

Creation of a Sponsor Quality Management Plan Under GCP Revision 2: Checks and Balances, Quality Systems, and Cross-Functional Communication

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1. Background

Conduct and oversight of clinical trials as a sponsor is increasingly complex for academic cancer centers, particularly when the center is responsible for on-site manufacture of investigational product, such as CAR T cells. In March 2018, the FDA adopted E6(R2) Good Clinical Practice: Integrated Addendum to ICH E6(R1). A key requirement of this guidance for clinical trial sponsors is the implementation of a quality management system. In response, Lineberger Comprehensive Cancer Center (LCCC) started an initiative to design a comprehensive quality management plan (QMP), beyond the scope of our NCI-required data and safety monitoring plan (DSMP), focused on LCCC as the sponsor to ensure human subject protection and the reliability of trial results.

2. Goals

The goal of this initiative was to develop a sponsor QMP with all systems described in FDA's guidance: clinical process and critical data identification, risk identification, risk evaluation, risk control, risk communication, risk review, and risk reporting.

3. Solutions and Methods

A cross-functional working group was formed to develop the QMP with the majority of the participants being staff within the clinical trials office (CTO) recognized as subject matter experts, including multicenter project managers; monitors; coordinators for the DSMC, PRC, and audits; and data managers. This group was further supported by members of CTO leadership. The group met monthly with action items between meetings. Gap analysis was performed to determine processes existing, lacking, or requiring formalization. All processes were evaluated for redundancies and cross-functional links. For complicated process development, smaller working groups were established (e.g., updating the LCCC DSMP, overhauling a data management plan, and designing a multicenter site escalation plan).

4. Outcomes

A comprehensive QMP was established supported by numerous SOPs, policies, job aids, and procedures. The success of the QMP is illustrated in:

- Clear methods to ensure quality management
- Overarching schema to aid in staff training
- Improved delineation of roles and responsibilities

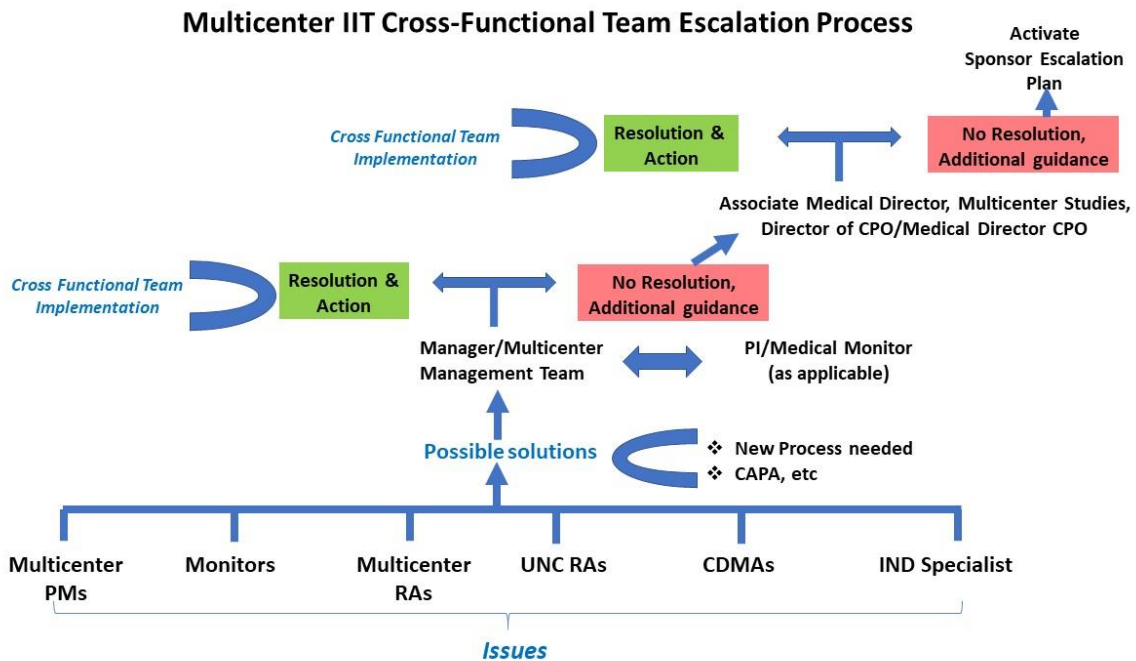
One specific example highlighting the success was the creation of a standardized cross-functional sponsor escalation plan to address queries from multicenter clinical trial sites and other issues with enrollment, data, regulatory, compliance, and communication (see figure). This plan resulted in the reduction of response time from days or weeks to days or hours (depending on issue complexity). The QMP was approved by LCCC leadership, is 18 pages long, is available in our learning management

system, and is required reading for all CTO staff involved in the management of investigator-initiated trials.

5. Lessons Learned

The most resounding lesson learned was that in a specialized clinical trial infrastructure most CTO staff and leaders lack the overarching understanding of how the functional groups can interact to create cross-functional systems of communication and quality. Many groups did not appreciate how collaboration could reduce overall burden on any one functional group and create better systems of checks and balances. Development of this plan will improve staff training/onboarding, serving as required reading material to highlight the overarching cancer center sponsor infrastructure. The QMP will also serve as the framework for development of trainings focused on our sponsor infrastructure.

Figure:



Abbreviations: CDMA = Clinical Data Management Associate, IND = Investigational New Drug, PM = project manager, RA = regulatory associate,