7 Operations tables, worksheets, and checklists

Table 7.1 Coordinating center activities by stage of multicenter trial (CCStage.Tab)

Initial design stage

- Calculate required sample size
- Outline data collection schedule, quality control procedures, data analysis plans, and data intake and editing procedures
- Develop organizational structure of the trial
- Prepare funding proposal for coordinating center
- Coordinate preparation of the funding applications

Protocol development stage

- Develop treatment assignment procedures
- Develop data system and related computer programs for receiving, processing and editing data
- Design and test data collection forms
- Develop interface for data transmission from clinics and other resource centers to coordinating center
- Train clinic personnel in required data collection procedures
- For trials with distributed data systems, train clinic personnel for data entry
- Implement clinic and personnel certification procedures
- Distribute study data forms
- Develop manuals and handbooks needed in the trial, including the treatment protocol, clinic manual of operations/handbook, coordinating center manual of operations/handbook, etc.
- Establish repository for official records of the study, including minutes of meetings, manuals/handbooks, etc.
- Serve as funding center for trial operated under a consortium mode of funding unless function fulfilled by some other center
- Serve as the procurement and payment center for general study needs, such as drug purchase and packaging, study insurance if desired, laboratory services, etc., when not performed elsewhere in the study structure

Patient recruitment stage

- Administer treatment assignment process, including monitoring for breakdowns in the assignment process
- Assume leadership role in outlining study needs for quality assurance
- Implement editing procedures to detect data deficiencies
- Develop procedures for monitoring performance of clinics in regard to enrollment, followup, adherence to the protocol, and data collection
- Develop treatment effects monitoring procedures
- Site visit to participating clinics
- Prepare study progress reports for submission to sponsor
- Prepare, in conjunction with the study leadership, renewal or supplemental funding requests as needed
- Update study manuals and handbooks

Treatment and followup stage

- Prepare data reports for treatment effects monitoring committee
- Prepare reports on performance of clinical and resource centers
- Carry out training sessions to maintain proficiency at clinics in treatment and data collection procedures
- Evaluate data processing procedures and modify as necessary
- Develop and test data collection forms for close-out stage
- Prepare summary of study results for presentation to participating investigators for use in close-out stage
- Locate study participants lost to followup
- Review study priorities and propose changes in the organizational and operating structure of the trial as needed
- Assume major role in writing paper on design, methods, and baseline results

Table 7.1 Coordinating center activities by stage of multicenter trial

Patient close-out stage

- Monitor for adherence to established patient close-out procedures
- Develop plans for final data editing
- Design and test computer programs needed for final data analysis
- Develop plans for final disposition of study data
- Coordinate logistics of patient disengagement from treatment
- Assume key role in primary results papers
- Develop plans for disengagement of clinical centers from the trial

Termination stage

- Perform final data edit and undertake final analysis of data according to plans outlined by study leadership
- Implement study plans for disposition of study records
- Assume leadership role in paper writing activities
- Undertake extra measures to locate patients lost to followup
- Supervise collection and disposal of unused study medications
- Distribute draft manuscripts and published papers to participating centers
- Serve as funding center for activities in the trial after termination of support for clinics

Post-trial followup stage (optional)

- Compile a list of patients eligible for post-trial followup
- Implement procedures to locate patients whose current whereabouts are unknown
- Coordinate mailings, telephone calls, or clinic visits required for post-trial followup
- Update existing data files with data collected during post-trial followup
- Assume leadership role in drafting and distributing manuscripts using post-trial followup results
- Ensure storage, under adequate security, of names of study patients and other identifying information for possible future contact or followup

Table 7.2 Treatment effects monitoring issues and recommendations (TEMCRec.Tab)

Philosophical issues	
Whether to monitor	Assume need unless one can argue that absence of monitoring does not pose risk for persons studied
Monitoring policy	Should be set by investigators with advice and consent role for sponsor
Monitoring body	Preferred approach is one involving a dedicated body commissioned specifically for monitoring
Responsibility	Conducting periodic reviews of interim data from the trial for the purpose of recommending whether the trial should proceed unaltered; authority should be as a recommending body as distinct from decision making body
Reporting	Recommendations should be reported directly to study investigators (via Study Chair) or simultaneous to study investigators and sponsor
Written rules	Ideally yes; should be written by study investigators; if written by the monitoring body then with the advice and consent of investigators
Masked monitoring	Not recommended because of impact on competency
Firewalls	Not recommended because of impact on competency
Look restrictions	Not recommended because of impact on competency
Stopping rules	Not recommended because of impact on competency
Stopping guidelines	Optional provided they are not seen as rules
Commissioning	
Vetting authority	Investigators with the advice and consent of the sponsor, or sponsor with the advice and consent of the investigators
Appointing authority	Investigators with the advice and consent of the sponsor, or sponsor with the advice and consent of the investigators
Chair	Person with credentials in the medical field of interest or experienced in trials; independent of the study and sponsor
Term limit	Not recommended
Attendance requirement	Preferred; requirement should be part of the vetting process and should be stated in the letter of appointment
Pay for members	Yes for voting members; no for nonvoting members
Payor	The study or sponsor; preferably the study
Amount	Modest; not so large so as to make members reluctant to recommend stopping because doing so will end their pay
Membership	
Composition	People with the collective disciplines, skills, and areas of expertise needed to ensure competent monitoring
Size (voting and nonvoting)	No larger than necessary consistent with competency requirements
Voting members	Independent of the study and sponsor
Ethicist	Optional
Lay representative	Optional

Table 7.2 Treatment effects monitoring issues and recommendations

Patient advocate	Optional
Activists	Optional
Nonvoting members	Study officers
Study representatives	Yes, as nonvoting members; typically, the study officers
Treater from the trial	All things considered, preferred
Membership parity	The same for all members except for act of voting
Membership listing	Listing should include all members; voting and non-voting
Meetings	
Frequency	At least twice a year; more often if necessary
Mode	Preferably face-to-face at least once per year
Time and location	Weekday; convenient site
Quorum	Specified in rules for the committee when formed; should include quorum requirement for voting and for nonvoting members
Absentee and proxy votes	No
Executive sessions	No
Operations	
Conflict of interest disclosure	Yes; disclosure should be part of the initial vetting process; disclosures should be updated on an annual basis
Report production	Coordinating Center
Distribution of reports	Coordinating Center
Report repository	Coordinating Center
Rapporteur	Typically, study staff from the Coordinating Center or Office of the Chair
Reporting to IRBs	Typically, via the Coordinating Center

Table 7.3 Guidelines for committee operations (CommOp.Tab)

A. General

- Create no more committees than necessary
- Provide a written charge for each committee outlining charge and function
- Indicate the individual or group that has authority to appoint or dissolve committees
- Avoid overlap of responsibilities with other committees
- Outline the relationship of one committee to another and the communication structure for committee-to-committee interactions
- Specify whether or not a committee has decision-making authority; if so, indicate areas of authority

B. Chair

- Specify the method of selection (e.g., election or appointment) and the term of office
- Designate a chair for each committee created; a vice-chair should also be designated for any committee that is to perform essential ongoing functions in the trial

C. Membership

- Specify the membership criteria for each committee
- Specify the methods to be used for rotation of members (if any), for filling vacancies, and for replacing non-functioning members
- Indicate ex-officio committee positions (e.g., chair of the study, director of the coordinating center and whether seated with or without vote)
- Specify conditions that disqualify individuals from filling a committee position, including conflicts of interest

D. Voting

- Specify quorum requirement for conduct of business
- Identify voting and nonvoting committee members and ex-officio voting and nonvoting positions
- Specify committee voting rules

E. Documentation and maintenance

- Maintain up-to-date list of committee members, their respective terms of office, and voting rights
- Designate an individual to serve as committee secretary
- Carry out periodic reviews in which committee charges are updated and committee-to-committee communication structures revised, where appropriate
- Dissolve committees that have completed their work or that are no longer functional

Table 7.4 Dos and don’ts for production of format robust documents (DoTemp.Tab)

Do

Establish and promulgate rules and procedures for document production, including rules on use of headers and footers
Tab paragraphs
Use white space to separate paragraphs in text documents
Use special marks to denote the end of documents, tables, and figures
Use italics or boldface (not underline) for emphasis
Use headers to indicate chapters and sections in manuscripts, manuals, handbooks, and monitoring reports
Use footers to indicate date of creation or of last update, producer, and file location
Use right or decimal align tabs to array arithmetic numbers in tables
Strip document of unnecessary electronic codes and settings (just trouble waiting to happen)
Turn widow and orphan protection on when producing text documents
Page number
Practice good housekeeping procedures; get rid of extra codes; turn off features turned on in the document at end of document; discontinue headers and footers

Don’t

Use the space bar to arrange or position text; the extra spaces will cause text to be in disarray when imported into a document with font or printer definitions different from those in place when the document was created
Use the tab key to position text; extra tabs will be problematic if font or pitch is changed
Intermingle use of the tab and indent key even if the two codes appear to create the same effect; the difference in function is not noticed until or unless text breaks to a second line
Use underlining or all capital for emphasis (underlined text and all cap text is harder to read)
Start new paragraphs without indenting, i.e., no "block paragraphing"
Left align arithmetic numerals in data tables
Use the enter key to manage line breaks; let the word processor do the managing
Use hard returns to manage page breaks; use "block protect", "conditional end of page" code, or other word processor features to do the managing
Turn on features not used
Leave features turned on; the codes are active and will influence text down stream when retrieved into a master document
Create documents using the default setting provided by the vendor

Table 7.5 Template and master document format specification worksheet (Format.Tab)

Template specifications

Page orientation
( ) Portrait (recommended)
( ) Landscape
( ) Mixed (best avoided, especially if documents are to be assembled into a master document)

Page margins

_____ Top (0.75" recommended)

_____ Bottom (0.75" recommended)

_____ Left (1" recommended)

_____ Right (1" recommended)

Font

Face _____

Point size ____

Page numbering
( ) No
( ) Yes (recommended)
Style
( ) Roman
( ) Arabic
Position
One-sided print
( ) Top right (recommended)
( ) Top center
( ) Bottom right
( ) Bottom center
Two-sided print
( ) Top outer (recommended)
( ) Top center
( ) Bottom outer
( ) Bottom center
Property
( ) Continuous (recommended)
( ) By section/chapter

Document settings
( ) Center page (recommended for "table" templates)
( ) Force odd page start (recommended for "chapter" templates)
( ) Orphan protection (recommended)

Table 7.5 Template and master document format specification worksheet

( ) Widow protection (recommended)
( ) Left justification
( ) Right justification (not recommended)

1st page suppressions
( ) Headers and footers
( ) Headers, footers, and page number
( ) Headers and footers; page number at bottom center
( ) Main header only
( ) Other (specify)

_____

Markings
( ) Mark title for list generation
( ) Mark title for table of contents generation
( ) Mark section headings for list generation
( ) Mark section headings for table of contents generation

End codes
( ) Discontinue headers/footers
( ) Hard page code
( ) Other (specify)

_____

Master document specifications

Document type
( ) Study protocol
( ) Study manual of operations/study handbook
( ) Treatment effects monitoring report
( ) Performance monitoring report
( ) Steering committee meeting book
( ) Research group meeting book
( ) Results manuscript
( ) Other (specify)

_____

Front matter
( ) Title and date
( ) Place of production
( ) Table of contents

Paper stock
Size
( ) 8.5x11"
( ) 8.5x14"

Table 7.5 Template and master document format specification worksheet

Color
( ) White
( ) Other _____

Weight
( ) 20 lb
( ) Other _____

Three hole paper
( ) Yes
( ) No

Print side
( ) One side (recommended for working documents)
( ) Both sides (not recommended absent page numbering, headers, and footers designed for two-sided printing)

Dividers
( ) No
( ) Yes

Number . . . . . ____

Labeling _____

Binding
( ) Paper clip (not acceptable)
( ) Bull clip (generally not advisable)
( ) Stapled, top left corner
( ) Stapled, top, center, and bottom left
( ) 3-ring loose leaf notebook (preferred for meetings involving review of tables, e.g., as in treatment effects monitoring reports)
( ) Single O ring (not recommended)
( ) O ring, top and bottom (acceptable)
( ) Other

_____

Covers
( ) Front
( ) Back
( ) Spine

Table 7.5 Template and master document format specification worksheet

Production

_____ Number of distribution copies

_____ Number of file copies

_____ Number of extra copies

_____ Total number

Mode of distribution
( ) Electronic (acceptable but rarely as sole means for important documents)
( ) Mailed
  ( ) Regular mail
  ( ) Commercial courier
( ) Hand delivered at meeting

Place of production: _____

Due date (day-month-year) . . . . . __—___—____

WS 7.1 Document production and archiving worksheet (DocMake.WS)

When: Early in the design phase of the trial

Who: Coordinating center personnel in conjunction with the study chair

Purpose: To establish production and archiving locations for key study documents

A. Identifying information

1. Study name: _____
2. Form completed by: _____
3. Date completed (day-month-year) . . . . . __—___—____

B. Base documents

4. Study protocol
   - Production loci . . . . . _____
   - Distribution loci . . . . . _____
   - Archive loci . . . . . _____
5. Prototype consent form
   - Production loci . . . . . _____
   - Distribution loci . . . . . _____
   - Archive loci . . . . . _____
6. Investigator's brochure
   - Production loci . . . . . _____
   - Distribution loci . . . . . _____
   - Archive loci . . . . . _____
7. Data collection forms
   - Production loci . . . . . _____
   - Distribution loci . . . . . _____
   - Archive loci . . . . . _____

8. Manual of operations
   Production loci . . . . . _____
   Distribution loci . . . . . _____
   Archive loci . . . . . _____
9. Study handbook
   Production loci . . . . . _____
   Distribution loci . . . . . _____
   Archive loci . . . . . _____

C. Monitoring reports

10. Performance monitoring reports
    Production loci . . . . . _____
    Distribution loci . . . . . _____
    Archive loci . . . . . _____
11. Treatment effects monitoring reports
    Production loci . . . . . _____
    Distribution loci . . . . . _____
    Archive loci . . . . . _____
12. Site visit reports
    Production loci . . . . . _____
    Distribution loci . . . . . _____
    Archive loci . . . . . _____
13. Minutes of study meetings
    Production loci . . . . . _____
    Distribution loci . . . . . _____
    Archive loci . . . . . _____
14. Study progress reports
    Production loci . . . . . _____

Distribution loci . . . . . _____

Archive loci . . . . . _____

D. Datasets

15. Analysis datasets

Production loci . . . . . _____

Distribution loci . . . . . _____

Archive loci . . . . . _____

16. Manuscript datasets

Production loci . . . . . _____

Distribution loci . . . . . _____

Archive loci . . . . . _____

17. Public use datasets

Production loci . . . . . _____

Distribution loci . . . . . _____

Archive loci . . . . . _____

E. Other documents

18. Study design synopsis

Production loci . . . . . _____

Distribution loci . . . . . _____

Archive loci . . . . . _____

19. Study CV

Production loci . . . . . _____

Distribution loci . . . . . _____

Archive loci . . . . . _____

WS 7.2 Investigator assurances worksheet (Assure.WS)

When: Before the start of enrollment

Who: Any person involved in the trial in clinics or study resource centers

Purpose: As an aid to reminding people of their responsibilities in the trial

A. Identifying information

1. Study name: _____

2. Study investigator: _____

3. Date completed (day-month-year) . . . . . __—__—____

B. Attestations

4. Study protocol
( ) Familiar with the study protocol
( ) Willing to follow the study protocol
( ) Read consent form used for enrollment of persons into trial

5. Tenets of the trial
( ) Objective of trial reasonable
( ) Question worth answering
( ) Sample size goal reasonable and feasible
( ) Treatments safe
( ) Willing to enroll and follow patients in the trial

6. Responsibilities
( ) Respect privacy of study subjects
( ) Protect confidentiality of study data
( ) Not to engage in practices that bring discredit to the study
( ) Comply with IRB policies and procedures underlying research on human beings
( ) Report practices that are wrong or fraudulent

C. Disclosures

7. Conflict of interest disclosure?
( ) No
( ) Yes
If yes, are the conflicts likely to seen by the public as sufficient to disqualify one from certain aspects or functions in the trial?

( ) Yes (specify)

_____

_____

( ) No

8. Conflict of interest disclosures on file for other investigators to see?
( ) Yes
( ) No (explain)

_____

9. Publications or public positions inconsistent with tenets of trial?
( ) No
( ) Yes (explain)

_____

WS 7.3 Study website (Website.WS)

When: Early in the trial, before the start of data collection

Who: A person designated by the director of the data center

Purpose: To provide a central, readily accessible archive of materials needed for conduct of the trial

Reminders and recommendations

- Consider establishing a password-protected website for any study involving geographically disbursed personnel whether single-center or multicenter
- Consider placing important study documents that do not have to be password-protected on open portion of the website
- Do not set up a study website without plans for maintenance and updating over the course of the study

A. Identifying information

1. Study name: _____

2. Form completed by: _____

3. Date completed (day-month-year) . . . . . __—___—____

4. Website address: . . . . . _____

B. Study centers

5. Website access (check one)
   ( ) Limited to study personnel via password protection (L)
   ( ) Open to public (O)
   ( ) Both a public and password-protected portion (B)

6. Content (check all that apply)

L	O	B	
( )	( )	( )	Current version of study forms
( )	( )	( )	Previous versions of study forms
( )	( )	( )	Current version of study protocol
( )	( )	( )	Previous versions of study protocols
( )	( )	( )	Current version of study handbooks/manuals of operations
( )	( )	( )	Prototype consent and assent forms
( )	( )	( )	Study directory
( )	( )	( )	Study CV
( )	( )	( )	Study synopsis
( )	( )	( )	Study centers
( )	( )	( )	Study registration site

L	O	B	
( )	( )	( )	Study committees and membership
( )	( )	( )	Study credit roster
( )	( )	( )	Policy and procedures memoranda
( )	( )	( )	Minutes of study meetings
( )	( )	( )	Site visit reports
( )	( )	( )	Meeting materials
( )	( )	( )	Performance reports
( )	( )	( )	Available datasets
( )	( )	( )	Publications
( )	( )	( )	Presentations
( )	( )	( )	Slide sets
( )	( )	( )	Other (specify) _____
( )	( )	( )	Other (specify) _____
( )	( )	( )	Other (specify) _____

C. Website custodian and maintenance

7. Custodian (check one)
   - ( ) Data center/coordinating center
   - ( ) Office of study chair/PI
   - ( ) Sponsor
   - ( ) Other (specify)

   _____

8. Frequency of updates (check one)
   - ( ) As needed
   - ( ) Weekly
   - ( ) Monthly
   - ( ) Other (specify)

   _____

9. Authority for issue and de-issue of passwords for website access (check one)?
   - ( ) Data center/coordinating center
   - ( ) Office of study chair/PI
   - ( ) Sponsor
   - ( ) Other (specify)

   _____

D. Sign-off

10. Content checklist (item 6) reviewed and approved by study leadership
    ( ) Yes (essential for content of public portion of website)
    ( ) No (Stop if website has a public portion)

11. Reviewing and approving body: _____

12. Date of sign-off (day-month-year) . . . . . __—__—____

WS 7.4 Conflicts of interest worksheet (CoI.WS)

When: Before the start of data collection

Who: Study officers

Purpose: To set-forth policy on disclosure of conflicts of interest

Definition

conflict of interest - 1. An interest deriving from financial holdings, proprietorship in some business, relationship to some product, post or position held, or stand taken by a person, group, agency, firm, or institution that is acknowledged by that person or party as constituting a conflict in relation to some activity, function, judgment, or action performed or to be performed. 2. A conflict due to competing needs, e.g., the conflict of a physician engaged in caring for patients under a treatment protocol when deciding whether to choose in favor of one's patient or protocol when in conflict; such a conflict arising from pursuit of conflicting values, e.g., the value of unmasked treatment effects monitoring in regard to competency requirements versus the value of masked treatment effects monitoring in regard to objectivity requirements. 3. A moral dilemma arising from the need to engage in some act or process that is at odds with one's belief or conviction, e.g., the dilemma of a physician engaged in recruiting patients for enrollment into a randomized trial in the absence of a state of equipoise, or the dilemma of one in a coordinating center in performing treatment effects monitoring considered to violate competency requirements. ***Usage note***: Most often used in relation to financial, business, or proprietary interests, but can be used in relation to one's post or employment, or more broadly in relation to a philosophical position or point of view considered to be in conflict with one's duty or to have the potential of influencing one's judgment or action in relation to some activity or function. Avoid as an implied charge or in a speculative sense. Generally, unless supported with factual information detailing the nature of the interest or circumstance considered to constitute a conflict, the term should not be used in an accusatory sense. Avoid, as well, suppositions as to effect. The direction or nature of the effect of a conflict of interest may be opposite to the one suggested in cases in which the individual is aware of the conflict and "overcompensates" for it.

A. Identifying information

1. Study name: _____

2. Form completed by: _____

3. Date completed (day-month-year) . . . . . __—__—____

B. Disclosure process

4. Persons required to disclose conflicts (check all that apply)
   - ( ) Center directors
   - ( ) Deputy center directors
   - ( ) Study officers
   - ( ) Steering committee members

( ) Executive committee members
( ) Treatment effects monitoring committee members
( ) Study physicians
( ) Data collectors
( ) Other (specify)

_____

_____

_____

5. Mode of disclosure (check all that apply)
   ( ) Discussion of what constitutes conflicts of interest at investigator meetings followed by round table oral disclosure of possible conflicts
   ( ) Written, via signed and dated disclosure statement

6. Frequency of disclosures?
   ( ) Once, at the beginning of the trial
   ( ) Annually over the course of the trial

   ( ) Other (specify) _____

C. Review

7. Body responsible for reviewing disclosures and for deciding whether conflicts disclosed are sufficient to disqualify
   ( ) Study chair
   ( ) Study officers
   ( ) Steering committee
   ( ) Sponsor
   ( ) Advisory committee independent of study investigators
   ( ) Other (specify)

   _____

8. Is there a process for dealing with conflicts considered to be sufficient to disqualify a person from some position or activity in the trial?
   ( ) No
   ( ) Yes (describe)

   _____

   _____

D. Disclosure repository

9. Location of where disclosure statements are filed
   - ( ) Not stored
   - ( ) Sponsor
   - ( ) Office of the study chair
   - ( ) Coordinating center
   - ( ) Other (specify)

     _____

10. Disclosure statements available to study investigators for inspection?
    - ( ) No
    - ( ) Yes

11. Disclosure statements available to the public?
    - ( ) No
    - ( ) Yes
      - ( ) Posted to public section of study website
      - ( ) On request
      - ( ) Other (specify)

        _____

WS 7.5 Study training and certification worksheet (Train.WS)

When: Prior to the start of data collection

Who: Leaders of the data center

Purpose: To specify training and certification procedures to be followed in the trial

Definition

certification - In the case of trials, a process for clearing a center or study personnel for participation. In regard to a center, a process intended to ensure that it has the requisite facilities, equipment, staffing, approvals, and that it meets specified standards; may involve onsite inspections. In regard to personnel, typically a process involving study specific training and evidence of proficiency in regard to performing key procedures and activities related to data collection.

A. Identifying information

1. Study name: _____

2. Form completed by: _____

3. Date completed (day-month-year) . . . . . __—___—____

B. Training

4. Personnel training prior to start of enrollment (check all that apply)
   - ( ) IRB training
   - ( ) Meeting of the research group prior to start of enrollment devoted to:
     - ( ) Review of the study protocol
     - ( ) Review of data collection procedures
     - ( ) Review of consent procedures
     - ( ) Review of responsibilities for integrity
     - ( ) Review of consequences of scientific misconduct
   - ( ) Completion of a knowledge assessment test based on the study protocol
   - ( ) Start-up site visits to study centers
   - ( ) Other (specify)

     _____

5. Study personnel subject to start-up training (check all that apply)
   - ( ) Center directors
   - ( ) Study physicians
   - ( ) Study nurses
   - ( ) Center coordinators
   - ( ) Data collectors
   - ( ) Data keyers

Table 7.5 Training and certification worksheet

( ) Other (specify)

_____

6. Methods of ongoing training of study personnel (check all that apply)
   ( ) Periodic meetings of the research group
   ( ) Periodic meetings of clinic coordinators
   ( ) Staff newsletters
   ( ) Site visits
   ( ) Policy and procedures memoranda from the coordinating center regarding changes to study procedures or protocol
   ( ) Other (specify)

_____

7. Personnel subject to periodic retraining (check all that apply)
   ( ) Center directors
   ( ) Study physicians
   ( ) Study nurses
   ( ) Center coordinators
   ( ) Data collectors
   ( ) Data keyers
   ( ) Other (specify)

_____

8. Method of training new personnel during the trial (check all that apply)
   ( ) None
   ( ) Job apprenticeship
   ( ) Formal testing
   ( ) Site visit
   ( ) Other (specify)

_____

C. Certification

9. Clinic certification?
   ( ) No
   ( ) Yes (check all that apply)
      ( ) IRB approvals
      ( ) Adequate examination area
      ( ) Standard examination room equipment
      ( ) Secure area for filing study forms and records
      ( ) Secure area for storage of study drugs
      ( ) Properly equipped blood draw area
      ( ) Refrigeration for blood specimens

Table 7.5 Training and certification worksheet

( ) Computer equipment and internet connection
( ) Other

_____

_____

10. Personnel certification?
    ( ) No
    ( ) Yes (check all that apply)
        ( ) Physicians
        ( ) Nurses
        ( ) Coordinators
        ( ) Data collectors
        ( ) Data keyers
        ( ) Readers
        ( ) Other (specify)

_____

_____

11. Certifying authority (check one)
    ( ) Coordinating center
    ( ) Office of study chair
    ( ) Sponsor
    ( ) Other (specify)

_____

12. Certification numbers issued by:
    ( ) Coordinating center
    ( ) Office of study chair
    ( ) Sponsor
    ( ) Other (specify)

_____

13. Are certification numbers of persons responsible for data collection recorded on study forms?
    ( ) No (explain)

_____

    ( ) Yes

Table 7.5 Training and certification worksheet

14. If numbers are issued describe process for de-certification if a person leaves the study or is barred from data collection

WS 7.6 Site visiting worksheet (SiteLook.WS)

When: Prior to the start of data collection

Who: Leaders of the coordinating center with input from study officers

Purpose: To layout plans for site visiting during the trial

A. Identifying information

1. Study name: _____
2. Form completed by: _____
3. Date completed (day-month-year) . . . . . __ __—__ __ __—__ __ __ __

B. Visiting plans and site visit reports

4. Clinic visits (check all that apply)
   ( ) Before start of enrollment
   ( ) Regularly over the course of the trial (specify frequency)

   _____

   ( ) For cause for performance or irregularities
   ( ) Other (specify)

   _____

5. Coordinating center visits (check all that apply)
   ( ) Before start of enrollment
   ( ) Regularly over the course of the trial (specify frequency)

   _____

   ( ) For cause for performance or irregularities

6. Other resource center visits (check all that apply)
   ( ) Office of study chair
   ( ) Reading centers
   ( ) Other (specify)

   _____

7. Site visit reports (check all that apply)
   ( ) Written report produced following visit by site visitors
   ( ) Report indicates date and place of visit, persons visited, and visiting team

( ) Report lists problems and deficiencies noted and recommended corrective actions
( ) Draft report sent to group visited for comment prior to finalizing
( ) Finished report distributed to group visited
( ) Finished report distributed to study leadership body for review and comment
( ) Repository for finished reports at study coordinating center
( ) Finished report posted to password-protected study website
( ) Other (specify)

_____

C. Clinic site visits

8. Startup visits?
   ( ) No
   ( ) Yes, answer questions below.

9. Composition of visiting team
   ( ) Persons from the coordinating center . . . . . Number ___

   ( ) Persons from other study clinics . . . . . Number ___
   ( ) Study chair
   ( ) Study sponsor
   ( ) Person not associated with the trial
   ( ) Other (specify)

   _____

10. Usual size of visiting team . . . . . Number _____

11. Visit activities (check all that apply)
   ( ) Kickoff meeting with all study staff
   ( ) Tour of facilities
   ( ) Wrap-up meeting
   ( ) Other (specify)

   _____

12. Things reviewed and checked
   ( ) IRB documents and approvals
   ( ) Date stamped IRB approved consent form
   ( ) Clinic space
   ( ) Examining facilities
   ( ) Inventory of equipment needed for the trial
   ( ) Location of study documents such as protocols, handbooks, and study forms
   ( ) Location of study files and security of files
   ( ) Storage area for study drugs
   ( ) Blood drawing facilities

( ) Staffing and qualification
( ) Infrastructure
( ) Other (specify)

_____

13. Routine clinic site visits?
( ) No
( ) Yes, answer questions below

14. Frequency of visits
( ) Once a year
( ) Once every two years
( ) Other (specify)

_____

15. Composition of visiting team
( ) Persons from the coordinating center . . . . . Number ___

( ) Persons from another clinic . . . . . Number ___
( ) Study chair
( ) Study sponsor
( ) Person not associated with the trial
( ) Other (specify)

_____

16. Usual size of visiting team . . . . . Number _____

17. Visit activities (check all that apply)
( ) Kickoff meeting with all study staff
( ) Tour of facilities
( ) Walk through of a "typical" data collection visit
( ) Interview of a study patient
( ) Review of study records and filing and storage
( ) Audit of selected forms
( ) Wrap-up meeting
( ) Other (specify)

_____

18. Things reviewed and checked
( ) Check of study documents including the study protocol and handbooks
( ) Check of study forms to verify clinic using most recent version
( ) Staff qualification, training, and certification

( ) Patient flow for treatment and data collection visits
( ) Procedures for keeping track of study patients and for scheduling appointments
( ) Count of persons lost to followup
( ) Clinic performance statistics
( ) Data deficiencies
( ) On-site keying procedures
( ) Staffing and qualification
( ) Clinic infrastructure and communication structure
( ) Other (specify)

_____

D. Coordinating center site visits

19. Site visits?
    ( ) No
    ( ) Yes, answer items below

20. Frequency of visits
    ( ) Once over life of trial
    ( ) Once every three years
    ( ) Other (specify)

    _____

21. Composition of visiting team
    ( ) Persons from other study centers . . . . . Number ___
    ( ) Study chair
    ( ) Study sponsor
    ( ) Persons from other coordinating centers . . . . . Number ___
    ( ) Other (specify)

    _____

22. Size of visiting team . . . . . Number _____

23. Visit activities and reviews (check all that apply)
    ( ) Presentations of organization of coordinating center and overview of its functions and activities and discussion
    ( ) Tour of facilities
    ( ) Review of treatment assignment procedure
    ( ) Staffing qualifications and training
    ( ) Overview of data system and of methods of harvesting, processing, and analyzing data
    ( ) Review of data backup procedures
    ( ) Review of data security procedures
    ( ) Review of performance monitoring procedures

( ) Review of treatment effects monitoring procedures
( ) Review of data editing and auditing procedures
( ) Review of methods for dealing with data irregularities
( ) Clinic site visiting procedures
( ) Quality control of analysis procedures
( ) Role in writing study papers
( ) Method of assigning analysis tasks to center personnel and of monitoring activities
( ) IRB approvals
( ) Management of protocol changes and changes to data collection forms
( ) Data entry and harvest procedures
( ) Center infrastructure and internal communication structure
( ) Other (specify)

CL 7.1 Maintenance activity checklist worksheet (KeepUp.CL)

To be completed in conjunction with study leadership as part of planning for start-up and to be reviewed and updated periodically over the course of the trial. Use spaces at left to indicate required activities during the trial. For items checked, indicate details as to when the activity is to be performed and who is to perform it.

A. Funding/letters of agreements/IND/IDE

( ) Progress reports to funding agency

Who: _____

When: _____

( ) Funding renewals

Who: _____

When: _____

( ) IND/IDE application

Who: _____

When: _____

( ) IND/IDE reporting

Who: _____

When: _____

B. Monitoring

( ) IRB renewals
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) Monitoring for near lapsed IRB approvals
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor

( ) Other (specify)

_____

( ) Monitoring for use of signed/dated consents at clinics
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) Compliance to AE reporting procedures
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) Drug supply
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

C. Updating

( ) Protocol
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) Handbook/manual of operations
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) Study forms
  ( ) Coordinating center
  ( ) Other (specify)

_____

( ) Data system
  ( ) Coordinating center
  ( ) Other (specify)

_____

( ) Study governance system
  ( ) Coordinating center
  ( ) Office of study chair
  ( ) Sponsor
  ( ) Other (specify)

_____

( ) Authorship policy
  ( ) Coordinating center
  ( ) Office of study chair
  ( ) Sponsor
  ( ) Other (specify)

_____

( ) Conflict of interest disclosures
  ( ) Coordinating center
  ( ) Office of study chair
  ( ) Sponsor
  ( ) Other (specify)

_____

( ) Study roster
  ( ) Coordinating center
  ( ) Office of study chair
  ( ) Sponsor
  ( ) Other (specify)

_____

( ) Registration of trial
  ( ) Coordinating center
  ( ) Office of study chair
  ( ) Sponsor
  ( ) Other (specify)

_____

( ) Study website
  ( ) Coordinating center
  ( ) Other (specify)

_____

( ) Study design synopsis
  ( ) Coordinating center
  ( ) Office of study chair
  ( ) Sponsor
  ( ) Other (specify)

_____

( ) Study CV
  ( ) Coordinating center
  ( ) Office of study chair
  ( ) Sponsor
  ( ) Other (specify)

_____

D. Tracking

( ) IRB renewal submissions
  ( ) Coordinating center
  ( ) Office of study chair
  ( ) Sponsor
  ( ) Other (specify)

_____

( ) Protocol amendments
  ( ) Coordinating center
  ( ) Office of study chair
  ( ) Sponsor

( ) Other (specify)

_____

E. Reporting

( ) TEMC recommendation to investigators
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) TEMC recommendation to IRBs
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) AEs to the FDA
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

F. Drugs

( ) Drug ordering
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) Distribution of drugs to clinics
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Central pharmacy
- ( ) Sponsor

( ) Other (specify)

_____

( ) Accountability of drugs used
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

G. Other

( ) Training
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) Draft manuscripts to investigators
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Writing committee chairs
- ( ) Sponsor
- ( ) Other (specify)

_____

( ) Published manuscripts to investigators
- ( ) Coordinating center
- ( ) Office of study chair
- ( ) Sponsor
- ( ) Other (specify)

_____

CL 7.2 Start-up requirements checklist worksheet (StartCk.CL)

To be completed in conjunction with the study leadership body as part of planning for start-up. Use check spaces at the left to indicate requirements for start-up and check spaces at the right to indicate things accomplished.

A. Executed funding agreements

( ) Clinics . . . . . ( )
( ) Coordinating center . . . . . ( )
( ) Other centers (specify) . . . . . ( )

_____

( ) Support centers (specify) . . . . . ( )

_____

B. Letters of agreement

( ) Drug company for supply of drug . . . . . ( )
( ) Other (specify) . . . . . ( )

_____

C. IND/IDE

( ) IND (specify) . . . . . ( )

_____

( ) IDE (specify) . . . . . ( )

_____

( ) Other (specify) . . . . . ( )

_____

D. Basics

( ) Approved study name . . . . . ( )
( ) Approved study nickname . . . . . ( )
( ) Approved study logo . . . . . ( )
( ) Approved statement of objective . . . . . ( )
( ) Approved primary outcome measure . . . . . ( )
( ) Approved treatment protocol . . . . . ( )
( ) Approved data collection schedule . . . . . ( )
( ) Approved design synopsis . . . . . ( )

( ) Sample size goal . . . . . ( )
( ) Approved study timetable . . . . . ( )
( ) Approved randomization design . . . . . ( )
( ) Approved treatment effects monitoring plan . . . . . ( )
( ) Other (specify) . . . . . ( )

E. Essential documents

( ) Study protocol . . . . . ( )
( ) Study handbook/manual of operations . . . . . ( )
( ) IRB approved consent form . . . . . ( )
( ) Approved data collection forms . . . . . ( )
( ) Investigator's brochure . . . . . ( )
( ) Study roster/directory . . . . . ( )
( ) Other (specify) . . . . . ( )

F. Governance and study policy

( ) Investigator-ratified study governance structure . . . . . ( )
( ) Approved authorship policy . . . . . ( )
( ) Approved conflict of interest disclosure procedures . . . . . ( )
( ) Approved policy on presentations . . . . . ( )
( ) Approved policy on publications . . . . . ( )
( ) Other (specify) . . . . . ( )

G. Data collection

( ) Approved screening procedures . . . . . ( )
( ) Approved consent process . . . . . ( )
( ) Approved baseline data collection forms . . . . . ( )
( ) Approved followup data collection forms . . . . . ( )
( ) IRB approved data collection forms . . . . . ( )
( ) Tested data collection forms . . . . . ( )
( ) Kickoff training meeting . . . . . ( )
( ) Personnel certification . . . . . ( )
( ) Other (specify) . . . . . ( )

H. Data system

( ) Data entry tutorial . . . . . ( )
( ) Tested randomization system . . . . . ( )
( ) Tested data system . . . . . ( )

( ) Operational data system . . . . . ( )
( ) Training meeting . . . . . ( )
( ) Other (specify) . . . . . ( )

I. IRB approvals

( ) Study protocol . . . . . ( )
( ) Consent process and consent/assent forms . . . . . ( )
( ) Data collection forms . . . . . ( )
( ) Approval for at least one clinic . . . . . ( )
( ) Approval for the data center/coordinating center . . . . . ( )
( ) Other IRB approvals (specify) . . . . . ( )

J. Other approvals

( ) Funding agency approval of study protocol . . . . . ( )
( ) Funding agency approval of data collection forms . . . . . ( )
( ) TEMC approval of study protocol . . . . . ( )
( ) Other (specify) . . . . . ( )

K. Other

( ) Study website . . . . . ( )
( ) Registration . . . . . ( )
( ) Drugs/devices packaged and ready for use . . . . . ( )
( ) TEMC appointed . . . . . ( )
( ) OMB clearance of study forms . . . . . ( )
( ) Other (specify) . . . . . ( )

L. Clinic clearance for enrollment

( ) IRB approval . . . . . ( )
( ) Evidence of IRB approval supplied to coordinating center . . . . . ( )
( ) Date-stamped consent form . . . . . ( )
( ) Evidence of IRB training for study personnel . . . . . ( )
( ) Other (specify) . . . . . ( )

CL 7.3 Training and certification checklist (Train.CL)

When: Prior to the start of data collection

Who: Coordinating center personnel in conjunction with study officers

Purpose: To outline training and certification procedures for the trial

A. Identifying information

1. Study name: _____
2. Form completed by: _____
3. Date completed (day-month-year) . . . . . __ __—__ __ __—__ __ __ __

B. Personnel training (check all that apply)

4. Personnel to be trained
   - ( ) Center and deputy center directors
   - ( ) Study coordinators
   - ( ) Study physicians
   - ( ) Data collectors
   - ( ) Data keyers
   - ( ) Data processors
   - ( ) Data analysts
   - ( ) Study officers
   - ( ) Steering committee members
   - ( ) Treatment effects monitoring committee members
   - ( ) Other (specify)

     _____

5. Method of training (check all that apply)
   - ( ) Didactic at kick-off research group meeting
   - ( ) On-line training
   - ( ) Testing
   - ( ) Site visiting
   - ( ) Other (specify)

     _____

6. Method of ongoing training during the trial (check all that apply)
   - ( ) Didactic at research group meeting
   - ( ) On-line training
   - ( ) Testing
   - ( ) Site visiting

( ) Newsletter
( ) Other (specify)

_____

7. Method of training new personnel during the trial (check all that apply)
   ( ) On-site training by existing personnel
   ( ) On-line training
   ( ) Testing
   ( ) Other (specify)

_____

C. Personnel certification and decertification

8. Does the trial require certification of study personnel for clearance to collect or process study data?
   ( ) No
   ( ) Yes

9. If yes, list personnel to be certified for data collection (check all that apply)
   ( ) Center and deputy center directors
   ( ) Study coordinators
   ( ) Study physicians
   ( ) Data collectors
   ( ) Data keyers
   ( ) Data processors
   ( ) Data analysts
   ( ) Study officers
   ( ) Steering committee members
   ( ) Treatment effects monitoring committee members
   ( ) Other (specify)

_____

10. If yes, who issues certifications?
    ( ) Coordinating center
    ( ) Other (specify)

_____

11. If yes, what is done if data are collected by a person not certified for data collection? (check all that apply)
    ( ) Data rejected
    ( ) Data accepted but flagged
    ( ) Clinic notified of protocol deviation

( ) Other (specify)

_____

12. If yes, who deactivates certifications?
    ( ) Coordinating center
    ( ) Other (specify)

_____

13. If yes, what are conditions for deactivation of certifications? (check all that apply)
    ( ) Departure from the study
    ( ) Data irregularities
    ( ) Other (specify)

_____

CL 7.4 Clinic site visit checklist (SiteCl.CL)

When: In relation to a study site visit

Who: The organizer of the site visit

Purpose: To outline the activities of a site visit and to document activities of a site visit

A. Identifying information

1. Study name: _____
2. Clinic being visited: _____
3. Date of visit (day-month-year) . . . . . __—__—____

B. Visit particulars

4. Visit history
   ( ) 1st visit
   ( ) Previous visits (list dates from 1st to most recent visit)

   Visit 1: _____

   Visit 2: _____

   Visit 3: _____

5. Purpose of this visit
   ( ) Routine
   ( ) For cause (check one)
      ( ) Poor performance
      ( ) Data irregularities
      ( ) Other (specify)

   _____

6. Roster of visitors and visitees

Name	Title
Visitors	
1:	
2:	
3:	

Name	Title
4:	
5:	
6:	

Visitees

1:	
2:	
3:	
4:	
5:	
6:	

7. Name and address of place of visit

   Name: _____

   Address: _____

8. Time of visit

   Start: _____ . . . . . End: _____

C. Document and activity checklist (use the list to indicate what is to be checked during the visit and to indicate what has been checked after the visit is finished)

	Check	Checked
9. Site visit checklist		
IRB approvals	( )	( )
IRB file of amendments and AE reports	( )	( )
IRB training of study personnel	( )	( )
Current protocol	( )	( )
Current Investigator's Brochure	( )	( )
Current handbook/manual of operations	( )	( )
Current version of study forms	( )	( )
Policy and procedures memoranda	( )	( )
Date stamped IRB approved consent form	( )	( )

CL 7.4 Clinic site visit checklist

	Check	Checked
Clinic space	( )	( )
Examining facilities	( )	( )
Inventory of equipment needed for the trial	( )	( )
Location of study documents, handbooks, and study forms	( )	( )
Location of study files and file security	( )	( )
Storage area for study drugs	( )	( )
Blood drawing facilities	( )	( )
Staffing and qualification	( )	( )
Personnel training and certifications	( )	( )
Personnel directory	( )	( )
Clinic infrastructure	( )	( )
Protocol deviations	( )	( )
Random forms audit	( )	( )
Audit trail of treatment assignments	( )	( )
Eligibility check of persons enrolled	( )	( )
Drug dispensing and drug accountability	( )	( )
Other		
_____	( )	( )
_____	( )	( )
_____	( )	( )

CL 7.5 Coordinating center site visit checklist (SiteCC.CL)

When: In relation to a coordinating center site visit

Who: The organizer of the site visit

Purpose: To outline the activities of the site visit and to document activities of the site visit

A. Identifying information

1. Study name: _____

2. Study investigator: _____

3. Date completed (day-month-year) . . . . . __—__—____

B. Visit particulars

4. Visit history
   ( ) 1st visit
   ( ) Previous visits (list dates from 1st to most recent visit)

   Visit 1: _____

   Visit 2: _____

   Visit 3: _____

5. Purpose of this visit
   ( ) Routine
   ( ) For cause (check one)
      ( ) Poor performance
      ( ) Data irregularities
      ( ) Other (specify)

   _____

6. Roster of visitors and visitees

Name	Title
Visitors	
1:	
2:	
3:	

Name	**Title**
4:	
5:	
6:	

Visitees

1:	
2:	
3:	
4:	
5:	
6:	

7. Name and address of place of visit

   Center name: _____

   Address: _____

8. Time of visit

   Start: _____ . . . . . End: _____

C. Document and activity checklist (use the list to indicate what is to be checked during the visit and to indicate what has been checked after the visit is finished)

	Check	**Checked**
9. Document and activity checklist		
IRB approvals	( )	( )
IRB file of amendments and AE reports	( )	( )
IRB training of study personnel	( )	( )
Current protocol	( )	( )
Current Investigator's Brochure	( )	( )
Current handbook/manual of operations	( )	( )
Forms list and revision history	( )	( )
Procedure for forms revisions	( )	( )
Policy and procedures memoranda procedures	( )	( )

CL 7.5 Coordinating center site visit checklist

	Check	Checked
Date stamped IRB approved consent form	( )	( )
Center space and equipment	( )	( )
Location of study documents, handbooks, and study forms	( )	( )
Location of study files and security of files	( )	( )
Staffing and qualification	( )	( )
Data processing staffing	( )	( )
Analysis staffing	( )	( )
Personnel training and certifications	( )	( )
Personnel directory	( )	( )
Center infrastructure	( )	( )
Security of data storage	( )	( )
Protocol deviations	( )	( )
Forms audits	( )	( )
Audit trail of treatment assignments	( )	( )
Eligibility check of persons enrolled	( )	( )
Drug dispensing and drug accountability	( )	( )
Review of study data systems	( )	( )
Review of center data security procedures	( )	( )
Study paper writing production and procedures	( )	( )
Data access policy	( )	( )
Internal quality control procedures	( )	( )
Performance monitoring procedures	( )	( )
Treatment effects monitoring procedures	( )	( )
Standing of center in the organizational structure of the trial	( )	( )
Other (specify)		
_____	( )	( )
_____	( )	( )
_____	( )	( )