**1. Introduction**

This Charter is for the Data Monitoring and Oversight Committee (DMOC) of the National Eye Institute (NEI) sponsored study entitled [insert name of the study] (hereinafter referred to as the study), [insert grant number and name of the principal investigator(s) and credentials].

[Insert one paragraph to introduce the study, the study design, and the objectives.]

The NEI supports complex, large multi- and single-center observational studies as cooperative agreements. When observational studies are conducted under a cooperative agreement (e.g., UG1), the NEI assumes a partner role in project activities by providing assistance, advice, and coordination of study activities without assuming the primary directorship of the study. This partnership between the NEI and the study investigators is enhanced through the expert guidance provided by a DMOC, which is constituted to provide advice to both the NEI and study investigators.

The Charter defines the roles and responsibilities of the independent DMOC, its membership, its relationship with other study components, and the purpose, timing, and format of its meetings. The Charter also outlines DMOC monitoring guidelines, communication and confidentiality procedures, and the content of DMOC reports.

The DMOC for the study will operate under this written charter, which serves as the committee’s standard operating procedures (SOPs). SOPs of the DMOC are based on the NEI guidelines which can be found at: <https://nei.nih.gov/funding/datastudies>.

**2. Roles and Responsibilities**

The overall role of the DMOC is to monitor the conduct of the study and assist the NEI and the study investigators in protecting the interests of study participants and in preserving the integrity and credibility of the study. The DMOC receives and reviews the accruing data from the study and provides recommendations about the study. The DMOC may also formulate recommendations to enhance the study’s scientific yield and timeliness including recommendations relating to the selection/recruitment of participants, their management, improving protocol adherence, and procedures for data management and quality control. The DMOC also has an important role in helping to ensure the accurate and impartial reporting of study results. Key responsibilities of the DMOC include but are not limited to:

* Evaluating the adequacy of the study protocol and Manual of Procedures (MOP) and attending study documents to address study specific aims and the study’s readiness for implementation. The DMOC will also consider whether issues raised in the initial review of the application or by the National Advisory Eye Council have been adequately addressed. The DMOC must formally approve the protocol, MOP, and attending study documents prior to study initiation.
* Evaluating the informed consent document and procedures. The DMOC provides advice to the NEI Program Director and the investigators regarding the adequacy of the consent. DMOC review is in addition to and not in lieu of IRB review and approval of the participant consent form.
* Evaluating participant safety. The DMOC will review procedures for notification and referral of participants with abnormal findings.
* Evaluating the statistical analysis plan and proposed data table shells. The DMOC may suggest additional analyses.
* Evaluating publication/presentation and publicity plans, including topics, preparation schedule and manuscript designation as primary or secondary based on their relevance to the study’s specific aims.
* Monitoring study performance and progress including recruitment, retention, adherence to study protocol.
* Assessing data quality, completeness, and timeliness.
* Reviewing the performance of individual centers, and if necessary, recommending actions to improve performance or terminate participation.
* Reviewing proposed protocol changes. Major protocol changes (e.g. sampling scheme, participant entry criteria, frequency or types of measurements or study outcomes) must be reviewed and approved by the DMOC prior to implementation. Minor protocol changes will be presented to the DMOC Chair and the NEI Program Director for concurrence prior to implementation. The DMOC can recommend protocol changes when appropriate, based on review of the protocol or accumulating data or other relevant information. Procedural changes, those that typically would not require Institutional Review Board (IRB) approval, can be implemented without DMOC review.
* Evaluating proposed ancillary or pilot/feasibility studies for merit, participant burden, and overall study impact.
* Assessing the relevance and impact of external evidence including published reports of related studies submitted by the NEI, study investigators, or DMOC members and evaluating whether the ongoing study needs to be changed.
* Reviewing and approving primary manuscripts and presentations prior to submission to ensure that study results are accurately and fairly presented and the conclusions appropriate. Primary manuscripts/presentations will be sent to DMOC for review and comment at least two weeks prior to their planned submission. Manuscripts that address secondary aims of the study or the results of ancillary studies do not routinely require DMOC review.
* Reviewing overall scientific direction of the study.

It is important to note that the DMOC is advisory to the NEI and the study investigators. Any DMOC recommendation to substantially alter a study will be carefully considered prior to any final decision or action by the study investigators and the NEI.

**3. Membership of the DMOC**

**3.1. Members**

Members of the DMOC are invited by the NEI Program Director in consultation with the study leadership (i.e. principal investigator(s) or project director(s) [may replace “study leadership” with actual names or titles]). The aims of the study will dictate DMOC size and the types of expertise required of DMOC members. Membership will usually range from four-to-seven members. Expertise will be sought in the areas of epidemiology, survey methods, statistics, participant advocacy, and clinical expertise. DMOC membership is constituted for the duration of the study.

The DMOC for this study comprises of the following [Insert number of standing members] members:

[Insert DMOC Roster: List members’ names, credentials, and institutional/departmental affiliation or area of expertise].

[Insert name of the DMOC Chair] is the chair of the DMOC.

Ad-hoc members can be assigned by the NEI to the DMOC to address a specific expertise in an area beyond that of the core membership. This could be a one-time requirement or a longer duration commitment, depending on the needs of the study. Responsibilities and requirements of the DMOC outlined in this charter apply to both core and ad-hoc DMOC members.

**3.2. Conflicts of Interest and Confidentiality**

The DMOC membership has been restricted to individuals free of significant conflicts of interest. The source of these conflicts may be financial, scientific, or personal in nature. Thus, DMOC members may not be involved in the study, have a vested interest in its outcome, have close personal or professional ties to a study investigator, or have financial ties to any commercial concerns likely to be affected by the study's outcome.

Any potential conflict of interest or the appearance of a conflict of interest must be disclosed prior to formal appointment of DMOC members and annually, thereafter. Potential conflicts may arise from interests in commercial products or services, which may be used in or could be affected by the study results. The appearance of conflict of interest may occur when DMOC members have affiliations with institutions that could benefit from the research, and this relationship can be seen as affecting objectivity in regard to study recommendations.

DMOC members will complete both a conflict of interest disclosure form and a statement of confidentiality before their first meeting. Competing interests should be disclosed by all DMOC members. The completed forms will be reviewed by the principal investigator(s), the DMOC Chair, and the NEI Program Director. If any reviewer notes a significant conflict of interest, the reviewer will bring it to the attention of the DMOC Chair and the NEI Program Director. If the DMOC Chair determines that a member has a significant conflict of interest that would compromise their ability to serve on the DMOC, the member will be replaced. The conflict of interest form will be renewed annually. At the beginning of each DMOC meeting, DMOC members will be verbally asked if there are any changes in their conflict of interest status.

Any DMOC members who develop significant conflicts of interest during the study should resign from the DMOC. The NEI in consultation with the DMOC Chair and study leadership will appoint a replacement.

Before the publication of primary results, DMOC members should not discuss information gained from their involvement in the study, unless agreed upon with the study leadership and other DMOC members.

**4. DMOC Meetings**

The DMOC will generally meet in person at least once each year. Additional meetings will be held either in-person or by teleconference as needed throughout the course of the study.

Investigators in study leadership positions including the principal investigator(s), representatives of the statistical coordinating center; and, as appropriate, representatives of resource centers (e.g. Image Reading Center) may attend the open sessions of the DMOC meeting. At the discretion of the DMOC, additional investigators/consultants may be invited to the meetings as required.

As a steward of public funds for clinical research, the NEI Program Director is responsible for programmatic and administrative oversight of the study and oversight of clinical research monitoring activities which is distinct from the monitoring itself. The NEI Program Director attends all portions of the DMOC meeting including open sessions and closed executive sessions to: respond to questions and provide information; apprise the DMOC of any programmatic considerations related to the study being monitored; ensure that DMOC monitoring conforms to NIH and the NEI policy and procedures; follow DMOC deliberations and recommendations; and, report back to Institute leadership to ensure that DMOC recommendations are acted upon. The NEI Program Director may provide information but in no way directs the deliberations or recommendations of the DMOC.

**4.1. Agenda**

[Insert name of responsible party, e.g. principal investigator] will prepare a draft agenda at least three weeks prior to the meeting. The draft agenda will be sent to the DMOC Chair and the NEI Program Director for review and comment.

Meeting materials will be prepared and provided to the DMOC members at least two weeks prior to the meeting. Materials for the first organizational meeting should include a draft of this DMOC Charter; agenda; the summary statement(s); the study investigators’ responses to peer reviewers; the study protocol; the study Manual of Procedures (MOP and attending documents. Collectively the MOP, agenda, and attending documents will provide information on study: objectives, design summary and outcomes; organizational structure; timeline and milestones; disease definitions; statistical analysis plan (including power considerations, analytic methods, and risk factor analyses); protocol criteria and procedures (including eligibility/exclusion criteria, questionnaires and exams, central reading center methods including for image grading); participant recruitment plans, data management, transmission and quality control procedures; data collection forms including the informed consent; publication, presentation and publicity plans; proposed pilot/feasibility/ancillary studies; and study policies (publication policy, conflict of interest policy, data sharing, protection of human subjects).

Data submitted for review at any DMOC meeting must be timely and of a high quality to allow the DMOC to adequately assess the integrity and progress in the study.

The principal investigator will be responsible for the preparation of meeting materials and all DMOC meeting arrangements.

At the end of each DMOC meeting, the committee will advise the NEI and study leadership of its conclusions and recommendations regarding the study.

**4.2. Structure of Meetings**

The DMOC will have an initial organizational meeting before the study starts. The expectation is that this inaugural DMOC meeting will be convened in person and will be attended by all DMOC members, the NEI Program Director, and the principal study investigators. Other study investigators or personnel may be asked to attend by the NEI Program Director.

In this first meeting, the summary statement, response to peer reviewers, study protocol and Manual of Procedures and attending study documents will be reviewed as required by the NEI guidelines. The contents of the DMOC Charter will be reviewed and standard operating procedures for the role and functioning of the DMOC will be discussed. Other topics for discussion include the: format and content of Open and Closed Executive sessions; statistical analysis plan; and plan for dealing with participant safety issues including making care referrals as warranted.

**4.2.1. Closed Executive Session**

DMOC meetings will typically begin and end with a closed executive session attended by all voting members of the DMOC and the NEI Program Director. At the end of the closed executive session the DMOC Chair will verbally communicate the recommendations of the Committee to the study investigators.

**4.2.2. Open Session**

The open sessions may be attended by DMOC voting members, the study leadership and the NEI Program Director. The DMOC Chair may ask other members of the Study to attend, as applicable, e.g., the Principal Investigator of the Reading Centers.

Appropriate topics for presentation and discussion include:

* Update on study progress
* Recruitment: overall and by site
* Plans for future recruitment
* Visit completion: overall and by site
* Summary of participant status: overall and by site
* Ineligible participants by site
* Compliance with study protocols and deviations by site
* Performance measures, including data quality and timeliness, operations of the Coordinating Center, Central Reading Centers including OCT and Photographic Reading Centers, as applicable
* Participant data
* Other topics requiring DMOC members’ input
  1. **Voting and Quorum**

The DMOC should strive to achieve consensus in formulating specific study recommendations. Among those members present, a simple majority vote will define agreement for DMOC recommendations; dissenting and abstaining votes will be noted. When a formal vote is needed for major protocol changes, regardless of whether these are initiated by DMOC or by the study investigators, two-thirds of DMOC members must participate in voting. DMOC recommendations will be transmitted to the NEI and the study leadership.

**4.4. Meeting Minutes**

The study investigators will be responsible for preparing draft minutes from each meeting/conference call within 14 days. The minutes will be distributed to the DMOC Chair and the NEI Program Director for initial review before distribution to the full Committee for final review and approval.

**4.5. Absence from DMOC Meetings**

Effort should be made for all DMOC members to attend all meetings. Member(s) whose absence is unavoidable should try to attend by teleconference. Absent DMOC members should review the DMOC agenda and report before the meeting and should pass their comments to the DMOC Chair for consideration during the discussions. If the committee is considering recommendations for major action after the DMOC meeting, the DMOC Chair will confer with the absent DMOC member(s) as soon after the meeting as possible to ascertain their concurrence. If needed, a follow-up teleconference will be arranged with the full DMOC.

If a member does not attend a meeting, it should be ensured that the member is available for the next meeting. If a member does not attend a second consecutive meeting, he/she should be asked if he/she wishes to remain part of the DMOC. If a member does not attend a third meeting, he/she should be replaced.

**5. Protocol Changes and Ancillary Studies**

Prior to the initiation of participant enrollment, the DMOC must approve the protocol, MOP and attending study documents including the participant informed consent form. During the conduct of the study, it may be necessary to modify the study protocol. The DMOC will be notified of all potential protocol changes. DMOC concurrence will be sought on all substantive recommendations or changes to the protocol prior to their implementation. If the DMOC recommends a protocol modification, the principal study investigators, in consultation with the NEI, will be responsible for implementing the change. Timely implementation of substantive DMOC recommendations is expected—exceptions may occur but these will require strong justification and concurrence of the NEI. After the study begins, investigators may propose ancillary studies. The DMOC will review ancillary study protocols for merit, participant burden and study impact.

**6. Review of Manuscripts**

The DMOC has a role in promoting the timely reporting of main results from the study and their accurate and fair conveyance. Study investigators will designate those manuscripts/presentations that address study specific aims as primary. Primary manuscripts/presentation abstracts will be sent to DMOC for review and comment at least two weeks prior to their planned submission. Secondary manuscripts may require review and approval by the DMOC.

**7. Amendments to the DMOC Charter**

This charter can be amended as needed during the course of the study. All amendments will be documented with sequential version numbers and revision dates and will be recorded in the minutes of the DMOC meetings. Each revision will be reviewed and agreed upon by both the NEI and the DMOC.

**APPENDIX**

***Example DMOC MEETING BINDER MATERIALS***

**Minutes of Last Meeting (open session)**

**Summary/Chronology**

1. Synopsis of protocol
2. Study timeline and current status

**Important Issues/Changes in Protocol and Procedures**

1. Listing/summary of important issues since last meeting

**Clinical Sites**

1. Listing of sites (investigators, location, status)

**Recruitment (or Enrollment)**

1. Recruitment summary by site by month (table and graphs)
2. Recruitment projection
3. original projection-time period, # per site
4. current projection

**Protocol and Procedural Deviations (since last meeting and cumulative)**

1. Ineligible participants: site, reason
2. Compliance with treatment protocol
3. Pertinent non-protocol treatments
4. Other major and minor protocol and procedural deviations

**Visit Completion**

1. Summary of participant Status
2. Current status of each participant tabulated by time period/visit number
3. Visit completion rate overall and by site
4. Visit completion rates for last expected visit for each participant by site

**Other Measures of Site Performance**

1. Timeliness and accuracy of form submission
2. Quality of imaging
3. Summary of outstanding issues from site visits

**Measures of Performance for the Data Coordinating Center and Reading Centers (if applicable)**

1. Timeliness and accuracy fulfilling responsibilities
2. Internal quality assurance measures

**Baseline participant Data**

1. Demographic and Clinical Characteristics

**Other Issues**