



White Paper AICRO – Working Group Clinical Trial Centers

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Introduction:

The clinical research environment is becoming more complex and highly competitive. A high amount of clinical trials are performed on a global basis and for a country or a site the adherence to the expected timelines, the quality of performance in the study and the respect of recruitment targets are critical factors to be considered for participation in international clinical research projects. The level of attractiveness of a country is constantly being measured through the above mentioned parameters and other key performance indicators; major hurdles have been identified for Italy, resulting as a consequence in a low level of attractiveness in comparison with other countries (1).

In addition, more focus on the level of readiness and quality of deliverables by sites is being placed globally with recent approaches like Risk Based Monitoring (2, 3), requiring a higher level of site autonomy to perform clinical studies. In Europe, the upcoming EU Clinical Trial Regulation (536/214) mentions the verification of site quality, leaving however what is exactly required as undefined. (4)

All together the above is warranting a higher level of preparedness of clinical trial sites in a country. Similar transformations are being seen also in Italy and abroad (5) and in more specialised settings like in phase 1 studies (6), academic/non-profit studies (7) and paediatric clinical research (8).

This white paper has been developed by AICRO through the set-up of a working group involving, as selected partners, Institutions of excellence with different backgrounds in clinical research in Italy who have reached the common goal of creating synergies for collaboration with CROs, agreed upon ways to increase the level of quality of clinical studies and, as a consequence, the overall attractiveness of our Country.

This document outlines the agreed definition of a Clinical Trial Center (CTC), aims to provide guidelines to Healthcare Structures who wish to create such an infrastructure, whose primary role should be to guarantee the oversight of clinical trials within Healthcare Structures, and presents the main elements that AICRO would recommend to find in these CTCs.

The main areas of elaborations have focused on the definition of the role and responsibilities that a CTC should have during the start-up phase of a clinical trial within a Healthcare Structure, its oversight on the study management, its continuing training of site personnel and its promotion of best practices aimed at maintaining high quality standards at the site. In addition, the role of a CTC should be to coordinate the activities associated with internal/external communication and business development, together with the development of technological infrastructures needed to fulfil all the above mentioned activities.

Definition - Clinical Trial Centre:

An organisational structure which operates as a centre of coordination and control within a Healthcare Structure, supporting one or more trial units; it can act as a central body for the execution of clinical studies and can fulfil the standards required by the external stakeholders (Sponsors, CROs, Associations Regulatory Agencies, etc.) in an effective and efficient manner.

The Clinical Trial Centre may also be the Sponsor of clinical studies (e.g.: in the case of non-profit/academic studies), provided it has the appropriate clinical research professionals (such as quality assurance managers, statisticians, monitors, data managers, etc.) available.

Recommendations:

In line with the previous paragraphs, the following responsibilities have been highlighted for a CTC, which become part of the expectations and guidelines to be fulfilled.

During the **Start-Up phase** of a study, a CTC should act as the central point of reference for the Institution acting as the primary link between the Investigators, Sponsors and CROs during the feasibility assessment and the site identification process.

The CTC should also work with all internal stakeholders (Ethics Committee, Administration, Investigators, Labs) to ensure that the start-up process is adequate to guarantee the operational readiness of the site within an acceptable timeframe, especially in view of the stringent timelines mandated by the upcoming Clinical Trial Regulation.

From a budget and contract perspective, a CTC should actively coordinate the definition of study budgets and should function as the primary point of contact between Sponsors and the Healthcare Structure during contract negotiations; in addition, a CTC should be responsible to oversee the processes of invoicing to Sponsors and internal financial reporting.

During the **course of a trial** a CTC should ensure accurate study management, provide operational oversight and support to the monitoring activities up to its closure.

On this regard the CTC should enable three key elements:

- The presence of appropriate site capabilities and the availability of adequate resources to support a specific clinical trial
- The appropriate planning tools which can assist in speeding-up the decision-making process and minimize duplication of efforts
- A set of skills for the personnel of the CTC to ensure an effective study management.

A CTC should also provide support in preparation and management of regulatory inspections or audits, and should provide adequate support to the hospital facility services, laboratory services, diagnostic services, maintenance, also regarding the handling of the trial supplies (medications or devices).

From a **GCP Training** perspective, a CTC should be involved in the oversight of all training aspects of the site personnel, undertaking the following activities on a regular basis:

- Create specific roles and responsibilities for all personnel involved in research, including non-clinical staff, by defining the required job descriptions and corresponding training plans
- Develop an internal process that will ensure a periodic review of the training needs and requirements of personnel and support their participation in courses or trainings in order to guarantee that the skills required are possessed and maintained in accordance with their role

From a **Quality perspective** a CTC should promote high quality standards at the site through:

- The presence of a Quality Management System and Quality Management Plan with predefined regular quality controls
- The creation, maintenance and regular revision of a set of SOPs to be distributed within the structure to all the personnel involved in the clinical trials, ensuring adequate and documented training on the SOPs.

In order to fulfil the above activities, a CTC should be equipped with a technological infrastructure accessible by all the «stakeholders» involved in a clinical trial within the Healthcare Structure (investigators, ethics committee members, departments, laboratory services, pharmacy, etc.) to enable the integration of information related to all aspects a clinical trial, such as: feasibility, study budget, Ethics Committee approval, contract execution, monitoring of study progress and invoicing to the study sponsor.

Finally, the CTC should also play a business development role for the Healthcare Structure aimed at identifying new partners, sponsors, collaborations with CROs, patient and scientific associations, both at the national and international level. Such a role should be properly communicated by an effective internal and external communication plan, describing the performance and accomplishments in clinical research of the entire Healthcare Structure.

Conclusion

In consideration of all of the above, a centralised structure like a Clinical Trial Centre is recommended to ensure the proper oversight of all aspects reported above.

The CTC can be the promoter of the collaboration among key persons and stakeholders, in order to ensure an efficient management of the clinical trials at the site. This would mean guaranteeing an efficient study start up process, speedy and qualitative subject recruitment, training and management of study personnel, development of SOPs and quality controls, together with appropriate metrics to track performance in all such areas.

It is finally recognized that effective communication and sharing of information amongst all the stakeholders within the Healthcare Structure is crucial for the success of the management and execution of clinical trials.

References

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