

# Principles of Clinical Trial Project Management



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1. Clinical trial project management
2. Clinical trial planning:
  - Role of the patient in clinical study planning
  - Project manager complex role and technique
  - Sequencing and scheduling
  - Building the study team
  - Study team resource planning
  - Communication
  - Clinical trial budget
3. Performance management
4. Risk management

# Clinical Trial Project Management

## A clinical trial is complex because:

- it consists of many processes
- it involves many functions in different organisations
- it involves collaboration of many people
- it needs to follow strict regulations
- it requires top quality performance of all involved
- it needs to adhere to strict timelines
- it needs to respect restricted budgets
- it needs intensive planning and risk management



**...while ensuring the integrity and safety of the patients involved**

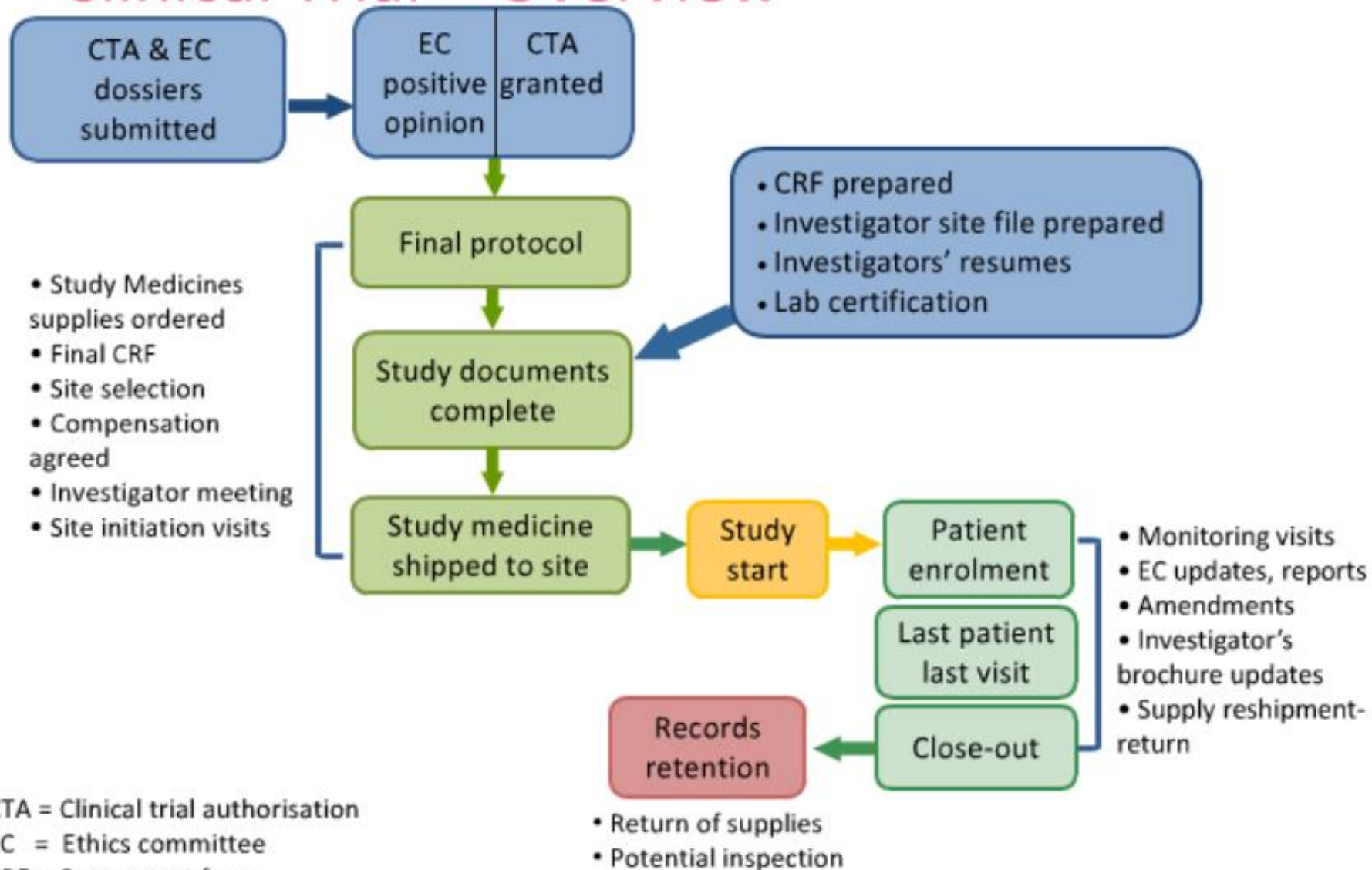
## Objective of a good clinical trial project management:

Conduct the study and report the results:

- in reliable quality
- on time
- within budget
- in compliance with applicable laws, regulations and guidelines



# Clinical Trial - Overview



CTA = Clinical trial authorisation  
 EC = Ethics committee  
 CRF = Case report form

## Clinical Trial Planning

Extensive planning of all aspects of the study is crucial!

### **'A 6-Month Process for Planning Multinational Clinical Trials'\***

List of 100 Points to Consider in Effective Study Preparation

This list provides a comprehensive understanding of the different aspects that need to be considered, decided and prepared to be able to start a clinical trial with the enrolment of the first patient.

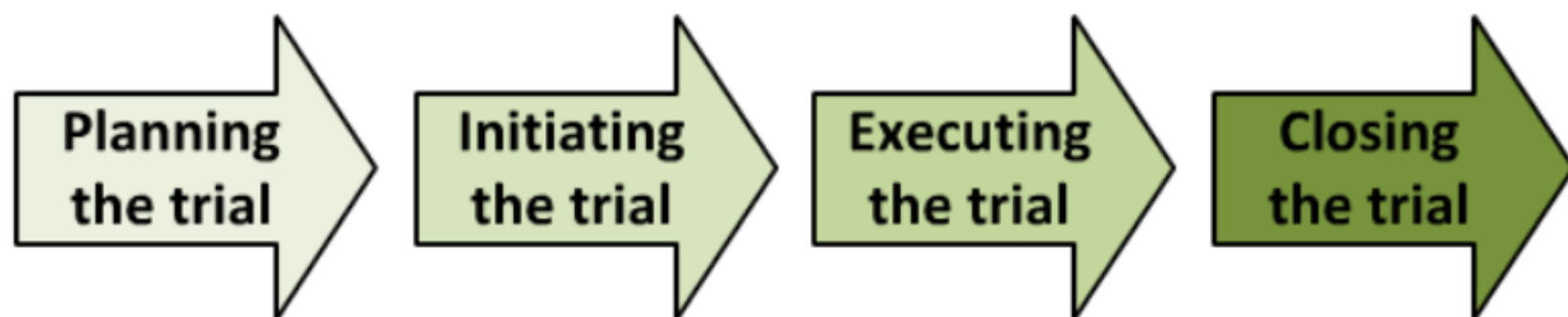
\*Source: <http://www.appliedclinicaltrials.com/node/244284?rel=canonical>

## Planning: Role of the Patient

- Input to protocol development concerning
  - Patient-relevant trial endpoints
  - Acceptable study design and comparator treatment (placebo or control treatment)
  - Acceptable visit scheme and activities during these visits
- Input to selection of investigators (which types of investigators are treating patients with this disease in a particular location)
- Input to collaboration with patient organisations:
  - Where to find them?
  - How to collaborate with them?
- Input to patient information and informed consent process
- Advice on most suitable approach to diaries and other means of patient-reported data

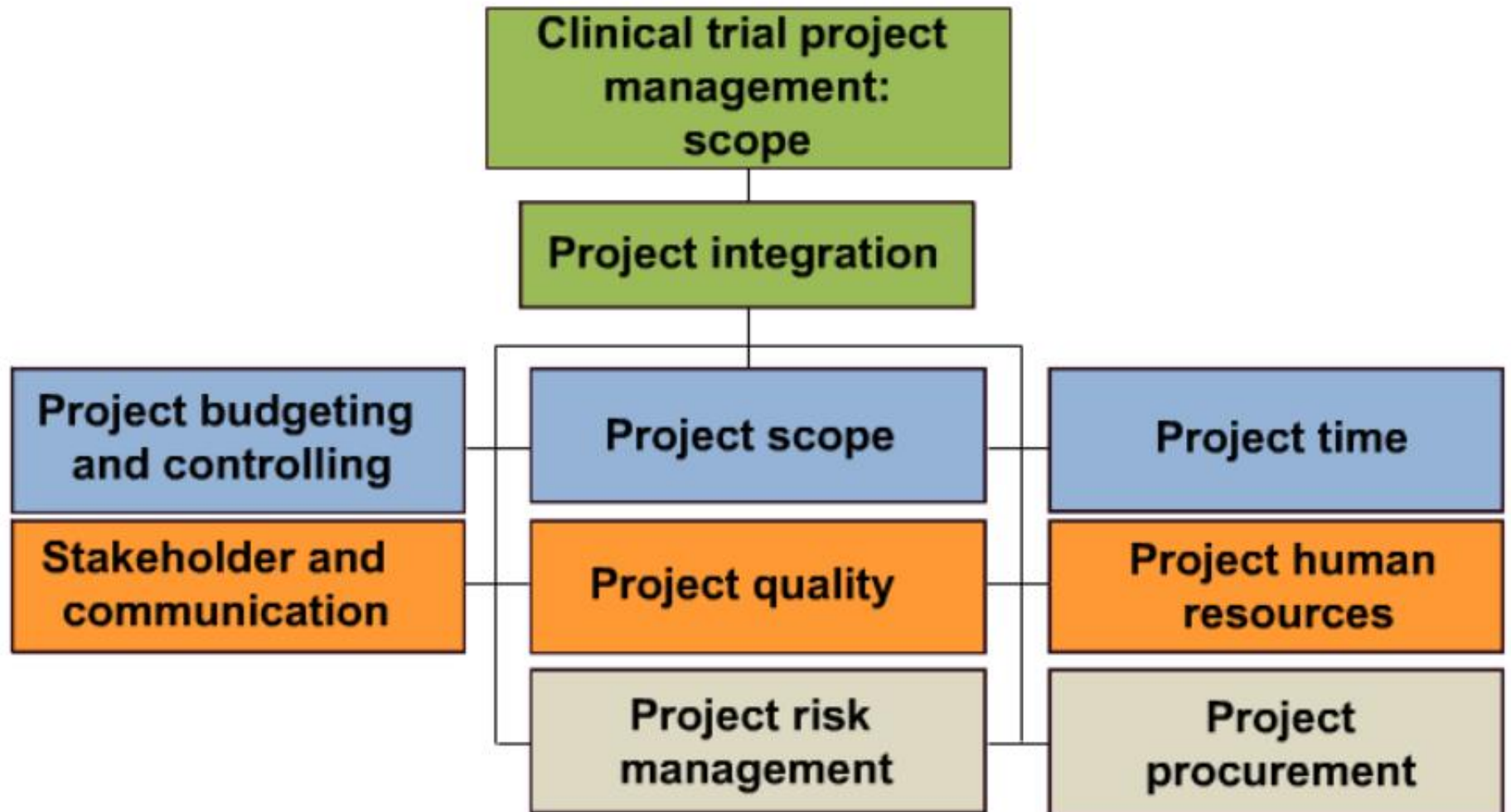
But clinical project management is not only about planning. It also covers the entire trial performance:

### Monitoring and controlling processes





# Project Management Knowledge Areas



# Planning: Project manager complex role in a trial



## **The project manager liaises with disciplines:**

- Financial management and accounting
- Purchasing and procurement
- Sales and marketing
- Contracts and commercial law
- Legal and regulatory
- Manufacturing and distribution
- Organisation and supply chain
- Goals planning, how-to planning, timing and progress measurement planning
- Human resources
- Health and safety practices
- Information technology (IT)
- Pharmacovigilance

## Resource Management – gaps

Develop creative ideas to decrease a resource gap:

- Reduction of task units (e.g. number of patients to be enrolled)
- Extension of time frames (e.g. enrolment period)
- Delegation to other team members
- Utilisation of staff with capacity in other departments
- Hiring part-time staff or students
- Hiring new fulltime staff
- **Insourcing** - staff contracted from an interim staff provider for a certain period of time.
- **Outsourcing** - work contracted to an external service provider who performs this task on behalf and under supervision of the sponsor

## Communication Plan

A communication plan will:

- Minimise / avoid misunderstandings
- Motivate internal and external team members
- Clearly outline expectations, tasks and responsibilities of all parties
- Document what was done
- Make sound business sense
- Include the patients' perspective

# Communication management

## Examples of stakeholders

- Patients
- Healthcare providers
- Regulators
- Investigators
- Partners/potential licensees
- CROs (contract research organisations)
- Payers
- Insurers
- Senior management
- Patient advocacy groups
- NGOs (non-governmental organisation)
- Academic research groups
- Media
- Financiers (investors)
- Lobbyists
- Governments
- Shareholders
- Sponsors

# Planning: Clinical trial budget planning

## Cost factors in clinical trials

### **Different cost factors in a clinical trial budget:**

- In-house costs of performing the trial (staff + overheads)
- Investigator and hospital costs
- CRO and other vendors costs
- Study medicine production, labelling and packaging
- Study approval, regulatory review, ethics committee fees
- Insurance
- Shipments
- Training
- Investigator meeting
- Other: \_\_\_\_\_

## Factors affecting the trial budget

- Type and frequency of tasks to be performed and complexity of the trial
- Staff levels included and their responsibility for tasks
- 'Hourly rates' of staff levels involved
- Level of outsourcing
- Trial duration
- Number of sites and countries involved
- Study medication costs
- Intensity of trial supervision (e.g. frequency of monitoring)

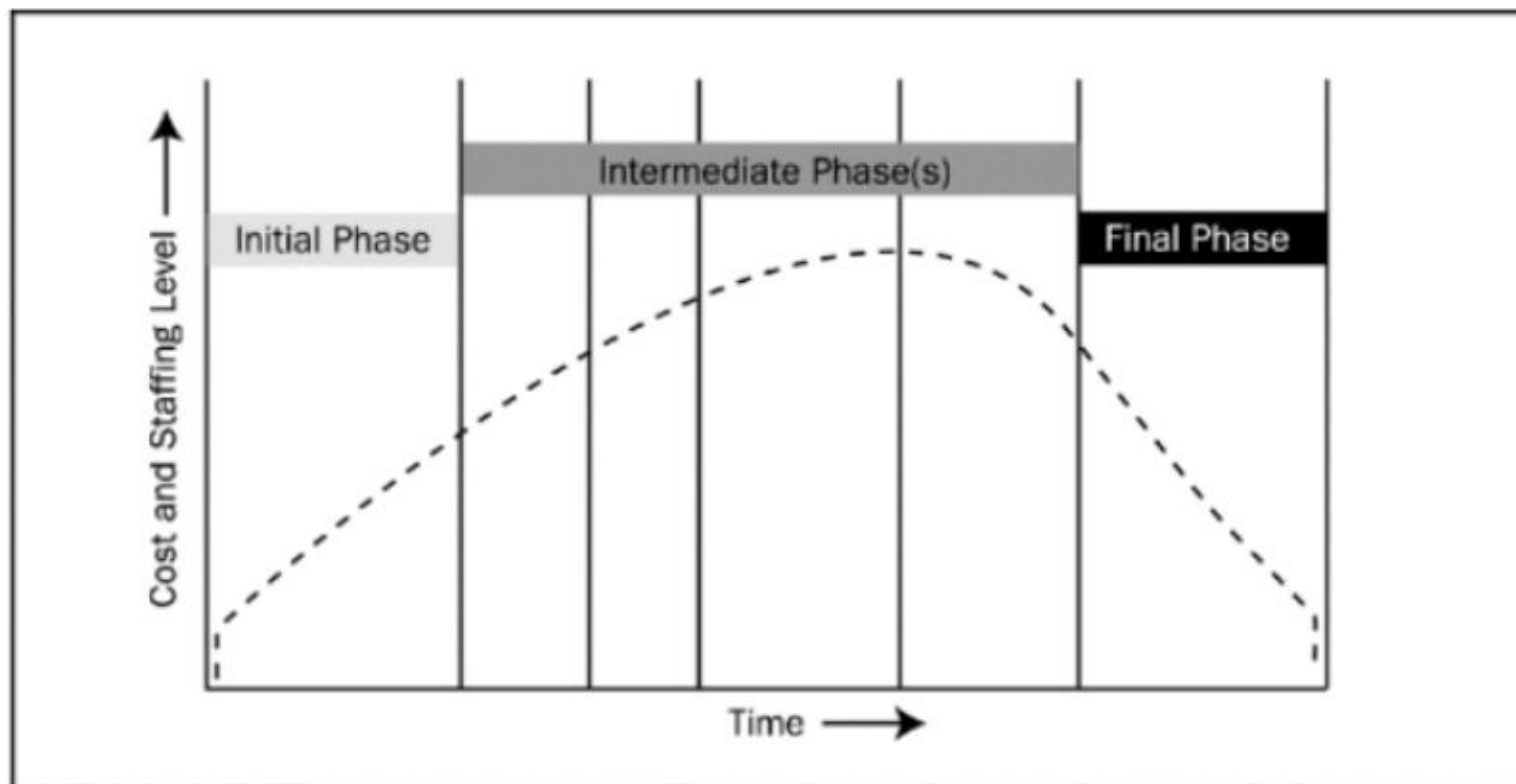


## Starting phase

- Rough assumptions on:
  - Number of study sites involved in which countries
  - Number of patients to be enrolled
  - Investigator and hospital fees per patient
  - Study medicine production, labelling and packaging costs
  - In-house costs
  - CROs and other vendors costs
  - Laboratory and other external clinical assessment costs
  - Overhead costs
  - Pass-through costs
- With increasing knowledge about the trial protocol and organisation the budget items get refined

# Trial cost cycle

## Common trial cost characteristics



# Performance management

## **Regular review of the status of critical trial elements in comparison to plan:**

- Study approval
- Site initiation
- Patient recruitment
- Safety of treatment and reporting to authorities and ethics committees
- Study medication supply
- CRF completion
- Monitoring
- Data cleaning status
- Statistical evaluation
- Final report
- Budget and cash-flow situation

# **Risk management: Risks in clinical trials**

## Risk assessment

Example: If enrolment is slower than expected (happens often), there is a real risk of not finishing on time – enormous impact on the trial

➤ **Risk: Patient enrolment slower than expected.**

	Low	Medium	High
Low			
Medium			
High			<b>X</b>

Probability

Impact

## Risk management. Summary

### **Benefits of risk management are:**

#### **1. Proactive study management**

- more prevention - less correction
- increased risk transparency and awareness
- increased trust in study management

#### **2. Less efforts to compensate deviations**

#### **3. Less individual and subjective risk handling**

- clear definitions, standardised processes and tools
- more reasonable risk decisions

**Better study progress and higher success rate!**