

Monday Morning Practice Pearls #32

What is a Corrective and Preventative Actions (CAPA) Plan?

The term CAPA, or Corrective and Preventive Action, plan has been around for quite some time and started in industry, specifically in manufacturing. In this context, it is a process used at all steps in the manufacturing process so that a company can identify, correct and prevent quality issues from occurring. Below is a table of terminology associated with CAPA:

Corrective Action	Action to eliminate the cause of an occurrence (i.e., issue, problem, or undesirable situation).
Preventive Action	Action to eliminate the cause of a potential occurrence
Treventive Action	(i.e., issue, problem, or undesirable situation).
Root Cause	A problem solving method used to identify the origin of
Analysis	the cause(s) of occurrences (i.e., issues, problems or
	undesirable situation)
Preventive action is taken to prevent occurrence whereas corrective action	
is taken to prevent recurrence.	

So how does this apply to clinical research?

If you think of the conduct of a study as a *quality system*, then you need to ensure there is quality at every step during the study conduct and have a process in place where you can identify, correct, and prevent future occurrences that may impact the quality of your final "product" (i.e., your data and participant safety). FDA warning letters to investigators have identified deficient CAPA plans such as:

- No detail regarding the specific corrective actions to be taken to address a particular problem.
- Not addressing the preventive measures that will be taken.
- Not describing the extent/pervasiveness of the problem (i.e., how many subjects were affected
 in the current study; and did the problem extend to other studies that used the same
 processes).
- Inadequate documentation of the corrective actions taken.
- Not specifying the timeframe in which corrective actions have been or will be undertaken/completed.

From the OHRP perspective, they focus on the adequacy of the actions taken by the institution to address the problem in particular whether or not the corrective actions will help ensure that the incident will not occur again, either with the investigator or protocol in question, or with any other investigator or protocol.

So what types of occurrences may warrant a CAPA and reporting?

- Protocol deviations
- Internal monitoring/auditing report trends
- External audit/inspection reports
- Trends of monitor letters and follow-up actions
- Participant complaint trends
- Number of subject withdrawals and/or premature terminations
- Reporting trends of adverse events and unanticipated problems

- Research staff member observations/concerns
- Management review results
- Risk assessment of clinical trial operations and quality systems
- Sponsor communications of study and/or data concerns
- IRB-identified concerns

Steps to a Successful CAPA Plan

In the event that problems are identified in a protocol that you are coordinating, either through your own internal quality reviews or via an external audit, you should follow the following steps as soon as you become aware of the problem.

- 1. Report the problem to the IRB using the NIH Problem Form in iRIS. If applicable, report to your sponsor; this may need to be done via email unless they have a specific form or mechanism for reporting. Don't wait until you have developed a full CAPA to inform the IRB and the sponsor.
- Evaluate the extent of the problem. How many subjects does it impact?
 - a. Was anyone harmed?
 - b. Was there potential for harm?
 - c. Could the problem possibly exist in other protocols that use the same processes and staff?
- 3. Determine the cause(s) of the problem.
 - a. Note that especially for system-related problems, there may be multiple levels of causes. It may be relevant to perform a root cause analysis so that appropriate corrective actions can be implemented to address the various contributing factors.
 - b. Some causes may require involvement of the institution (i.e., CCR or CC) if they lie outside your direct oversight.
 - c. If possible, correct the problem as it relates to current subjects.
- 4. Develop processes to ensure that the problem is prevented in the future.
- 5. Document the plan including the individuals who will be accountable for the various components of the CAPA plan and who will ensure that all steps are successful.
 - a. A CAPA should be on institution letterhead and should contain the following information:
 - i. Protocol title, number, PI
 - ii. Statement of the problem
 - iii. Assessment of the root cause
 - iv. Corrective actions:
 - 1. Implementation details including by whom and by when:
 - 2. Training of staff and others, if applicable, on new processes or reinforce previous training. It's vital to document the training you have done to correct any deficiencies.
 - 3. Assessment of correction
 - v. Preventive actions to prevent recurrence
 - b. CAPA plan and evidence of training should be placed in the regulatory binder/folder.