Does the source data match the transcribed data in the CRF?



Review all safety events plus check required reporting has occurred



100% SDV is time consuming and costly



ICH GCP does not mandate 100% SDV or require it to always occur on-site



There are three more types of monitoring (see below)

Different types of monitoring

Monitoring should use a risk based approach and may be conducted on-site, remotely or centralised (or a combination of these). Targeted monitoring should be conducted at all times.

Remote vs On-Site

On-site monitoring requires visiting the participating site and reviewing the original documents. Remote monitoring occurs when trial data can be accessed electronically, away from the site where the data is collected. The person checking the quality of the data doesn't need to be physically at the site to verify the data is accurate. The monitor needs remote access to the eCRF and/or the investigator site files.

USE REMOTE MONITORING TO:

- > Review signed consent forms
- > Track recruitment status
- > Track safety reporting
- > Analyse statistical information
Review data entry compliance

+ Reduces the time spent at site so is a cost effective method

- Not being on site regularly to check the high risk data points can mean the quality of data is less

Centralised

Occurs when there is remote evaluation of all the study data, carried out by data managers and statisticians. All site data feeds into one database. Provides effective oversight of accumulating data in real time, particularly for multi-centered trials**.

USE CENTRALISED MONITORING TO:

- > Identify sites with high frequency of errors, protocol deviations or data anomalies
- > Analyse site performance metrics
- > Identify efficacy and safety data trending
- > Identify and mitigate data quality issues which may compromise the study results

+ Oversight of large multi-centred trials is increased

- Requires an IT platform to be implemented and managed at each site

Targeted

Occurs when certain parts of the trial data are determined to be more important to review in detail than other parts of the data. This monitoring focusses on the aspects of a clinical trial that have the most potential to impact participant safety and the credibility of the study's results.

USE TARGETED MONITORING TO:

- > Monitor only a random sample of data sets in order to save time
Any issues identified prompts monitoring across all data sets
- > Focus on specific pathology results that may indicate participant safety is at risk
- > Focus on certain reported adverse events that may be of interest for the safety profile of the drug

+ Reduces the time spent at site so is a cost effective method

- Reducing the number of data points to check may negatively impact participant safety and study outcomes

Top tips to choose the right monitoring strategy



- > Select the level of SDV to match your budget
- > Select the type of monitoring to suit your trial design
- > Ensure the SDV is appropriate to manage the risks, in particular participant safety
- > Document what type of monitoring and details in a CMP

What type of monitoring is best suited for your trial?

*SOP: Standard Operating Procedures

**Integrated Addendum to ICH E6(R1): Guideline for Good Clinical Practice, Section 5.18.3, Nov 2016