Update on the Clinical Trials Transformation Initiative:

Rethinking approaches to clinical trial oversight and premarket safety management

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Clinical Trial Transformation Initiative

Organization

- A public private partnership co-founded by FDA and Duke in late 2007
- Through a memorandum of understanding with FDA, Duke “hosts” the initiative

Finances

- Membership fees support infrastructure and projects
- Awarded an FDA Cooperative Agreement Sept 2009

Current member organizations

Category	Number of organizations
Academic institutions	16
Pharmaceutical companies	9
US Government Members & Liaisons	7 (FDA [OC,CDER, CBER, CDRH] AHRQ, CDC, CMS, NIH, OHRP, VA)
Biotechnology companies	6
Clinical research organizations	4
Professional societies	4
Trade organizations	4
Clinical investigator groups	3
Device companies	3
Institutional Review Boards	2
Patient representatives	2
Private equity firm	1
Regulatory law firm	1
Standard Setting Organization	1

61 member organizations; 2 patient representatives

FDA Clinical Trials Transformation Initiative

Mission

- To identify practices that through broad adoption will increase the quality and efficiency of clinical trials

Strategy

- Seek incremental improvements to current system
- Identify and shape potential transformational changes to the system

Projects focused on incremental change

Completed projects

- Effective and efficient monitoring as a component of quality
- Improving unexpected SAE reporting to IND investigators

Current projects

- Applying “quality by design” principles to clinical trials
- IND safety assessment and communication
- Use of central IRBs for multicenter clinical trials
- Site metrics for study start-up

Identifying & shaping transformational change

Prediction:

Technological revolution could transform clinical research

- Organizational and personal electronic health care records, internet, smart phones, social networks… to support recruitment, trial procedures, data capture

Challenges:

Potential barriers to efficient and effective research must be minimized

- Regulatory, trial conduct and quality assurance approaches must support high quality research… and focus on the principles that will remain constant

Need for reliable evidence from clinical trials

- Essential for appropriate decision making concerning the benefits and risks associated with clinical interventions.

- Decisions made in the absence of reliable evidence (either because relevant trials have never been performed or because those that have been performed were poorly designed or conducted) may harm individual patients and public health.

High quality clinical trials

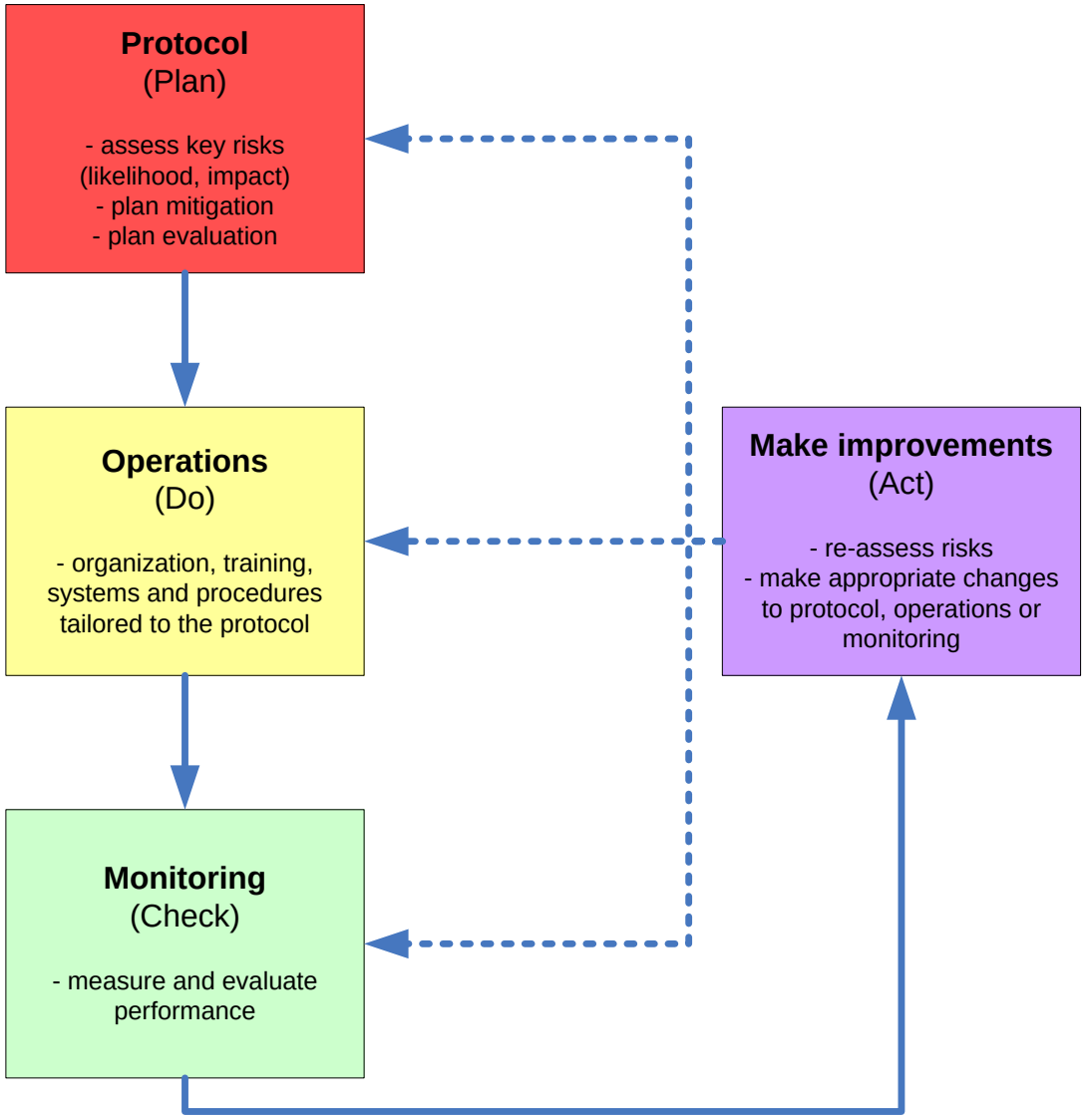
Avoid errors that matter to decision making

- Human subjects protection, e.g.
  - appropriate information and consent at each stage of trial
  - safe administration and monitoring of investigational products
  - safe study procedures (e.g. biopsy, invasive imaging)

- Reliability of results, e.g.
  - proper randomization with no foreknowledge of likely treatment allocation
  - minimize post-randomization withdrawals
  - minimize loss to follow-up
  - sufficient numbers of relevant clinical outcomes
  - unbiased ascertainment and analysis of study outcomes

Also consider the impact on participants/patients not in the trial

Quality by Design (QbD)



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- Leslie Ball
  - Office of Scientific Investigations, CDER, FDA
- Patrick Archdeacon
  - Office of Medical Policy, CDER, FDA
- Janet Wittes
  - Statistics Collaborative, Inc.