International Maternal Pediatric Adolescent AIDS Clinical Trials Network

Manual of Procedures

May 2019
## IMPAACT Manual of Procedures
### Overview of Section Contents and Identification of Current Section Versions

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| Section 5 Community Partnership | 2.0 20 Nov 2018 | • Added version number and updated footer for consistency with other sections  
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- Clarified that protocol medical officers generally attend SMC reviews in Section 13.5.2  
- Clarified roles/responsibilities and timelines in Table 13-1  
- Clarified SMC’s report process description in Section 13.5.4  
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- Added review process for draft open DSMB reports, as described in the SPDSMP, in Section 13.7.1  
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• Updated entire section to align with current procedures and evaluation criteria  
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| Section 19 Publications Requirements and Procedures | 31 Jul 2018     | • Throughout the section, “endpoints” replaced with “outcome measures”  
• Added reference to updated requirements for primary and secondary outcomes entry into ClinicalTrials.gov in Sections 19.2.1 and 19.2.2  
• Updated process to compile appendix of contributors and appropriate acknowledgements in Sections 19.4, 19.6.3, and 19.7.1 (and as relevant in Tables 19-2 and 19-3)  
• Updated guidelines for authorship consistent with the Uniform Requirements for Manuscripts Submitted to Biomedical Journals in Section 19.6.1  
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| Appendix I Unblinding Procedures    | 10 Dec 2018      | • Changes related to access to and procedures for the Emergency Unblinding Utility on the DMC Portal were updated in the rows Table I-1 related to DMC User Support and Site IoR or designee; as well as in Section I.5.1  
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1 OVERVIEW OF THE IMPAACT NETWORK

1.1 Background of the International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Network

The International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Network is a global collaboration of investigators, institutions, community representatives, and other partners organized for the purpose of evaluating interventions to treat and prevent HIV infection, its consequences, and associated infections in infants, children, adolescents, and pregnant and postpartum women through the conduct of high quality clinical trials.

IMPAACT was formed in 2006 through a merger of investigators from the Pediatric AIDS Clinical Trials Group (PACTG) and the Perinatal Scientific Working Group of the HIV Prevention Trials Network (HPTN). Following re-competition of leadership grants in 2013-2014, a new seven-year funding cycle began in December 2014.

Overall support and funding for IMPAACT is provided by the National Institute of Allergy and Infectious Diseases (NIAID) with support and co-funding from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) and the National Institute of Mental Health (NIMH), all components of the United States National Institutes of Health (NIH). See Section 1.5, below, for additional details related to NIH support of IMPAACT.

In this Manual of Procedures (MOP), mention of ‘HIV’ refers to HIV-1 unless otherwise stated, as HIV-1 is the most widespread type worldwide and is the most common circulating type among sites participating in IMPAACT studies.

See the IMPAACT Network website for additional details: http://impaactnetwork.org.
1.2 IMPAACT Mission and Scientific Agenda

IMPAACT’s mission is to significantly decrease incident HIV and HIV-associated infections and to decrease mortality and morbidity due to HIV and HIV-associated infections and co-morbidities among infants, children, adolescents, and pregnant and postpartum women. IMPAACT’s research agenda includes evaluation of the following:

- New and existing anti-HIV drugs and formulations
- Novel approaches for managing tuberculosis in HIV-infected or at-risk populations
- Biomedical and behavioral interventions to prevent maternal HIV acquisition, perinatal and postnatal HIV transmission, and secondary transmission from perinatally HIV-infected adolescents
- Immunogenicity, safety, and efficacy of high priority vaccines
- Potential for HIV cure through therapeutic interventions aimed at reduction and clearance of HIV reservoirs
- Interventions to prevent and manage complications of HIV infection and treatment

IMPAACT’s mission and research agenda are organized into five research areas: HIV treatment, tuberculosis, HIV prevention, HIV cure, and complications and co-morbidities. These research areas are described in detail below.

1.2.1 HIV Treatment

Despite licensure of more than 30 ARVs in adults, most new antiretrovirals have not been evaluated for use in pregnant and postpartum women, children, and especially newborns and infants. IMPAACT aims to evaluate the pharmacokinetics (PK), safety, and drug interactions of new and existing ARV agents and formulations leading to optimal dosing and licensing for HIV-infected infants, children, adolescents, and pregnant and postpartum women. Priorities include evaluation of:

- Safety, PK, and drug-drug interactions in HIV-infected infants, children, and adolescents, including new ARVs, new formulations, and novel drug combinations
- Safety and PK of ARVs and drug-drug interactions (e.g., ARVs, TB drugs, and contraceptives) in HIV-infected pregnant and postpartum women

1.2.2 Tuberculosis

Tuberculosis (TB) is a major cause of morbidity and mortality among HIV-infected pregnant women and children, and the diagnosis of TB in children is very difficult. Evaluation of new TB drugs and TB vaccines for PK, safety, dosing, and efficacy is lacking in these vulnerable populations as are accurate diagnostic tests for TB in children. IMPAACT aims to evaluate novel approaches for TB prevention, treatment and diagnosis in HIV-infected children, adolescents, and pregnant and postpartum women. Priorities include evaluation of:

- PK, safety, and efficacy of new drugs and drug combinations to prevent and treat TB in HIV-infected and uninfected children, adolescents, and pregnant women
- Novel strategies for diagnosing TB in HIV-infected and uninfected children
- Novel vaccines for prevention and treatment of TB in HIV-infected and uninfected children
1.2.3 HIV Prevention

Evaluating interventions that prevent perinatal HIV transmission and allow HIV-infected women to safely breastfeed while optimizing their own and their child’s health is a major priority in the developing world. Likewise, secondary transmission from perinatally infected adolescents to sexual partners is a growing area of concern. IMPAACT aims to develop and test biomedical/behavioral interventions to prevent HIV maternal acquisition and perinatal and postnatal transmission, and to prevent secondary transmission from perinatally HIV-infected adolescents to sexual partners. Priorities include evaluation of:

- Interventions to prevent HIV transmission in the perinatal period and during breastfeeding while optimizing infant and maternal health outcomes
- Safe, effective, and feasible interventions to reduce incident HIV infection in pregnant and breastfeeding women and their partners
- Biomedical and behavioral interventions to reduce HIV transmission in youth, including primary prevention (e.g., pre-exposure prophylaxis [PrEP]) and secondary prevention (e.g., adherence to biomedical interventions, retention, and care)

1.2.4 HIV Cure

Due to the known timing of acute infection in newborns and potentially stronger immune systems in youth, interventions to achieve a cure or functional cure are promising in these populations. IMPAACT aims to evaluate the potential for HIV cure through therapeutic interventions directed at prevention and clearance of HIV reservoirs in HIV-infected infants, children, and adolescents. Priorities include evaluation of:

- Whether very early therapy with intensified combination antiretroviral therapy (ART), that includes agents that block virus entry and/or integration, prevents HIV reservoir establishment in infants and achieves “functional cure”
- Unique cohorts of HIV-infected children and youth likely to achieve cure through interventions that stimulate latent proviruses and enhance HIV-specific immunity
- Immune modulatory agents, including therapeutic HIV vaccines, virus activation or target cell modification strategies to affect cure in perinatally and behaviorally infected youth on long-term suppressive combination ART
- The relationship between viral reservoirs and infant immunity

1.2.5 Complications and Comorbidities

Neurocognitive impairment, chronic immune activation/inflammation, serious HIV co-infections and toxicities of long-term ARV exposure are significant causes of disease in these vulnerable populations and need to be addressed to reduce and prevent serious morbidities. IMPAACT aims to determine optimal and feasible methods for the prevention and management of co-infections and co-morbidities of HIV infection and its treatment. Priorities include evaluation of:

- Interventions to prevent or treat cognitive impairment and mood disorders in HIV-infected children
- Vaccines for infectious agents other than HIV that cause significant morbidity and/or mortality in HIV-exposed infants and HIV-infected pregnant women, children, and adolescents
- Adverse events/toxicities from long term treatment in HIV-infected children
- The importance of chronic immune activation/inflammation in children during growth and development and evaluation of interventions to alter it and related complications
1.3 IMPAACT Network Organization

The IMPAACT Network is led by the Network chair and vice chair. The Network chair serves as the chair of the Scientific Leadership Group (SLG), which sets the overall research priorities of the Network, in close consultation with five scientific committees (SCs), aligned with the five research areas, as above. With input from the IMPAACT Community Advisory Board (ICAB), the SLG with the SCs drive the scientific research agenda aligned with the Network’s mission and scientific agenda. To enable the SLG to focus on scientific priorities and leadership, most network management functions are the responsibility of a Management Oversight Group (MOG), whose membership is a subset of the SLG. Through this structure, protocol teams are formed and studies are implemented at clinical research sites, and the IMPAACT Network mission is furthered. Additional details on the roles and responsibilities of each component included in Figure 1-1 are provided in Section 2.

Several advisory groups support the IMPAACT SLG. The IMPAACT Community Advisory Board (ICAB) is responsible for advising the network leadership, SCs, protocol teams, and other network groups on issues related to the planning and implementation of the IMPAACT research agenda and for supporting local (site) community programs through training and information exchange. The Social Behavioral Sciences Core (SBS Core) is a group of experts who help support the IMPAACT Network’s research agenda by providing guidance on behavioral sciences aspects of proposals during concept sheet development and, as needed, protocol development. An external scientific advisory group may be convened as needed to provide constructive feedback on the Network’s current and planned scientific agenda, including identifying any gaps and providing recommendations for prioritization and future directions.

The central resources of the IMPAACT Network include the Leadership and Operations Center (LOC), the Statistical and Data Management Center (SDMC), and Laboratory Center (LC), who coordinate closely in the development, implementation, and oversight of network studies and other network management and operations activities. The resources and services provided include supporting the network leadership, structure, and functioning; providing comprehensive biostatistical and data management leadership and services; and facilitating laboratory preparedness and performance, coordination, and oversight of the Network’s laboratories.

Three additional network committees provide oversight, under the direction of the SLG and MOG. The Multidisciplinary Protocol Review Group (MPRG) reviews protocols on behalf of the SLG prior to submission to the NIAID Sciences Review Committees. For designated studies, a Study Monitoring Committee (SMC) monitors participant safety and the progress and quality of IMPAACT study conduct. The Network Evaluation Group (NEG), on behalf of the MOG, develops performance metrics for the various network entities.

In addition to the groups included in Figure 1-1, research sites and protocol teams support the overall development and implementation of IMPAACT studies. IMPAACT research is conducted through the NIAID- and NICHD-supported sites throughout the world. Investigators and other representatives of these sites, including community representatives, participate in all levels of the IMPAACT Network structure. Further detail on clinical research sites (CRSs) is described in Section 2. Protocol teams are created for each IMPAACT research study so that studies are designed and implemented with the highest scientific and ethical standards. Protocol teams assume primary responsibility for scientific leadership in the development, implementation, and day-to-day oversight of IMPAACT studies and dissemination of their results. Further detail on the composition and functions of protocol teams is included in Section 4.
1.4 IMPAACT Operational Policies

The organizations and individuals that comprise the IMPAACT Network adhere to relevant US Federal regulations and National Institutes of Health (NIH)/National Institute of Allergy and Infectious Diseases (NIAID)/Division of AIDS (DAIDS) policies as a condition of receipt of Federal funding. Each clinical research site also adheres to relevant local regulations and policies. In addition, IMPAACT-specific policies and procedures guide network investigators, site staff, and other members in meeting relevant requirements and standardizing site operations for each IMPAACT study. The IMPAACT Network also follows good documentation practices, as described further in Section 3. These policies and procedures are contained in the following:

- **IMPAACT Network Manual of Procedures (MOP):** This manual provides general guidelines for network members and describes IMPAACT policies and procedures for all sites, study teams, and staff. The IMPAACT Operations Center coordinates development and maintenance of the Network MOP in collaboration with representatives the SDMC, LC, and Network leadership; representatives of the MOG are responsible for reviewing sections prior to their release.
• **Study-specific Implementation Materials (e.g., MOP, Laboratory Processing Chart [LPC], Participant Enrollment and Data Collection Materials):** In addition to study protocols, conduct of each IMPAACT study may be guided by study-specific implementation materials, including a study-specific MOP, LPC, and participant enrollment and data collection materials. The materials provide instructional and reference resources and are generally developed for each individual study. Note that study requirements and procedures (including those described in site and study-specific standard operating procedures [SOPs]) must be conducted in accordance with the study protocol. In the event study-specific implementation materials or tools are inconsistent with the protocol, the specifications of the protocol take precedence. See Section 11 for further details regarding study-specific implementation materials.

• **Site and Study-specific Standard Operating Procedures (SOP):** Standard Operating Procedures (SOPs) for site operations and for study operations ensure standard, uniform performance of site and study-related tasks and compliance with IMPAACT procedures, *International Conference on Harmonisation Good Clinical Practices* (ICH GCP) guidelines, and *US Food and Drug Administration* (FDA) regulations, where applicable.

1.5  **Governmental Organizations Involved in IMPAACT Research**

As described above, financial support for IMPAACT is provided by NIAID with co-funding from NICHD and NIMH. The Network works with governmental regulatory agencies including the US *Food and Drug Administration* (FDA), the US *Office of Human Research Protection* (OHRP), and similar agencies in other countries where IMPAACT research is conducted.

1.5.1  **National Institute of Allergy and Infectious Diseases/Division of AIDS**

NIAID and its co-funding Institutes have substantial scientific and programmatic involvement in the IMPAACT Network through technical assistance, advice, and coordination. The role of the NIH staff is to assist and facilitate, not to direct the research activities.

DAIDS staff participate on IMPAACT study teams, as described in Section 4, and governing committees, as described throughout the Network MOP. They also facilitate the communication between other partners, such as other funding agencies, pharmaceutical companies, the US FDA, and IMPAACT leadership. See Figure 1-2 for the overall DAIDS organizational structure.

Organizationally, DAIDS is comprised of the Office of the Director and four scientific programs. The Prevention Sciences Program, which includes the Maternal, Adolescent, and Pediatric Research Branch, is the scientific program responsible for IMPAACT. In addition, several groups within the Office of the Director collaborate to support IMPAACT Network functions, including the Office of Clinical Site Oversight (OCSO), which includes the Pharmaceutical Affairs Branch (PAB) and Monitoring Operations Branch (MOB), and the Office for Policy in Clinical Research Operations (OPCRO), which includes the Regulatory Affairs Branch (RAB).

When an IMPAACT study is to be conducted under an Investigational New Drug (IND) application, DAIDS typically holds the IND and negotiates a clinical trial agreement (CTA) with the collaborating pharmaceutical company to document the responsibilities and rights of each party for the clinical trial. The agreement typically includes, but is not limited to, IND application sponsorship (if applicable), provision of study products, safety and data monitoring, confidentiality, and access to data. In general, terms in the CTA covering access to data conform to DAIDS and Network policies. See Section 11.1.1 for additional details related to the CTA process.
DAIDS typically has the option to file an IND application for investigational agents evaluated in IMPAACT studies. Appropriate DAIDS staff advise protocol teams on behalf of NIH on the specific regulatory requirements for IND sponsorship. In situations in which DAIDS is the IND sponsor, they also assemble, review, and submit the required regulatory documents to the US FDA, as described in Section 9.

Further detail on DAIDS’s roles and responsibilities within the IMPAACT protocol development and modification process are described in Section 9.

General information on DAIDS may be found on the DAIDS website.

Figure 1-2. DAIDS Organizational Structure

1.5.1.1 Maternal, Adolescent, and Pediatric Research Branch of the Prevention Sciences Program

The Maternal, Adolescent, and Pediatric Research Branch of the Prevention Sciences Program within DAIDS is responsible for IMPAACT. As part of this responsibility, representatives participate across all areas of the Network.

For all IMPAACT protocols, a DAIDS medical officer (MO) is assigned to the protocol team, as described in Section 4; of note, during study implementation, the DAIDS MO monitors the safety of the intervention(s) in ongoing studies and is provided with the interim and final analysis reports. When a protocol is sponsored or co-funded by a collaborating institution or research group (i.e., NICHD or NIMH), monitoring activities may also be conducted by their medical representative(s).
1.5.1.2 Office for Policy in Clinical Research Operations

The Office for Policy in Clinical Research Operations (OPCRO) manages and supports DAIDS clinical research and helps ensure the following:

- Compliance with applicable regulations, standards, and good clinical practice guidelines
- Study participant safety and welfare
- Study quality and integrity

Regulatory Affairs Branch

The Regulatory Affairs Branch (RAB) is a branch within OPCRO. RAB is responsible for regulatory affairs across the DAIDS programs. RAB performs regulatory management and surveillance and is the liaison to the U.S. FDA for clinical trials sponsored/funded by DAIDS. RAB members sign the Form FDA 1571 for DAIDS-sponsored INDs.

Protection of Participants, Evaluation, and Policy Branch

Protection of Participants, Evaluation, and Policy Branch (ProPEP) is a branch within OPCRO. ProPEP provides subject matter expertise on human subjects protections matters (i.e., 45 CFR 46, 21 CFR 50, and 21 CFR 56), IRB/EC requirements, and HSP/GCP compliance issues. ProPEP also develops and maintains DAIDS policy documents to promote harmonization and to ensure compliance with applicable laws, regulations, guidelines, and policies, and serves as the liaison to OHRP.

1.5.1.3 Office of Clinical Site Oversight

The Office of Clinical Site Oversight (OCSO) facilitates the clinical research of the DAIDS scientific programs by overseeing NIAID-supported clinical research sites associated with the NIAID-sponsored HIV/AIDS clinical trials networks. As such, it performs the following key functions:

- Manages the NIAID Clinical Trials Units and Clinical Research Sites associated with the HIV/AIDS Clinical Trials Networks
- Coordinates a range of clinical site management activities for network
- Serves as a resource on operational and regulatory issues and ensures that appropriate clinical research standards, policies, and procedures are used by clinical research sites
- Provides oversight and management of a contract to ensure that clinical site monitoring is conducted in accordance with applicable regulatory requirements
- Provides pharmaceutical expertise for protocol development and implementation as well as oversight of a study product storage and distribution contract
- Verifies that optimal safeguards are employed for participant safety and ensures that high quality research practices are used
- Monitors clinical site progress of enrolling underserved populations and ensuring community representation
Pharmaceutical Affairs Branch

The Pharmaceutical Affairs Branch (PAB) in OCSO assigns a DAIDS pharmacist to participate on each IMPAACT protocol team, as described in Section 4; the DAIDS pharmacists’ roles include:

- Coordination and oversight of the supply, packaging, and distribution of study products
- Advise protocol teams on all pharmaceutical aspects of protocol development, including consultation on available dosage forms and placebos, product packaging, and supply to sites
- Coordination with pharmaceutical companies, as applicable, to ensure adequate and timely supply of study products
- Oversight and monitoring of quality assurance standards and SOPs for all pharmacy- and product-related issues at research sites participating in IMPAACT trials

PAB is responsible for the review and approval of each CRS Pharmacy Establishment Plan (PEP), which must be in place at each CRS prior to protocol registration. PAB assesses the pharmaceutical aspects of each protocol and communicates its assessment during SRC reviews.

Monitoring Operations Branch

The Monitoring Operations Branch (MOB) in OCSO serves as a resource on operational and regulatory issues and ensures that appropriate clinical research standards, policies, and procedures are used by NIAID-funded clinical research sites and provides oversight and management of a contract to ensure that clinical site monitoring is conducted in accordance with applicable regulatory requirements. MOB staff coordinate with NICHD’s clinical site monitoring contractor to ensure consistency in site monitoring plans and approaches across all sites (NIAID-funded and NICHD-funded) participating in IMPAACT studies.

1.5.1.4 DAIDS Contractors

Regulatory Support Center

The DAIDS Regulatory Support Center (RSC) is a contract-based organization that provides comprehensive clinical regulatory support for all IMPAACT studies. DAIDS RSC works closely with DAIDS OPCRO. This support consists of:

- Reviewing protocol documents for regulatory compliance
- Preparing and filing new IND Applications and amendments to existing INDs in compliance with the procedural and substantive requirements of 21 CFR 312 (examples of submissions to the FDA include original IND Applications, Annual Reports, Safety Reports, and Responses to FDA Requests for Information)
- Reviewing all informed consents (ICs) during review at the Clinical Sciences Review Committee (CSRC) and Prevention Sciences Review Committee (PSRC) and Regulatory Review stages.
- Translating sample ICs to Spanish
- Reviewing and tracking all required clinical site regulatory documents for all protocol versions at each CRS to ensure that all documents needed to fulfill the study sponsor’s regulatory obligations relating to protocol registration are reviewed for completeness and accuracy within the specified timeline set up by the sponsor
- Planning and conducting trainings on protocol registration procedures as requested by DAIDS
- Collecting adverse events reported by site participating in IMPAACT studies, processing the events for review by the DAIDS MO, and preparing the reports for transmittal to the FDA, if required
- Establishing internal procedures and developing safety training for the CRSs
- Supporting the DAIDS CSRC and PSRC by providing technical and administrative support to the SRC reviews of concept proposals and protocols
- Preparing CTAs
- Distributing and managing Investigator Brochures (IBs) and safety information

Clinical Research Products Management Center

The Clinical Research Products Management Center (CRPMC) is a contract-based organization that provides centralized ordering, storage, and distribution of study products evaluated in IMPAACT trials. The CRPMC works closely with PAB. CRPMC responsibilities include:

- Receiving shipments of study products from the manufacturer
- Storing products under appropriate and secure conditions
- Communicating with and distributing study products to authorized IMPAACT site pharmacists
- Monitoring study product inventories
- Monitoring study product expiry dates
- Recalling and processing of study product returns
- Executing final disposition of study products
- Maintaining records of study product management
- Repackaging or relabeling study products under Good Manufacturing Practices (GMP), as needed
- Preparing participant kits, if needed, for specific protocol

The CRPMC also provides the Clinical Site Monitor with reports of product shipments to the CRSs for protocol monitoring and study assessment visits.

Clinical Site Monitoring Contractor

The Clinical Site Monitoring Contractor (CSM) is a contract-based organization that evaluates the NIAID-funded CRSs for adherence to Good Clinical Practice (GCP), regulatory compliance, accurate protocol implementation, internal quality assurance, HIV testing and counseling, and test agent accountability. The CSM works closely with the MOB.

CSM staff visit CRSs periodically to review study documentation for selected protocols and participants, review regulatory documents, audit pharmacies, and document error resolution per assignments received from DAIDS. Further details on monitoring by the CSM are included in Section 13.

NICHD-funded CRSs are monitored by a separate contractor, which collaborates with the MOB to ensure a consistent monitoring approach for IMPAACT studies.

1.5.2 Eunice Kennedy Shriver National Institute of Child Health and Human Development

NICHD is a co-funding Institute and has substantial scientific and programmatic involvement in the IMPAACT Network through technical assistance, advice, and coordination. NICHD staff participate on IMPAACT study teams, as described in Section 4, and governing committees, as described through the Network MOP. For all IMPAACT protocols, an NICHD MO is assigned to the protocol team, as described in Section 4.

NICHD also supports and funds clinical research sites that participate in the IMPAACT Network; these sites are overseen by a separate coordinating center that works collaboratively with DAIDS.
1.5.3 National Institute of Mental Health

NIMH is a co-funding Institute and has substantial scientific and programmatic involvement in the IMPAACT Network through technical assistance, advice, and coordination. NIMH staff participate on IMPAACT study teams, as described in Section 4, and governing committees, as described through the Network MOP. For select IMPAACT protocols, an NIMH MO is assigned to the protocol team, as described in Section 4.

1.5.4 US Food and Drug Administration

In its capacity as a regulatory agency of the US Federal government, the US FDA has responsibility for reviewing and approving protocols for IMPAACT studies conducted under an IND, regardless of whether the studies are conducted at US or non-US sites. For many IMPAACT studies, DAIDS holds the IND and thus is responsible for working directly with the US FDA. The US FDA receives and reviews copies of serious adverse event reports that meet the criteria of Title 21, Code of Federal Regulations (CFR) 312.56. The US FDA is responsible for review of study data that are submitted in support of licensure applications and may conduct audits of IMPAACT studies, including but not limited to conducting regulatory inspections at US and non-US sites.

Additionally, in-country agencies may also provide regulatory oversight over IMPAACT trials performed in non-US settings.

1.5.5 Department of Health and Human Services

1.5.5.1 Office for Human Research Protections

The US Office for Human Research Protections (OHRP) fulfills responsibilities set forth in the Public Health Service Act, including monitoring compliance relative to Department of Health and Human Services (DHHS) regulations for the protection of human subjects in research supported by any component of the DHHS. OHRP is also responsible for establishing criteria for and negotiation of Assurances of Compliance with institutions engaged in research involving human subjects supported by the DHHS. The IMPAACT Network operates in full compliance with the regulations and guidelines of OHRP.

For IMPAACT, DAIDS is responsible for protocol review, including review and approval of sample informed consent language. The approved language is subsequently distributed with the protocol for relevant Institutional Review Board/Ethics Committee (IRB/EC) review and approval.

1.5.5.2 US Office for Civil Rights

For studies conducted in US settings in institutions that are covered entities, compliance with the Health Insurance Portability and Accountability Act (HIPAA) must be assured. Each institution is responsible for ensuring its own compliance. For non-US institutions, each institution is responsible for determining whether it is a covered entity under HIPAA, and, if so, each covered entity is responsible for ensuring compliance with this requirement, as set forth in Title 45 CFR 160 and 164.
2 NETWORK GROUPS

The IMPAACT Network is comprised of a global network of investigators from clinical research sites, the Leadership and Operations Center (LOC), Laboratory Center (LC), Statistical and Data Management Center (SDMC), IMPAACT Community Advisory Board (ICAB), and other groups and committees charged with the scientific management and operational support of the Network. The Network is led by a chair and vice chair, who are accountable to the NIAID Program Officer. Additional information concerning these entities is provided in this section.

2.1 Network Leadership

The IMPAACT Network is led by the Network chair and vice chair in collaboration with the Scientific Leadership Group (SLG), Scientific Committees (SCs), and Management Oversight Group (MOG). The leadership is responsible for ensuring the efficient development and implementation of the IMPAACT research agenda as well as managing and coordinating activities across the Network.

2.1.1 Network Chair and Vice Chair

The Network chair is an investigator with experience reflective of the network’s scientific agenda and operational scope. He or she serves as chair of the SLG and MOG. Responsibilities include managing the IMPAACT LOC; overseeing and managing the network’s finances; directing the network and executing its plans as determined by SLG, MOG, and NIH partners; ensuring collaboration with other research networks and groups; and serving as the network’s executive representative. Other responsibilities include but are not limited to maintenance of network policies and procedures, regulatory compliance and performance evaluation, review of publications, and collaboration with the community. The Network
chair must commit a minimum level of effort of 50% for the term of service, which is the award period of the IMPAACT Network grant.

The SLG (described in Section 2.1.2) elects the Network chair and vice chair. The SLG reviews applicant submissions and SLG voting members elect the chair, after a broad solicitation for individuals with relevant expertise and experience. Applicants need not be associated with an IMPAACT site; however, site leadership experience is considered a strength. Election decisions are generally expected to be based on at least 80% concurrence among voting members. Any current SLG member who applies is recused from the entire review and election process.

A call for applicants and/or nominations for Network chair typically takes place approximately 15 months before beginning a new Network grant funding cycle so that the elected chair can be named in the application for the new grant. The newly elected chair serves in a transitional capacity as Network chair-elect, participating as a non-voting member of the SLG and MOG, until the new grant is awarded, at which time she or he assumes the duties of Network chair.

If it becomes necessary to replace the Network chair ahead of schedule, a special election may be held. The vice chair will serve as chair until the replacement is selected.

The Network vice chair should meet the same requirements as the chair and is elected following the same procedures as the Network chair. The primary duties of the vice chair are to assist the Network chair, assume the powers and duties of the Network chair in her or his absence or in case of potential conflict of interest, and lead meetings in the absence of the Network chair. The Network vice chair also serves as chair of some network committees and groups.

2.1.2 Scientific Leadership Group

The SLG sets the overall scientific agenda of the Network. The Network chair serves as the chair of the SLG; other members include the Network vice chair, SDMC principal investigator (PI), LC PI, Operations Center Director, Study Monitoring Committee (SMC) chair, ICAB chair, five at-large investigators, and NIAID, NICHD, and NIMH representatives. At-large members of the SLG are selected by the MOG to ensure appropriate breadth and depth of scientific expertise and diversity, reflective of the Network’s research agenda and geographical scope.

The primary responsibilities of the SLG are to:

- Set the overall scientific agenda of the Network
- Prioritize studies across research areas and the overall research portfolio
- Review evolving HIV/AIDS science and determine implications for the Network
- Review new study proposals
- Identify gaps in the network’s research agenda and commission studies to address these
- Liaise with other research networks and groups to foster collaboration

The SLG convenes regularly via teleconference and in person, including periodically with the SC chairs and vice chairs and, as needed, with external advisors. When voting is required, SLG members with conflicts of interest (e.g., part of team developing proposal) abstain from voting, and decisions are generally expected to be based on at least 80% concurrence among voting members. Voting members include all listed SLG members above, with one voting representative from each of the three NIH institutes. To ensure coordination and communication, additional representatives of the Operations Center, SDMC, LC, and NIH sponsoring institutes may participate in SLG meetings as observers.
Decisions made by the SLG are communicated in writing to the relevant parties, and updates on plans and activities are provided to SLG members during routine calls or otherwise as needed. Updates to other Network members are provided via email broadcasts, website postings, teleconferences, and other means as appropriate. On a quarterly basis (typically, March, June, September, and December), the SLG reviews and prioritizes new study proposals; review is based on scientific merit, potential public health impact, and feasibility and research advantage of network implementation, as described in Section 9. See Section 6 for details regarding network meetings and communications.

2.1.3 Management Oversight Group

As described in Section 2.1.2, the SLG focuses on the scientific priorities for the Network. Network management and oversight functions are the responsibility of the MOG, which is comprised of a subset of the SLG members. The Network chair serves as the chair of the MOG; other members include the Network vice chair, SDMC PI, LC PI, Operations Center Director, and NIAID, NICHD, and NIMH representatives.

The primary responsibilities of MOG are to:

- Oversee the Network’s fiscal matters
- Evaluate and recommend the distribution of resources across network components
- Ensure regulatory compliance
- Develop collaboration agreements
- Monitor network performance and productivity
- Review and approve the Network Manual of Procedures (MOP)
- Carry out other administrative and operational aspects of the network’s business

The MOG convenes regularly via teleconference and in person. When voting is required, MOG members with conflicts of interest (e.g., part of team developing proposal) abstain from voting, and decisions are generally expected to be based on at least 80% concurrence among voting members. Voting members include all listed MOG members above, with one voting representative from each of the three NIH institutes. To ensure coordination and communication, additional representatives of the Leadership and Operations Center (including the Finance Office at JHU), SDMC, LC, and NIH sponsoring institutes may participate in MOG meetings as observers.

Decisions made by the MOG are communicated in writing to the relevant parties, and updates on plans and activities are provided to MOG members during routine calls or otherwise as needed. Updates to other Network members are provided via email broadcasts, website postings, teleconferences, and other means as appropriate. See Section 6 for details regarding network meetings and communications.
2.1.4 Scientific Committees

The IMPAACT Network is committed to conducting high quality clinical trials that advance the prevention and treatment of HIV and its complications for infants, children, adolescents, and pregnant and postpartum women globally. The Network’s research agenda includes five scientific specific aims, reflecting the following key research areas:

- HIV Treatment
- Tuberculosis
- HIV Prevention
- HIV Cure
- Complications and Comorbidities

For each research area, an SC continually reassesses research priorities in light of emerging science as well as new ideas and opportunities, seeks collaboration with other research networks and entities, and oversees the development and review of study proposals based on scientific priorities. Each SC is composed of experts in the specific field and includes a chair and vice chair, investigators, ICAB representatives, and representatives of the SDMC, LC, Operations Center, and NIH.

The SCs are responsible for:

- Reviewing their respective portfolios of studies in the context of evolving science and standards of care
- Identifying gaps in the science and new interventions for target populations
- Ensuring that new high priority study proposals are developed for consideration by the SLG

SCs convene regularly via conference call and in person. SC chairs and vice chairs periodically meet with the SLG via teleconference or in-person meetings. SCs are expected to collaborate on areas of topical overlap and mutual interest, each drawing upon the expertise of others as needed. See Section 6 for details regarding network meetings and communications.

2.1.4.1 SC Chair and Vice Chair

SC chairs and vice chairs are selected by the SLG to ensure appropriate breadth and depth of scientific expertise and diversity, reflective of the network’s research agenda and geographical scope. Chairs and vice chairs are accountable to the SLG. They are responsible for leading their respective SCs and participating in SLG conference calls and meetings as requested to discuss their SC’s research agenda and priorities. Each SC also has a designated SLG liaison who is available for Network leadership consultation on an ongoing basis.

2.1.4.2 SC Membership

SCs are comprised of a chair and vice chair, at-large members, and representatives from the ICAB, SDMC, Laboratory Center, Operations Center, NIAID, NICHD, and NIMH. At-large member are chosen by the chair and vice chair and confirmed by the SLG after a broad solicitation for individuals with relevant expertise and experience.
SCs convene regularly via teleconference and in person. When voting is required, SC members with conflicts of interest (e.g., part of team developing proposal) abstain from voting. Voting members include all listed members above, with one voting representative from the ICAB, each of the central resource groups, and each of the three NIH institutes. Voting may be considered completed once at least 60% of at-large members plus chair and vice chair have voted; if decisions are mixed or split, the chair and vice chair may determine next steps, based on the results.

To ensure coordination and communication with Network leadership, a liaison from the SLG is also selected to participate in each SC; this person is not considered a voting member. To augment or expand existing expertise within an SC or to replace a departing member, the SC chair and vice chair may propose additional individuals for membership, with appointment to be confirmed by the SLG.

2.1.5 Removal of Any IMPAACT Leadership Member

In the unlikely event that any IMPAACT leadership (SLG or SC) member needs to be removed for cause, a written proposal to remove the member must be submitted with support from at least three voting members. Removal of the member is based on at least 80% concurrence among voting members and requires concurrence from NIAID.

Leadership members include the Network chair, Network vice chair, at-large SLG members, SC chairs and vice chairs, and all other members of the SLG and MOG, with the exception of NIH members.

2.2 Advisory Groups

2.2.1 IMPAACT Community Advisory Board

The IMPAACT Community Advisory Board (ICAB) is responsible for advising the Network leadership, SCs, protocol teams, and other network groups on issues related to the planning and implementation of the IMPAACT research agenda and for supporting local (site) community programs through training and information exchange. The ICAB also communicates and represents the views of local community programs through participation of its representatives in the SLG, SCs, and other network groups. The ICAB convenes regularly by teleconference and in person. The ICAB chair is accountable to the Network chair and the MOG. See more information about the ICAB in Section 5.

2.2.2 Social Behavioral Sciences Core

The Social Behavioral Sciences Core (SBS Core) is core group of experts who support the IMPAACT Network’s research agenda by providing guidance on behavioral scientific issues during the development of new study proposals. The SBS Core is led by a chair with the support of up to four primary members; the core may also request input from non-core consultants and experts on an ad hoc basis. The SBS Core is accountable to the SLG.

2.2.3 External Scientific Advisory Group

An external scientific advisory group may be convened periodically to provide constructive feedback on the network’s current and planned scientific agenda, including identifying gaps and providing recommendations for prioritization and future directions. The group may be convened either via teleconference or in person. The group includes diverse expertise and experience relevant to the network’s research agenda, including pediatric HIV therapy, pediatric TB/HIV co-infection, perinatal HIV transmission, adolescent HIV prevention, pediatric HIV vaccines, pediatric immunology, HIV
reservoirs, metabolic/neuropsychiatric complications of HIV and ARV therapy, and behavioral science. The group also includes community representation. Members must be currently unassociated with IMPAACT and have no current conflict of interest. The group is directly advisory to the SLG. The external scientific advisory function may be fulfilled through alternative means as determined by the SLG.

2.3 Central Resources

The central resources of the IMPAACT Network include:

- Leadership and Operations Center (LOC), located at Johns Hopkins University (JHU) and FHI 360
- Statistical and Data Management Center (SDMC), located within the Harvard School of Public Health and Frontier Science Foundation
- Laboratory Center (LC), located at the University of California Los Angeles (UCLA)

These groups coordinate closely with each other in the development, implementation, and oversight of Network studies and other Network activities.

2.3.1 Leadership and Operations Center

The Leadership and Operations Center (LOC) supports the Network leadership, structure, and functioning. Oversight of the LOC is the responsibility of the Network chair. The LOC includes functions across two institutions: the IMPAACT Finance Office (at JHU) and the IMPAACT Operations Center (at FHI 360).

The Finance Office administers and disperses grant and other funding for support of the Network leadership, protocol chairs, clinical research sites, specialty laboratories, the Operations Center, and other central resources. The Finance Office also executes contracts with pharmaceutical companies and other collaborators to support Network studies.

The Operations Center provides a central point of coordination, communications, and support for all aspects of the Network. The Operations Center supports the scientific agenda; coordinates the development, implementation, and reporting of IMPAACT studies; supports all Network groups, committees, and protocol teams; and arranges and supports all network meetings and leadership travel. The Operations Center Director serves as a voting member of the SLG and MOG.

The LOC’s specific operational responsibilities, by functional area, are summarized in Table 2-1.

2.3.2 Statistical and Data Management Center

Through a separate but linked and fully collaborative grant, the Statistical and Data Management Center (SDMC) is responsible for helping to shape the Network’s scientific agenda and plays a key role in all phases of science generation and protocol development. The SDMC also provides comprehensive biostatistical and data management leadership, specifically in the design and implementation of network studies and in the collection, quality control, and analysis of study data in accordance with study protocols and in collaboration with other team members, following the principles of Good Clinical Data Management Practices (GCDMP) and Good Clinical Practices (GCP).

The SDMC is comprised of a Statistical and Data Analysis Center (SDAC), located at the Center for Biostatistics in AIDS Research at the Harvard School of Public Health, and a Data Management Center
(DMC), located at Frontier Science Foundation. The SDMC PI has fiscal responsibility for the SDMC grant, is accountable to the NIAID Program Officer and the Network chair, and serves as a voting member of the SLG and MOG.

The SDMC’s specific operational responsibilities, by functional area, are summarized in Table 2-2.

### 2.3.3 Laboratory Center

Through a separate but linked and fully collaborative grant, the Laboratory Center (LC) is responsible for helping to shape the network’s scientific agenda and plays a key role in all phases of science generation and protocol development. The LC is also responsible for leadership, oversight, and support of laboratory aspects of network studies and other activities including site laboratory preparedness and performance and coordination and oversight of the networks’ specialty laboratories. The LC plays a leadership role in cross-network activities, updating, harmonizing and streamlining laboratory procedures used in other networks and groups.

The LC is located at the University of California Los Angeles. The LC PI has fiscal responsibility for the LC grant, is accountable to the NIAID Program Officer and the Network chair, and serves as a voting member of the SLG and MOG.

The LC staff maintains regular communication with IMPAACT sites and confirms that sites are able to perform study-required laboratory procedures and tests prior to site activation for the study. The LC staff also visit sites, as necessary, to assess laboratory facilities and procedures.

The LC’s specific operational responsibilities, by functional area, are summarized in Table 2-3.
<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| **Leadership and governance**                       | • Serve on and provide logistical and administrative support to the SLG, MOG, SCs, ICAB, SBS Core, MPRG, SMC, NEG, and other Network committees and groups  
• Participate in the overall management of the Network and development of the IMPAACT scientific agenda  
• Provide operational leadership to the Network  
• Coordinate development and management of the Network MOP  
• Coordinate and support Network evaluation processes (see Section 18) |
| **Protocol management and support**                  | See Section 4 for a full listing of roles and responsibilities for the protocol CTS.  
• Facilitate the development, review, approval, and tracking of capsules, concepts, ancillary studies, and other related study proposals  
• Assign a Clinical Trials Specialist (CTS) to each IMPAACT protocol  
• In collaboration with the protocol chair, plan and manage protocol team business in consultation and with the support of other protocol team members  
• Facilitate communication between protocol teams, study sites, Network leadership, and other Network and sponsor entities as needed |
| **Technical assistance to sites**                    | • Coordinate development and implementation of study-specific training plans  
• Coordinate and facilitate responses to inquiries from site staff on logistics and procedures for IMPAACT studies in collaboration with protocol team members and other Network entities as applicable |
| **Coordination of, facilitation of, and participation on oversight committees** | • Serve as member of and coordinate MPRG (see Section 9), SMC (see Section 13), and Network Evaluation Group (NEG; see Section 18) activities  
• Facilitate preparation and distribution of relevant review materials; prepare and distribute review outcome reports and associated communications, as applicable |
| **Community engagement**                             | See Section 5 for a full description of roles and responsibilities for the Operations Center community program staff.  
• Facilitate broad community involvement through community representation on key Network committees and, as applicable, by working with sites to develop and enhance the IMPAACT Community Advisory Board (ICAB)  
• Support the work of the ICAB and IMPAACT CAB Leadership Group (ILG) |
| **Communication and information dissemination**       | • Develop and maintain the IMPAACT website, including relevant information on sites and IMPAACT studies  
• Support and coordinate Network-level communication through conference calls, in-person meetings, electronic and written materials, announcements, and postings on the IMPAACT website  
• Support and organize Network meetings  
• Develop and maintain email groups and directories for the IMPAACT communication system in collaboration with the DMC  
• Maintain inventory of site- and study-related information and provide requested information to Network leadership and other committees as needed  
• Support the NIAID CRMS by providing current study-specific information and documents in real time |
| **Financial management and support for sites**        | • Evaluate the adequacy of financial resources provided to sites, as necessary  
• Assist NIH Grants Management Branch (GMB), DAIDS Prevention Sciences Program (PSP), OCSO, and IMPAACT leadership in analysis of site funding requests and all other Network financial matters  
• Develop an annual funding plan based on the needs of the scientific agenda implemented during the funding cycle |
### Table 2-2. IMPAACT SDMC Operational Responsibilities

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| **Leadership and governance**       | • Serve on the SLG, MOG, SCs, MPRG, SMC, NEG, and other Network committees and groups
• Participate in the overall management of the IMPAACT Network and development of the IMPAACT scientific agenda
• Provide statistical and data management leadership to the IMPAACT Network
• Contribute to Network evaluation processes (see Section 18) |
| **Protocol management and support**  | See Section 4 for a full listing of roles and responsibilities for the statistician, PDM, and LDM.
• Participate in the review of capsules, concepts, ancillary studies, and other related study proposals
• Assign a statistician, a protocol data manager (PDM), and a laboratory data manager (LDM) to each IMPAACT protocol
• Participate in the protocol-related groups, as applicable
• Design and maintain the study databases
• Provide centralized data entry and data management
• Provide reports to fulfill Investigational New Drug (IND) reporting requirements, as applicable
• Review and provide study data and reporting to pharmaceutical partners under the terms of the Clinical Trials Agreement (CTA), as applicable
• Develop and implement data quality control (QC) systems
• Provide needed information to the DAIDS Clinical Site Monitor to assist with site-monitoring visits |
| **Technical assistance to sites**    | • Participate in development and implementation of study-specific training plans
• Respond to inquiries from site staff in collaboration with protocol team members and other Network entities as applicable
• Provide operational assistance to sites, the LC, and protocol teams for specimen tracking and retrieval, including labeling and specimen tracking sheets to facilitate specimen entry into the specimen tracking system, the Laboratory Data Management System (LDMS), and reports of LDMS entry errors and discrepancies between LDMS and CRF databases |
| **Information technology support**  | • Develop and maintain software systems and related procedures for transmitting, receiving, processing, analyzing, and storing study data and meeting reporting requirements
• Assist sites in set-up and maintenance of data collection material relay systems |
| **Participation on oversight committees** | • Serve as a member of MPRG (see Section 9), SMC (see Section 13), and NEG (see Section 18) |
| **Clinical data safety monitoring**  | • Provide clinical review of relevant laboratory and safety data for accuracy, consistency, and completeness
• Provide QC and coding of adverse event (AE) data
• Verify completeness of expedited adverse event reporting through reconciliation of AEs reported to DAIDS and those reported to the SDMC |
<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| Leadership and governance             | • Serve on the SLG, MOG, SCs, MPRG, SMC, NEG, and other Network committees and groups  
• Participate in the overall management of the Network and development of the IMPAACT scientific agenda  
• Contribute to Network evaluation processes (see Section 18)  |
| Protocol management and support       | • Participate in the review of capsules, concepts, ancillary studies, and other related study proposals  
• Assign a Laboratory Center representative to each IMPAACT protocol; facilitate assignment of a Laboratory Technologist, in consultation with Laboratory Technologist Committee, to each IMPAACT protocol  
• Review and define appropriate laboratory testing methods and materials to be used in IMPAACT studies  
• Participate in protocol-related groups, as applicable  
• Collaborate with other NIH-sponsored HIV clinical trial networks to harmonize laboratory methods and maximize the efficiency of protocol development, implementation, and analysis  
• Collaborate with IMPAACT specialty labs to perform protocol-specified testing |
| Technical assistance to sites         | • Participate in development and implementation of study-specific training plans  
• Respond to inquiries from site staff in collaboration with protocol team members and other Network entities as applicable  
• Provide operational assistance to sites, the LC, and protocol teams for specimen tracking and retrieval, including labeling and specimen tracking sheets to facilitate specimen entry into the specimen tracking system, the Laboratory Data Management System (LDMS), and reports of LDMS entry errors and discrepancies between LDMS and CRF databases |
| Participation on oversight committees | • Serve as a member of MPRG (see Section 9), SMC (see Section 13), and NEG (see Section 18) |
2.4 **Oversight Groups**

Three additional Network groups provide oversight on behalf of the SLG and MOG:

- Multidisciplinary Protocol Review Group (MPRG)
- Study Monitoring Committee(s) (SMC)
- Network Evaluation Group (NEG)

These committees have both standing and *ad hoc* members and convene via teleconference as needed.

### 2.4.1 Multidisciplinary Protocol Review Group

The Multidisciplinary Protocol Review Group (MPRG) reviews protocols on behalf of the SLG prior to submission to the NIAID Sciences Review Committees. The purpose of the MPRG review is to ensure IMPAACT protocols are scientifically rigorous, accurate, consistent, complete, and standardized to the extent possible. The MPRG critically reviews protocols for scientific and design integrity, operational feasibility, focusing on key issues such as site participation, infrastructure and capacity, relevance to the community, and any ethical, logistical or potentially regulatory concerns. The review is multidisciplinary to streamline and avoid multiple sequential review steps. This group has authority to approve protocols, request revision and re-submission, or to disapprove them, based on network-specified criteria.

The MPRG is comprised of the Network vice chair (who serves as MPRG chair); the chair or vice chair of the relevant SC; standing representatives of the Operations Center, SDMC, LC, and ICAB; the IMPAACT pharmacist; designated NIH representatives; and 1-2 external reviewers with expertise in the content area of the protocol.

See Section 9 for additional detail on the MPRG.

### 2.4.2 Study Monitoring Committee

In support of the management and oversight functions of the MOG, for designated studies, a Study Monitoring Committee (SMC) monitors participant safety and the progress and quality of IMPAACT study conduct. The scope of SMC reviews varies across studies, reflective of protocol specifications.

The SMC is comprised of the SMC chair (a Network investigator); the Network chair or vice chair; the chair or vice chair of the relevant SC; standing representatives of the Operations Center, SDMC, and LC; designated NIH representatives; and additional content area reviewers when needed.

See Section 13 for additional detail on the SMC.
2.4.3 Network Evaluation Group

The Network Evaluation Group (NEG), on behalf of the MOG, develops performance metrics for the various network entities. Evaluation reports are shared with the entities whose work was evaluated and with network sponsors, as appropriate. A primary component of network evaluation is the CRS Performance Report. This report focuses on critical aspects of study implementation at the site level, such as participant accrual and retention, data quality, laboratory performance, and regulatory issues. At the request of the MOG, the NEG may evaluate and report on other network entities in a similar manner.

The NEG is comprised of the Network vice chair (who serves as the NEG chair); standing representatives of the Operations Center (the Network Evaluation Coordinator), SDMC, and LC; and designated NIH staff.

See Section 18 for additional detail on the NEG.

2.5 Protocol Teams

Protocol teams assume primary responsibility for scientific leadership in the development, implementation, and day-to-day oversight of IMPAACT studies; protocol teams are also responsible for timely dissemination of study results. Further detail on the composition and functions of protocol teams are contained in Section 4.

2.6 Clinical Research Sites

IMPAACT studies are conducted at clinical research sites (CRSs) funded by NIAID and NICHD throughout the world. Investigators and other representatives of these sites, including community representatives, participate in all levels of the Network structure. The active participation of site investigators is critical to IMPAACT’s scientific mission. These sites bring extensive clinical trials capacity and a wealth of experience for implementation of the Network’s scientific agenda. When necessary to reach special populations or to expand capacity, additional sites may be engaged as “protocol-specific” sites for selected IMPAACT studies (see Section 10).

IMPAACT sites are experienced in implementing clinical trials, monitoring for and reporting adverse events, achieving high participant retention rates, and rigorously adhering to study protocols. Site staff are skilled in applying the principles of Good Clinical Practice (GCP) and Good Clinical Laboratory Practice (GCLP) in all aspects of study conduct. These practices include obtaining informed consent and assent; performing clinical, pharmacy and laboratory study procedures; maintaining study product accountability; performing data management and quality management processes; and collecting, labeling, processing, testing, storing, and shipping biological specimens. In addition, each site obtains community input on the research process through its community advisory board(s), although a site may refer to this structure by another locally chosen name or establish an alternative structure.
Staffing at each site may vary based on the structure of the site, the number and type of studies being conducted, and any local requirements. Some staff members may have general functions that apply across studies and others may have study-specific responsibilities. Site staff often include the following:

- CRS Leader and CRS Coordinator
- Study-specific Investigators of Record (IoR) and sub-investigators
- Study-specific Coordinators
- Pharmacist of Record, study-specific Pharmacists of Record, and other pharmacists and pharmacy technicians
- Research nurses and clinicians
- Data managers and technicians
- Laboratory directors, managers, technologists, and technicians
- Counselors and social workers
- Community educators and liaisons
- Participant outreach, recruitment, and retention staff
- QA/QC staff
- Administrative staff

2.6.1 NIAID Sites

The Division of AIDS at NIAID funds sites worldwide to participate in Network studies. Each site is part of a Clinical Trials Unit (CTU); CTUs may be comprised of multiple sites. NIAID provides resources to fund research infrastructure and study implementation through cooperative agreements with CTU and through the LOC.

2.6.2 NICHD Sites

The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) funds sites worldwide to participate in Network studies. NICHD provides resources to sites to fund research infrastructure and study implementation through the NICHD Coordinating Center.

2.6.3 Protocol-Specific Sites

Sites that are not affiliated with the Network through NIAID or NICHD may be funded to implement specific Network studies if needed to meet the study objectives. See Section 10 for additional details.
Section 3 is not yet available.
Protocol teams assume primary responsibility for scientific and operational leadership in the development, implementation, and oversight of IMPAACT studies and dissemination of study results. This section outlines the protocol chair selection process, the responsibilities of protocol team members and the protocol team’s relationship with IMPAACT oversight and scientific committees. IMPAACT oversight and scientific committees are outlined in Sections 13 and 2, respectively; the protocol development process is further detailed in Section 9.

4.1 Protocol Chair and Vice Chair

Key protocol team members are proposed in study concept sheets, and proposed protocol chairs and vice chairs are reviewed by the IMPAACT Scientific Leadership Group (SLG) at the time of concept review.

4.1.1 Protocol Chair and Vice Chair Selection

One protocol chair and one vice chair are typically proposed in the concept sheet. Exceptions are assessed by the SLG on a case-by-case basis (e.g., co-chairs or multiple vice chairs). As noted in Section 9, the SLG reviews the proposed protocol chair and vice chair based upon past leadership performance, current commitments, and relevant expertise and experience. The SLG also considers whether proposed chairs have the capacity to serve concurrently as chair or vice chair of multiple IMPAACT studies and/or network committees. Protocol chairs need not be affiliated with an IMPAACT study site or other IMPAACT organization. Network resources are allocated to support these critical positions.

Members of the IMPAACT Management Oversight Group (MOG) and SLG are not eligible to serve as protocol chair or vice chair due to potential conflict with their oversight responsibilities. Selection as protocol chair or vice chair does not imply that a site with which a chair is affiliated will be selected for study participation (see Section 10).

4.1.2 Protocol Chair and Vice Chair Responsibilities

The protocol chair provides scientific leadership during the development, implementation, and reporting of the study and assumes responsibility for completion of protocol team responsibilities within the approved budget and timeline. Protocol chairs may often delegate specific areas of responsibility to the vice chair, but decision-making authority and ultimate responsibility for the study rests with the protocol chair.
Protocol chairs must familiarize themselves with IMPAACT processes and adhere to them. A listing of responsibilities is included in the scope of work of the contractual agreement that provides network resources to support each protocol chair and vice chair.

Protocol team business is planned and managed by the protocol chair and the clinical trials specialist (CTS) in consultation and with the support of other protocol team members. Specifics of protocol team management vary according to the needs and type of study, the number and location of sites involved, and individual leadership and management approaches.

General Responsibilities (throughout the lifecycle of the study):

- Leading protocol team meetings and calls
- Coordinating the establishment and dissolution of study-specific groups as necessary to achieve efficiency in the development, implementation, and reporting of the study
- Monitoring progress in relation to established timelines and working with protocol team members as needed to address delays that may be encountered
- Monitoring the quality and progress of study conduct and working with protocol team members and study sites as needed to address study implementation issues
- Providing status updates to IMPAACT leadership, as needed
- Acting as a liaison between the protocol team and network leadership and oversight groups
- Ensuring active and timely communication with participating study sites

Pre-Implementation:

- Leading protocol development in coordination with the CTS
- Working with Operations Center staff to complete the study site selection process
- Working with Operations Center staff to develop the study budget
- Ensuring timely development and sign-off of required key study implementation plans and materials
- Facilitating final decision making within the protocol team to achieve agreement on scientific or operational issues brought before it; if agreement cannot be reached, referring the issue to the MOG/SLG

Study Implementation:

- Participating in study data reviews consistent with the study monitoring plan
- Together with the protocol statistician(s), reporting on the status of the study to the Study Monitoring Committee (SMC) and/or Data and Safety Monitoring Board (DSMB)
- Ensuring timely development of study closure plans and materials

Publications:

- Overseeing analysis and writing teams (designating writing team members, reviewing schedules, monitoring progress, prioritizing analyses, communicating publication plans, responding to IMPAACT Publications Committee review, advocating for additional resources as required), as further described in Section 19
- Ensuring review and approval of all study-related manuscripts, abstracts, and presentations
4.2 Protocol Team

Protocol teams assume primary responsibility for scientific and operational leadership in the development, implementation, and oversight of IMPAACT studies and dissemination of their results.

4.2.1 Protocol Team Membership

The protocol chair identifies investigators with expertise relevant to the study. Investigators involved with the development of the concept sheet may not necessarily be invited to be a member of the protocol team. Additional team members are assigned by the Operations Center, Statistical and Data Management Center (SDMC), Laboratory Center (LC), NIH, and DAIDS Pharmaceutical Affairs Branch (PAB), as applicable. The Operations Center coordinates and communicates the protocol team formation. Team members need not be affiliated with an IMPAACT study site or other IMPAACT organization. Membership of each protocol team will vary according to the protocol, but membership should generally include:

- Protocol chair (and/or co-chair, vice chair)
- DAIDS Medical Officer (MO)
- NICHD MO
- NIMH MO (if applicable)
- CTS(s)
- Statistician(s)
- Protocol Data Manager(s)
- Laboratory Data Manager(s)
- DAIDS Protocol Pharmacist(s) (if applicable)
- Community representative(s)
- LC Representative
- Pharmaceutical or industry representative(s) (if applicable)
- Laboratory Technologist
- Westat Representative (if applicable)
- Investigator(s)
- Site investigator from each participating CRS

Additional members, as required for a specific protocol, may include a pharmacologist, virologist, behavioral scientist, immunologist, etc.

4.2.2 Protocol Team Responsibilities

Although individual protocol team members have different roles in fulfilling specific protocol team responsibilities (see Table 4-1), all members are expected to provide scientific, operational, or site-specific input, as appropriate, to protocol team activities.
Table 4-1. Roles of Key Protocol Team Members

<table>
<thead>
<tr>
<th>Team Member</th>
<th>Primary Roles and Responsibilities</th>
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</table>
| Protocol chair                   | • Ultimate responsibility for execution of the study and final decision-making authority  
• See Section 4.1.2 for further details of chair responsibilities                                                                                                                                                                               |
| Vice chair                       | • Collaborate with the protocol chair for execution of the study  
• See Section 4.1.2 for further details of chair responsibilities                                                                                                                                                                                   |
| Medical Officer (DAIDS, NICHD, or NIMH) | • Participate fully in protocol team discussions and decisions  
• Facilitate communication between protocol team and relevant NIH groups and staff  
• Provide timely MO review of study documents and response to queries  
• Provide oversight of safety monitoring during study implementation  
• DAIDS MO to review and sign-off on each MOP version                                                                                                                                                                                             |
| Clinical Trials Specialist (CTS) | • With protocol chair, provide scientific and operational input to the protocol and coordinate and lead protocol development and any subsequent protocol modifications, as applicable  
• Organize and document protocol team conference calls and meetings  
• Prepare study budget with Operations Center financial staff, in collaboration with the protocol chair and, as applicable, with input from site representatives  
• Submit protocol for required IMPAACT and DAIDS reviews (MPRG, applicable Sciences Review Committee, Regulatory, MO) and manage response/revision process as needed (see Section 9)  
• Coordinate the site selection process (see Section 10)  
• Develop and produce the study-specific manual of procedures (MOP) with input from DMC, LC, and other protocol team members, as applicable (see Section 11)  
• Collaborate with protocol team members to coordinate the completion of study opening requirements (see Section 11)  
• Coordinate and develop the training plan and materials and provide study-specific training with DMC, LC, and other protocol team members, as applicable (see Sections 11 and 16)  
• Coordinate the site activation process (see Section 11)  
• Assess the performance of and provide operational guidance to sites during study conduct, enabling the sites to respond to problems and issues that arise during implementation of studies and dissemination of findings  
• Provide information on study progress to the sites, protocol teams, Network leadership, pharmaceutical representatives (if applicable), and/or DAIDS  
• With the SMC or DSMB coordinator, collaborate with SDMC on SMC and/or DSMB reviews and reports  
• Contribute to study close-out procedures (see Section 14)  
• Participate in publication activities and facilitate as needed (see Section 19)  
• See Section 2 for further details of Operations Center responsibilities                                                                                                                                                                          |
<table>
<thead>
<tr>
<th>Team Member</th>
<th>Primary Roles and Responsibilities</th>
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| Statistician                    | • Provide design, statistical, and scientific input during protocol development and throughout the conduct of the study  
• Lead development of statistical components of the protocol  
• Collaborate in protocol development and protocol related materials  
• Develop randomization and enrollment plan, as needed  
• Lead development and implementation of the Study Progress, Data, and Safety Monitoring Plan (SPDSMP), including routine reports (see Sections 11 and 13), in collaboration with the protocol data manager (PDM) and laboratory data manager (LDM)  
• Lead development and implementation of the Statistical Analysis Plan (SAP), in collaboration with the protocol chairs, MOs, and other protocol team members  
• Conduct data analyses and generate interim analysis reports for the SMC or DSMB, in collaboration with the PDM and other protocol team members  
• Conduct data analyses and generate final analysis reports, in collaboration with the PDM and other protocol team members  
• Contribute to study close-out procedures (see Section 14)  
• Contribute to publication activities and lead analyses, as needed  
• Submit study results to ClinicalTrials.gov  
• See Section 2 for further details of SDMC responsibilities |
| DAIDS Protocol Pharmacist (if applicable) | • Lead development of pharmacy and study drug/product components of the protocol  
• Collaborate with the CTS to develop and produce the MOP, with primary responsibility for pharmacy sections (see Section 11)  
• Advise protocol team on all study product-related issues, including study drug/products and associated materials for administration  
• Collaborate with CTS on review of site-specific study activation requirements related to pharmacy requirements prior to study activation  
• Interact with pharmaceutical companies to ensure study product supply and materials as needed  
• Provide and monitor timely study product shipment to study sites  
• Monitor drug supply, expiration dates, and budgets for drug, where necessary |
| Investigators                    | • Provide scientific input into protocol development  
• Provide input and review clinical related sections of study implementation documents as applicable  
• Provide investigator-specific expertise, as applicable  
• Participate in publication activities as applicable |
<p>| Pharmaceutical or industry representative | • Provide input in protocol development and implementation as applicable and as outlined in network and/or sponsor agreements |</p>
<table>
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<tr>
<th>Team Member</th>
<th>Primary Roles and Responsibilities</th>
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| **Protocol Data Manager (PDM)** | • Collaborate in development of protocol  
• Collaborate with the CTS to develop and produce the MOP, with primary responsibility for data management, reporting, and randomization sections  
• Lead the development of Clinical Data Interchange Standards Consortium (CDISC)-compliant data collection instruments (e.g., case report forms [CRFs], computer-based questionnaires) and instructions, in collaboration with LDM and statistician, as needed  
• Collaborate with CTS on review of site activation requirements related to data management prior to activation  
• Conduct training on data management and data collection instrument completion  
• Collaborate with statistician and LDM to develop and implement the SPDSMP (including development and distribution of routine reports)  
• Collaborate with LDM, pharmacologist, and statistician in the development and implementation of the PK management plan, when applicable  
• Collaborate with statistician to generate interim analysis reports for the SMC or DSMB and final analysis reports  
• Provide support for data collection and management  
• Collaborate with CTS to provide support for operational matters that may influence study data  
• Assess the data management quality of sites and report results to protocol team  
• Conduct data management site visits as needed  
• Contribute to study close-out procedures, including data collection and cleaning (see Section 14)  
• Participate in publication activities and facilitate as needed  
• See Section 2 for further details of SDMC responsibilities |
| **Laboratory Data Manager (LDM)** | • Collaborate in development of protocol  
• Collaborate with PDM to develop data collection instruments and instructions  
• Collaborate with the LC representative and LT on development of the Laboratory Processing Chart (LPC)  
• Lead the development and implementation of the LDMS preloads (Windows) and Quick Add Templates (Web)  
• Collaborate with the statistician and PDM to develop and implement the SPDSMP  
• Lead development and implementation of the PK data management plan with the protocol pharmacologist, statistician, and PDM, when applicable  
• Assess the quality of laboratory data for the study, including but not limited to, specimen completeness, in collaboration with the PDM, and may report results to protocol team  
• Coordinate specimen shipping requests  
• Contribute to study close-out procedures (see Section 14)  
• Participate in publication activities and facilitate as needed  
• See Section 2 for further details of SDMC responsibilities |
<table>
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<tr>
<th>Team Member</th>
<th>Primary Roles and Responsibilities</th>
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| Community representative(s)       | • Provide perspective of community and potential participants during protocol development, study implementation, and publications and results dissemination  
• Facilitate communication with the ICAB, throughout the life of the study  
• Work with protocol team and CABs to develop and implement plans for dissemination of study results to the community, as needed                                                                 |
| LC Representative                  | • Collaborate in development of protocol  
• Collaborate with the LT and LDM to develop the LPC and coordinate review and comments by protocol team  
• Collaborate with the CTS and LT to develop and review the MOP, with primary responsibility for laboratory related sections  
• Collaborate with LT to provide laboratory expertise in development of data collection instruments  
• Collaborate with CTS on review of site-specific study activation requirements related to laboratory requirements prior to study activation; for NIAID sites, confirm laboratory readiness (for NICHD sites, confirmation of laboratory readiness is confirmed by Westat)  
• Collaborate with LT to conduct training on study-specific laboratory procedures and processes  
• Collaborate with CTS and LT to provide support for operational matters that may influence laboratory procedures or results  
• Participate in publication activities and facilitate as needed  
• See Sections 4 and 17 for further details of LC responsibilities                                                                 |
| Laboratory Technologist (LT)       | • Collaborate in development of protocol  
• In collaboration with LC representative and LDM, develop the LPC and coordinate review and comments by protocol team  
• In collaboration with LC representative, provide laboratory expertise in development of data collection instruments  
• In collaboration with LC representative and other protocol team members, identify study-specific laboratory requirements and materials  
• In collaboration with LC representative, conduct training on study-specific laboratory procedures and processes  
• Collaborate with CTS and LC representative to provide support for operational matters that may influence laboratory procedures or results  
• In collaboration with LC representative and CTS, develop and review laboratory related sections of the MOP  
• Participate in publication activities as needed                                                                 |
| Westat Representative (if applicable) | • For studies with NICHD site participation, facilitate communication between protocol team, Westat colleagues, and NICHD sites                                                                                                           |
| Site investigator from each participating CRS | • Provide site-informed input into protocol development and implementation  
• Review and comment on study implementation materials and data collection instruments  
• Participate in publication activities as needed                                                                 |
4.2.3 Study-Specific Groups

The protocol chair may identify study-specific groups to address specific needs/activities during protocol development and study conduct, and appoint protocol team members or external investigators to these study-specific groups. Examples might include study-specific groups to address:

- Development and/or oversight of specialized behavioral procedures for a study
- Development and/or oversight of specialized clinical procedures for a study
- Development of specialized data collection modules (in collaboration with SDMC)
- Ongoing support of site clinicians regarding toxicity management and study drug dosing, such as a Clinical Monitoring Committee (or Core Team)
- Review of safety assessments and reports or determination of outcome measures (e.g., external safety review groups or outcome review groups)
- Drafting and submission of manuscripts and presentations (see Section 19)

The CTS facilitates and generally participates in the conference calls and meetings of these study-specific groups. Where applicable, the CTS provides summaries to the protocol team for the study-specific group meetings and conference calls. Delegation of responsibilities for ongoing, study-specific groups is outlined in the protocol during development; membership and roles and responsibilities of these groups is generally described in the SPDSMP. Network leadership review of membership on atypical study-specific groups may be required.

When protocol chairs and CTSs are not included in the group membership, a group chair is typically identified to assume leadership responsibilities and decision-making authority and a group member is designated to assume management and documentation responsibilities; see Figure 12-1 in Section 12 for details on quorum and documentation requirements.

4.3 Relationship of Protocol Team to IMPAACT Management Oversight Group (MOG)

The MOG monitors each IMPAACT protocol team with regard to protocol development, implementation, analysis, and reporting. This oversight is accomplished through the SMC, Operations Center, LC, and SDMC by a mixture of formal reviews of key documents produced by the protocol teams (study protocol, protocol summaries, open reports to the SMC or DSMB, and primary and secondary manuscripts) as well as review of prepared reports.

In addition to oversight provided by the SMC or DSMB, as detailed in Section 13, routine MOG oversight includes:

- Evaluation of study progress in relation to key implementation benchmarks established by the MOG and information from the protocol teams (e.g., timeliness of enrollment and follow-up targets, routine reports to the SMC or DSMB, and progress in data analysis and reporting). The MOG identifies and communicates recommended actions on delayed protocols and unexpected problems during protocol implementation.
- Assistance to DAIDS in determining the need for additional resources, for example, because of unexpected costs associated with planned study procedures.
- Adjudication of conflicts that cannot be resolved within the protocol teams. If all reasonable attempts to adjudicate conflicts or address problems with the protocol team do not result in resolution of the conflict, the MOG may direct that the protocol team membership or its leadership be modified.
The SLG may also provide scientific guidance, as needed. In particular, protocol changes including significant changes to the scientific goals, study objectives, or design must be approved by the relevant SC and SLG, as described further in Section 9.

4.4 Conflict Resolution within Protocol Teams

Conflicts within IMPAACT are handled by referring the issue in dispute to the next level of the IMPAACT organizational structure.

If a conflict arises within a protocol team and cannot be resolved between the members involved, the issue is referred to the protocol chair. If the protocol chair cannot resolve the issue with the protocol team, the issue is referred to the MOG.
5 COMMUNITY PARTICIPATION AND ENGAGEMENT IN THE IMPAACT NETWORK

Community participation and engagement are critical in the conduct of scientific research. There is mutual benefit to communities and researchers when both parties work together throughout the scientific research process. In the IMPAACT Network, community participation occurs throughout the network, community and site levels through various mechanisms that include representation on the network committees, protocols teams, and cross network community activities.

5.1 Confidentiality

IMPAACT Community Advisory Board (ICAB) members are required to sign confidentiality agreements when requested. Members MUST agree to acknowledge the sensitive nature of IMPAACT discussion by refraining from:

- Disclosing confidential information, including but not limited to capsules, concept sheets, protocols in development, study participant data and identifiers, HIV infection status, and unpublished study results.
- Sharing unpublished product data or other confidential proprietary information.
- Sharing or distributing personal user names and passwords to IMPAACT-related websites.
- Sharing or distributing draft ICAB documents. Members can share documents for community review once approved timelines for such review have been set.

Members are responsible for making certain an item can be made public. If a member is in doubt, that member MUST clarify the issue of confidentiality. Clarification can come from the provider of the information, the chair of the relevant IMPAACT committee or protocol, or the chairs of the ICAB. Members must also respect confidentiality of disclosures by any member of the clinical trials networks (for example, the sharing of photographs, personal stories, HIV status, etc.).

Breach of confidentiality by any member may result in disciplinary action, up to and including loss of membership privileges. Disciplinary actions are determined by the ICAB leadership.
5.2 IMPAACT Community Advisory Board (ICAB)

The ICAB includes representatives from Asia, Africa, and the Americas and assists clinical research site (CRS) Community Advisory Boards (CABs) with capacity building, training, and development. The role of the ICAB is to provide HIV/AIDS life-experience based expertise that positively impacts the formulation and implementation of research by community representation at the network and cross-network levels.

The purpose of the ICAB as a collective is to ensure that the principles of community participation are the foundation of all community engagement activities at a CRS and to facilitate community participation throughout the research process (concept development, study implementation, results dissemination, and post-trial access to interventions that are found to be effective).

ICAB goals are to:

- Provide HIV/AIDS life-experience that assists in the development and implementation of research.
- Develop ways to share challenges and solutions, best practices, experience, and lessons learned.
- Build community capacity to provide input and support to the IMPAACT scientific agenda.
- Evaluate value and effectiveness of community at network, regional and site levels.

To meet these goals, the ICAB works to:

- Integrate participation of community members who represent diverse HIV study communities and their advocates into Network committees and protocol teams.
- Promote understanding of community needs and issues among IMPAACT researchers and other Network members.
- Inform and advise the IMPAACT Scientific Leadership Group (SLG) on community-related issues of concern.
- Advise and advocate for Network efforts in research, evaluation, and training addressing community participation at all levels of IMPAACT research.

5.2.1 ICAB Membership

From each IMPAACT CRS, both a CAB representative and a community educator/community liaison (CE/CL) are appointed to the ICAB. Typically, the local CAB elects the CAB member to serve on the ICAB while the CRS Leader or designee appoints the CE/CL. The staff liaison supports and facilitates the CAB representative’s participation in the ICAB.

Standing membership in the ICAB includes:

- Voting members
  - ICAB chair
  - ICAB vice chair
  - ICAB Leadership Group members
  - One CAB member from each CRS
• Non-voting members
  - One Community Educator (CE) / Community Liaison (CL) from each CRS
  - Emeritus ICAB chairs
  - Operations Center Community Engagement Program staff

5.2.2 ICAB Roles and Responsibilities

The roles and responsibilities of the ICAB include:

• Ensuring that IMPAACT scientific priorities reflect the needs of people living with HIV/AIDS, including community research priorities
• Promoting the inclusion of all populations in clinical trials
• Advocating for innovative, efficient, and timely clinical trials
• Protecting the interests of research participants
• Advocating for an effective CAB at every IMPAACT site
• Facilitating information flow between the sites and network, including new and emerging research and study results when available
• Bringing site and regional community issues to the ICAB Leadership Group for further discussion with the IMPAACT Network
• Participating on site-specific protocol teams, when applicable
• Training and mentoring CAB members with assistance from site staff, ICAB Leadership Group, and IMPAACT Operations Center
• Electing the membership of the ICAB Leadership Group

5.2.2.1 Election of ICAB Leadership Group Members

An important role of the ICAB is in the election of the membership of the ICAB Leadership Group. Positions for the ICAB Leadership Group (ILG) are filled through an open solicitation made to the full ICAB. Those interested in serving as an ILG member must complete a multi-component application process. This process is designed to identify the best qualified individuals from the pool of applicants. See Section 5.3.4 for further details.

The IMPAACT Operations Center community program staff reviews all application packets using a rated checklist to convert responses into a numerical score. Candidates with the highest combined scores advance to the final stage of the application process, which is an open election.

There is only one voting ICAB representative from each site – the designated site CAB representative. Therefore, there is only one vote per site. The voting membership of the ICAB votes for their preferred leadership group members (vice chair and five at-large members) by submitting a rated list of candidates (see Section 5.3.3 for the process of designating the chair). The rated list of candidates scores the most qualified/preferred candidate with a rating of #1, the second most qualified/preferred candidate with a rating of #2, and so forth. The ICAB representative may base their vote solely upon their own preferences or discuss the qualifications of candidates with their site’s community liaison or site CAB.

Staff liaisons are responsible for ensuring that their site’s voting ICAB member votes when requested. If necessary, the staff liaison may consult the voting ICAB member and submit a ballot on his/her behalf.
5.2.3 ICAB Participation Requirements

Members of the ICAB are expected to actively participate in bi-monthly conference calls. If the ICAB representative is unavailable, he or she should ensure that another site representative participates on the call.

ICAB members are expected to attend the annual IMPAACT Network Meeting and the ICAB face-to-face meetings. Upon their return, they shall report on both the community and scientific content of that meeting to their CAB.

Additionally, protocol-specific CABs may be established for some IMPAACT studies and are generally comprised of ICAB members from the CRSs conducting the particular study. Study-specific ICAB calls take place on a routine basis. Participation in protocol team and other network committee conference calls and meetings occur as appropriate.

The ICAB brings site CAB members together for networking, training, and capacity building. The ICAB facilitates information flow between community voices at the sites and the network.

5.3 ICAB Leadership Group (ILG)

The ILG provides guidance and support to the ICAB and advises IMPAACT leadership on matters concerning community engagement in all aspects of the IMPAACT research agenda. The ILG serves as a conduit of information between the IMPAACT ICAB, IMPAACT leadership, and IMPAACT scientific committees.

The ILG goals are to:

- Respond to time-sensitive requests for community input when it is not feasible to obtain a response from the full ICAB.
- Inform, facilitate, and guide the development of a community-centered, relevant, effective, and ethical research agenda.
- Proactively identify challenges related to community engagement and/or research implementation to ensure the ethical and scientific rigor of IMPAACT research.
- Through the ICAB chair,
  - Inform the IMPAACT SLG of the ICAB’s decisions, concerns, and activities.
  - Advise the IMPAACT SLG on strategies to address challenges and issues of concern.
- Develop mechanisms for sharing experiences, lessons learned, and best practices for community engagement in IMPAACT research.

5.3.1 ILG Standing Membership

The standing membership of the ILG include:

- Voting ILG members
  - ICAB chair
  - ICAB vice chair
  - Five at-large members
• Non-Voting ILG members
  – Operations Center Community Program staff
  – Emeritus ICAB chairs

5.3.2 ILG Membership Requirements

Although any member of the ICAB may be a part of the ILG, it is important that individuals representing the following groups be included:

• HIV-infected women of child-bearing age
• Mothers, fathers, and caregivers of HIV-infected and affected babies, children, and young people
• HIV-infected adolescents and young people

The qualifications of ILG members include:

• The ability to provide daily life-experience based expertise on living with HIV/AIDS
• The ability to read, speak, and write English at a conversational or fluent level
• Access to a computer with dependable internet capability, whether at home or the research site
• Access to a telephone with dependable service connection
• Time flexibility for participation in international conference calls (US time zones)
• A good history of past ICAB contributions, if applicable
• Strong public speaking and presentation skills
• A basic understanding of scientific protocols
• The ability to quickly respond to time-limited requests

Regional and Site Representation on the ILG

It is important that the ILG impartially represents communities from each geographical region that participates in IMPAACT research. For this reason, only one ICAB representative from any one CRS can serve on the ILG. This policy is ensured during the ILG solicitation and election process by:

• Alternating geographic representation between the ICAB chair and ICAB vice chair
• Making ineligible the participation in the ILG by the second ICAB representative from the same site as the ICAB chair
  – The ICAB chair position is not an elected position. Therefore, to ensure impartial representation within the ILG, the other ICAB representative at the site is not eligible to apply for a position within the ILG until after the ICAB chair’s one term of three years expires.
• When both the community representative and site liaison apply for a position within the ILG:
  – Only the community representative when both applicants from the same site are equally qualified, based upon the scoring results of the application and performance checklist, is included in the open election.
  – Only the applicant with the higher totaled score when the applicants from the same site are not equally qualified, based upon the results of the application and performance checklist, is included in the open election.

In the circumstance that the ILG’s membership is not composed of at least one representative from each geographical region (Africa, Asia, South America, and the United States), the ILG will petition volunteers from the unrepresented region(s) for assistance and guidance to ensure that any input and feedback into IMPAACT research and projects include the perspective of communities within all regions.
5.3.3 ILG Member Term Limits

ICAB Chair
After one term of three years, the ICAB chair moves into an emeritus chair role where he/she continues to actively participate in the leadership and direction of the ILG but through mentorship and guidance.

ICAB Vice Chair
After one term of three years, the ICAB vice chair automatically moves into the position of ICAB chair.

At-Large Members
At the end of one term of three years, an elected at-large ILG member may re-apply for a second term. At-large members may only serve up to two (2) consecutive three-year terms. Members who have served two consecutive terms must rotate off the ILG.

Emeritus Chair
The emeritus chair serves for one three-year term in which he/she actively participates in the leadership and direction of the ILG through mentorship and guidance. The emeritus chair is not a voting member of the ILG.

5.3.4 ILG Membership Selection Process

The positions of ICAB vice chair and the at-large membership of the ILG are filled through an open solicitation made to the full ICAB. Those interested in serving as an ILG member must complete a multi-component application process. This process is designed to identify the best qualified individuals from the pool of applicants.

The process may include:

1. Completion of an application form which assesses the desired qualification requirements for the position.
2. Submission of a performance checklist that is to be completed by either the site liaison or site principal investigator. The performance checklist evaluates the ICAB member’s performance and interaction with their site and site CAB by assessing:
   - Active participation and regular attendance in site CAB meetings
   - Responsiveness to emails and requests made by the site and/or CAB
3. Submission of a one (1) page Statement of Interest that clearly describes the candidate’s experience with HIV/AIDS, history working within a community advisory board structure, and any other information the candidate feels relevant and important to this selection process.

The IMPAACT Operations Center community program staff reviews all application packets using a rated checklist to convert responses into a numerical score. Candidates with the highest combined scores advance to the final stage of the application process which is an open election.

The voting membership of the ICAB are asked to vote for their preferred leadership group members by submitting a rated list of candidates (with a rating of #1 for the most qualified/preferred candidate, #2 for the second most qualified/preferred candidate and so forth). If the current ICAB chair is from the Americas region, the Africa or Asia region candidate with the most votes becomes the new ICAB vice chair. Likewise, if the current chair is from within the Africa or Asia region, the new vice chair is the candidate from the Americas with the most votes. The remaining candidate who receives the highest number of votes fills the position of the new ICAB vice chair.
5.3.5  ILG Roles and Responsibilities

The roles and responsibilities of the ICAB Leadership Group include:

- Developing mechanisms for sharing experiences, lessons learned and best practices for community engagement in IMPAACT research
- Collaborating with others in the IMPAACT Network Leadership to develop measurement criteria and tools for the evaluation of the IMPAACT Community Engagement Program
- Planning trainings in conjunction with the ICAB and IMPAACT Operations Center
- Seeking opportunities that allow IMPAACT CRS community staff to actively participate in the process of generating science as well as collaborate more closely with the Biomedical Science Working Group, Behavioral Research Working Group and protocol teams in supporting community-focused HIV prevention research

ICAB Leadership Group members participate in routine conference calls and periodic face-to-face meetings.

5.3.6  ILG Scientific Committee Representation

Each at-large ILG member serves as an ICAB representative to one of the five Network Scientific Committees (SC). The roles and responsibilities of the SC representatives are to:

- Review and provide feedback on all new capsules, concepts, and protocols that are in development within the SC
- Inform and advise the ILG on issues of concern
- Participate in face-to-face Scientific Committee meetings
- Regularly participate on all SC conference calls

5.4  IMPAACT Site Community Advisory Boards

Typically, a CRS obtains community input into the research process through its CAB, although a CRS may refer to this structure by any locally chosen name or establish an alternative structure. Community representatives provide input to protocol teams, particularly in reviewing protocols in development, adapting sample consent forms for local use and developing other study-related materials.

ICAB representatives submit a bi-monthly site update report form to the Operations Center Community Engagement Program staff. The site update report form captures the site CAB’s activities, accomplishments, and challenges that can be shared with the full ICAB for cross-learning and development. Routine CAB updates are also provided on ICAB conference calls.

To ensure their autonomy and to reduce possible conflicts of interest, CAB members are volunteers from the CRS community and are not paid staff members at the site. They must adhere to CAB by-laws and governance regarding roles, responsibilities and meeting attendance. They are expected to participate meaningfully so that issues requiring community dialogue can receive appropriate attention. CAB members and community partners involved in review of protocols and related documents sign a statement of confidentiality to ensure the confidentiality of proprietary information and to protect members and study participants from HIV-related stigma.

The CRSs support CAB members as they share their community expertise and gain new skills through face-to-face meetings and conference calls. CAB members are reimbursed for legitimate costs associated
with participating in the advisory process, such as transportation, childcare and meals, at a level deemed appropriate by the individual CRS. This reimbursement should not be construed as payment. The CRS staff and other IMPAACT members (such as Clinical Trials Specialists, protocol chair, protocol team members, the IMPAACT Statistical and Data Management Center or the IMPAACT Laboratory Center) who are conducting training or assessment visits at study sites should be available to participate in CAB meetings as needed. The CRSs are expected to support representatives of the CAB participating in the IMPAACT meetings, protocol-specific training, and community workshops.

5.5 Community Input into the Protocol Development Process

Note: Please see IMPAACT MOP Section 9 for full details of the IMPAACT protocol development process. Community reviews of developing IMPAACT research occur during each phase of the protocol development process.

5.5.1 Capsule and Concept Development

The research development process begins within the IMPAACT SCs. Typically, a one week review period is allotted for review and feedback within each SC prior to voting for further development. Once a capsule or concept is given to the SC for review, the ICAB SC representatives should immediately share the document with the ILG. ILG members then review and provide written feedback on the research document to the SC representative within five days of receipt. The SC representative summarizes all ILG comments and submits them to the SC chair/vice chair, clinical trials specialist (CTS), and proposing investigators through the electronic voting system. A written copy of the summarized comments is also shared with the ILG.

The ICAB chair, serving as the ICAB representative on the IMPAACT SLG, shares the community’s feedback with the SLG at the appropriate time.

5.5.2 Protocol Development

Critical input is sought from site representatives, community representatives, and other stakeholders throughout the process as needed to ensure both the appropriateness and the operational feasibility of the study. When a protocol has reached the stage of development where it is ready for submission to the IMPAACT Multidisciplinary Protocol Review Group (MPRG), the draft protocol is sent to the full IMPAACT Community Advisory Board for review and comment. ICAB comments are consolidated and provided to the ICAB representative to the MPRG. The MPRG representative submits the collective ICAB comments to the MPRG for consideration and response.

5.6 Cross Network Collaborations and Community Partners

The ICAB works with other Division of Acquired Immune Deficiency Syndrome (DAIDS) research networks by having representation on the DAIDS’s HIV/AIDS Network Collaboration (HANC) Community Partners group. Community Partners (CP) promotes effective representation of the many communities within which the NIH/NIAID-sponsored HIV clinical trials networks conduct research. ICAB members selected and appointed to CP participate in monthly conference calls and online tools such as email and a web portal system that allows for document collaboration and discussion boards.

The ICAB works with HANC Community Partners, other research/community groups and organizations when it deems the partnership beneficial to IMPAACT. The ICAB identifies and selects members to work on these collaborations. Opportunities for cross-network collaborations are encouraged within the ICAB.
ICAB members may also collaborate with other community groups from National Institutes of Health (NIH) and non-governmental organizations (NGOs). Through these relationships, the ICAB identifies HIV/AIDS research needs and issues across networks and institutes and works toward effective resolution of these needs and issues.
6 NETWORK MEETINGS AND COMMUNICATIONS

Communication and information dissemination are critical to the successful management of a large, international, multicenter network such as the International Maternal Pediatric Adolescent AIDS Clinical Trial Network (IMPAACT). IMPAACT uses a variety of approaches to enhance communication within the Network about study-specific and network-wide research initiatives. The Operations Center supports and coordinates much of the communications within IMPAACT through conference calls, in-person meetings, electronic and written materials, and announcements and postings through IMPAACT’s website. The website serves as a main driver of general and public communication, where study-specific information and postings about Network-wide activities can be found.

6.1 In-Person Meetings

6.1.1 Annual Network Meeting

In collaboration with the IMPAACT leadership, the Operations Center organizes an annual Network meeting to bring together IMPAACT members and collaborators to discuss study designs and research goals, review data from ongoing trials, examine cross-cutting issues, and provide an overview of the IMPAACT scientific agenda. In addition, the meeting provides opportunities for training, identifying key issues, defining and discussing Network procedures, and clarifying roles and responsibilities of IMPAACT members. The meeting generally includes plenary sessions to update IMPAACT members on the latest scientific research related to the Network’s mission and agenda. The Network Scientific Leadership Group (SLG), Management Oversight Group (MOG), Scientific Committees (SCs), IMPAACT Community Advisory Board (ICAB), and protocol teams schedule meetings in conjunction with this yearly event.

The Operations Center is responsible for the overall logistics of the meeting; preparation of agendas and background materials; and subsequently, dissemination of any required materials for the SLG, MOG, SCs, protocol teams, and protocol-specific sessions in collaboration with the chair of the respective committee, team, or group. Additionally, the annual Network meeting may provide NIH training opportunities.
6.1.2 Leadership Retreats

As described in Section 2, Network leadership groups (SLG, MOG, and SCs) may convene in-person meetings, which are generally held annually. The purpose of these meetings is to discuss the priorities and direction of the IMPAACT Network. The Operations Center is responsible for the overall logistics of the retreat including preparation of agendas and background materials.

6.1.3 Protocol Team Meetings

In addition to routine conference calls, protocol teams may meet in-person during protocol development to facilitate the process, with the appropriate timing to be discussed and agreed upon by the team, as described in Section 9. The Clinical Trials Specialist (CTS) assigned to the protocol with assistance from other Operations Center staff will be responsible for the overall logistics of the meetings and conference calls including polling for call times and distribution of agendas, background materials and documentation of key decisions and action items. Protocol teams may also hold in-person meetings during the annual network meeting, as needed.

6.2 Communications

6.2.1 Conference Calls

Conference calls are used extensively to facilitate the Network’s research activities. For each call, toll-free numbers are provided to all US participants and, when available, to non-US participants. Where a toll-free number is not available, the Operations Center will make every effort to dial out to international participants.

Routine schedules of calls are established for various IMPAACT groups and committees. As needed, Operations Center staff query IMPAACT members involved in protocol or committee work to schedule conference calls or meetings. Prompt response to these scheduling requests is required for efficient set-up of conference calls.

The Operations Center provides a broad range of administrative support for conference calls; preparation and/or distribution of call agendas and pre-meeting materials; sending email meeting reminder notices; and preparation, distribution, and archiving of conference call summaries. As part of their support of these groups, Operations Center staff generally document and distribute summaries of SLG, MOG, SC, protocol team, and other Network conference calls.

In addition, webinar support may be provided to allow for interactive slide presentations and other media rich methods for sharing of information and data.

6.2.2 Material Distribution

Staff of the IMPAACT central resources (Leadership and Operations Center, Statistical and Data Management Center [SDMC], and Laboratory Center) disseminate IMPAACT information and study materials using a variety of techniques including email, website postings, mail, and express mail services. To ensure information transfer, each Network organization must:

- Have the capacity to send, access, and receive materials distributed using the above techniques
- Ensure that IMPAACT communications and materials are distributed to all appropriate staff members
- Maintain all key study and IMPAACT communications in a well-organized filing system
Key IMPAACT information is posted on the public IMPAACT website for access by all Network members. Information from central resources and from the National Institutes of Health (NIH) is included and maintained regularly to ensure timeliness of material availability and dissemination. Other websites with information relevant to the Network include:

- DAIDS Regulatory Support Center (RSC): https://rsc.niaid.nih.gov/
- US Food and Drug Administration (FDA): http://www.fda.gov/
  - National Institute of Allergy and Infectious Diseases (NIAID): https://www.niaid.nih.gov/
  - Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD): https://www.nichd.nih.gov/
- Office of Clinical Site Oversight (OCSO): https://www.niaid.nih.gov/about/division-aids-overview

6.2.3 Network Website

The IMPAACT website (http://impaactnetwork.org) provides a wide range of materials.

The general philosophy governing the design, maintenance, and content of the website is to provide a site that (1) contains useful and up-to-date information on the Network organization and studies; and (2) accommodates various internet connections and software and hardware limitations across this multinational Network.

Documents available on the IMPAACT website are to be in PDF unless otherwise noted. All documents generally open in new windows, thus providing browsers with easy access back to the main website. Information on the IMPAACT website is updated frequently. This may include posting IMPAACT protocols, letters of amendments, full protocol amendments, and study-specific materials including laboratory processing charts, manual of procedures, training, and study implementation materials. Study-specific pages are developed to suit the needs of each particular study. An updated list of site names and numbers and a list of protocols (numbers and titles) that includes participating sites and status of each study is also posted. The website also features a searchable IMPAACT publications database.

The design and maintenance of the IMPAACT website is the responsibility of the Operations Center. Questions and comments on the website may be sent to: IMPAACT.webcontact@fstrf.org.

6.3 Release of Information to the Public

6.3.1 Public Information Policy

Investigators and site staff may have access to proprietary and sensitive information as a result of their participation in IMPAACT protocols. The following guidelines relate to disclosure of product and study-related information to the public. These guidelines are in keeping with the policies and procedures of the DAIDS Office of Program Operations and Scientific Information, the NIAID Office of Communications and Government Relations (OCGR), and the NIAID News and Public Information Branch (NPIB).

Inquiries from the press, community representatives, and public officials concerning general study status may be addressed by the study investigators to whom questions are directed to; however, investigators
may not independently provide public comments related to study outcomes or adverse events. Such activities are to be coordinated between the protocol team and the sponsor.

Press inquiries more specifically or generally about IMPAACT activities should be referred to the Network leadership and DAIDS.

Proprietary information about study products in development or used in a trial conducted under an Investigational New Drug (IND) application may not be discussed publicly by anyone without written permission of the product’s manufacturer.

6.3.2 Disclosure of Study Results

In general, results from multi-site studies are not released until completion of the study at all participating sites. Any exceptions to this policy require explicit approval of the Network chair, SDMC PI, Operations Center Director as well as the protocol chair and SLG.

The release of study results provides an opportunity to share findings that could influence the standard of care in the communities where IMPAACT studies are conducted or the design and/or conduct of ongoing or future trials. As outlined in Sections 14 and 19, the protocol team creates a study results communications plan well before the end of the study. The plan identifies key members of the communication team (i.e., protocol chair, protocol statistician, designated spokespeople, etc.) and their roles, specifies the timeline and activities planned for release of the study results within the team and externally, and identifies the key stakeholders (protocol team members/site staff, sponsors, community advisory boards, host country officials, collaborating institutions, other US government and non-US public health agencies, and investigators/sponsors of other studies that may be impacted by the study results) to be informed of the results. Disclosure of study results, particularly of Phase IIb/III trials, by the protocol statisticians to study investigators, other protocol team members, IMPAACT leadership, and sponsors should be part of the study communications plan.

Results are released to host country officials, study participants, community representatives, sponsoring industry collaborators, relevant non-governmental organizations, and other governments in an accurate, well-controlled, and timely manner. Ideally this will happen before, or at the same time, as the results are released to the general public.

Particular care is to be taken to coordinate release of results with officials in host countries and in the communities where the study was conducted.

See the IMPAACT Publications Requirements and Procedures, Section 19, for additional details related to disclosure of study results.

6.3.3 Press Releases and Public Announcements

All Network-related press releases and public statements will be developed or approved by NIAID, NICHD, and NIMH and, as appropriate, by its co-sponsors. When such materials are developed by the sponsor(s), the DAIDS Medical Officer and IMPAACT Operations Center will coordinate review by Network and/or study leaders as needed. When these materials are developed within the Network, the DAIDS Medical Officer and IMPAACT Operations Center will ensure that they are reviewed and approved by required groups. Before any materials undergo NIH review, the IMPAACT Operations Center ensures they have been reviewed and/or approved by relevant parties within the Network. Study-related press releases and materials must be approved by the protocol chair and the IMPAACT Network chair.
To ensure accuracy of information and proper identification of IMPAACT, NIH, and other funding sources, all press releases generated by the Network must be reviewed by the IMPAACT Operations Center, which will coordinate additional review by the appropriate funding institutes, as necessary. Investigators should allow sufficient time for this process.

When study results are to be published or presented at a scientific meeting, the IMPAACT Operations Center in collaboration with NIH and other relevant sponsors may coordinate press announcements with the authors and the publishing journal or scientific meeting organizer to comply with all required embargo guidelines. For studies conducted under a Clinical Trials Agreement (CTA) with a product manufacturer, the publication guidelines and procedures described in the CTA also must be followed. In cases of specific points of discordance between CTA requirements and this policy, the CTA requirements shall be followed.

All press releases, statements, and public announcements must properly acknowledge that the activities of the IMPAACT Network are performed cooperatively with NIAID, NICHD, and NIMH.

The IMPAACT Operations Center ensures that NIAID, NICHD, and NIMH program leadership and their respective communications offices are notified in advance of all IMPAACT news releases and statements before they are publicly disseminated.
Section 7, General Policies and Procedures, is not yet available.
8 HUMAN SUBJECTS CONSIDERATIONS

8.1 Applicable US Federal Regulations and Guidelines

IMPAACT studies are funded by the United States (US) National Institutes of Health (NIH) and therefore they must be conducted in accordance with applicable sections of the US Code of Federal Regulations (CFR) as described below.

**CFR Title 45, Part 46 (45 CFR 46):** All IMPAACT studies must be conducted in accordance with 45 CFR 46 entitled “Protection of Human Subjects,” which includes subparts related to:

- Review of research by Institutional Review Boards/Ethics Committees (IRBs/ECs)
- Requirements for obtaining and documenting informed consent
- Additional protections and requirements when the following types of human subjects are involved in research:
  - 45 CRF 46 Subpart B: Pregnant women
  - 45 CRF 46 Subpart B: Fetuses
  - 45 CRF 46 Subpart B: Neonates
  - 45 CRF 46 Subpart D: Children
  - 45 CRF 46 Subpart C: Prisoners
Health Insurance Portability and Accountability Act (HIPAA): US sites participating in IMPAACT studies must also comply with CFR Title 45, Parts 160 and 164, which cover “Standards for Privacy of Individually Identifiable Health Information” (also known as the “Privacy Rule”), which include subparts related to:

- Standards for use and disclosure of protected health information (PHI)
- Authorizations to use and disclose PHI or waivers of authorization
- Tracking of PHI uses and disclosures

Investigational New Drug (IND): IMPAACT studies conducted under an IND application are subject to additional regulation by the US Food and Drug Administration (FDA) and must be conducted in accordance with:

- 21 CFR 11 Electronic Records, Electronic Signatures
- 21 CFR 50 Protection of Human Subjects
- 21 CFR 54 Financial Disclosure by Clinical Investigators
- 21 CFR 56 Institutional Review Boards
- 21 CFR 312 Investigational New Drug Application
- 21 CFR 314 Applications for FDA Approval to Market a New Drug

Form FDA 1572: The Investigator of Record (IoR) is the individual at each site for an IMPAACT study who is responsible for ensuring that a clinical trial is conducted in accordance with the protocol, applicable U.S. federal regulations, in-country regulations and any provisions imposed by the reviewing IRB/EC/other regulatory entity. This person is the signatory for the Form FDA 1572 for studies conducted under an IND (or the Division of AIDS [DAIDS] Investigator of Record Form for non-IND studies).

The IoR is required to sign either a Form FDA 1572 (for IND studies) or a DAIDS Investigator of Record Form (for non-IND studies) to formally document agreement to conduct the study in accordance with the study protocol and applicable US regulations. The forms are completed and submitted to the DAIDS Protocol Registration Office (PRO) as part of the protocol registration process described in Section 11. The forms are available at https://rsc.niaid.nih.gov/clinical-research-sites/protocol-registration-forms, and guidance for completing them is provided in the DAIDS Protocol Registration Manual, which is available at https://rsc.niaid.nih.gov/clinical-research-sites/daids-protocol-registration-policy-and-procedures-manual.

In addition to signing either the Form FDA 1572 or the DAIDS Investigator of Record Form, the IoR must sign a study-specific Protocol Signature Page to formally document agreement to conduct the study in accordance with the protocol and all applicable protocol related documents and in compliance with US regulations; standards of the International Council for Harmonisation (ICH) Guideline for Good Clinical Practice (GCP); IRB/EC determinations; all applicable in-country, state, and local laws and regulations; and other applicable requirements and institutional policies.

8.2 International Council for Harmonisation Guideline for Good Clinical Practice

DAIDS requires that all IMPAACT studies be conducted in accordance with the ICH Guideline for GCP, which is available at http://www.ich.org/products/guidelines/efficacy/article/efficacy-guidelines.html.
8.3 Human Subjects Protection (HSP) Training

IMPAACT sites must comply with the DAIDS policy on Human Subjects Protections (HSP) and GCP Training Requirements, which is available at https://www.niaid.nih.gov/research/daids-clinical-site-implementation-operations.

For all site key personnel, required training must have been completed within three years prior to participating in IMPAACT research and must be repeated every three years. For new site key personnel, documentation of required training must be completed within 90 days of assignment to an IMPAACT study and prior to functioning without direct supervision.

The DAIDS glossary defines key personnel as individuals that are involved in the design and conduct of human-subjects clinical research funded by the NIH. More specifically, this includes any site personnel who have more than minimal involvement with the conduct of the research (such as performing study evaluations or procedures or providing the study intervention) or more than minimal contact with study participants or confidential study data, records or specimens that are related to study conduct.

All other personnel who have minimal involvement in the conduct of the research or minimal study-related contact with participants should receive training that emphasizes the protection of participant privacy and confidentiality. Minimally involved personnel includes drivers, couriers, clerical staff, and administrative staff.

Several acceptable training resources and methods are described in the DAIDS policy, including NIAID Learning Center training modules which can be accessed at https://learningcenter.niaid.nih.gov. Other options and additional guidance related to training are included in Section 16.

As a condition for site-specific study activation, IoRs must document that all study site staff are appropriately qualified and trained to carry out their delegated duties. IoRs also must maintain adequate documentation of staff having completed required training. Documentation of HSP training must be maintained on site and made available upon request to DAIDS personnel, study monitors, sponsor or regulatory authority representatives, site IRBs/ECs, and other US, local, and international regulatory entities.

8.4 IRB/EC Review and Approval

All IMPAACT studies must be reviewed and approved by IRBs/ECs responsible for oversight of research involving human subjects conducted at a site. A responsible IRB/EC registered with the US Office for Human Research Protections (OHRP) under a Federal Wide Assurance (FWA) must oversee IMPAACT research conducted at each site. In many cases, more than one IRB/EC are involved, for example, if a site is funded through a US institution with one or more sites in other countries. In such cases, all responsible IRBs/ECs must review and approve all required study-related documentation (as described further below). All studies must be reviewed and approved by all responsible IRBs/ECs prior to the initiation of study implementation. Thereafter, all studies must undergo continuing review at least annually.

All IRBs/ECs responsible for oversight of a given study must be listed on the Form FDA 1572 or the DAIDS Investigator of Record Form signed by the IoR.

The IRBs/ECs responsible for oversight of IMPAACT studies must meet the requirements of 45 CFR 46 and 21 CFR 56 (as applicable) and must be associated with an institution/organization that has received an FWA from OHRP, which formalizes the institution’s commitment to protect human subjects. Additional information related to assurances is available on the OHRP website.
US regulations and the ICH Guideline for GCP specify the documents that sites are required to submit to their IRBs/ECs when obtaining initial and continuing review. Some IRBs/ECs may require additional documentation in support of their reviews; sites must comply with all IRB/EC requirements.

Documentation of all submissions to and all approvals from all responsible IRBs/ECs — and any other IRB/EC correspondence — must be maintained in on-site Essential Document files for each study. In addition, DAIDS requires submission of IRB/EC approval documentation and other documents to the PRO using the DAIDS Protocol Registration System (DPRS). Further information on the protocol registration process is provided in Section 11 and in the DAIDS Protocol Registration Manual. DAIDS requires all IRB/EC approval documentation to be labeled with the full protocol title, including the network protocol number, the DAIDS study ID number, the protocol version number, and the protocol version date. Although not required, sites are encouraged to request that IRBs/ECs note the effective and expiration dates of all approvals.

Table 8-1. Required IRB/EC Submissions for Initial Review and Approval (Prior to Study Initiation)

<table>
<thead>
<tr>
<th>Documents Sites Must Submit to IRB/EC</th>
<th>Written Approval Required*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol Version 1.0 (or first implementation version of the protocol, if not Version 1.0)</td>
<td>Yes</td>
</tr>
<tr>
<td>Site-specific Informed Consent Forms (ICF) and Assent Forms</td>
<td>Yes</td>
</tr>
<tr>
<td>Note: IMPAACT study informed consent forms typically contain information on participant reimbursement amounts and schedules; however, these may be approved through submission of separate materials.</td>
<td></td>
</tr>
<tr>
<td>Investigator's Brochure(s)** or Package Inserts**</td>
<td>No</td>
</tr>
<tr>
<td>Other Safety-related Information (if applicable)</td>
<td>No</td>
</tr>
<tr>
<td>Investigator of Record Current Curriculum Vitae</td>
<td>Yes</td>
</tr>
<tr>
<td>Participant Recruitment Materials Developed Prior to Study Initiation</td>
<td>Yes</td>
</tr>
<tr>
<td>Other Written Information for Study Participants Developed Prior to Study Initiation</td>
<td>Yes</td>
</tr>
<tr>
<td>Other Documentation Required/Requested by the IRB/EC</td>
<td>If required by IRB/EC</td>
</tr>
</tbody>
</table>

*Based on U.S. regulations and the ICH Guideline for GCP, written approval is required for these documents. Additional approvals may be required by IRB/EC policies and procedures. If so, the required approvals must be obtained and filed.

**Required for studies with investigational products

Note: All documents must be submitted to all IRBs/ECs responsible for oversight of study implementation at the site. Documentation of all submissions and approvals from all responsible IRBs/ECs must be maintained in on-site Essential Document files.

45 CFR 46.109 requires that research be subject to continuing IRB/EC review at intervals appropriate to the degree of risk, but not less than once per year.

IoRs are responsible for ensuring timely submission of continuing review requests to IRBs/ECs so that no lapse in approval occurs for ongoing studies. The CTU PI is responsible for ensuring that the IoR fulfills this responsibility. As specified in the DAIDS Protocol Registration Manual, if a lapse occurs, the research at the site must stop, unless the IRB/EC finds that it is in the best interest of individual participants to continue participating in the research interventions or interaction. Enrollment of new participants cannot occur after the expiration of IRB/EC approval(s). Sites should contact their appropriate Institute representative and/or Institute Program Officer when there is any lapse and for
additional guidance and information. Sites should submit IRB/EC lapse documentation (i.e., the site's
documentation of the lapse to the IRB/EC and the IRB/EC's response) to DAIDS PRO.

Continuing reviews must be conducted consistent with all applicable US and local regulations and
IRB/EC policies and procedures. IoRs must submit documentation for review consistent with these
regulations, policies, and procedures. IoRs must also submit documentation of continuing review to
DAIDS PRO through the DPRS.

8.5 Other Regulatory Entities

In addition to oversight by IRBs/ECs, research conducted at many IMPAACT sites is subject to oversight
by other regulatory entities. The DAIDS Protocol Registration Manual defines this type of entity as “Any
group other than the local IRB/EC responsible, for reviewing and/or approving a clinical research
protocol and site-specific informed consent forms (ICFs) prior to implementation at a site. For example,
in some states within the US, institutional approvals are required since these states have research
regulations in addition to the federal human subjects protection regulations detailed in US federal
regulations (45 CFR 46). In addition, at many non-US sites, other approvals may be required in addition
to the local IRB/EC approval, which include but are not limited to approvals from ministry of health,
national regulatory agency, in-country drug control council, national IRB/EC, or other government
agency.”

All regulatory entities responsible for oversight of a given study must be listed on the Form FDA 1572 or
the DAIDS Investigator of Record Form signed by the IoR.

IoRs are responsible for preparing submissions to and obtaining required initial and continuing review
approvals from regulatory entities and for submitting documentation of the required approvals to DAIDS
PRO through the DPRS.

8.6 Informed Consent and Assent

Informed consent is a process by which an individual voluntarily expresses his/her willingness to
participate in research, after having been informed of all aspects of the research that are relevant to the
decision. In the remainder of this section, persons who provide informed consent are referred to as
“consenter.” These individuals may be study participants themselves or the parents, legal guardians, or
legally authorized representatives of study participants.

Written informed consent must be obtained before any study-specific procedures are performed with a
potential study participant. For many IMPAACT studies, written assent must also be obtained from
potential participants who are not of legal age or are otherwise not able to provide independent informed
consent. All site staff involved in obtaining informed consent and assent must be designated on the study-
specific delegation of duties log and listed on the Form FDA 1572 or DAIDS Investigator of Record
Form for the study. These staff must be qualified by education, experience, training, and knowledge of the
study, as determined by the IoR, and appropriate training documentation must be available to support the
IoR’s delegation of responsibility for obtaining informed consent to these staff. See Section 11 for
additional guidance related to the delegation of duties log.

For some IMPAACT studies, informed consent for both screening and enrollment is obtained in one step.
For other studies, informed consent is first obtained for screening, and then informed consent for
enrollment is obtained (in a second step) from participants found to be eligible during the screening
process. Informed consent may also be requested for additional or optional procedures or for storage and
possible future research use of biological specimens. Consenters may decline consent for optional
procedures and still participate in a given study. ICFs may have separate sections to describe these procedures and separate signature blocks to document consent decisions for these procedures. Alternatively, a separate ICF may be used. Whenever a study involves human genetic testing, consenters must be provided with options to either consent to or decline this testing.

Because informed consent is considered an ongoing process, key elements of informed consent should be reviewed at all study follow-up visits.

For studies conducted at US sites, additional authorization to use or disclose protected health information may be required if the site is regarded as a “covered entity” under HIPAA, and therefore subject to the Privacy Rule. This additional authorization may be included as part of the study ICF or may be a separate document. Authorization to use or disclose Protected Health Information must be approved by a responsible Privacy Board for the covered entity. The Department of Health and Human Services (DHHS) Office for Civil Rights (OCR) has developed tools to help entities determine whether they are covered entities and subject to the HIPAA.

The DAIDS policy on DAIDS Review of Informed Consent Forms; Impact of HIPAA Privacy Rule clarifies how DAIDS informed consent reviews and protocol registration will be managed in the context of HIPAA. DAIDS will review ICFs for compliance with the Common Rule and US FDA regulations and DAIDS requirements, but not for Privacy Rule compliance.

Informed consent is rooted in the ethical principle of respect for persons. It is not merely a form or a signature, but a process involving information exchange, comprehension, voluntariness, and documentation. Each of these aspects of the informed consent process is described below. Additional informed consent process information promulgated by DAIDS is available at https://rsc.niaid.nih.gov/clinical-research-sites/informed-consent-process-information. Refer to Section 4.8 of the ICH Guideline for GCP and the informed consent section of the DAIDS policy on Requirements for Source Documentation in DAIDS Funded and/or Sponsored Clinical Trials for further information, which is available at https://www.niaid.nih.gov/research/daids-clinical-site-implementation-operations.

All IMPAACT sites must establish and maintain standard operating procedures (SOPs) for obtaining informed consent and assent that address all aspects of the informed consent and assent processes consistent with all applicable regulations and guidelines, DAIDS policies and procedures, and site IRB/EC policies and procedures; sites should also note that SOPs may need to be modified and/or augmented to meet individual IMPAACT study protocol specifications (e.g., in study-specific addenda). Additional key considerations for SOPs established for IMPAACT studies include methods for:

- Ascertaining whether a potential participant is of legal age or is otherwise able to provide independent informed consent
- Ascertaining legal guardianship
- Obtaining assent from participants who were enrolled prior to the age of assent
- Obtaining informed consent from participants who were enrolled prior to the age of independent informed consent
- Ascertaining whether a consenter is literate and who may serve as a witness to informed consent processes conducted with illiterate consenters
- Ascertaining comprehension before proceeding to an informed consent decision

Sites are encouraged to incorporate Community Advisory Board (CAB) input into these SOPs and to seek IRB/EC review and approval of these SOPs.
US regulations (45 CFR 46 and 21 CFR 56) specify the elements of informed consent that must be conveyed to consenters through the informed consent process. It is the responsibility of the IoR, and by delegation all study staff involved in conducting the informed consent process, to deliver all required information to consenters. Based on the reviews completed as part of the IMPAACT protocol development and study activation processes, there is assurance that once a site is activated for an IMPAACT study, a site’s ICFs include all information required by the regulations. However, responsibility for informed consent does not end with preparation of an adequate ICF. It also is the responsibility of the IoR and designated study staff to:

- Deliver all required information in a manner that is understandable to the consenter
- Assure that informed consent is obtained in a setting free of coercion and undue influence
- Confirm that the consenter comprehends the information
- Document the process

Further guidance related to each of these requirements and processes is provided in the subsections below.

**8.6.1 Deliver all Required Information in a Manner that is Understandable to the Consenter**

The informed consent process should be conducted in the consenter’s preferred language and should reflect whether the consenter is determined to be literate per site SOPs.

If the consenter is literate, begin the informed consent process by providing the consenter with a copy of the ICF to read. Also provide the consenter with any other informational materials developed to complement the ICF. If the consenter is not literate, read the materials to the person. After the consenter has read the materials (or had them read to the consenter), verbally review the information provided. A checklist or the ICF itself may serve as a useful guide for this. For example, note the main points described in each paragraph of the ICF and ask if the consenter has questions or concerns about each point. Listen carefully to the questions and/or concerns expressed by the consenter and discuss these thoroughly. Take as much time as needed to address each question or concern.

If the consenter is not literate, an impartial literate witness must be present during the entire informed consent process. See Section 8.7.1 below for more information regarding illiterate participants.

**8.6.2 Assure that Informed Consent is Obtained in a Setting Free of Coercion and Undue Influence**

During informed consent discussions, take care to not overstate the possible benefits of the study, nor to understate the risks. Also describe the alternatives to study participation and emphasize that the availability of medical care and other services (outside the study) will not be affected by the consenter’s decision whether to take part in the study. Encourage the consenter to take as much time as needed — and to talk about study participation with others if the consenter chooses — before making a decision.

When a witness is present during the informed consent process, care should be taken to minimize the perception of coercion due to the presence of the witness. For example, the purpose of having the witness present should be clearly explained to the consenter, with emphasis on the fact that the witness is there as a protection for the consenter, not as an agent of the study per se.
8.6.3 Confirm that the Consenter Comprehends the Information

The consenter must not be asked to agree to take part in the study, or to sign or make his/her mark on the ICF, until he/she fully understands the study. Study staff are responsible for ensuring that each consenter understands all aspects of study participation before signing or marking the ICF.

A variety of approaches can be taken to assess comprehension. Unless a specific method is designated as required to be used in a given study, methods used should be as specified in site SOPs. These methods may include a semi-structured checklist to guide a discussion in which the consenter responds to open-ended questions designed to elicit understanding of key concepts; other types of documented discussions with the consenter; and structured knowledge quizzes administered to the consenter.

Regardless of the method used to assess comprehension, if the assessment indicates misunderstanding of aspects of the study, study staff should review those aspects again until the consenter fully understands them. If after additional review and discussion the consenter is not able to demonstrate adequate understanding, the consenter should not be asked to sign or mark the ICF. Similarly, if the consenter has concerns about possible adverse impacts if he/she were to provide consent, or indicates that he/she may have difficulty adhering to the study requirements, the consenter should not be asked to sign or mark the ICF unless or until such issues can be resolved to the satisfaction of the consenter and the IoR or designee.

8.6.4 Document the Process

US regulations require that informed consent be documented through the use of a written ICF approved by the responsible IRBs/ECs and signed and dated by the participant or the participant’s legally authorized representative at the time of consent. In general, the same documentation conventions that apply to informed consent processes are expected to apply for assent processes.

All signature and date blocks on the ICF should be completed in ink. Legal names should be used. Fabricated/falsified names should never be used. Initials may not be used in place of a consenter’s full surname, and it is strongly recommended that initials not be used in place of a consenter’s full first name. However, if a consenter commonly signs his/her name using an initial for his/her first name, the initial may be used, provided this practice is acceptable per the policies of the site institution(s). Character symbols (e.g., Chinese characters) are acceptable in countries that use them.

If the consenter is not literate, the witness who was present during the informed consent process must sign and date the ICF to attest that the information in the consent form and any other written information was accurately explained to, and apparently understood by, the consenter, and that informed consent was freely given by the consenter.

The DAIDS policy on Requirements for Source Documentation in DAIDS Funded and/or Sponsored Clinical Trials lists detailed requirements and suggestions for documenting the informed consent process. Sites must comply with all requirements and are encouraged to comply with all suggestions. To assist with compliance, study staff may use informed consent coversheets (or other similar tools). Sites choosing to use coversheets should identify the coversheets as source documents in their SOPs for source documentation and should use the coversheets consistently to document each informed consent process conducted with each consenter. All informed consent documentation must be maintained on file in participant study records.

In addition to completing the documentation requirements of the ICF itself, each informed consent process should be documented in a signed and dated chart note. The note should document that informed
consent was obtained before conducting any study procedures. The note also should document adherence to the requirements of the informed consent section of the DAIDS policy on Requirements for Source Documentation in DAIDS Funded and/or Sponsored Clinical Trials. However, if an informed consent coversheet (or other similar tool) is used, it is not necessary to transcribe information recorded on the coversheet (or other tool) into the chart note.

Data required to document informed consent and assent decisions will also be entered into study-specific eCRFs.

Regulations require that consenters be given a copy of their signed ICF. If a consenter opts not to receive a copy, this should be documented, and the consenter should be offered an alternate form of study contact information (e.g., a contact card or appointment card) in lieu of the full ICF. The same approach should generally be taken, when applicable, with assent forms.

8.6.5 Reconsenting

As indicated above, IMPAACT site SOPs for obtaining informed consent should describe methods of obtaining assent from participants who were enrolled prior to the age of assent and for obtaining informed consent from participants who were enrolled prior to the age of independent informed consent. IoRs and designated study staff are responsible for determining when previously-enrolled study participants reach the age of assent and/or the age of independent informed consent and for conducting and documenting required assent and informed consent processes with these participants. As assent and consent requirements change over time with participant age, the most up-to-date assent and consent decisions are taken to apply. For example, if a participant previously-enrolled at 16 years of age is not willing to provide written informed consent for continued study participation when she reaches 18 years of age, her decision should be taken to override the prior consent decision made when she was first enrolled in the study.

Over the course of a study, new information may become available that may affect prior informed consent and assent decisions. For example, protocol-specified procedures may be modified or new safety- or risk-related information may come to light. In such cases, the study protocol, sample ICFs, and sample assent forms are typically amended, and study staff are required to obtain re-consent (and re-assent if applicable) for the continued study participation of previously-enrolled participants. Further detailed written guidance on re-consenting and re-assenting requirements is typically provided to sites by the protocol team. In addition, in August 2018, DAIDS issued a memorandum (Timing of consent and re-consent with updated IRB/EC/RE-approved informed consent forms, dated 20 August 2018) on the expected timing of re-consent. In general, re-consenting is expected to occur immediately (in a timely manner and without delay) upon obtaining all required IRB/EC and regulatory entity approvals of revised ICFs (and assent forms), usually by or at the participant’s next study visit.

8.6.6 Storage of Informed Consent Forms

IMPAACT sites must maintain, in a confidential and secure manner, the complete, original, signed and dated ICFs (and assent forms if applicable), of all persons who are screened for and/or enrolled in IMPAACT studies, in accordance with the specifications of the study protocol and the study-specific manual of procedures (see also Section 8.8).
8.7 Special Populations

8.7.1 Additional Considerations for Illiterate Consenters

US regulations and the ICH Guideline for GCP specify additional protections that must be in place when obtaining informed consent from illiterate consenters. A witness who is literate in the language in which the informed consent discussion is conducted must be present during the entire informed consent process undertaken with an illiterate consenter. The ICH guideline identifies an impartial witness as a person who is independent of the study and cannot be unfairly influenced by people involved with the study. This witness need not be totally unaffiliated with the study. It may be possible, for example, to designate a ‘subject advocate’ who would be available at each site. The witness will sign and date the ICF to attest that the information in the consent form was accurately explained to, and apparently understood by, the consenter, and that informed consent was given freely by the consenter. Site SOPs for obtaining informed consent should specify procedures to be followed when obtaining informed consent from illiterate persons and should define who may serve as the witness to the informed consent process. Refer to Figure 8-1 for a summary of considerations for obtaining informed consent from illiterate consenters. Figure 8-2 provides an example of completion of informed consent signature blocks for illiterate consenters.

Additional considerations for documenting the informed consent process for illiterate consenters are as follows:

- The study staff member who conducts the informed consent process should document the consenter’s illiteracy in the study chart.
- Unless other conventions that have been endorsed by DAIDS are specified in site SOPs (and the endorsement filed in study essential files), the study staff member who conducts the informed consent process should enter the consenter’s name below the consenter’s printed name block on the ICF, together with a signed and dated note documenting the name of the person who made the entry and the date of the entry. The consenter’s signature date should be completed in the same manner.
- The consenter should mark (e.g., thumbprint) in the consenter’s signature block.

8.7.2 Additional Considerations for Research Involving Pregnant Women, Fetuses, and Underage Participants

IMPAACT studies frequently involve pregnant women, women who may become pregnant, fetuses, infants, and children.

45 CFR 46 specifies additional considerations for research involving fetuses, pregnant women, and neonates and research involving children in Subparts B and D, respectively. These subparts outline additional requirements for IRBs/ECs when reviewing research involving these vulnerable populations and assessing the relative risks and benefits of the proposed research.

DAIDS requires documentation of the IRB/EC designation of the pediatric risk/benefit category from 45 CFR 46.404-407 and 21 CFR 50.51-54 and IRB/EC approval for involvement of children based on the determination specified by that category. This requirement applies to the initial and continuing reviews of study protocols and to any subsequent reviews of protocol amendments involving potential study risks or benefits. The documentation may be provided in IRB/EC approval letters or in other official correspondence from the IRB/EC and must be included in submissions to DAIDS PRO. Additional guidance from DAIDS can be found at https://www.niaid.nih.gov/sites/default/files/enrollingchildrenrequirements.pdf.
Obtaining and documenting consent for participation of infants and children may involve obtaining consent from one or both parents or from a legally authorized representative or guardian in absence of a parent. DHHS regulations at 45 CFR 46.102(I) define a legally authorized representative as an individual or judicial or other body authorized under applicable law to consent on behalf of a prospective subject to the subject’s participation in the procedure(s) involved in the research. Thus, under 45 CFR 46.102(I), the determination of who may be a legally authorized representative is a matter of state or local law. Therefore, it is highly recommended that informed consent procedures, including defining the minimum age for independent consent and defining and ascertaining legal guardianship, be submitted for review and approval by the responsible IRBs/ECs prior to initiation of IMPAACT studies involving infants and children.

8.7.3 Additional Considerations for Prisoners

IMPAACT does not plan to conduct any studies that recruit, screen, or enroll participants from a prison setting. However, it is possible that persons enrolled in IMPAACT studies could become incarcerated during follow-up. 45 CFR 46 Subpart C specifies additional considerations for protection of prisoners as subjects in biomedical and behavioral research including enhanced IRB/EC review requirements and a requirement to obtain approval for prisoner participation from the Secretary of the US DHHS. IMPAACT sites will comply with these requirements prior to involving prisoners in any IMPAACT study.
**Figure 8-1. Summary of Considerations for Obtaining Informed Consent from Illiterate Consenters**

- Each site must specify procedures for obtaining and documenting informed consent from illiterate persons in its SOP for obtaining informed consent. These procedures must be consistent with the DAIDS policy on *Requirements for Source Documentation in DAIDS Funded and/or Sponsored Clinical Trials* and must be followed each time informed consent is obtained from an illiterate consenter. It is recommended that each site seek IRB/EC review and approval of these procedures.

- An impartial witness must be present during the entire informed consent process with an illiterate consenter. The witness must sign and date the informed consent form to attest that the information in the consent form was accurately explained to, and apparently understood by, the consenter, and that informed consent was freely given by the consenter.

- The site SOP for obtaining informed consent should define who may serve as the witness to the informed consent process.

- Take care to minimize the perception of coercion due to the presence of the witness.

- Unless other conventions that have been endorsed by DAIDS are specified in site SOPs, the study staff member who completes the informed consent process with the consenter should print the consenter’s name below the consenter’s printed name line on the informed consent form, together with a signed and dated note documenting the name of the person who made the entry and the date of the entry (see Figure 8-2 below).

- The consenter should mark on the consenter’s signature line.

- Unless other conventions that have been endorsed by DAIDS are specified in site SOPs, the study staff member who completes the informed consent process with the consenter should enter the date upon which the consenter mark on the informed consent form below the consenter’s signature date line, together with a signed and dated note documenting the name of the person who made the entry and the date of the entry (see Figure 8-2 below).

- For more information, see Section 4.8 of the ICH GCP guidance and the informed consent section of the DAIDS policy on *Requirements for Source Documentation in DAIDS Funded and/or Sponsored Clinical Trials*. 
8.8 Confidentiality

Study site staff will make every effort to maintain the confidentiality of study participants and information that can be linked to them; however, absolute confidentiality cannot be guaranteed.

Authorized representatives of the following organizations are granted access to participant study records as needed to assess the quality of study conduct:

- NIH
- Collaborating pharmaceutical companies
- Clinical Site Monitors
- IMPAACT Operations Center, SDMC, and Laboratory Center (LC)
- Responsible IRBs/ECs
- US FDA
- Local drug regulatory authorities
- Other US, local or international regulatory authorities

In addition to efforts undertaken by site staff to ensure confidentiality, IMPAACT has obtained a Certificate of Confidentiality that protects US sites from being compelled to disclose study-related information by any US federal, state, or local civil, criminal, administrative, legislative act or other proceedings. The provisions of the Certificate of Confidentiality (CoC), as well as its limitations (e.g., in cases of reportable harm to self or others), will be included in the ICF and will be explained to participants during the informed consent process for each study to which the certificate applies. See Section 7 for further details regarding the CoC.
8.9 Participant Costs for Study Participation

Unless otherwise specified in the study protocol, IMPAACT study procedures are performed at no cost to study participants.

8.10 Participant Reimbursement for Study Participation

Pending IRB/EC approval, participants may be reimbursed for their time and effort when taking part in IMPAACT studies, and/or be reimbursed for costs associated with travel to study visits, time away from work, child care, etc. Guidance should be sought from local community representatives on appropriate site-specific reimbursement types, amounts, and schedules prior to final IRB/EC approval.

8.11 Access to HIV-related Care

8.11.1 HIV Counseling and Testing

Most IMPAACT studies involve HIV testing. All such testing will be provided in the context of HIV pre-test, risk reduction, and post-test counseling. In accordance with NIH policies, participants (or their parent or guardian) must receive their HIV test results and associated counseling to enroll in IMPAACT studies.

8.11.2 Care for Participants Identified as HIV-Infected

Most IMPAACT studies will identify persons who are infected with HIV, either as part of the study screening process or during follow-up of enrolled participants. IMPAACT studies cannot provide long-term HIV care and/or treatment with antiretroviral medications to persons who are identified as HIV-infected; however, each protocol contains information on HIV-related care and support that may be available to study participants who become HIV-infected. Plans for post-study access to agents provided through an IMPAACT study from which participants are benefiting are discussed early in protocol development and addressed in each protocol.

All study sites are required to assess locally available resources for care (not limited to antiretroviral treatment) and to develop a resource list/referral plan for persons identified as HIV-infected when conducting IMPAACT studies. At a minimum, participants will be referred to providers where they can obtain the local standard of care for HIV-infected individuals. They also will be referred to other available research studies for HIV-infected individuals. For any participant who is identified as both HIV-infected and pregnant, every effort will be made to facilitate access to interventions to reduce the probability of HIV transmission to the participant's infant. Further information and guidelines on HIV prevention, treatment and care may be found on the World Health Organization website at http://www.who.int/publications/guidelines/hiv_aids/en/index.html.

8.12 Communicable Disease Reporting Requirements

IMPAACT study staff will comply with all applicable local requirements to report communicable diseases identified among IMPAACT study participants to local health authorities. Participants will be made aware of all reporting requirements during the study informed consent process.
9 PROTOCOL DEVELOPMENT AND MODIFICATIONS

9.1 Capsule Development and Review

9.1.1 Development

9.1.2 Scientific Committee Review

9.1.3 Scientific Leadership Group Review

9.2 Concept Development and Review

9.2.1 Development

9.2.2 Scientific Committee Review

9.2.3 Scientific Leadership Group Review

9.3 Protocol Development and Review

9.3.1 Development

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9.3.3 IMPAACT Multidisciplinary Protocol Review Group

9.3.4 DAIDS Scientific Review

9.3.5 DAIDS Regulatory Review

9.3.6 DAIDS Medical Officer Review and Sign-Off

9.3.7 Final DAIDS Regulatory Affairs Branch Review and Sign-Off

9.3.8 Distribution of Version 1.0

9.4 Protocol Modifications

9.4.1 Clarification Memoranda

9.4.2 Letters of Amendment

9.4.3 Full Version Protocol Amendments

9.4.4 Urgent Safety Notifications

9.5 Co-Endorsed and Co-Development of Protocols and Other Networks’ Studies

9 PROTOCOL DEVELOPMENT AND MODIFICATIONS

The IMPAACT Network has an open and iterative process for review of new study proposals designed to efficiently identify those of highest scientific merit and potential public health impact for further development. Network studies are developed through multidisciplinary collaboration among investigators, the Scientific Committees (SC), the Scientific Leadership Group (SLG), the Management Oversight Group (MOG), the central network resources (Operations Center, Statistical and Data Management Center [SDMC], and Laboratory Center [LC]), the IMPAACT Community Advisory Board (ICAB), site representatives, and external collaborators. The process involves sequential development and review steps for study capsules, concepts, and protocols, shown in Figure 9-1 and described in greater detail in the remainder of this section.

Scientific priorities for IMPAACT research are determined by the SLG in collaboration with the SCs, in alignment with the network’s mission and research agenda (outlined in Section 1). New studies may be proposed by IMPAACT investigators, by external investigators or may be commissioned by the SLG. Regardless of origin, initial review and prioritization is the responsibility of the relevant SC (see Section 2 for more detail on SC roles and responsibilities). As depicted in Figure 9-1, new study development begins with a short study proposal in the form of a ‘capsule’ document that briefly outlines the proposed study so that an initial determination can be made about whether further development within the network is warranted (see Figure 9-2 for review criteria). If so, the capsule is further elaborated into a study concept so that a determination can be made about whether the network should commit resources to full protocol development and study conduct.

For high priority studies, the SLG may approve a capsule for full protocol development – eliminating the concept development and review step. Likewise, the SLG may commission development of a study concept – eliminating the capsule development and review step.
Conflicts of Interest

The network follows a strict conflict of interest policy throughout the capsule, concept, and protocol review process. Any SC or SLG member involved in the development of a proposed study, recuses herself or himself from scoring and voting on that study and only participates in discussions of the study proposal when investigators/study team members are expected/invited to participate (e.g., in open sessions of review calls).

Figure 9-1. Protocol Development, Review, and Approval Process

*An early CSRC review may be required or requested.

Note: Each review step may require revisions and resubmissions.
Figure 9-2. IMPAACT Study Review Criteria

<table>
<thead>
<tr>
<th>The criteria outlined here are used for all stages of study proposal review - for capsules, concepts, and protocols. For each of the three criteria, proposals are assigned numerical scores of 1 to 5, with 1 being the most favorable.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scientific merit</strong></td>
</tr>
<tr>
<td>- Study is aligned with IMPAACT’s scientific agenda and priorities</td>
</tr>
<tr>
<td>- Hypothesis is scientifically sound and can be appropriately tested with the proposed study design</td>
</tr>
<tr>
<td>- Study design and methods will yield the proposed outcomes</td>
</tr>
<tr>
<td><strong>Potential public health impact</strong></td>
</tr>
<tr>
<td>- Study is relevant to one or more IMPAACT study populations (infants, children, adolescents, pregnant/postpartum women affected by HIV)</td>
</tr>
<tr>
<td>- Study will answer important public health questions or is in the critical path of research toward such answers</td>
</tr>
<tr>
<td><strong>Feasibility and suitability for network implementation</strong></td>
</tr>
<tr>
<td>- Study population is available at IMPAACT-affiliated sites</td>
</tr>
<tr>
<td>- Study conduct is feasible within the network structure</td>
</tr>
<tr>
<td>- Study will benefit from a multisite and multidisciplinary collaboration with network support and oversight</td>
</tr>
</tbody>
</table>

9.1 Capsule Development and Review

9.1.1 Development

The first step in proposing a new IMPAACT study is a two to three-page capsule. The capsule template is available on the IMPAACT website and includes the elements outlined in Figure 9-3: http://impaactnetwork.org/resources/study-proposals.htm

Figure 9-3. Elements of IMPAACT Capsules

| - Title of proposed study |
| - Rationale |
| - Objectives and endpoints |
| - Hypotheses |
| - Study design |
| - Key study population characteristics and approximate sample size (e.g., 10-100, hundreds, thousands of participants) |
| - Study duration (enrollment and follow-up) |
| - Laboratory assays required |
| - Anticipated study implementation at international and/or sites in the United States |

Completed capsules should be submitted by the proposing investigator(s) to the Operations Center via the following email address: impaact.capsubmissions@fstrf.org. The capsule is then assigned an identification number for tracking purposes and forwarded to the appropriate SC for review. The tracking number is also communicated to the Statistical and Data Analysis Center (SDAC) at cbar.attask@sdac.harvard.edu.
Capsules may be submitted at any time, however, as described below, SLG review of new study proposals typically occurs on a quarterly basis.

9.1.2 Scientific Committee Review

The Operations Center forwards each new numbered capsule to the relevant SC chair and vice chair to begin the IMPAACT review process. Capsules received at least two weeks in advance of the next scheduled monthly SC call are typically reviewed on that call, unless otherwise determined by the SC chair. This lead-time also allows for the ICAB representative on each SC to obtain more broad-based feedback on the capsule from other ICAB members (as described in Section 5).

It is generally expected that the SC chair assigns committee members as primary and secondary reviewers of the capsule. In addition, the SDAC representative (or designee) on the SC provides a brief statistical review. If needed, an external expert may be invited as either a primary or secondary reviewer. These reviewers provide written comments to the Operations Center at least three days in advance of the review call for distribution to the full SC and to the proposing investigators. The proposing investigators are invited to the call to briefly introduce the capsule and respond to questions or requests for clarification; however, participation is not required. Assigned reviewers lead the discussion of the capsule. Other SC members provide review comments during the call (or in writing in advance if they are not able to participate). These review calls include an open portion followed by a closed portion for SC members only. After the review call, SC members with no conflicts of interest vote (typically electronically) on next steps for the capsule, per the following three categories:

1. Approve for SLG review, with SC comments to be addressed as appropriate
2. Revise and re-submit for SC review
3. Discontinue development with the network

Committee members base their reviews on the extent to which the proposed study is aligned with the committee’s scientific priorities as well as the criteria listed in Figure 9-2. When more than one capsule is approved for submission to the SLG within a review cycle, the SC prioritizes them.

The Operations Center coordinates with the SC chair and vice chair to distribute each capsule for review, schedule the review, organize the committee voting process, and communicate the outcome of the review in writing to the proposing investigators, the SC chair, vice chair and, SDAC representatives, and the full SC. If it is determined that a capsule should be revised and re-submitted to the SC, the proposing investigators may be requested to provide a written response to the reviewers’ comments along with the revised capsule.

Note: As research priorities evolve over time in response to emerging science and changing standards of care, and because network resources may fluctuate, a capsule that was not approved previously may be submitted for re-consideration at a later time. In such cases, the proposing investigators are encouraged to discuss their plans with the relevant SC chair and vice chair in advance.
9.1.3 Scientific Leadership Group Review

The SLG reviews new study proposals (capsules) on a quarterly basis (March, June, September, and December of each year), either via conference call or during an in-person meeting. Submission deadlines and review dates are announced to the SCs in advance so that their reviews, which must precede SLG review, can be planned accordingly. To allow adequate time for review, proposals must be submitted at least two weeks in advance of the scheduled SLG review. This lead time also allows for the ICAB SLG representative to obtain more broad-based feedback on the capsule from other ICAB members.

For proposed studies deemed of especially high priority by the SC for which there are external or other critical timeline considerations, the relevant SC chair may submit a written request for expedited SLG review of a capsule (i.e., before the next scheduled quarterly review). Decisions regarding these requests are made on a case-by-case basis by the SLG chair and vice chair.

The Operations Center coordinates submission of all capsules that have been approved by the respective SCs to the SLG. A primary, secondary, and statistical reviewer are assigned to each capsule. Assigned reviewers submit written comments to the Operations Center 1-2 days in advance of the SLG review for distribution to the full SLG, the relevant SC chair/vice chair and the proposing investigators prior to the review. Quarterly reviews include an open portion followed by a closed portion for SLG members only (which may be held on a separate day). During the open portion, the relevant SC chair or vice chair briefly introduces the capsule and responds to questions or requests for clarification. During the closed portion of the review, assigned reviewers lead the discussion of the capsule. Other SLG members provide review comments during the call/meeting (or in writing in advance if they are not able to participate). In some cases, all SC chairs and vice chairs are invited to participate, for example, when the quarterly review is held during the IMPAACT annual meeting.

After the review, SLG voting members who participated in the review assign a priority score to the capsule using the criteria specified above in Figure 9-2 and vote on next steps for the capsule, per the following categories.

1. Approve for concept development, with SLG comments to be addressed as appropriate
2. Revise and re-submit for SLG review
3. Discontinue development with the network

The SLG may defer scoring or voting on a capsule if it is determined that additional forthcoming information is critical to decision-making, for example, results of another relevant study that is planned or underway.

If a capsule is approved for concept development, the SLG reviewers’ comments are to be addressed/reflected in the concept; a separate response is not required unless specifically requested by the SLG. However, if SLG reviewers’ suggestions/comments are not addressed in the concept (e.g., through inclusion of enhanced rationale for the proposed approach), a separate response with an explanation is advised. If it is determined that a capsule should be revised and re-submitted to the SLG, the proposing investigators are requested to provide a written response to the reviewers’ comments along with the revised capsule. Prior to re-submission, the documents should be reviewed by the SC chair and/or vice chair to determine if further SC review is required before the revised capsule and response are submitted to the SLG.

Only capsules voted for concept approval by at least 75% of eligible voting SLG members move forward. If the number of capsules to be approved for concept development must be limited due to budgetary or other constraints, the average score assigned to each capsule is used to rank the capsules in priority order.
for approval. Approval for concept development does not guarantee approval for protocol development and study implementation.

The Operations Center documents the review outcome and communicates the final result for each capsule to the full SLG, the proposing investigators, the relevant SC chair and vice chair, and SDAC representatives within one week of voting completion; for each capsule approved for concept development, the Operations Center assigns a concept number which is included in the outcome notification for tracking purposes. The Operations Center also notifies SDAC representatives at cbar.attask@sdac.harvard.edu of capsules approved for concept development or disapproved by the Network.

9.2 Concept Development and Review

9.2.1 Development

Concepts are developed in a template format that is available from the Operations Center. Concepts are expected to be approximately 10 pages in length (excluding references and budget estimate) and describe the proposed study in greater detail than the capsule. In addition, the leadership of the protocol is proposed in the concept, including the proposed protocol chair and vice chair, for approval by the SLG.

The Operations Center, SDAC, and LC assign staff to support the development of each concept. The Operations Center also provides administrative and coordination support to the concept development group. The SDAC statistician(s) provides advice on study design and sample size calculations, and the LC provides advice on laboratory evaluations, as needed. Proposing investigators may involve other collaborators with relevant expertise in the concept development team.

Fully developed concepts are submitted to the relevant SC for review, ideally within six weeks of the capsule’s approval. To allow adequate time for review, concepts must be submitted at least two weeks in advance of the regularly scheduled monthly SC call.

9.2.2 Scientific Committee Review

The SC concept review process and criteria are the same as described above for capsules.

Following the review discussion, SC members with no conflicts of interest vote on next steps for the concept, per the following three categories:

(1) Approve for SLG review, with SC comments to be addressed as appropriate
(2) Revise and re-submit for SC review
(3) Discontinue development with the network

The outcome of the SC concept review is communicated as described above for capsules. The Operations Center also forwards approved concepts for review by the SLG.
9.2.3 Scientific Leadership Group Review

Whereas capsules are typically solicited and reviewed by the SLG on a quarterly basis, concepts that are developed from approved capsules are reviewed during the first available scheduled SLG call or meeting following submission of the concept; i.e., concept submission/review need not await the next scheduled quarterly SLG review.

Concepts are reviewed by the SLG in the same manner and according to the same review criteria as described above for capsules.

Following the review discussion, eligible SLG voting members assign a numeric score to the concept based on the criteria specified in Figure 9-2 and vote on next steps, per the following three categories:

(1) Approve for protocol development, with SLG comments to be addressed as appropriate
(2) Revise and re-submit for SLG review
(3) Discontinue development with the network

Concepts are considered approved for protocol development if at least 75% of voting SLG members vote for approval. While a detailed costing of the proposed study is not expected, approval of the concept for protocol development represents a commitment of resources from the network to develop a full study protocol and the intention to conduct the proposed study within the network. (See Section 11 for further details on the protocol budgeting process.)

The Operations Center documents the review outcome and communicate the final result for each concept to the full SLG, the proposing investigators, the relevant SC chair, vice chair, and SDAC representatives (cbar.attask@sdac.harvard.edu) within one week of voting completion; for each concept approved for protocol development, the Operations Center assigns a protocol number which is included in the outcome notification.

9.3 Protocol Development and Review

The protocol development and review processes detailed below are based on the guidance posted on the RSC website (https://rsc.tech-res.com/network-and-protocol-teams/protocol-development).

9.3.1 Development

Once a concept is approved for protocol development, protocol team formation begins. As noted above, the names of the proposed protocol chair and vice chair(s) are included in the concept sheet submission for SLG review and endorsement. SLG endorsement is based on past leadership performance, current protocol/SC commitments, and relevant expertise/experience. A maximum of 10-15% FTE direct support is provided for protocol team leadership (across both/all chair and vice chair positions). No more than two vice chairs are endorsed, and SLG members are not eligible for a chair or vice chair position but may participate as a protocol team member.

The assigned Operations Center Clinical Trials Specialist (CTS) works with the SLG-endorsed protocol chair and vice chair(s) to initiate the formation of the protocol team and contacts the SDMC, LC, Division of AIDS (DAIDS) Program and Pharmacy Affairs Branch (PAB), National Institute of Child Health and Human Development (NICHD), and National Institute of Mental Health (NIMH) to determine their assigned representatives. If specific expertise is needed on the team (e.g., pharmacologist, immunologist, behavioral scientist, etc.), recommendations may be sought from the relevant members of the SLG (e.g.,
LC Principal Investigator (PI) and/or SC chairs as needed. As described in Section 10, representatives from each selected site are added to the protocol team once the site selection process has been completed to ensure adequate input on operations, feasibility, and other aspects of the study.

To initiate the development of the protocol document, the CTS incorporates all information from the approved concept and any relevant review comments into the IMPAACT protocol template and works closely with the protocol chair to specify the timeline for completion of the various sections and review steps to ensure adherence to the relevant (standard or fast-track) timeline specified, and key writing assignments are determined. A determination is made regarding whether an early Clinical Sciences Review Committee (CSRC) review should be arranged and, if so, that step is incorporated into the timeline. The protocol team or IMPAACT leadership may request an early review and/or this may be determined by DAIDS. It is generally expected that most IMPAACT protocols will not require an early review (Prevention Sciences Review Committee, PSRC, does not conduct early reviews). When an early review is required or requested, the review should occur prior to submission of the protocol for IMPAACT Multidisciplinary Protocol Review Group (MPRG) review.

Modifications of the study objectives, design, and/or schedule of evaluations that would substantively affect the size, scope, or cost of a study — relative to the previously-approved concept sheet — require review and approval from the IMPAACT leadership. To avoid delays in protocol development, such approval should be sought prior to submission of the protocol for MPRG review.

The protocol chair and co-chair(s), CTS, and an assigned protocol writing team then draft the full protocol through an iterative process. The team communicates frequently via email and conference calls. An in-person protocol development meeting should also be convened to facilitate the process, with the appropriate timing agreed upon by the team. Such meetings are generally expected to include team members with key writing responsibilities rather than all members. See Section 4 of this manual for further details on the composition and responsibilities of the Protocol Team.

For efficiency, the protocol team should prioritize development of the study schema, which includes the study objectives, design, and eligibility criteria first, followed by the schedule of evaluations. Development of other sections of the protocol (e.g., background and rationale) may proceed concurrently with work on the schema, design, and eligibility criteria. However, it is often counter-productive to develop other sections before these three sections are fully discussed and agreed upon by the team. Once such agreement is achieved, these sections should generally not be re-visited. All other sections should then be developed based on the agreed-upon content of these sections. Within the statistical section, the sub-section describing outcome measures should correspond with the study objectives and should take into consideration requirements for submitting study results to ClinicalTrials.gov.

Critical input is sought from site representatives, community representatives and other stakeholders, throughout the protocol development process as needed to ensure both the appropriateness and the operational feasibility of the study. Also throughout the process, the CTS monitors adherence to the protocol template to ensure that all applicable research regulations, guidelines, NIH policies, and IMPAACT policies and procedures are reflected in the protocol document. Likewise, the CTS works with the team to ensure that required elements of informed consent are reflected in the sample informed consent forms (ICFs) appended to the protocol. Version control is maintained throughout the process and key decisions are documented for future reference as needed, e.g., in conference call and meeting summaries and in subsequent iterations of the protocol document.

The protocol chair and CTS are responsible for maintaining the protocol development timeline, communicating deadlines to team members as needed, following-up on pending items, and ensuring deadlines are met. Internal organizational reviews may also be conducted (e.g., at SDAC or the
Operations Center) but must be coordinated in keeping within the overall protocol development timeline. As the final step within the timeframes specified above, the draft protocol is distributed to all protocol team members for review and sign-off prior to submission for MPRG review.

Team sign-off is accomplished with one of the following required by the protocol chair, vice chair(s), medical officers (MO), and statistician(s):

1. Approve
2. Approve contingent on the following changes
3. Approved with suggested changes
4. Revise and redistribute for sign-off

Upon Protocol Team sign-off, the draft protocol is submitted to the IMPAACT MPRG at least two weeks prior to the anticipated review date.

The CTS begins internal Operations Center coordination of the MPRG review 3-4 weeks prior to Protocol Team sign-off. See Table 9-1 for an outline of the protocol development process and timeframes.

### Table 9-1. Standard and Fast Track Protocol Development Timelines

<table>
<thead>
<tr>
<th>Protocol Development Timelines</th>
<th>Standard Process</th>
<th>Fast Track Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMPAACT Reviews</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of full draft protocol (including early CSRC review, if applicable, and internal SDAC review)</td>
<td>12 weeks</td>
<td>6 weeks</td>
</tr>
<tr>
<td>Protocol Team sign-off</td>
<td>1 week</td>
<td>1 week</td>
</tr>
<tr>
<td>IMPAACT MPRG Review (including advance submission, and post review revisions/response)</td>
<td>5 weeks</td>
<td>2 weeks</td>
</tr>
<tr>
<td><strong>NIAID Division of AIDS Reviews</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protocol Team sign-off</td>
<td>1 week</td>
<td>1 week</td>
</tr>
<tr>
<td>DAIDS Clinical or Prevention Sciences Review Committee Review (including advance submission and post review revisions/response)</td>
<td>6 weeks</td>
<td>3 weeks</td>
</tr>
<tr>
<td>DAIDS regulatory review (including advance submission and post review revisions/response)</td>
<td>4 weeks</td>
<td>2 weeks</td>
</tr>
<tr>
<td>DAIDS Medical Officer sign-off followed by protocol team response</td>
<td>10 working days</td>
<td>5 working days</td>
</tr>
<tr>
<td>DAIDS Regulatory Affairs Branch final sign-off</td>
<td>10 working days</td>
<td>3 working days</td>
</tr>
<tr>
<td><strong>Total Time from Concept Approval to Final Protocol Version 1.0</strong></td>
<td>~33 weeks</td>
<td>~17 weeks</td>
</tr>
</tbody>
</table>

Note: Revisions and resubmission may be required at each review step.
9.3.2 Protocol Development Tracking and Oversight

Full draft protocols are expected to be submitted to the MPRG within 12 weeks (standard) or 6 weeks (fast-track) of beginning the development process, as outlined above. A high priority protocol may be designated for fast-track development by the SLG if there are urgent, time-sensitive considerations and the study must be implemented quickly in response to emerging scientific or clinical medicine priorities or due to external factors such as a pharmaceutical company’s regulatory timeline. A limited number of studies may be fast-tracked at the same time, and the SLG may have to consider shifting priorities (delaying other projects) to accommodate these accelerated timelines.

The Operations Center provides monthly reports to update the MOG on protocol development status, and study implementation challenges and progress (see Section 13 Oversight). Should a draft protocol become significantly delayed, a change in study team leadership may be required as determined by the MOG. If a protocol in development becomes irrelevant or no longer feasible due to emerging science or changing standards of care, a decision to stop development is made by the SLG.

9.3.3 IMPAACT Multidisciplinary Protocol Review Group

The purpose of the MPRG review is to ensure IMPAACT protocols are scientifically rigorous, accurate, consistent, complete, and standardized to the extent possible. The MPRG critically reviews protocols for scientific and design integrity, operational feasibility, focusing on key issues such as site participation, infrastructure and capacity, relevance to the community, and any ethical, logistical, or potentially regulatory concerns. The MPRG conducts reviews on behalf of the SLG. The review is multidisciplinary to streamline and avoid multiple sequential review steps.

The MPRG is comprised of the network vice chair (who serves as MPRG chair); the chair or vice chair of the relevant SC; standing representatives of the Operations Center, SDMC, LC, and ICAB; the IMPAACT pharmacist; a study coordinator; designated NIH staff; and 1-2 external reviewers with expertise in the specific content area of the protocol.

Reviewers provide written comments on the protocol in advance of the review call, divided into major and minor comments. These are collated and distributed to all reviewers prior to the review call to facilitate the discussion. There is an initial closed session for discussion of the major comments, after which the protocol chair joins the call to answer questions and offer clarifications as needed. During the final closed session, the MPRG settles on the collective major comments to be included in the review summary and agrees on one of the following options:

1. Approved as written or with specific changes stipulated; no re-review required
2. Re-submission/re-review required by the full review group or a subset (as determined by the chair) after required changes are incorporated and response to the reviewers’ comments is submitted
3. Disapproved

The Operations Center summarizes the review in writing, distributes the draft to the MPRG and, following sign-off by the MPRG chair, provides the summary to the Protocol Team, typically within three working days of the review.

If required, a response to reviewers’ comments and revised protocol are to be submitted to the MPRG in writing, typically within 14 working days of receiving the review summary. The protocol cannot proceed to the next review step until MPRG approval is obtained. If the protocol team has concerns about the review recommendations or outcome, and these cannot be resolved through discussion between the MPRG chair and protocol chair, the IMPAACT SLG assists with resolution.
Throughout all reviews, from capsule through protocol reviews, the IMPAACT SC, SLG, and the MPRG determinations are considered final.

9.3.4 DAIDS Scientific Review

Upon completion of the MPRG review step, IMPAACT protocols are reviewed by a DAIDS Scientific Review Committee (SRC), either the CSRC or the PSRC, as determined by DAIDS. The SRC evaluates the research plans specified in each protocol on the basis of:

- NIAID’s and other co-sponsoring institutes’ research agenda, priorities, and other NIH clinical studies
- Scientific merit and study design
- Human subjects considerations and participant safety
- Compliance with US federal regulations and ethics
- Study oversight and monitoring
- Feasibility of timely completion
- Pharmacy and regulatory considerations
- When appropriate, plans for interim monitoring and analysis

Following team sign-off (process to be followed as described in Section 9.3.1, the protocol is prepared for submission for SRC review. The submission process varies between CSRC and PSRC review as below:

- For protocols undergoing CSRC review: When the protocol is ready for CSRC review, the CTS submits the protocol to the CSRC coordinator and Clinical Study Information Office (CSIO), along with the MPRG’s comments and the team’s response (if required). Every attempt will be made to hold the review by two weeks after the complete set of documents are received by the CSRC coordinator. The DAIDS MO may help with advanced scheduling to ensure timely reviews.

- For protocols undergoing PSRC review: When the protocol is ready for PSRC review, the CTS submits the protocol to the DAIDS MO, along with the MPRG’s comments and the team’s response (if required). The DAIDS MO reviews the protocol and any accompanying documents for completeness (within one week) and forwards them to the PSRC coordinator at least two weeks (10 working days) prior to the scheduled PSRC review date.

Protocol team representatives are generally invited to participate in an initial open session of the SRC review to provide a brief overview of the protocol and any major issues that they wish to highlight. Reviewers present their major comments to the protocol team representatives, followed by discussion of those of highest priority, as determined by the SRC chair. The SRC then proceeds in closed session.

The SRC review comments are summarized in a consensus memorandum that is provided to the protocol team typically within 10 working days after the review. The memorandum identifies major and minor review findings along with one of four review outcomes:

- Approved
- Approved contingent upon the protocol team adequately addressing in writing the major concerns, with the MO determining the adequacy of the response and the revised protocol
- Approved contingent upon the protocol team adequately addressing in writing the major concerns with the SRC reviewing the responses and the revised protocol
- Disapproved
When applicable, the protocol team prepares a response to all SRC comments and a revised version of the protocol (and any additional documents requested) for submission through the SRC coordinator. The response to each comment should include a description of any changes made in the protocol or justification for no change. If the response and/or changes are deemed acceptable, the protocol team is notified in writing of SRC approval and the protocol moves forward to the next review step. If the team’s response and revised protocol are not deemed acceptable, the protocol chair is notified and a plan for resolving the outstanding issues is developed in consultation with the MO(s), Branch Chief and others such as the SRC chair, Prevention Sciences Program Director, and key reviewers.

After SRC approval of the protocol is obtained, the final three steps of the DAIDS review process can begin. These steps are the DAIDS regulatory review, MO review and sign-off, and final DAIDS Regulatory Affairs Branch (RAB) review and sign-off described below. Throughout these steps, the CTS works closely with other protocol team members to respond to review comments and make any necessary changes to the protocol.

9.3.5 DAIDS Regulatory Review

Once SRC approval is obtained and the key protocol team members have reviewed the changes, the protocol — labeled “Regulatory Review Version” — is submitted with the ClinicalTrials.gov checklist by the CTS to DAIDS (or its regulatory contractor) for regulatory review (copying the CSIO). The regulatory review is to be completed within 10 working days of protocol receipt. During this step, DAIDS (or its regulatory contractor) carries out a regulatory review of the protocol. DAIDS (or its regulatory contractor) incorporates all comments into a review summary document and transmits the document electronically to the CTS.

9.3.6 DAIDS Medical Officer Review and Sign-Off

Unless otherwise instructed, the protocol team revises the protocol based on the regulatory review summary and prepares a response document, confirming that requested changes were made and providing justification if a requested change was not made. This revised version — labeled “Medical Officer Review Version” — is submitted to DAIDS (or its regulatory contractor) by the CTS for MO review (copying the CSIO). This review is completed within 10 working days of protocol receipt. During this time, DAIDS (or its regulatory contractor) reviews the protocol to ensure that all regulatory review findings have been satisfactorily addressed and then forwards the protocol for review by the MO.

The MO reviews the protocol to confirm an acceptable response to the regulatory review, including incorporation of any necessary changes into the protocol document, and to complete a final quality assurance check of the protocol on behalf of DAIDS. As a member of the protocol team, the MO has reviewed the protocol in detail multiple times prior to this step; therefore, few changes are generally expected.

DAIDS (or its regulatory contractor) incorporates any review comments into a review summary document and transmits the document electronically to the CTS. The protocol team prepares a response to any MO comments and revises and re-submits the protocol as needed, following the process described above for regulatory review. Once the MO has approved the protocol, it can be submitted for final DAIDS RAB review and sign-off.
9.3.7 Final DAIDS Regulatory Affairs Branch Review and Sign-Off

Unless otherwise instructed by DAIDS (or its regulatory contractor), the CTS submits the MO-approved version of the protocol — labeled “FINAL Version 1.0” — to DAIDS (or its regulatory contractor) for final RAB sign-off (copying the CSIO). RAB sign-off is expected within approximately 10 working days of submission. DAIDS RAB reviews the revised protocol and provides sign-off. DAIDS (or its regulatory contractor) submits the finalized protocol to the FDA (for Investigational New Drug [IND] studies) and sends it to the Operations Center for distribution to sites.

9.3.8 Distribution of Version 1.0

Upon receipt of the final DAIDS approval notification, the CTS electronically distributes the final approved protocol to the protocol team and participating study sites. The final protocol is also posted on the IMPAACT website.

Many pre-implementation activities begin during the protocol development process, while others are dependent upon the distribution of the final, approved protocol. See Section 11 of this manual for details regarding pre-implementation activities.

9.4 Protocol Modifications

In accordance with DAIDS policies and procedures, IMPAACT protocols may be clarified/modified by three methods:

- Clarification Memorandum (CM)
- Letter of Amendment (LoA)
- Full Version Protocol Amendment

These methods for protocol changes and clarifications, which are described in the following sections, are used for both IND and non-IND protocols. The protocol team determines the method to use in conjunction with the DAIDS MO, based on the guidance posted by DAIDS (or its regulatory contractor) ([https://rsc.niaid.nih.gov/networks-protocol-teams/developing-protocols](https://rsc.niaid.nih.gov/networks-protocol-teams/developing-protocols)). See Table 9-2, below, for additional requirements and procedures.

As with version 1.0 of the protocol, the Operations Center CTS is responsible for working with the protocol chair and team to develop the protocol modification document (e.g., CM, LoA), ensuring that the applicable review steps are completed, and issuing final versions to the team and participating study sites. Copies of all final protocol modifications are posted on the IMPAACT website.

While protocol modification documents are in development and under review, study implementation proceeds according to the specifications of the prior approved version of the protocol, including any previously approved LoAs and CMs. Protocol modifications specified in the modification documents may only be implemented after the documents are fully approved, as described below.

**IMPAACT SC/MOG/SLG/MPRG Review of Amendments**

Before a protocol team develops a LoA or full version protocol amendment that will likely have study budget implications, as determined by the Operations Center in consultation with the protocol chair, network chair, SDMC PI, and/or LC PI, MOG approval must be obtained through submission of a brief memorandum from the protocol team summarizing and providing the rationale for the proposed changes
and describing how the study budget may be affected. Likewise, if the proposed amendment includes significant changes to the scientific goals, study objectives or design, SC and SLG approval must be obtained before amendment development is begun in earnest. The Operations Center works with the SC chair as needed and with the Network chair (who serves as the chair of the SLG and MOG) to ensure appropriate advance reviews and avoid duplicative steps. Once developed, full version protocol amendments require review and approval by the MPRG, or a subset thereof, as determined by the MPRG chair on a case by case basis depending on the nature and extent of the changes being made or if recommended by the MOG or SLG. Unless otherwise determined by the MOG or SLG during its advance (amendment proposal) review, LoAs do not require MPRG review and approval once developed.

Table 9-2. Requirements and Procedures for Protocol Modifications

<table>
<thead>
<tr>
<th>Modification Requirements</th>
<th>Clarification Memorandum</th>
<th>Letter of Amendment</th>
<th>Protocol Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content involves change of risk-to-benefit ratio?</td>
<td>No</td>
<td>Yes, but impact should be minimal</td>
<td>Yes</td>
</tr>
<tr>
<td>Content must be reported to study participants?</td>
<td>No</td>
<td>Possibly, depends on content and requirements of site IRBs/ECs</td>
<td>Yes</td>
</tr>
<tr>
<td>Content requires change of informed consent form?</td>
<td>No</td>
<td>Possibly, depends on content and requirements of site IRBs/ECs</td>
<td>Yes</td>
</tr>
<tr>
<td>Results in change of protocol version number?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Requires approval by Medical Officer?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Requires approval by DAIDS SRC?</td>
<td>No</td>
<td>Yes, unless requirement waived by MO</td>
<td>Yes, unless requirement waived by MO</td>
</tr>
<tr>
<td>Requires DAIDS regulatory review?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Requires final Medical Officer sign-off following regulatory review?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Requires RAB sign-off following Medical Officer review?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Requires approval by site IRBs/ECs?</td>
<td>No, unless required by site IRBs/ECs</td>
<td>Yes, amended procedures may not be undertaken until after site IRB/EC approvals are obtained</td>
<td>Yes, amended procedures may not be undertaken until after site IRB/EC approvals are obtained</td>
</tr>
<tr>
<td>Requires protocol registration?</td>
<td>No</td>
<td>Yes, amended procedures may not be undertaken until after site IRB/EC approvals are obtained</td>
<td>Yes, amended procedures may not be undertaken until after site IRB/EC approvals are obtained</td>
</tr>
</tbody>
</table>

*Note: Amendments including any revised site-specific informed consent forms should be implemented upon CRS receipt of all required IRB/EC approvals. Refer to the latest DAIDS Protocol Registration Manual, section “Amendment Registration,” for details.*
9.4.1 Clarification Memoranda (CM)

CMs typically are short documents prepared to provide further explanation or more detailed information related to current protocol specifications. CMs also may be used to correct minor errors and inconsistencies in a protocol. A CM cannot be used if the modifications would impact participant safety, the risk-to-benefit ratio of study participation, or the sample ICFs. A standard format for IMPAACT CMs is followed, which includes:

(A) Instructions to sites regarding approvals and implementation
(B) A summary of and rationale for the modifications included
(C) A detailed account of where and how the modifications are being applied to the current protocol text

Because CMs should be implemented immediately, any materials needed prior to implementation (e.g., participant enrollment or data collection materials) should be finalized prior to CM finalization and distribution. Note that updates to these materials are generally not anticipated with changes implemented through a CM but would need to be discussed and confirmed by the protocol team (including the DAIDS MO). Protocol team members who identify any such requirements are responsible for notifying the CTS and protocol chairs early in the CM development process.

The decision to use a CM is the responsibility of the DAIDS MO and does not require DAIDS RAB approval or sign-off; however, the MO may consult with RAB if there are questions related to the content proposed in a CM prior to making a final determination. Drafts are distributed to the protocol team for review and sign-off. Written approval of a CM by the DAIDS MO is required prior to finalization and distribution to sites and the protocol team. Once approved, CMs are distributed to the protocol team and participating study sites by the CTS. IRB/EC approval of CMs is not required by DAIDS; however, sites may to submit CMs to their IRBs/ECs for their information or, if required by the IRB/EC, for approval prior to implementation. All applicable IRB/EC requirements must be followed. CMs may be implemented by sites upon issuance unless their IRB/EC requires prior approval.

9.4.2 Letters of Amendment (LoA)

LoAs typically are relatively short documents prepared to specify changes to a protocol that have minimal impact on participant safety and the risk-to-benefit ratio of study participation and include relatively minor modifications of study informed consent forms, if any. A LoA can be used when there are specific changes to the protocol that result in the addition of new information or the deletion of incorrect or unnecessary information. A LoA does not change the protocol version number and is considered part of the previously approved protocol version. A standard format for IMPAACT LoAs is followed, which includes:

A) Instructions to sites regarding approvals and implementation
B) A summary of and rationale for the modifications included
C) A detailed account of where and how the modifications are being applied to the current protocol text

In the instructions to sites regarding approvals and implementation, specific guidance is provided regarding protocol registration and informed consent requirements associated with the LoA. Instructions for protocol registration requirements indicate whether 1) the LoA should be implemented immediately upon obtaining all required approvals, or 2) implementation should be deferred until after obtaining a notice of LoA registration from the DAIDS Protocol Registration Office, or 3) implementation should be deferred until after obtaining notification from the Operations Center (as described further below). The
first (immediate implementation) is the standard approach. The CTS coordinates with the protocol team, the DAIDS MO, and DAIDS RAB as needed to confirm the approach to be taken for each LoA.

For some LoAs, members of the protocol team may determine that modifications contained in the LoA require additional time for preparation of materials prior to implementation of the LoA. For example, additional time may be needed to make investigational study products available or to update the SES prior to implementation of the LoA. Protocol team members who identify any such requirements are responsible for notifying the CTS and protocol chairs early in the LoA development process. The CTS then incorporates wording into the instructions to sites stating that implementation of the LoA occurs upon obtaining all relevant approvals AND issuance of notification that all operational requirements for implementation of the LoA have been completed.

Drafts are distributed to the full protocol team for review and sign-off. LoAs typically incorporate the content of prior CMs issued under the same prior version of the protocol. See Section 9.4 above for required IMPAACT network reviews and approvals. The protocol team works with the MO to make an initial assessment of whether the proposed changes may be made using a LoA (rather than a full version protocol amendment); final determination regarding the appropriate method to be used is made by DAIDS RAB once the protocol team has formally submitted a request (in the form of a LoA versus full version protocol amendment), and this determination is communicated by DAIDS (or its regulatory contractor) before the internal review of a LoA is completed. If the collective changes being requested by the protocol team are extensive and cannot be implemented easily and immediately, the DAIDS RAB may require the protocol team to develop a full version protocol amendment. LoAs follow the same DAIDS review steps outlined above for original protocols, with the exception that SRC review of LoAs is not required unless otherwise determined by the DAIDS MO in consultation other DAIDS staff.

Once final DAIDS RAB sign-off on the LoA is obtained, DAIDS (or its regulatory contractor) notifies the CTS; if the study is being conducted under an IND, this notification includes acknowledgement that the LoA has been submitted to the FDA. The Operations Center then distributes the approved LoA to the protocol team and participating study sites. LoAs must be reviewed and approved by site IRBs/ECs prior to implementation. They typically include instructions to study sites regarding IRB/EC review and approval and recommendations on how to notify participants of the changes, if applicable. However, it is responsibility of the responsible IRB/EC to determine whether and how participants are to be notified of the changes made in the LoA, and all IRB/EC requirements must be followed. The LoA may not be implemented at a site until approval is obtained from all IRBs/ECs responsible for oversight of research at that site and any other applicable regulatory entities. Sites are required to submit a registration packet for the LoA to the DAIDS Protocol Registration Office; however, implementation of the LoA need not await this step and, instead, should proceed as soon as all relevant IRB/EC and other required approvals are obtained (see DAIDS Protocol Registration Manual).

9.4.3 Full Version Protocol Amendments

Full version protocol amendments are prepared when required changes to a protocol are substantive in number and/or nature. Modifications made via a full version protocol amendment are incorporated directly into the protocol document and result in a new protocol version number. A full version protocol amendment must also incorporate all CMs and LoAs previously implemented since the last DAIDS approved version of the protocol.
Examples of changes requiring a full version protocol amendment may include:

- Increase or decrease of more than 10% of the total number of participants to be enrolled
- Study design changes such as addition of a new study arm, a new study drug or formulation, an increase in dosage or dosing frequency of a study drug
- Substantive changes to the sample informed consent form(s)

Full version protocol amendments are developed by the protocol team as described above for original protocols and are accompanied by a summary of changes document that includes instructions to the participating sites regarding approval and implementation of the amendment, an overview of the changes and rationale for each, and a detailed description of where the changes (additions and deletions) were made in the protocol text.

IMPAACT review and approval steps for amendments are described in Section 9.4. Depending on the nature and extent of the modifications, DAIDS SRC review may be required as determined by the MO in consultation with the SRC chair and other DAIDS staff; if so, the procedures described in Section 9.3.4 are followed. DAIDS (or its regulatory contractor) regulatory review, MO review and sign-off, and final RAB review and sign-off steps described in Section 9.3.5 must be completed for all full amendments. As described above, the protocol team works together to respond to and complete the various review steps.

Upon receipt of the final DAIDS approval notification (which includes acknowledgement that the new version has been submitted to the FDA, if applicable), the CTS electronically distributes the final approved protocol to the protocol team and participating study sites. Full amendments (new protocol versions and the accompanying summary of changes) must be reviewed and approved by site IRBs/ECs prior to implementation. The summary of changes document includes instructions to study sites regarding IRB/EC review and approval and recommendations on how to notify participants of the changes and whether re-consenting is required. However, it is the responsibility of the responsible IRB/EC to determine whether and how participants are to be notified of the changes made in the full version protocol amendment, and all IRB/EC requirements must be followed. The full version protocol amendment may not be implemented at a site until approval is obtained from all IRBs/ECs responsible for oversight of research at that site and any other applicable regulatory entities. Sites are required to register the full version protocol amendment through the DAIDS Protocol Registration Office; however, implementation of the full version protocol amendment should proceed as soon as all relevant IRB/EC and other required approvals are obtained (see DAIDS Protocol Registration Manual).

9.4.4 Urgent Safety Notifications

When there is a significant and immediate participant safety concern requiring notification of sites, investigators, IRBs/ECs and participants in an expedited manner, an Urgent Safety Notification may be required. These notifications are typically written as Dear Investigator and Dear Participant Letters developed by the protocol team, in consultation with and with the approval of the DAIDS RAB. They include an explanation of and rationale for the changes and are distributed to sites for submission to their IRBs/ECs and other regulatory entities, with instructions regarding implementation. Recommendations for informing participants and re-consenting participants if needed is provided to sites by the protocol team; however, the relevant IRBs/ECs are responsible for determining the appropriate method for informing participants of the information and the appropriate methods for consenting participants.
9.5 Co-Endorsed and Co-Development of Protocols and Other Networks’ Studies

The IMPAACT Network recognizes that a thriving international network of researchers and collaborators is essential to ensuring rapid and continuing advancement of the Network’s mission to significantly change HIV disease and associated infections among infants, children, adolescents, and pregnant/postpartum women. To facilitate this collaborative environment, the IMPAACT Network welcomes the opportunity to cooperate with other networks, researchers, and organizations in co-sponsorship or endorsements. Such cooperation enables IMPAACT to expand its scope, avoid duplication, and enhance the interdisciplinary environment. The mutual benefits include increased awareness of relevant activities and publications; and identification of researchers with specific interests.

IMPAACT protocols co-endorsed by another network may require review by a scientific and/or leadership group of the other network; however, such reviews are typically considered advisory, with IMPAACT procedures and approvals to take precedence.

Generally, the IMPAACT Network will consider co-endorsement of a capsule or protocol if the topic is of high interest, does not conflict with other IMPAACT studies, and is thought to be feasible for IMPAACT-affiliated sites’ participation. If IMPAACT is considering co-endorsement of another network’s study, the relevant SC and the SLG reviews the other network’s draft (or final) protocol for scientific merit and may provide comments; however, it is generally not expected that recommended changes must be made; instead – unless otherwise stipulated/agreed upon in advance – the IMPAACT SC and SLG makes a determination about co-endorsement with the assumption that their recommended changes to a protocol will not be accepted. The MOG may review the need for and availability of IMPAACT resources; depending on the collaborative group, additional Memoranda of Understanding may need to be developed and approved.

In cases in which IMPAACT and another network agree to co-develop a protocol, the roles and responsibilities of each are agreed upon in advance by the respective leadership groups on a case by case basis. Typically, protocol team leadership include representatives from both networks (e.g., as co-chairs), with other representatives from each network included as needed, and one of the networks’ operations center, SDMC, and LC designated to take the lead to avoid duplication of effort. In addition, both networks typically provide scientific and operational review of the protocol, jointly or in parallel.
SITE SELECTION FOR IMPAACT STUDIES

This section describes the initial site selection process for IMPAACT studies in development, for adding new sites for ongoing IMPAACT studies, and for expansion to sites not affiliated with IMPAACT.

10.1 Initial Site Selection for New Studies

For each new IMPAACT study, a site selection process will be carried out by the protocol team, with oversight from the IMPAACT Management Oversight Group (MOG), to determine which clinical research sites (CRS) will conduct the study. The site selection process is initiated after a study concept has been approved for protocol development (see Section 9 of this manual for more information on the protocol development process) and will result in development of a site selection and study accrual plan for review and approval by the MOG. Objectives of the process include:

- Target the appropriate populations for enrollment into protocols (e.g., pregnant women, HIV/TB co-infection)
- Involve site investigators and other key site staff early in protocol development and preparation for study implementation
- Enhance the ability to predict the timing of key study milestones (e.g., completion of enrollment) based on specific enrollment projections provided by each site and, together, for the study overall
- Foster site staff investment in and accountability for meeting study accrual targets and successful study implementation
- Optimize allocation of network resources
- Target study-related communications, training, and materials to participating sites

For most studies, a two-step site selection process that is open to all IMPAACT-affiliated sites (see exceptions below) will be undertaken by the protocol team. This process involves initial solicitation, review, and approval of a brief study site application followed by solicitation, review, and approval of a more extensive site implementation plan (SIP), as described below. In some cases, however, a modified process may be utilized; this is most likely in the context of follow-on studies proceeding directly from a prior study (at the same sites) and studies conducted in collaboration with sponsors other than Division of AIDS (DAIDS), Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), and National Institute of Mental Health (NIMH).
When reviewing applications and SIPs, protocol teams will aim to identify the optimal number of sites required to ensure both high quality and timely conduct of the study; the MOG will evaluate this as well when reviewing the team’s site selection and accrual plan. Other factors that may be considered include:

- Site capacity, experience, and past performance in other studies
- Laboratory capabilities, including any study-specific assays or assessments
- Study-specific pharmacy requirements (e.g., freezers)
- Country-specific approval requirements and specimen shipment restrictions and approval requirements
- Concurrent participation in other studies that involve the same participant populations, staff, space/facilities, and/or other resources
- Optimal utilization of network-affiliated sites
- Preference and/or requests from collaborators (e.g., National Institutes of Health Intramural Research Program, collaborating networks, or pharmaceutical co-sponsors)

### 10.1.1 Preliminary Assessment of Site Capacity

A Site Profile Database will be maintained to catalog the research capacity of IMPAACT-affiliated sites. Aspects of site capacity maintained in the database include study site facilities and equipment as well as access to and size of populations of interest (e.g., number of pregnant women booked in antenatal care per year, number of antiretroviral naïve children entering care per year, number of antiretroviral experienced children and adolescents currently in care, protocol approval timelines). Proposing investigators may request database information from the Operations Center for planning purposes as study capsules, concepts, and protocols are developed, and this information may be reviewed and used to inform the site selection process described below.

### 10.1.2 Step 1 of the Site Selection Process: Site Application

To maximize site input and protocol team representation during protocol development, the first step of the selection process should begin as soon as possible after a study concept has been approved for protocol development. However, initiation of the process will require, at a minimum, a clear understanding of the study objectives, eligibility criteria, and any operational requirements that may impact site selection (e.g., access to a 24-hour pharmacokinetic processing facility, laboratory certification to perform certain assays, ability to ship specimens outside of the study site location, if central testing is required for a specific study).

The purpose of this step is to rapidly identify interested sites that meet minimum requirements to conduct a study (and to rule out those that do not). To achieve this goal, the protocol team develops a brief application document that requests information on site capacity limited to the minimum requirements by study. For most studies, the application is distributed to all IMPAACT-affiliated NIAID and NICHD sites (emailed by the Operations Center to CRS leaders/site principal investigators [PI], copied to clinical trials unit [CTU] PIs, and the NICHD coordinating center), with an invitation to interested sites to complete the application and return it to the protocol team for further evaluation. Alternatively, if it is known in advance — based on specific study objectives — that site selection will be limited geographically, or based on current standards of care or other considerations, the application distribution may be targeted accordingly.

Protocol team members will review all applications received and determine which sites meet minimum requirements to conduct the study. Depending on the needs of the study and the number of applications expected, teams may delegate this responsibility to a subset of team members, minimally including the
protocol chair, vice chair(s), and clinical trial specialist (CTS). If a protocol team, or subset of team members, determines that additional information is needed to fully evaluate a site, the required information will be requested by the CTS. Each applicant site will be informed of the outcome of this review, and sites that meet the minimum requirements will proceed to Step 2 of the process. All communications to and from potential study sites will be coordinated by the CTS.

10.1.3 Step 2 of the Site Selection Process: Site Implementation Plan

Sites that are found to meet minimum requirements in Step 1 of the site selection process will be asked to complete a SIP in Step 2 of the process, coordinated by the CTS. The purpose of this step is to obtain sufficient operational detail from each potential site to optimize selection of sites with respect to overall capacity, quality of study implementation, efficiency, and budgetary considerations. To achieve this goal, the protocol team develops a SIP tailored to the operational needs of the study. Importantly, the SIP will also collect accrual projections that will be used by the protocol team to develop a site selection and accrual plan for review and approval by the MOG as described below.

As with the application document in Step 1, all communications to and from potential study sites regarding SIPS will be coordinated by the CTS. However, NICHD-funded sites must submit their SIPS for review by the NICHD coordinating center prior to subsequent submission to the CTS.

Protocol team members will review all SIPS received to determine which sites to include in their study-specific site selection and accrual plan. Depending on the needs of the study and the number of SIPS expected, teams may delegate the review and approval responsibility to a subset of team members, minimally including the protocol chair, vice chair(s), and CTS. Other team members may also review and approve selected portions of the SIP; for example, the Laboratory Center representative or laboratory technologist may review sections of the SIP related to specimen processing and other laboratory operations. Upon initial review of a SIP, if a protocol team determines that additional information is needed to fully evaluate a site, the required information will be requested by the CTS. Protocol teams may also utilize information from the Site Profile Database to inform site selection decisions. When more sites meet the criteria for participation than are required to meet study objectives, the protocol team may rank the applicant sites based on available information and select the required number of sites based on this ranking.

10.1.4 Site Selection and Accrual Plan

Based on their SIP review, the protocol team will develop a site selection and accrual plan for review by the MOG. The MOG will determine whether to approve the plan as proposed or to recommend or require modifications. Once the plan is approved, the protocol team will inform each site that submitted a SIP of the final review outcome (including reasons for not being selected, when applicable). Sites approved to take part in the study may also be advised to develop study-specific accrual SOPs or other operational plans adequate to meet the accrual projections specified in their SIPS, as actual accrual performance will be monitored against these projections.

10.1.5 Designation of Sites for Protocol Registration

Once final site selection decisions are made, and sites are informed of these decisions (as described above), the CTS will designate the selected sites as permitted to register for the study in the DAIDS Protocol Registration System.
10.2 Addition of Sites during Accrual of Ongoing Studies

During the accrual phase of a study, a protocol team or the MOG may determine that one or more additional sites are needed to enhance enrollment or otherwise meet the study objectives in a timely manner. However, the addition of sites is not the primary solution to resolving low accrual rates, but rather active management and involvement of the protocol team to facilitate participating sites in recruitment strategies should first be undertaken. Because of the potential implications for network resources, protocol teams must seek MOG approval before initiating a process to add sites to an ongoing study. A short memorandum outlining the rationale, proposed approach, and implications for the study timeline (including an updated study accrual plan) and, if there are budget or cost implications, a budget is required. If approved, the team will proceed to contact potential additional sites per the approved plan. It is generally expected that the two-step process described above will be followed to select additional sites; however, if a protocol team determines that a modified process would be more effective or efficient, the alternative approach may be proposed to the MOG. For example, a site that previously submitted an application and SIP that met the requirements, but was not needed, may be approached first and asked to update their submission documents as needed.

10.3 Expansion Beyond the IMPAACT Network Affiliated Sites

In some cases, it may be necessary to engage sites that are not currently affiliated with IMPAACT to conduct a particular study. In such cases, additional capacity at sites affiliated with the other NIAID-funded networks would first be sought; this may be accomplished through a co-endorsement agreement with another network or through direct solicitation of sites affiliated with other networks (with permission of the leadership of those networks, as needed). If the required additional capacity cannot be identified among sites currently affiliated with other networks, engagement of sites that were proposed as part of a NIAID CTU application but not funded will be considered next, followed – if necessary – by soliciting sites that are not associated with a NIAID-funded network or with NICHD, following DAIDS protocol specific site expansion procedures.

For some studies, IMPAACT research partners or sponsors may specifically request inclusion of sites beyond those currently funded for IMPAACT studies by NIAID or NICHD. In such cases, the MOG’s approval must be obtained and the DAIDS protocol specific site expansion procedures must be followed, regardless of funding source.
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11 STUDY-SPECIFIC PRE-IMPLEMENTATION ACTIVITIES

There are a number of preparatory steps that must be completed before an IMPAACT study can be designated as open to accrual, as defined by the Division of AIDS (DAIDS) Study Statuses. These steps should be initiated during protocol development. While many of the steps cannot be completed prior to finalization of protocol Version 1.0, all should be completed as rapidly as possible following finalization of protocol Version 1.0.

The protocol chair and clinical trial specialist (CTS) work closely with other protocol team members to identify and track all requirements that must be met to open each study to accrual; while some requirements apply to all studies, others may be study-specific. These requirements are described in Section 11.1. After all requirements have been met, the CTS announces that the study is open to accrual by notifying the protocol team and participating sites, the IMPAACT Data Management Center (DMC) Chief Data Manager, DAIDS Regulatory Support Center Clinical Study Information Office (RSC CSIO), and DAIDS Office of Clinical Site Oversight Monitoring Operations Branch (OCSO MOB).

The CTS also coordinates the site-specific study activation process for each study, which, as described in Section 11.2 below, should proceed in parallel with work toward opening each study to accrual.

Sites may not initiate implementation of an IMPAACT study until after the study is opened to accrual and they have received a site-specific study activation notice.
11.1 Study Opening Requirements

This section describes requirements that must be met to open a study to accrual.

11.1.1 Clinical Trials Agreement

A clinical trial agreement (CTA) is typically negotiated between a collaborating pharmaceutical company and DAIDS to document the responsibilities and rights of each party for the clinical trial. The agreement typically includes, but is not limited to, Investigational New Drug (IND) application sponsorship (if applicable), provision of study products, safety and data monitoring, and access to data. In general, terms in the CTA covering access to data conform to DAIDS and Network policies.

When CTAs are required, the DAIDS CTA Team negotiates with the company. The DAIDS medical officer (MO) assigned to the study initiates the CTA development process internally at DAIDS during the protocol development process once it is determined that one or more pharmaceutical companies will provide study product and/or other support for the study (typically at the time of DAIDS Scientific Review Committee [SRC] review). The CTA Team seeks input and review of CTAs by the protocol chair, MOs, and Statistical and Data Management Center (SDMC) Principal Investigator (PI), who consults with the SDMC representatives on the protocol team, as needed, during the negotiation process. In some cases, study protocols cannot be distributed to participating sites as final until the CTA is finalized. The status of a CTA can be tracked on the National Institute of Allergy and Infectious Diseases Clinical Research Management System (NIAID CRMS, previously called DAIDS Enterprise System [ES]).

Copies of executed CTAs are provided to the collaborating pharmaceutical companies and the IMPAACT Operations Center and SDMC. They are not typically distributed to study sites, and sites are not expected to maintain copies of CTAs.

11.1.2 ClinicalTrials.gov Registration and Entry of Results for IMPAACT Studies

ClinicalTrials.gov is a US government-funded clinical trials registry.

In September 2007, the US Food and Drug Administration and Amendments Act (FDAAA) mandated that certain types of clinical trials be registered in ClinicalTrials.gov and that results be entered for all trials except for Phase I and observational studies. This mandate applied to all trials initiated or ongoing as of 26 December 2007. In September 2016, the US Department of Health and Human Services issued a Final Rule for Clinical Trials Registration and Results Information Submission (42 CFR Part 11) that clarifies and expands the regulatory requirements and procedures for submitting registration and summary results information of clinical trials on ClinicalTrials.gov, in accordance with FDAAA 801. Also in September 2016, NIH issued a final policy to promote broad and responsible dissemination of information from NIH-funded clinical trials through ClinicalTrials.gov. Under this policy, every clinical trial funded in whole or in part by NIH is expected to be registered on ClinicalTrials.gov and have summary results information submitted and posted in a timely manner (within one year after the Primary Completion Date, which is the date on which the last participant was examined or received an intervention to collect final data for the primary outcome measure(s)), whether subject to FDAAA 801 or not. This policy is effective for applications for funding, including grants, other transactions, and contracts submitted on or after 18 January 2017. For the NIH intramural program, the policy applies to clinical trials initiated on or after 18 January 2017. In addition, some journals require that studies (including Phase I) be registered on ClinicalTrials.gov. All IMPAACT studies are registered.
The Sponsor and/or Responsible Party of the study is responsible for entering and maintaining the data in ClinicalTrials.gov:

- For IND studies, for which the IND is held by DAIDS, the sponsor is DAIDS and the study is registered and maintained by DAIDS (or its regulatory contractor).
- For non-IND studies, the sponsor is IMPAACT and the study is registered and maintained by the Network.
- Submission of IMPAACT study results to ClinicalTrials.gov (when required) is generally done by SDAC.

Per FDAAA, protocols must be registered no later than 21 days after the first participant is enrolled.

### 11.1.3 United States Food and Drug Administration Review

If an IMPAACT protocol is submitted to the US Food and Drug Administration (FDA) under a new IND application, a minimum period of 30 calendar days must elapse before the study can be opened to accrual. Within this 30-day period, the FDA will review the protocol and notify the IND sponsor of any issues identified during this review. If the FDA is not able to complete its review within 30 days, the team may be informed that the timeline for the review has been extended; in this case, the study cannot be opened to accrual until further information is received from the FDA. IMPAACT protocols are typically distributed to participating sites to initiate local protocol submission processes (see Section 11.2.1), while awaiting the outcome of the FDA review.

If the FDA finds sufficient safety concerns, a Clinical Hold on the protocol may be issued. In this case, the study may not open to accrual until the issues are resolved. The FDA may require that the protocol be amended or that additional data be submitted to justify why an amendment is not required. The protocol team must coordinate with the DAIDS MO and DAIDS Regulatory Affairs Branch (RAB) to respond to the FDA as soon as possible and within the timeframe specified by the FDA.

If no communication is received from the FDA within 30 days of the submission, or if questions or comments are received in the absence of a Clinical Hold, the protocol may be considered “Safe to Proceed.”

In addition to the above, FDA review questions and comments may be received at any time during the lifecycle of a study. The protocol team must coordinate with the DAIDS MO and DAIDS RAB to address any such questions and comments within the timeframe specified by the FDA.

### 11.1.4 Study Product Acquisition and Shipment to Sites

Study products for IMPAACT studies are typically received from the manufacturer or other source and stored at and distributed to participating sites from the DAIDS Clinical Research Product Management Center (CRPMC). General instructions for ordering study products from the CRPMC are provided in the *Pharmacy Guidelines and Instructions for DAIDS Clinical Trials Networks*. For some studies, these general instructions may be supplemented with additional or alternative study-specific instructions provided by the DAIDS Pharmaceutical Affairs Branch (PAB).

Before study products can be provided to a study site, the DAIDS protocol registration process described in Section 11.2.2 must be completed. For non-US sites, the site’s Pharmacist of Record (PoR) must also communicate with the CRPMC and provide any documentation needed to permit import of study product. The site Investigator of Record (IoR) and PoR are responsible for understanding the local requirements
and obtaining the necessary approvals, including those that may provide waivers of import fees. To aid sites in obtaining local approvals, the CRPMC will provide a pro forma invoice upon request, detailing the quantity, lot numbers, expiration dates (when available), value, and other details of all products and related materials to be shipped to the site for use in the study. Sample product labels may also be provided by the DAIDS PAB upon request for use in obtaining local approvals, if necessary. PoRs are encouraged to provide information to the CRPMC that may be helpful in shipping products to the study site, including suggestions for preferred couriers and specific wording to be used on the shipping documents to avoid unnecessary customs delays or fees.

For studies involving drugs or biologics that are not conducted under an IND, export approval from the US FDA may also be required before study product can be shipped to certain countries. This approval may be sought by either the product manufacturer or the local drug authority and can take a long time to obtain; therefore, the process to obtain approval should be initiated as early as possible in the pre-implementation phase of the study.

Study product must be available for ordering at the CRPMC before a study can be opened to accrual. Questions regarding study product acquisition and shipment should be directed to the DAIDS protocol pharmacist for the study.

11.1.5 Laboratory Processing Chart

A Laboratory Processing Chart (LPC) is developed for most IMPAACT studies as a detailed laboratory-related companion document to the protocol. LPCs provide detailed instructions for specimen collection, handling, processing, storage, and shipping; the LPC also contains Laboratory Data Management System (LDMS)-specific visit codes, specimen type code, and applicable data collection material details. The LPC also lists relevant contact information for collaborating laboratories and repositories.

The laboratory technologist (LT) assigned to each protocol is primarily responsible for developing the LPC in close collaboration with the IMPAACT Laboratory Center (ILC) representative. Prior to submitting the draft LPC for final review by the protocol team, the LT coordinates with the ILC representative to arrange for a secondary review by another LT from the Laboratory Technologists Committee (LTC). The protocol team is responsible for reviewing the LPC and ensuring that it matches the protocol Schedule of Evaluations and other relevant sections of the protocol. The full protocol team is responsible for reviewing drafts of the LPC when distributed. Sign-off is required from the protocol chair, LC representative, LDM, and CTS. The final LPC must be available before a study can be opened to accrual.

The LT is responsible for finalizing and maintaining the LPC, requesting its posting and distribution, and ensuring appropriate version control. If the LPC requires updates during study implementation, the LT will coordinate that process. Further details regarding the LPC may be found in Section 17.

11.1.6 Participant Enrollment Materials

The DMC Subject Enrollment System (SES) is used to enroll participants in IMPAACT studies. For most studies, the system is also used to track screening of potential participants. The system requires use of eligibility checklists that correspond to study-specific inclusion and exclusion criteria, which must be programmed into the system for each study. In a process coordinated by the protocol data manager, draft versions of the checklists are distributed for protocol team review; sign-off is required from the protocol chair and protocol statistician prior to finalization.
For studies that involve use of a study drug or product that will be provided to participants upon enrollment, a prescription file must also be developed for the study and programmed into the SES. For studies that involve random assignment, the prescription files are linked to the randomization programming. Draft versions of prescription files are reviewed by the protocol pharmacist and protocol statistician, with sign-off required prior to finalization.

Once the eligibility checklists and prescription and randomization files are finalized, DMC staff program them into the SES and perform all necessary programming and system checks. Final programmed versions of the checklists and, as applicable, prescription and randomization files must be available before a study can be opened for accrual. Once final programmed versions are available, the DMC randomization coordinator sends an announcement to protocol team and participating sites informing them that the checklist is available for review but that the study is not yet open to accrual; see the last bullet in Section 11.1.7.

11.1.7 Data Collection Materials

Data collection instruments (e.g., electronic case report forms [eCRFs]) are used by study staff to record data needed to answer IMPAACT study questions. The DMC is responsible for developing the data collection instruments and associated materials (e.g., data collection forms schedules or eCRF completion guide) needed for each study. Standard data collection instruments are used preferentially, but study-specific instruments are developed as needed to meet the data collection needs of each study as efficiently as possible.

IMPAACT data collection instruments are developed as follows:

- Development of the data collection instruments for a study typically begins when the protocol is in the final stages of development (i.e., following approval of the protocol by DAIDS SRC).
- The internal DMC study team puts together a data collection forms schedule and listing, or eCRF completion guide, of required data collection instruments based on protocol objectives, schedules of evaluations, and reporting needs. Scientific expertise is sought externally, as appropriate.
- Data collection instruments are distributed to the protocol team for review and comment; sign-off by the protocol chair and statistician is required to complete study builds.
- If select data collection instruments require translation into local languages after they are finalized in English, the DMC team will work with site staff to prepare the local language translations and back-translations. DMC staff will review back-translations to ensure that the translated data collection instruments retain the intended meaning of the original English language instruments.
- The data collection instruments go through a series of reviews:
  - Team review
  - DMC review, including Clinical Data Interchange Standards Consortium (CDISC) standards review, as needed
  - SDAC review
  - IMPAACT eCRF committee
  - Final team review and sign-off
- Once the data collection instruments have been reviewed by the team and final sign-off is received from the protocol chair and statistician, internal DMC processes are initiated for Clinical Trials Data Management System (CTDMS) finalization. This process requires six to eight weeks. The final data collection instruments are then posted to the DMC portal. The data manager will notify the protocol team and participating sites once the data collection instruments are available.
The Chief Data Manager informs the Operations Center when all DMC materials (i.e., data collection and participant enrollment materials) are ready for study opening. These materials must be available before a study can be opened to accrual.

If the data collection instruments require updates during study implementation, the protocol data manager will coordinate that process. Final sign-off by the protocol chair and statistician is required for new and updated data collection instruments.

11.1.8 Study-Specific Manual of Procedures

A study-specific manual of procedures (MOP) serves as an operational resource for implementation of IMPAACT studies. The purpose of a study-specific MOP is to supplement the protocol with further information to optimize adherence to study protocols and standardization of study procedures across sites.

Study-specific MOP development typically begins when the protocol is in the final stages of development. The CTS is responsible for coordinating the development and review of all MOP sections in close cooperation with the protocol chair and other protocol team members, some of whom are typically assigned primary authorship responsibilities, as outlined in Table 11-1. For example, the protocol pharmacist may prepare sections of the MOP related to study product management. Regardless of primary authorship assignments, the CTS will coordinate the development and finalization of all sections, requesting and incorporating input other protocol team members and site staff as needed prior to finalization.

The full protocol team is responsible for reviewing draft sections of the study-specific MOP when distributed. Sign-off of all sections is required from the protocol chair and DAIDS MO; sign-off requirements for other protocol team members are listed in Table 11-1. Sign-off requirements must be completed before the MOP can be finalized and made available to participating sites.

Topics typically included in study-specific MOPs are as follows:

- Study overview
- Site preparations for the study
- Study communications and resources
- Participant accrual and retention considerations
- Recruitment, screening, and enrollment considerations
- Study implementation, visits, and procedures considerations
- Informed consent and assent considerations
- Pharmacokinetic (PK) considerations
- Pharmacy and study drug considerations
- Specimen collection and laboratory considerations
- Expedited adverse event (EAE) reporting considerations
- Clinical and toxicity management considerations
- Data management considerations

The final study-specific MOP must be available before the study is opened to accrual.

The MOP may be updated over time as experience with study implementation identifies aspects of the study protocol that may require further explanation or in response to frequently asked questions. When updates are required, the CTS will coordinate that process. The CTS will draft or obtain required updated text and obtain review and sign-off from protocol team members as listed in Table 11-1; sign-off from the
protocol chair and DAIDS MO is required for all updates. The CTS will document updates using a version control log that will be made available with the updated MOP upon finalization of the updates. Depending on the complexity of the study-specific MOP, it may be versioned in its entirety or by section (this will be reflected in the version control log; versioning of the MOP will correspond with the same whole number as the current version of the protocol).

The CTS will notify the protocol team and participating sites of all study-specific MOP updates. It is the responsibility of the site IoR to ensure that current versions of the MOP are maintained on-site, in all relevant locations, and that updated MOP content is communicated to all applicable study staff in a timely manner.

| Table 11-1. Protocol Team Member Study-Specific MOP Responsibilities and Requirements |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Protocol Team Member             | Responsibilities and Requirements                                                                                                                                                     |
| Protocol Chair and DAIDS MO      | Responsible for review and sign-off of all sections                                                                                                                                    |
| Protocol Data Manager            | Responsible for review and sign-off on sections related to data collection and management                                                                                                 |
| Protocol Lab Specialist and Laboratory Technologist | Responsible for input, review, and sign-off on sections related to specimen collection, processing, testing, shipping, and other related sections |
| Protocol Investigators            | Responsible for input and review of sections related to clinical or other specialized procedures and safety reporting         |
| Protocol Pharmacist              | Responsible for input, review, and sign-off of sections related to study product and study product management                    |
| Protocol Pharmacologist          | Responsible for sections related to PK procedures and considerations for study implementation, if applicable                      |
| CTS                              | Responsible for sections related study overview, documentation requirements, accrual and retention, informed consent, study procedures, safety and clinical procedures, counseling, and any other sections related to study-specific requirements |
| Protocol Statistician            | Responsible for review of relevant sections                                                                                                                                             |

11.1.9 Study Monitoring Plans

Each IMPAACT study protocol specifies monitoring to be performed throughout the course of the study. Protocol statisticians and data managers are responsible for developing a study progress, data, and safety monitoring plan (SPDSMP) that details the study data to be monitored; the type, frequency, and content of monitoring reports that will be generated; and responsibilities for generating, receiving, and reviewing monitoring reports. The content of the SPDSMP must be consistent with relevant sections of the study protocol (e.g., safety related roles and responsibilities, monitoring). Drafts of the SPDSMP are distributed for protocol team review and input, in an iterative process as needed, to prepare a near final draft to be discussed with the Study Monitoring Committee (SMC) or Data and Safety Monitoring Board (DSMB) that oversees the study during the initial SMC or DSMB review. Input from all team members, and the SMC or DSMB, is incorporated into the final SPDSMP, with sign-off obtained from the protocol chairs and DAIDS MO. The SPDSMP should be finalized approximately concurrent with the study protocol and must be finalized before the study is opened to accrual, unless otherwise specified in the protocol.

For studies that include PK evaluations, the laboratory data managers are responsible for developing a Pharmacology Data Management Plan, in collaboration with the protocol pharmacologist and the protocol
data managers. In general, this plan should specify the process for monitoring PK sample collection, data quality, and sample shipping for the study, as well as content, format, schedule, and mechanism for transfer of PK assay results and parameter datasets (note that some elements describing data transfer may be included in data transfer agreements, DTAs, in some studies moving forward). The plan must be consistent with relevant sections of the study protocol and SPDSMP. A near final draft of the plan should generally be discussed with the SPDSMP during the initial SMC review or if applicable and requested for an initial DSMB review. Input from all team members is incorporated into the final Pharmacology Data Management Plan, with sign-off obtained from the protocol chairs, pharmacologists, protocol data managers, and laboratory data managers. Finalization of the plan is required prior to opening the study to accrual.

Other study-specific monitoring plans may be developed as described in the study protocol as applicable and will generally follow the same processes as described above for the SPDSMP.

11.1.10 Statistical Analysis Plan

The protocol statisticians are responsible for drafting a statistical analysis plan (SAP) that details the analyses to be performed to fulfill the study objectives. The primary SAP details the analyses to be performed for the primary study publication; when applicable, additional SAPs may be prepared for analyses to be performed for secondary publications. For PK studies, protocol pharmacologists are responsible for developing a pharmacology SAP. Drafts of SAPs are distributed for protocol team review and input, in an iterative process as needed. Input from all team members is incorporated into final versions.

The primary SAP must be finalized before the study is opened to accrual, unless otherwise specified in the protocol.

11.1.11 Study Budget

Study-specific budgets are developed during protocol development and require review and approval from the IMPAACT Management Oversight Group (MOG) prior to opening a study to accrual. The Operations Center works with the protocol chair and other team members as appropriate to develop the study-specific budget inclusive of site and protocol-specific specialty laboratory costs, costs for central resources (Operations Center, SDMC, and LC), and any other study-specific costs as needed. Typically, the study budget will be submitted to the MOG for review and approval soon after the draft protocol is reviewed by the Multidisciplinary Protocol Review Group (see Section 9), as significant changes affecting the budget may result from that review. If additional changes with budget implications are made after MOG review, e.g., resulting from subsequent protocol review steps such as DAIDS Scientific Review Committee review, the updated budget will be re-submitted to the MOG.

The Operations Center maintains study budgets and coordinates with the Johns Hopkins University (JHU) Finance Office, which executes sub-agreements, sub-contracts, and other funding mechanisms in a timely fashion to ensure all necessary components of the study are implemented per protocol. For example, some screening procedures may require sub-contracts or sub-agreements to be developed, negotiated, and fully executed prior to opening a study to accrual. Some study procedures or shipping of specimens during study follow-up may allow sub-agreements and sub-contracts to be developed during study implementation. The CTS will communicate with the LC representative and LT to ensure that all IMPAACT protocol-specific specialty labs and/or contract labs have been notified that they will receive and process study-specific samples. Any budget modifications needed during study implementation will be communicated to the MOG for approval and to the JHU Finance Office prior to finalization.
Protocol modifications, such as Letters of Amendment (LoA) or full protocol amendments, may have implications on the study budget. The proposed modifications, along with any associated changes to the budget, must be reviewed and approved by the MOG prior to development of the LoA or full protocol amendment (see Section 9).

11.2 Site-Specific Study Activation

During the process of protocol development, the protocol team compiles a study-specific listing of regulatory, operational, and other applicable requirements that must be met for participating sites to initiate study implementation. This is referred to as the “Site-Specific Study Activation Checklist.” Sites are encouraged to complete all study activation requirements in a timely manner, with the overall goal of completing the activation process as soon as possible after the study is opened to accrual.

For all studies, sites are required to obtain required approvals and successfully complete the DAIDS protocol registration process as described in Sections 11.2.1 and 11.2.2 prior to study activation. Sites are also required to complete a study-specific delegation of duties log, as described in Section 11.2.3 prior to study activation.

Additional study activation requirements are further described in the sections below, as follows:

- Section 11.2.4: Financial disclosures
- Section 11.2.5: Clinical trials insurance
- Section 11.2.6: Pharmacy requirements (for studies that include study products)
- Section 11.2.7: Data management requirements
- Section 11.2.8: Laboratory requirements
- Section 11.2.9: Study-specific standard operating procedures (SOPs)
- Section 11.2.10: Study-specific training (see also Section 16)
- Section 11.2.11: Site-specific SOP for regulatory inspection readiness
- Section 11.2.12: Local language translation of study documents

Additional study-specific requirements may be specified and tailored to the needs of the study as determined by the protocol team to ensure site readiness for study implementation. Other requirements may include the following:

- Availability of specialized personnel
- Availability and confirmed operability of specialized equipment or supplies on site (e.g., study-specific electrocardiography [ECG] or dual x-ray absorptiometry [DXA] machines)
- Availability of required concomitant medications on site
- Availability of translated study implementation materials
- On-site review of study-specific documentation (e.g., study product investigator’s brochure or package insert, study-specific MOP, study-specific LPC)

The CTS is responsible for coordinating the development and review of the checklist in close cooperation with the protocol chair and other protocol team members, some of whom are typically assigned responsibilities for confirming elements of activation for each site, as outlined in the generic, template activation checklist, posted on the IMPAACT website. Sign-off of all sections is required from the protocol chair and DAIDS MO; sign-off requirements for other protocol team members will be determined per the applicable requirements. The CTS will distribute the activation checklist to participating sites, communicate with sites and other protocol team members as needed to confirm completion of the activation requirements, and maintain documentation of completion for each site. Other
team members typically involved in the process include the protocol data manager, LC representative, and protocol pharmacist. The CTS will follow-up with sites in an iterative process to confirm when each requirement has been met, with the aim of confirming completion of all requirements as rapidly as possible and ideally by the time that the DAIDS protocol registration process has been completed.

Once all site activation requirements have been met, the CTS will grant site readiness approval through the DMC portal to the study-specific screening and enrollment screens in the SES. The CTS will also issue a site-specific study activation notice indicating that the site may initiate study implementation. Sites may not conduct any study-specific screening or enrollment (on-study) procedures prior to receipt of their site-specific study activation notice.

11.2.1 IRB/EC and Other Regulatory Approvals

Consistent with 45 CFR 46 (and 21 CFR 56 for IND studies), all sites must obtain IRB/EC approval of IMPAACT study protocols. Approval must also be obtained from other regulatory and/or approving entities as described in the DAIDS Protocol Registration Manual. Each site should complete study-specific submissions to their IRBs/ECs and other regulatory entities as soon as possible following distribution of the final study protocol and protocol amendments, if applicable. The site IoR is responsible for ensuring that all applicable review and approval requirements are met and adequately documented. It is recommended that sites request that IRB/EC and other regulatory entity approval letters reference the following:

- DAIDS Study ID and IMPAACT protocol number
- Full protocol title
- Protocol version number and date
- Version number and date of approved informed consent forms
- Risk/benefit category if research involves children or adolescents (this is required per the DAIDS Protocol Registration Manual)
- Effective date of approval
- Signature of the chair of the review body or designee
- Title of the person signing for the review body

It is also recommended, but not required, that the expiration date of the approval be included. If the date of expiration is not in the approval letter, it is assumed to be one year from the date of approval. If approval documentation is provided in a language other than English, the document must be translated into English.
11.2.2 DAIDS Protocol Registration

After obtaining approval from all required IRBs/ECs and regulatory entities, each site must complete the DAIDS protocol registration process as described in the DAIDS Protocol Registration Manual. The protocol registration process verifies that sites have obtained all required approvals to conduct a study and have submitted documentation pertaining to investigator qualifications, commitments, and responsibilities that are required by US regulations and DAIDS; this documentation includes the IoR’s signed and dated protocol signature page (PSP) and a signed and dated Form FDA 1572 (for IND studies) or DAIDS Investigator of Record Form (for non-IND studies). The protocol registration process also verifies that site-specific informed consent forms contain the necessary information to comply with US regulations.

In addition, the process verifies completion of the PSP by the site IoR. (Note: DAIDS does not require submission of the signed PSP to site IRBs/ECs or other regulatory entities, unless required by the regulatory entity.) The IoR at each site is responsible for completing the PSP and ensuring it is submitted to DAIDS PRO. The completed PSP should also be filed on site with other study essential documents.

Upon successful completion of the protocol registration process, the site will receive a Registration Notification or a Registration with Required Corrections Notification, which is copied to the Operations Center, and subsequently noted by the CTS as constituting completion of this study activation requirement.

11.2.3 Study-Specific Delegation of Duties Log

As of 1 November 2017, DAIDS requires clinical research sites to maintain study-specific Delegation of Duties Logs, as follows:

- **For all studies in which the site was enrolling participants as of 1 November 2017:** A study-specific Delegation of Duties Log, meeting DAIDS requirements and signed by the IoR, was to be in place no later than 1 November 2017.
- **For all new studies in which the site would enroll participants after 1 November 2017:** A study-specific Delegation of Duties Log, signed by the IoR, was to be in place prior to initiating the study. The IMPAACT Operations Center worked with study teams to implement this requirement during the site-specific study activation process, generally, by distributing a template study-specific Delegation of Duties Log for site use. For studies in which site-specific study activation had already been granted but a study-specific Delegation of Duties Log was not yet in place, a study-specific Delegation of Duties Log, meeting DAIDS requirements and signed by the IoR, was to be in place prior to initiating the study or as of 1 November 2017 (whichever was sooner).
- **For ongoing studies in which the site was no longer enrolling participants on or after 1 November 2017:** A study-specific Delegation of Duties Log was strongly encouraged by IMPAACT, but not required.

Additional DAIDS guidance may be found at [https://rsc.niaid.nih.gov/clinical-research-sites/delegation-duties-logs](https://rsc.niaid.nih.gov/clinical-research-sites/delegation-duties-logs).

During the activation process, the protocol CTS may provide sites with suggested study-specific duties or roles in addition to the standard listing of roles and responsibilities.

Generally, the requirement for site-specific study activation for this element is that the site IoR or designee confirms to the Operations Center the completion of the study-specific delegation of duties log.
11.2.4 Financial Disclosures

For studies conducted under an IND, all individuals listed on Form FDA 1572 must complete a study-specific financial disclosure form to fulfill 21 CFR 54 requirements. These forms must be completed prior to activation and kept up-to-date on-site throughout the course of the study; additional details about this requirement are provided in Section 7 of this manual and on the DAIDS Regulatory Support Center website.

IMPAACT has developed a template financial disclosure form that may be used to record the required information. Alternatively, an equivalent form required by a pharmaceutical company may be used. The CTS will provide sites with the relevant form to be used for a given study.

To meet study activation requirements, at a minimum, the IoR or designee at each site must confirm when financial disclosure forms have been completed by all individuals listed on the Form FDA 1572. In some cases, the IoR will need to submit the completed forms to the Operations Center or to DAIDS. Completed forms must be available on site for review by site monitors and other sponsor, IMPAACT, FDA and other regulatory entity representatives.

Note that the requirement to maintain financial disclosure documentation for a given study is separate and distinct from NIH requirements to identify conflicts of interest, which is done periodically through the Office of HIV/AIDS Network Coordination (HANC). While there may be some overlap in the information collected through these two mechanisms, financial disclosure documentation must be compiled and maintained on-site for each IND study conducted at each site.

11.2.5 Clinical Trials Insurance

As of 10 August 2018, DAIDS requires verification of clinical trials insurance (CTI) prior to study activation for sites in countries where CTI is legally required, as listed on the DAIDS RSC website at https://rsc.niaid.nih.gov/networks-protocol-teams/clinical-trials-insurance.

CTI will be verified by the Operations Center following review of the site’s insurance certificate relative to the DAIDS Clinical Trials Insurance Certificate Checklist, Version 1.0, dated August 9, 2018. Insurance certificates must be maintained in the site’s essential document files and be available for inspection upon request. Site IoRs are responsible for maintaining insurance coverage in good standing throughout the relevant coverage period for each study, consistent with DAIDS requirements.

Note: Sites participating in ongoing DAIDS sponsored studies must ensure that CTI is procured by 1 November 2018. Insurance certificates for ongoing studies must be provided to the site’s OCSO Program Officer.

11.2.6 Pharmacy Requirements

Completion of pharmacy-related activation requirements is generally confirmed by the DAIDS protocol pharmacist, who notifies the CTS when requirements have been met. Generally, study products are required on-site prior to activation. However, depending on the length of the study screening process and other study product considerations, such as shelf-life, the protocol team may determine that this requirement can be waived. Other pharmacy requirements may include availability of required pharmacy infrastructure or equipment, availability of concomitant medications and supplies for study drug administration on site, and completion of specialized pharmacist training, when applicable.
11.2.7 Data Management Requirements

Completion of data management activation requirements is generally confirmed by the protocol data manager, who notifies the CTS when requirements have been met. The protocol team may require translation and back-translation of study-specific data collection instruments as an activation requirement. If so, translated instruments must be independently back-translated into English for review and approval by the DMC. Other data management requirements for activation may include completion of training applicable to the study, such as for Medidata Rave and the Subject Enrollment System, and availability of relevant materials and equipment on site for study implementation.

11.2.8 Laboratory Requirements

Confirmation of relevant local laboratory certifications and/or approvals is typically required prior to activation. Initiation or completion of specimen or material transfer agreements may also be required prior to activation to ensure that samples may be shipped in a timely manner as applicable for the study.

Completion of laboratory-related activation requirements is generally confirmed by the protocol Laboratory Center representative (for NIAID sites) or by Westat (for National Institute of Child Health and Human Development [NICHD] sites), who notifies the CTS when requirements have been met (see Section 17).

11.2.9 Study-Specific Standard Operating Procedures

The protocol team will consider the operational requirements to implement a study to identify study-specific SOPs that should be in place at each site prior to study activation. The protocol team may also require team review of draft SOPs and submission of the final version for activation. Requirements will be outlined in the study-specific activation checklist and are generally confirmed by the CTS.

11.2.10 Study-Specific Training

For each IMPAACT study, the protocol team agrees on a study-specific training plan that is tailored to the needs of the study and the participating sites, as further described in Section 16. The site IoR is responsible for ensuring that site staff are appropriately qualified and trained to carry out their delegated duties and that all training is adequately documented.

11.2.11 Site-Specific Standard Operating Procedure for Regulatory Inspection Readiness

Sites participating in IND studies must be adequately prepared for regulatory inspection visits and/or audits. The activation requirements for IND studies include site SOPs describing roles, responsibilities, and procedures for preparing for and participating in regulatory inspection visits. These SOPs are intended to be applicable across studies conducted at a given site, and therefore are not study-specific. A template SOP that may be adapted for use at each site and an SOP review checklist are available from DAIDS. For activation of each IND study, the site IoR or designee is required to confirm that this SOP is available at the site.
11.2.12 Local Language Translation of Study Documents

Site IoRs are responsible for ensuring that site staff and participants are provided all required study-related information in a language they understand. Site IoRs are responsible for notifying the protocol team whether protocol documents and other study implementation materials require translation into local languages. Protocol team members may also identify translation needs; for example, interviewer-administered or participant-completed data collection instruments must be translated into local languages. For other types of documents, it is generally expected that site staff will translate the materials into applicable local languages and arrange for an independent translation certification or back-translation. In some situations, the Operations Center or the NICHD coordinating center may be able assist with the translations.

When translated materials are required for study implementation, this will be reflected in the study activation checklist. In some circumstances, sites may be activated to initiate a study with only English language materials available, if this is appropriate for the study population at the site. In these situations, only English-speaking participants may be screened and enrolled in the study until the required local language materials are available. This will be stated in the initial site-specific study activation notice, and an updated notice will be issued once all required translated materials are available.
12 STUDY IMPLEMENTATION

12.1 Participant Accrual and Follow-Up in IMPAACT Studies

12.1.1 Accrual Projections

As part of protocol development and the site selection process, overall study and site-specific participant accrual targets are established. Overall targets are specified in the study protocol based on the scientific objectives and statistical considerations. Site-specific targets are specified in the site selection and accrual plan developed by the protocol team and approved by the IMPAACT Management Oversight Group (MOG, see Section 10). Unless otherwise specified, the study-specific enrollment period begins on the first day of participant enrollment at any participating study site; site-specific enrollment periods are considered to begin on the first day of participant enrollment at that site. For many studies, the time from the first day of participant screening through the end of participant accrual is also tracked and reported.

Site-specific accrual targets should reflect protocol specifications for distribution of participants (e.g., within specific geographical areas, age groups, etc.); enrollment caps for sites may be specified in the protocol or in the MOG-approved accrual plan, depending on the needs of the study. Otherwise, enrollment targets may be shifted across sites in response to actual accrual/site performance. Protocol teams should consider whether to specify a maximum number of participants to be enrolled for any site to...
ensure that one or more sites or populations from a given area are not inappropriately over-represented. Some IMPAACT protocols specify an estimated total number of participants to be enrolled to reach a target number who are fully evaluable as defined in the protocol; in such cases, guidelines for adding participants are typically specified in the protocol. The protocol chair and statistician lead the protocol team in making these determinations, and work with the data manager, clinical trials specialist (CTS), and other team members to ensure that procedures are in place to operationalize accrual targets and restrictions as needed.

For studies in which enrollment targets are shifted across sites, sites inform their Institutional Review Boards/Ethics Committees (IRBs/ECs) of increases or decreases in their enrollment targets in accordance with IRB/EC requirements and revise their informed consent forms to reflect changes as needed.

The Statistical and Data Management Center (SDMC) generates routine study screening, enrollment, and retention reports – for each IMPAACT study overall and by site – for review by the MOG; the reports for each study are shared with the protocol team. When applicable, reports are also generated by cohort or other relevant study-specific groupings. Protocol teams are responsible for closely monitoring accrual and retention on an ongoing basis and taking appropriate action as necessary to ensure that targets are met, in consultation with the MOG as needed.

### 12.1.2 Screening and Enrollment

For each IMPAACT study, screening and enrollment visit procedures are described in detail in the study protocol and, if applicable, the study-specific MOP. Information pertinent to participant screening and enrollment that is applicable to all IMPAACT studies is provided in the remainder of this section.

Written informed consent must be obtained from all IMPAACT study participants or their legal guardians prior to the performance of any protocol-specified screening or enrollment procedures. See Section 8 for additional information on the informed consent process.

Unless determined otherwise in consultation with Network leadership, screening for each study is tracked using the Data Management Center (DMC) Subject Enrollment System (SES) and reasons for screening failures are recorded or entered on a Screening Failure case report form (CRF). When relevant, protocol teams should also implement mechanisms to track recruitment and pre-screening activity. Screening data are monitored closely by the protocol team to identify specific barriers to enrollment (based on reasons for exclusion) and to monitor the pipeline of potential participants at participating sites, both of which inform study feasibility.

For each study, the SDMC provides participating sites with a list of participant identification numbers (PIDs) to be assigned to study participants for purposes of study data management. A PID is assigned to a potential study participant at time of screening for his/her first IMPAACT study. This same PID is used if the participant enrolls to any future network study as well. Detailed information on the structure and format of PIDs, and instructions for assigning them to individual study participants, are available on the DMC portal under Site Support in the Computing Manual: Participant Enrollment Methods.

From both a statistical and operational perspective, it is important to define when participants are considered enrolled in a study. For IMPAACT studies, participants are considered enrolled upon successful entry of required eligibility data into the SES. Successful entry into the SES generates a study identification number (SID) and, when applicable, prescribing information for the study intervention the participant should receive following enrollment.
The Division of AIDS (DAIDS) policy on essential documents (Requirements for Essential Documents at Clinical Research Sites Conducting DAIDS Funded and/or Sponsored Clinical Trials) requires study sites to document IMPAACT study screening and enrollment activities on screening and enrollment logs. Screening and enrollment logs may be maintained separately or combined into one log. The DAIDS policy on essential documents specifies that participant initials be recorded on screening and enrollment logs, in addition to PIDs. For IMPAACT studies, in agreement with DAIDS, participant initials need not be recorded on screening and enrollment logs if doing so presents a potential threat to participant confidentiality. However, in such cases, a separate document must be available to document the link between a participant’s name and PID.

12.1.3 Follow-Up Visits

For each IMPAACT study, the expected duration of participant follow-up, as well as the number and type of follow-up study visits or contacts that are scheduled to take place during the course of the study, are specified in the study protocol. In addition to specifying target visit dates, the protocol also specifies allowable visit windows for certain follow-up visits. Visit windows are defined as the period of time around the target date during which the visit procedures must be performed. In addition to allowable visit windows, narrower target visit windows within which the visit is expected to be performed may also be defined and used when reporting participant retention and the number of visits conducted early or late. Sites are encouraged to conduct visits within the visit window. Failure to conduct study-specific procedures within the protocol-specified visit window is a deviation from the protocol and should be documented appropriately (see Section 12.4).

Interim visits are those that are not scheduled per protocol and are in addition to regular study visits. Interim visits or contacts may take place for a variety of reasons (e.g., a participant may be sick, need additional study product, additional laboratory tests, etc.). The interim visit must be documented in the participant’s study record; unless immediate reporting is specified (e.g., an adverse event that meets the criteria for expedited reporting), data are recorded or entered on CRFs at the next scheduled study visit, or as instructed by the protocol team and protocol data manager.

When necessary and unless otherwise specified in the study protocol, sites may conduct “split” visits in which the evaluations required for a given study visit are conducted over a period of more than one visit to the clinic.

12.1.4 Participant Transfer between IMPAACT Sites

During the course of IMPAACT studies, participants may leave the geographic area where they were enrolled and relocate to another area where the same study is taking place. To maximize retention, participants who relocate from one study area to another may be encouraged to continue their participation in their new location, unless otherwise directed by the study protocol. To accomplish this, study staff at both the originating site and the receiving site complete the process of a participant transfer.

All transfers should be performed using the Participant Transfer Request utility on the DMC portal. To complete a transfer using this utility, both sites must have completed the protocol registration process with the DAIDS Protocol Registration Office and have been issued a site-specific study activation notice from the Operations Center.
Key considerations are as follows:

- Care should be taken by both the originating site and the receiving site to protect participant privacy and confidentiality throughout the transfer process.
- The originating site is responsible for initiating each transfer using the Participant Transfer Request utility.
- The originating site is responsible for all aspects of study-related documentation and data management for study visits occurring before the transfer, including completion of CRFs and resolution of data queries for visits occurring before the transfer. Should additional data queries for pre-transfer visits arise after the transfer has been completed, the originating and receiving sites should work together as needed to resolve the queries.
- After all documentation has been completed and all data queries have been resolved, the originating site is responsible for preparing copies of the participant’s study records (source documents and any paper-based CRFs):
  - Original source documents — including original CRFs that serve as source documents — are retained at the originating site; certified copies are provided to the receiving site.
  - Original paper-based CRFs (excluding those that serve as source documents) are provided to the receiving site; certified copies are retained at the originating site.
  - eCRFs must be signed off by the originating site IoR in Rave prior to the participant transfer; the DMC will work with the originating and receiving sites to make the eCRFs available to the receiving site.
- The originating site is responsible for providing participant-specific contact details and participant-specific pharmacy details to the receiving site.
- The participant must provide written informed consent to continue study participation at the receiving site; receiving site staff are responsible for conducting and documenting the informed consent process per site standard operating procedures (SOP), using the informed consent form currently approved by the receiving site IRBs/ECs.
  - Note: Exceptions to this requirement may be applicable when the same informed consent form is approved for use at both the originating site and the receiving site.
- The receiving site is responsible for completing the transfer using the Participant Transfer Request utility. The receiving site is then responsible for all aspects of study-related documentation and data management for the transferred participant.
- The protocol data manager is copied on all correspondence generated by the Participant Transfer Request utility. When the receiving site completes the transfer through the utility, the data manager updates the clinical database to recognize that the transfer has been completed and the receiving site has taken full responsibility for the participant and study data going forward.
- If the study participant is on more than one study, this process needs to be completed for each study for which she/he is transferring study follow-up.
- The originating site should consult with the protocol team regarding the handling of specimens (e.g., when and where to ship specimens).

Due to concerns regarding confidentiality, documentation and other factors, temporary transfers (when a participant will be away from his/her originating site and potentially followed at another participating site for a short period of time) are typically not allowed.
12.1.5 Investigator-Initiated Early Termination of Participants

IMPAACT study participants (or their parent or legal guardian) may withdraw their consent to participate in IMPAACT studies at any time, for any reason. Investigator-initiated termination of an individual’s IMPAACT study participation prior to the protocol-specified completion of follow-up should occur only under extraordinary circumstances. For instance, termination may be considered if there is potential for harm to study staff or significant disruption of study operations.

In studies involving investigational products or interventions, Investigators of Record (IoRs) will not routinely terminate study participants solely because the participants are non-adherent to the protocol-specified regimen for use of the investigational product or intervention.

Prior to terminating a participant from an IMPAACT study, the IoR should seek approval of members of the protocol team designated in the study protocol. Designated members of the protocol team assess the scientific, operational, and statistical implications of the requested termination and determine whether the termination may take place.

The CTS or other designated protocol team member documents and provides the determination in writing (email or meeting minutes are acceptable) to the site. Site staff must always record reasons for termination in participant study records.

12.1.6 Participant Unblinding During Study Implementation

Protocol teams should indicate unblinding procedures in the protocol, including guidelines to determine if and when individual participant management unblinding is appropriate. Any deviation from the guidelines included in Appendix I, Unblinding Procedures, must be explicitly stated in the protocol; such “non-standard” unblinding are reviewed and approved by the Statistical and Data Analysis Center and the IMPAACT Multidisciplinary Protocol Review Group prior to protocol finalization. Additional details concerning background on blinding as well as procedures for unblinding during study conduct for safety or per-protocol and procedures for unblinding following study closure can be found in Appendix I.

12.2 Data Collection

The DAIDS policy on Requirements for Essential Documents at Clinical Research Sites Conducting DAIDS Funded and/or Sponsored Clinical Trials specifies the essential documents that study sites must maintain for DAIDS-sponsored studies.

In its policy on Requirements for Manual of Operational Procedures, DAIDS requires study sites to establish an SOP for maintaining essential documents. All study sites must comply with this requirement and follow their SOP for maintaining essential documents for the studies.

Site staff should also ensure that essential documents are subject to quality control (QC)/quality assurance (QA) procedures per the DAIDS policy on Requirements for Clinical Quality Management Plans.

The above-referenced DAIDS policies are available at: https://www.niaid.nih.gov/sites/default/files/daids-essentialdocpolicy.pdf
12.2.1 Participant Research Records

The United States Code of Federal Regulations and International Conference on Harmonization (ICH) Good Clinical Practice (GCP) guidance requires study site staff to maintain adequate and accurate participant “case history records” containing all information pertinent to the study for each IMPAACT study participant.

12.2.1.1 Participant Research Record Contents

Participant research records should contain all of the following elements:

- Basic participant identifiers such as PIDs or initials (Note that initials or other participant identifiers other than PID number should never be entered on a CRF or submitted to the DMC or study clinical database.)
- Documentation that the participant (or parent or legal guardian) provided written informed consent to participate in the study prior to the conduct of any study procedures
- Documentation that the participant met the study’s eligibility criteria
- A record of the participant’s random assignment (if applicable)
- A record of the participant’s exposure to investigational products (if applicable)
- A record of all contacts, and attempted contacts, with the participant including all clinic visits, off-site visits (e.g., at home or work), and all verbal and written contacts
- A record of all procedures performed by study staff during the study
- Complete source documents
- All CRFs and other study data collected from the onset of screening through end of participation
- Study-related information on the participant’s condition before, during, and at the conclusion of study participation, including:
  - Data obtained directly from the participant (e.g., interview responses)
  - Objective data ascertained by study staff (e.g., exam and laboratory findings)
  - Objective data obtained from non-study sources (e.g., medical records)

In addition to the above, the DAIDS policy on Requirements for Source Documentation in DAIDS Funded and/or Sponsored Trials requires that all protocol deviations involving participants be documented in participant’s study records, along with reasons for the deviation and attempts to prevent or correct the deviations, if applicable. See Section 12.4 regarding IMPAACT requirements for reporting protocol deviations.

12.2.1.2 Concept of Source Data and Source Documentation

The ICH/GCP guidance defines source data and source documentation as follows:

- The term “source data” refers to all information in original records and certified copies of original records of clinical findings, observations, or other activities in a clinical trial necessary for the reconstruction and evaluation of the trial. Source data are contained in source documents (original records or certified copies).
- The term “source documents” refers to original documents, data and records (e.g., hospital records; clinical and office charts; laboratory notes; memoranda; participants’ diaries or evaluation checklists; pharmacy dispensing records; recorded data from automated instruments; copies of transcriptions certified after verification as being accurate and complete; microfiche; photographic negatives; microfilm or magnetic media; x-rays; participant files; and records kept at the pharmacy, the laboratories, and medico-technical departments involved in the trial).
Source documents are commonly referred to as the documents — paper-based or electronic — upon which source data are first recorded.

IMPAACT study sites must adhere to the standards of source documentation specified in the DAIDS policy on **Requirements for Source Documentation in DAIDS Funded and/or Sponsored Trials**. This policy contains both requirements and recommendations. Study sites must comply with all requirements and are advised, but not required, to comply with all recommendations. Source documentation includes original documents and certified copies that include documentation pertaining to a participant while on study.

For each IMPAACT study, participant case history records typically consist of some or all of the following:

- Narrative chart notes
- Visit checklists or flow sheets
- Laboratory reports
- Medical records or clinic charts
- CRFs
- Randomization log or other documentation (when applicable)
- Investigational product dispensing and accountability records (when applicable)
- Other source documents and non-CRF data collection tools or questionnaires

As a condition for study activation, each site must have an established SOP for source documentation that specifies the use of these documents as source documents (see Section 11).

Supplemental information on use of chart notes, visit checklists, and CRFs as source documents is provided below. Also provided below is information related to investigational product dispensing and accountability records, document organization, and record retention requirements.

The DAIDS SOP for source documentation requires that a site must document which CRFs, if any, will be used as source documents. Study staff must follow the specifications of this SOP consistently for all study participants throughout the study. In the event that study staff are not able to record source data directly onto data collection instruments designated as source documents, the following procedures should be undertaken:

- Recording the data onto an alternate source document
- Entering the alternate source document into the participant’s study chart
- Transcribing the data from the alternate source document onto the appropriate CRF
- Recording a chart note stating the reason why an alternate source document was used
12.2.1.3 Chart Notes

Chart notes must be used to document the following:

- Procedures performed that are not recorded on other source documents
- Pertinent data about the participant that are not recorded on other source documents
- Protocol deviations that are not otherwise captured on other source documents

All chart notes or other tools used as source documentation must document the PID of the study participant to whom they pertain, the identity of the study staff member who entered information, and the date of the entry. Study sites are strongly encouraged to adopt a common format — such as the Subjective-Objective-Assessment-Plan (SOAP) format for all chart notes — to help ensure adequacy and consistency of note content and maximize adherence to GCP standards. Alternative standardized formats are acceptable and may be adopted by study sites.

12.2.1.4 Visit Checklists

In some studies, visit checklists may be a convenient tool for study staff to fulfill the requirement of documenting all procedures performed with each study participant. Note that checklists alone often are not sufficient for documenting all procedures. For example, chart notes may be required to document procedures performed at unscheduled study visits to explain why procedures, in addition to those specified on a checklist, may have been performed or why procedures specified on a checklist were not performed. Chart notes also may be required to document the content of counseling sessions and/or other in-depth discussions with participants (e.g., related to adherence to protocol requirements).

Study procedures for which visit checklists are used as source documentation must contain the PID, the initials or signature of the authorized study staff member completing the procedures, and the date the procedure was completed. Individual study staff members must initial only those procedures that they complete. In addition, if procedures listed on a single checklist are completed across multiple dates, the date upon which each procedure is completed must be clearly noted. Additional detailed guidance related to proper use of visit checklists may be provided in each study-specific MOP.

12.2.2 Case Report Form Distribution, Completion, and Data Entry

The DMC distributes CRFs to the participating sites in a format dependent on the Clinical Trials Data Management System (CTDMS) in use for the study.

For studies in eData, the formats include:

- Bulk CRFs: Preprinted CRFs bundled by form or visit type
- Electronic CRFs: PDF versions of the CRFs are furnished to the site through the Forms Management Utility on the DMC portal and the site is responsible for printing them
For studies in Medidata Rave, the formats include:

- Electronic CRF (eCRF) completion guide: PDF versions of the CRFs with instructions for preparation of collection of the study data and with data collection forms schedules are available on the DMC portal
- Print matrix: PDF versions of forms as they appear in the CTDMS, which may be downloaded by site personnel from the DMC portal
- Annotated print matrix: PDF versions of forms as they appear in the CTDMS, with annotated fields that may be used for data retrieval, which may be downloaded by site personnel from the DMC portal
- eCRFs for Participant Interviews or Questionnaires: PDF versions of these CRFs are furnished to sites through the Forms Management Utility on the DMC Portal and sites are responsible for printing them

Study staff may use these tools to develop documentation for collection of participant data for entry into Medidata Rave.

Aspects of CRF completion and data entry vary depending on the CTDMS in use for the study (either Medidata Rave or eData). Some studies that are currently being implemented using eData may continue to use eData, while other studies have or will be migrated to Medidata Rave. New studies utilize Medidata Rave. Refer to the protocol and associated documents for the CTDMS to be used. In addition, the LPC and MOP should be used in scheduling participant visits and specimen collection.

12.2.2.1 Data Management Procedures for Studies using eData

Data for IMPAACT clinical trials are collected on protocol CRFs by designated study staff at each clinical research site and then key-entered into the Data Management System (eData). Designated study staff should perform quality control checks on the data before submitting the keyed CRF data to the central database. DMC personnel train site staff on the appropriate completion and recording of data on the CRFs, and form-specific instructions are, in most cases, printed on each CRF.

Site data staff should use CRF notebooks developed and distributed by the DMC. These notebooks provide the framework for collecting the necessary study data based on the schedules of evaluation in the study protocol. The Data Collection Forms Schedule in the CRF notebooks should aid in scheduling participant visits and specimen collection.

12.2.2.2 Data Management Procedures for Studies using Medidata Rave

Data entered into Medidata Rave is completed by designated study staff. Site staff should perform quality checks of the data prior to and while entering the data, as well as after saving the data in Medidata Rave. Site staff should utilize reports within Medidata Rave to resolve queries and address delinquencies. Reports for quality review of participant data, productivity, and administrative reports, are available to sites; some reports are available within the DMC portal or in Medidata Rave. Studies that are migrated from eData to Medidata Rave will continue to use the reports available on the DMC portal.

Site staff should use completion guides developed and distributed by the DMC. These guides provide the framework for collecting the necessary study data based on the schedules of evaluation in the study protocol and aid in scheduling participant visits and specimen collection.
12.2.2.3 Data Management Procedures for Studies using either eData or Medidata Rave

Sites use the SES on the DMC portal for submission of screening checklists and eligibility checklists for both new and subsequent steps for participant enrollments. Requests for participant transfers to new sites, eligibility corrections, and unblinding requests are managed through the appropriate utilities on the DMC portal. Any questions on available reports should be sent to the protocol data manager.

Site staff should utilize daily and monthly reports provided by the DMC and within Medidata Rave for error resolution, resolving data delinquencies, and responding to data queries, and select web utilities on the DMC portal provide additional data QA/QC reports for site staff to review participant data.

The assigned protocol data managers and other DMC staff answer questions about data management and system issues. If the protocol data manager is unavailable, sites should contact the Chief Data Manager or Coordinating Data Manager, who have overall responsibility for central data management in IMPAACT.

Hardware and software computing requirements as well as procedures for enrolling participants, submitting participant data, and other areas of central DMC requirements can be obtained by contacting FSTRF User Support and from the Computer Manual, accessible by the FSTRF website: https://www.frontierscience.org/. Information regarding DMC training programs is also available at this website.

12.3 Study Team Communications

After initial release of a study protocol, several types of study-related communications may be used to report on study progress or provide further clarification of protocol-specified procedures and study documentation requirements. Such communications may include but are not limited to those listed in Table 12-1. Unless otherwise specified in a study protocol, quorum and sign-off requirements included in Table 12-1 should be considered minimum standards; protocol teams may specify additional requirements, beyond those specified in the table, if applicable. Further guidance on expectations and procedures for meeting quorum requirements is provided below the table.

Because of the complexity and scope of changes incorporated into this sub-section, the procedures specified in Section 12.3 are considered effective and to be implemented by all IMPAACT protocol teams within 30 days after the version date shown in the footer of this section.
### Table 12-1. Study Team Communications

<table>
<thead>
<tr>
<th>Communication Type</th>
<th>Description</th>
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</table>
| Conference calls and meetings               | Protocol teams (including site representatives), and designated subgroups (e.g., Clinical Management Committee), take part in routine meetings and conference calls throughout the period of study implementation. Summaries of these meetings and conference calls are typically prepared and distributed by the protocol CTS. Refer to Table 12-2 and Figure 12-1 for requirements related to quorum and for alternative procedures to be followed for study-specific groups that function — in whole or in part — independent of the protocol team (e.g., safety or endpoint review groups).  

Meeting and conference call summaries will list all participants, designate participants who are members of designated subgroups, and state whether relevant quorum requirements were met.  

When protocol-specified or other important study implementation decisions require review and/or recommendations from a Study Monitoring Committee or Data and Safety Monitoring Board, these will be documented per the procedures described in Section 13 of this manual. |
| All-site email messages and memoranda       | Protocol teams typically provide key study-related updates to site representatives via email. For example, updates on participant accrual and achievement of study milestones (e.g., completion of accrual, closure of follow-up) are often provided by email.  

When protocol-specified or other important study implementation decisions require communication to sites (e.g., study drug dose-finding or cohort progression decisions), these are communicated in a memorandum that is reviewed by the protocol team or designated subgroup and then distributed to all sites via email. Prior to distribution of any such memorandum, sign-off must be obtained from one protocol chair (chair, co-chair, or vice chair), one protocol statistician, one protocol data manager, and the DAIDS medical officer; when the document involves PK issues, sign-off must also be obtained from a protocol pharmacologist. The process of preparing, obtaining review and sign-off, and distributing this type of memorandum is coordinated by the protocol CTS. |
| Communications to Network leadership and oversight groups | Protocol teams may need to provide study-related communications to IMPAACT leadership and/or oversight groups. For example, teams may need to provide study-related updates or request consultation on study design or study implementation issues. When this type of communication is needed, relevant team members will prepare a memorandum or other applicable document for review by the protocol team or designated subgroup. Prior to distribution to the Network leadership or oversight group, sign-off must be obtained from one protocol chair (chair, co-chair, or vice chair), one protocol statistician, one protocol data manager, and the DAIDS medical officer; when the document involves PK issues, sign-off must also be obtained from a protocol pharmacologist. The process of obtaining sign-off and distributing this type of document is coordinated by the protocol CTS. |
### Table 12.1. Study Team Communications

<table>
<thead>
<tr>
<th>Communication Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>Protocol clarification memoranda, letters of amendment, and full amendments with an attendant summary of revisions</td>
<td>These documents are developed and issued as described in Section 9. Development of these documents is coordinated by the protocol CTS, and final versions are distributed to all protocol team members and study sites. Final versions are also posted on the IMPAACT website.</td>
</tr>
<tr>
<td>Study-specific MOP updates</td>
<td>These updates are developed and issued as described in Section 11. As with the initial MOP version, development of the updated version is coordinated by the CTS and final versions are posted on the IMPAACT website.</td>
</tr>
<tr>
<td>Reports</td>
<td>Data reports on study progress, protocol adherence, data quality, etc., are developed and issued by the SDMC in accordance with the study progress, data, and safety monitoring plan (SPDSMP, see Section 11).</td>
</tr>
<tr>
<td>Study implementation questions</td>
<td>These questions may be related to protocol interpretation as well as administrative, ethical, regulatory, clinical, counseling, data, and laboratory operations. Any such questions that are not answered by the protocol or other operational guidance documents should be emailed to the protocol team or designated subgroup (e.g., study-specific Clinical Management Committee), as per protocol. As described in Section 12.4, reportable protocol deviations are submitted to the protocol deviation email list (<a href="mailto:IMPAACT.deviation@fstrf.org">IMPAACT.deviation@fstrf.org</a>).</td>
</tr>
<tr>
<td>Conference calls and refresher training sessions with site staff</td>
<td>Refresher trainings and conference calls for study coordinators and other site staff with the study clinical trials specialist, data manager, laboratory representative and other protocol team members are held as needed, and for some studies on a routine basis. These sessions provide a forum for discussion of study implementation challenges, clarification of operational aspects, review of protocol updates (i.e., associated with amendments and clarification memoranda) and other topics suggested by site staff.</td>
</tr>
</tbody>
</table>

The quorum requirements specified in Table 12-2 should routinely be met through active real-time participation in meetings and conference calls. Quorum members should proactively identify any meetings or conference calls for which they are not available and provide written review comments or other required input in advance of the meeting or call; receipt of such input in advance will be considered sufficient to meet quorum requirements.
Table 12-2. Quorum Requirements

<table>
<thead>
<tr>
<th>Quorum Type</th>
<th>Required Members to Meet Quorum</th>
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</thead>
<tbody>
<tr>
<td>When protocol-specified or other important study implementation decisions are made via conference call, the following team members, who comprise the quorum for decision-making, must take part in the call:</td>
<td>• One protocol chair (chair, co-chair, or vice chair)</td>
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<td>• One protocol statistician</td>
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<td></td>
<td>• One protocol data manager</td>
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<td>• One CTS</td>
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<td>• DAIDS medical officer or designee*</td>
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<td>• When decisions involve pharmacokinetic (PK) issues, the quorum also includes one protocol pharmacologist.</td>
</tr>
<tr>
<td>When reviews of study data for purposes of monitoring participant safety are conducted via conference call, the following team or subgroup members, who comprise the quorum for this type of review, must take part in the call:</td>
<td>• One protocol chair (chair, co-chair, or vice chair)</td>
</tr>
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<td></td>
<td>• One protocol statisticist</td>
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<tr>
<td></td>
<td>• One protocol data manager</td>
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<tr>
<td></td>
<td>• One CTS</td>
</tr>
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<td></td>
<td>• DAIDS medical officer or designee*</td>
</tr>
<tr>
<td></td>
<td>• When reviews involve PK data and/or considerations for individual study drug dosing, the quorum also includes one protocol pharmacologist.</td>
</tr>
<tr>
<td>When reviews of study data for purposes of monitoring study progress and/or the quality of study conduct are conducted via conference call, the following team or subgroup members who comprise the quorum for this type of review, must take part in the call:</td>
<td>• One protocol chair (chair, co-chair, or vice chair)</td>
</tr>
<tr>
<td></td>
<td>• One protocol statisticist</td>
</tr>
<tr>
<td></td>
<td>• One protocol data manager</td>
</tr>
<tr>
<td></td>
<td>• One CTS</td>
</tr>
<tr>
<td></td>
<td>• DAIDS medical officer or designee*</td>
</tr>
</tbody>
</table>

*The assigned DAIDS medical officer should ideally take part in all reviews and decisions. If the assigned DAIDS medical officer is not available, the assigned NICHD medical officer or an alternate DAIDS representative designated by the assigned DAIDS medical officer may take part in the place of the assigned DAIDS medical officer.

When quorum requirements are not met, the decision to be made or the review to be performed should be deferred to a later date while still meeting protocol requirements for timeliness and frequency of review; in particular, safety data reviews should occur within protocol-specified timelines. When it is not possible to re-schedule in a timely manner, the following procedures may be followed to complete the required decision-making or perform the required review:

• All available team members will take part in the scheduled call or meeting; the CTS will prepare a summary of the call or meeting, listing all participants and stating that quorum requirements were not met.
• A protocol chair will provide a summary of the relevant discussion to the absent quorum member via email (copied to the CTS) and request that the absent member reply via email to confirm his or her review and indicate whether he or she concurs with the discussion that took place in his or her absence (copied to the CTS).
• If the absent quorum member does not concur, the protocol chair will determine next steps (e.g., further email communication, convening an ad hoc conference call, deferral to the next scheduled conference call).
• Once consensus is achieved, the CTS will inform all relevant team members of the outcome.

Use of the above-listed procedures is expected to be infrequent within a given protocol team or subgroup. Should any team or sub-group identify that quorum requirements are frequently not being met, action should be taken by the team to address this; when resolution cannot be achieved within the team, action may be taken by the IMPAACT MOG.
The above-listed procedures generally apply to decisions made or reviews performed via meeting or conference call. In some cases, decisions may be made and reviews may be performed via email. In such cases, all protocol team or subgroup members should ideally provide input via email and an email response must be obtained from the applicable quorum members (as listed in Table 12-2). A protocol chair will coordinate with the CTS to confirm the outcome of the decision or the review and, if consensus is not reached, to determine next steps. Once consensus is achieved, the CTS will inform all relevant team members of the outcome.

Figure 12-1. Alternative procedures to be followed for study-specific groups that function independent of protocol teams

For some IMPAACT studies, groups designated to fulfill key responsibilities may function — in whole or in part — independently of the protocol team (e.g., safety or endpoint review groups). In some cases, protocol team members (e.g., protocol chair, medical officer) are members of the group. In most cases, protocol data managers and/or statisticians work directly with the group (e.g., by providing data reports to be reviewed by the group and documenting review outcomes). For any such group, the requirements of this MOP section are generally expected to apply, and the following should be described in the SPDSMP:

- Quorum requirements for the group’s key functions must be defined. Group members may or may not choose to designate a chair of the group, but regardless of this designation, a quorum must be defined.
- An individual must be designated to fulfill the documentation requirements specified in this section. This individual may be a protocol chair, chair of the group, protocol data manager, protocol statistician, or other designee.

See Section 4.2.3 for additional details related to study-specific groups.

12.3.1 Confidentiality of Study Data

Unless otherwise specified in the study protocol, discussion of study post-entry data during an ongoing study should be limited to designated committees (e.g., Data and Safety Monitoring Board) to avoid bias in study conduct and/or interpretation of data.

12.3.2 Clinical Management Committee (CMC)

Note: This section describes CMC responsibilities in support of participant management. CMCs may also be involved in study data reviews and decision-making; refer to Table 12-1 for more information on those topics.

For some studies, a Clinical Management Committee (CMC) or analogous group composed of appropriate protocol team members (and external clinicians if needed) is designated in the protocol to provide support to site investigators and clinicians regarding clinical management of participants, management of study drug regimens, and other clinical considerations. The CMC may also respond to site requests for guidance related to eligibility and co-enrollment in IMPAACT and other studies. Separate from information that may be provided to the CMC as part of notifications or queries from sites,
distribution of study data to the CMC (or not) is directed by protocol specifications and the study monitoring plan. For comparative studies, treatment assignment information should not be provided to the CMC unless necessary for participant safety.

In general, designated members of the CMC will respond to queries received from sites as soon as possible and generally within 24 hours of receipt. When a complete response cannot be provided within 24 hours, a reply will be emailed to the site confirming receipt and indicating that a full response is in process.

The study-specific CMC email group (generally, IMPAACT.####CMC@fstrf.org) should be copied on all responses, as should all site personnel included on the original query. The study-specific protocol team and site representative email groups (generally, IMPAACT.TEAM####@fstrf.org; IMPAACT.PROT####@fstrf.org) should not be copied (even if copied by the site in error).

Designated CMC members are encouraged but not required to seek input from other CMC members before responding to the site, to confirm the accuracy and completeness of a proposed response. This should be done routinely in the first few months of study implementation to establish consensus among CMC members. When input from other CMC members is sought, care should be taken to remove site personnel from email messages, to avoid confusion and/or misunderstanding at the site. Once consensus is achieved within the CMC, a final response should then be sent to the site, copied to the CMC and site personnel included on the original query.

Designated CMC members are permitted to respond to queries from the site with which they are affiliated, unless otherwise specified by the protocol or other operational guidance, such as the study-specific MOP. This should be done following the same process described above, with the CMC email group copied.

If an incomplete or incorrect response is inadvertently sent to a site, a correction or additional relevant guidance should be sent to the site as soon as possible.

The study-specific CTSs who are members of the CMC will support the query response process by prompting for responses within 24 hours and by providing references to protocol and MOP sections that are relevant to a query. The CTSs may also send responses on behalf of the designated CMC member (when helpful). However, designated CMC members should generally plan to send all responses over weekend and holiday periods. Upon request, the CTSs may retrieve and distribute prior CMC correspondence among CMC members (for example, to provide background information from a prior query for the same participant or to provide a reminder of how similar queries were handled in the past).

Query responses must provide guidance to site staff that is consistent with protocol specifications. Responses cannot authorize or approve protocol deviations. In the event that a protocol deviation is identified in CMC communications with a site, the deviation should be acknowledged, and the site should be reminded to fully document the deviation, the reason why it occurred, and corrective and preventive actions taken, in accordance with DAIDS policies and good clinical practice guidelines. The CTSs can provide template wording when this type of response is necessary. The CTSs can also follow-up with sites as needed when deviations meeting IMPAACT criteria for network-level reporting occur (see Section 12.4).
12.3.3 **DMC Queries and QC Reports**

The protocol data manager and designated DMC staff (e.g., medical coders) review CRF data submitted to the central study database and items that need verification or further clarification are sent as queries to the site data management staff.

For studies using eData, on a daily or monthly basis, the DMC sends a number of QA/QC reports (e.g., the UPD8 and monthly quality assurance reports) to site staff to identify data that are inconsistent, missing, or contain out-of-range values. Additionally, QA/QC reports are available on the DMC portal and may be run as needed by site staff. Site staff should review and respond to QC reports sent by the DMC in a timely manner.

For studies using Medidata Rave, reports to review queries, overdue forms, and other quality assurance reports are available within Medidata Rave and may be run as needed by sites. Data management staff at the sites should routinely review the reports and correct or clarify the data items in question. Site staff should routinely check within Rave to ensure QC issues, such as overdue forms or queries, are addressed.

For all studies, queries may also be sent in preparation for interim analyses and these should be addressed as soon as possible. If the site has questions about any queried items that show up repeatedly on QC reports, they should contact the protocol data manager for further explanation. Any issues should be addressed as soon as possible, generally within seven to ten working days of receipt.

12.3.4 **Data Management Quality Summary Reports**

The SDMC routinely generates reports on site-specific and protocol-specific data management performance.

For studies using eData, the reports include:
- Total number of records expected versus submitted
- QC rate (the number of errors per 100 transactions)
- Percentage of QCs resolved
- Timeliness of submitted data (mean/median number of weeks)

For studies using Medidata Rave, the reports include:
- Data completeness
- Timeliness of submitted data
- Query responsiveness
- Error responsiveness

If there are concerns about a site’s data management quality, the data manager and protocol team work with the site to help develop strategies for improving performance.

12.4 **Protocol Deviations**

This section outlines the process by which protocol deviations are defined, classified, reported, and documented for IMPAACT studies. These guidelines apply to all IMPAACT studies and may be augmented by additional sponsor requirements or any protocol specifications.

IoRs, and by delegation all study staff, are responsible for conducting IMPAACT studies in compliance with the IRB-approved protocol; applicable US laws and regulations; ICH Guidelines on Good Clinical
Practice; applicable local laws, regulations, and guidelines; and standards of professional conduct and practice. Any non-compliance with the IRB-approved protocol is a protocol deviation. Deviations may be incurred by study participants, protocol team members, IoRs, sub-investigators, coordinators, physicians, nurses, counselors, data managers, pharmacy staff, laboratory staff, and/or additional supervisory, oversight, or support staff.

Note: Throughout this section, reference is made to the “IRB-approved protocol.” This terminology refers to the study protocol that has been approved by site IRBs, ECs, drug regulatory authorities, and all other applicable regulatory entities.

12.4.1 Applicable Regulatory Requirements and Guidance


- **21 CFR 312.60**: states that “an investigator is responsible for ensuring that an investigation is conducted according to the signed investigator statement, the investigational plan, and the applicable regulations; for protecting the rights, safety, and welfare of subjects under the investigator’s care; and for the control of drugs under investigation…”

- **21 CFR 56.108**: states that investigators must “(b) Follow written procedures for ensuring prompt reporting to the IRB, appropriate institutional officials, and the Food and Drug Administration of: (1) Any unanticipated problems involving risks to human subjects or others; (2) any instance of serious or continuing noncompliance with these regulations or the requirements or determinations of the IRB; or (3) any suspension or termination of IRB approval.”

- **45 CFR 46.113**: authorizes the IRB to suspend or terminate approval of research that is not being conducted in accordance with IRB’s requirements or that has been associated with unexpected or serious harm to subjects.

- **45 CFR 46.103(b)(4)(iii)**: states that institutions must have written procedures (which investigators must follow) for ensuring the prompt reporting to the IRB of proposed changes in a research activity, and for ensuring that such changes in approved research, during the period for which IRB approval has already been given, may not be initiated without IRB review and approval except when necessary to eliminate apparent immediate hazards to the subject.

- **45 CFR 46.103 (b) (5)**: states that institutions must have written procedures (which investigators must follow) for prompt reporting to the IRB, appropriate institutional officials, and the department or agency head of any unanticipated problems involving risks to subjects or others, or any serious or continuing noncompliance with 45 CFR 46 or the requirements or determinations of the IRB; and any suspension or termination of IRB approval.

The full U.S. CFR may be found at [www.ecfr.gov/](http://www.ecfr.gov/).

International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH)

- **ICH Guideline 4.5**: states that the investigator should not implement any deviation from or changes of the protocol without prior review and documented approval from the IRB except where it is necessary to eliminate an immediate hazard(s) to a study subject or when the change(s) involve only logistical or administrative aspects of the study.

- **ICH 4.5.3**: states that the investigator, or person designated by the investigator, should document and explain any deviation from the approved protocol.

The full ICH guidelines may be found at [http://ichgcp.net/](http://ichgcp.net/).
United States Food and Drug Administration (U.S. FDA)

Guidance, compliance, and regulatory information from the US Food and Drug Administration (FDA) may be found at http://www.fda.gov/drugs/default.htm. The FDA considers protocol deviations as acts contrary to the written protocol.

Further insight into the FDA’s perspective on protocol deviations can be found at http://www.fda.gov. The website contains copies of warning letters issued by the FDA, as made available under the 1996 amended Freedom of Information Act. Examples of warning letters including protocol non-compliance issues include:

- Letter to JM Isner; 28 April 2000 (St. Elizabeth’s Medical Center; Boston, Massachusetts): Subject ___ was enrolled into study VEGF2-CAD-001 (cardiac arterial disease study); however, the subject met the protocol exclusion criteria.
- Letter to EJ Kopp; 21 June 2000 (CARE Center, Raleigh, NC): Two of 14 subjects did not meet protocol criteria regarding duration of _____.

United States Health and Human Services

Regulations from the U.S. HHS may be found at http://www.hhs.gov/ohrp/.
### 12.4.2 Definitions Applicable to IMPAACT Research

**Table 12-2. Definitions**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>Protocol deviations</strong></td>
<td>Any departure from an IRB-approved protocol. This includes but is not limited to the following:</td>
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<tr>
<td></td>
<td>• Administrative inconsistencies or minor errors in the implementation of the protocol (e.g., visit outside the window, lab assessed off schedule, violation of inclusion/exclusion criteria)</td>
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<tr>
<td></td>
<td>• Departure from specified treatment, examination, or data collection procedures in a study protocol</td>
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<tr>
<td></td>
<td>Protocol deviations may or may not render a participant ineligible to participate in a study and may be considered significant or serious when they increase potential risk to participants or affect the integrity of study data. An isolated deviation may not be significant by itself but significance may increase with numerous deviations of the same nature.</td>
</tr>
<tr>
<td><strong>Reportable protocol deviation</strong></td>
<td>Deviations that require additional reporting by the IoR or designee as described in Section 12.4.3 below. Defined by IMPAACT as deviations that result in:</td>
</tr>
<tr>
<td></td>
<td>• Significant increased risk to the study participants or others</td>
</tr>
<tr>
<td></td>
<td>• Significant non-compliance with IRB-approved protocol requirements</td>
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<tr>
<td></td>
<td>• Significant non-compliance with Good Clinical Practices or Good Clinical Laboratory Practices and all applicable regulations</td>
</tr>
<tr>
<td></td>
<td>Examples of reportable protocol deviations include:</td>
</tr>
<tr>
<td></td>
<td>• Enrollment of an ineligible participant</td>
</tr>
<tr>
<td></td>
<td>• Failure to obtain informed consent or assent from the participant, legal guardian, or other or legally authorized representative prior to performing protocol-specified procedures</td>
</tr>
<tr>
<td></td>
<td>• Performing procedures not specified in the IRB-approved protocol and not otherwise clinically indicated for the participant</td>
</tr>
<tr>
<td></td>
<td>• Knowingly reporting of an inaccurate laboratory result</td>
</tr>
<tr>
<td></td>
<td>• Failure to follow protocol-specified procedures for participant safety monitoring, management, or reporting (including failure to report expedited adverse events within three reporting days)</td>
</tr>
<tr>
<td></td>
<td>• Breach of participant confidentiality</td>
</tr>
<tr>
<td></td>
<td>The list of examples shown above is intended as a guide and is not all-inclusive.</td>
</tr>
<tr>
<td></td>
<td><em>Participant non-compliance (e.g., missed visits, missed doses of study drug) is considered a protocol deviation but is not considered a reportable protocol deviation. Participant non-compliance should be documented and reported per usual site procedures (and any applicable protocol requirements) but should not be reported as described in Section 12.4.3 below.</em></td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Corrective action</td>
<td>Action taken to correct (when possible) or otherwise address a protocol deviation. Corrective actions are commonly specified in consultation with the relevant protocol team and/or IMPAACT leadership. In all cases, corrective action must include documentation of the deviation. Per the DAIDS policy on Requirements for Source Documentation in DAIDS Funded and/or Sponsored Clinical Trials, all protocol departures/deviations/violations must be recorded in the participant’s research record and, if pertinent, reasons for the departures and/or attempts to prevent or correct the departures are to be included in the documentation. Examples of corrective actions include (but are not limited to) notifying the affected participant(s), protocol team, and/or IRB; re-consenting the participant(s); completing missed procedures; repeating laboratory tests; completing additional participant monitoring or management procedures; and/or destroying specimens collected in error.</td>
</tr>
<tr>
<td>Preventive action</td>
<td>Action taken to prevent recurrence of a deviation. Preventive actions are commonly specified in consultation with the relevant protocol team and/or IMPAACT leadership. In all cases, preventive action must include documentation of the deviation. Per the DAIDS policy on Requirements for Source Documentation in DAIDS Funded and/or Sponsored Clinical Trials, all protocol departures/deviations/violations must be recorded in the participant’s research record and, if pertinent, reasons for the departures and/or attempts to prevent or correct the departures are to be included in the documentation. Examples of preventive actions include (but are not limited to) discussion of the deviation with relevant study staff, refresher training of study staff; review and/or revision of SOPs or other study implementation materials; development of new study implementation materials; implementation of additional communication, QC/QA, or oversight/supervisory procedures; changes in day-to-day workflow; and/or changes in general participant management or laboratory procedures.</td>
</tr>
</tbody>
</table>

NIAID and NICHD Clinical Site Monitors may identify protocol deviations in their monitoring reports and some of these may meet the definition of a reportable protocol deviation. In the event that deviations identified by Clinical Site Monitors meet the definition of reportable, the IoR or designee must report the deviation as described in Section 12.4.3 below. Likewise, other network partners such as representatives of the Operations Center, DMC, or ILC may identify a reportable protocol deviation; these persons should notify the IoR as soon as possible (within 3 days of awareness) so that the IoR can then report the deviation.

Note that there is not a one-to-one correlation between events reported by the Clinical Site Monitor and those to be reported through the IMPAACT protocol deviation reporting system. The Clinical Site Monitor may report protocol non-adherence events and violations that encompass every infraction of the
protocol. For example, if a blood specimen is drawn for ALT, but is not processed by the laboratory, it is a non-adherence event according to the Clinical Site Monitor. This would not be a reportable protocol deviation because it is one missed collection and does not represent a systemic issue that would affect study data. If, however, an ALT is to be drawn at each participant visit and is not being done at all, this would be a reportable protocol deviation.

Section 12.4.3 describes procedures for reportable protocol deviations.

### 12.4.3 Procedures for Reportable Protocol Deviations

All reportable protocol deviations must be reported by site investigators within ten working days of site awareness (unless a shorter timeframe is otherwise specified in the protocol). If needed, consultation with the Operations Center, SDMC, LC, or respective protocol team is available. Of note, based on protocol-specific directions, protocol deviations are often communicated to protocol teams ahead of submission of the protocol deviation CRF (for example, through consultation with the study-specific Clinical Management Committee).

Reporting procedures require entry of a protocol deviation case report form (CRF) — so that the deviation is recorded in the study database — and distribution of the same information to members of the IMPAACT leadership and respective protocol team. The general structure and questions included on the CRF are shown in Figure 12-2. To minimize reporting burden, sites should complete and enter the CRF per usual data management procedures, save a PDF version of the CRF, and email the PDF with any additional supplemental documents (e.g., IRB correspondence) to IMPAACT.Deviation@fstrf.org.

If a reportable deviation involves more than one participant, one protocol deviation CRF should be completed for each participant. If more than 25 participants are involved, or if the deviation does not involve specific participants, the deviation should be reported only via email to IMPAACT.Deviation@fstrf.org (i.e., a CRF should not be entered into the study database). If the deviation occurred over a period of time, the range of dates over which the deviation occurred should be indicated on the CRF.

The Operations Center will review the emailed report(s) for completeness (e.g., all fields are completed, all pages are provided) and legibility (e.g., if handwritten reports are provided, all fields are readable; if typed reports are provided, pages and text are not cut-off); in addition, if the reported deviation is unclear, the Operations Center representative may also consult with the protocol-specific CTS to work on next steps. Once any completeness, legibility, and understanding issues are resolved, the emailed report (completed CRF and any supplementary materials) is sent to the following distribution list typically within five working days by the Operations Center:

- Protocol chair(s)
- Protocol medical officer(s)
- Protocol CTS(s)
- IMPAACT leadership (Network chair and vice-chair, as well as NIH and operational component representatives, including leadership of the SDMC, LC, and Operations Center)
- IMPAACT program officer(s)
- Site Office of Clinical Site Oversight (OCSO) program officer (NIAID sites only) or Westat site contact (NICHD sites only)
- DAIDS Team Leader for the Office for Policy in Clinical Research Operations (OPCRO)
- Protocol pharmacist (if the deviation involves study product or prescribing issues)
- Protocol Laboratory Center representative (if the deviation involves laboratory issues)
This group works jointly to assess the deviation’s severity and the appropriate corrective and preventive action plan. If revisions are incorporated following submission of the report into the database, the original protocol deviation CRF should be updated in the study database; if requested, the updated PDF version of the revised CRF should be emailed to IMPAACT.Deviation@fstrf.org.

12.5 DAIDS Critical Event Reporting

DAIDS has developed a critical event reporting system. Per the policy, critical events include the following:

- Unanticipated Problems
- Serious or Continuing Noncompliance
- Suspension or Termination of IRB/EC Approval
- Suspected Research Misconduct

Additional details on site responsibilities for identification and classification of critical events, the critical events manual, and associated appendices can be found at:


All critical event reporting questions should be directed to the site’s OCSO representative.
**Figure 12.2. IMPAACT Protocol Deviation Reporting Form**
(Note that the fields presented below are for reference only; reportable deviations should be entered into CRFs as described in Section 12.4.3)

<table>
<thead>
<tr>
<th>Date form submitted:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of deviation:</td>
<td></td>
</tr>
<tr>
<td>CRS Name/Number (if applicable):</td>
<td></td>
</tr>
<tr>
<td>Protocol Number:</td>
<td></td>
</tr>
<tr>
<td>Participant Identification Number(s) (if applicable):</td>
<td></td>
</tr>
<tr>
<td>Site awareness date:</td>
<td></td>
</tr>
<tr>
<td>Deviation date (or range):</td>
<td></td>
</tr>
</tbody>
</table>

Has or will this deviation be reported to the local IRB/EC?
- Yes
- No

Has or will this deviation be reported to DAIDS as a critical event?
- Yes
- No

Type of deviation (please check one):
- Did not meet eligibility criteria (if this is selected, the category, protocol version and description of the criteria the participant did not meet must be completed)
- Failure to follow trial randomization or blinding procedures
- Study product management deviation
- Study product dispensing error
- Conduct of non-protocol procedure
- Breach of confidentiality
- Physical assessment deviation
- Lab assessment deviation
- Use of non-IRB/EC-approved materials
- Informed assent/consent process deviation
- Other

If type of deviation is “did not meet eligibility criteria”:
- Inclusion criteria
- Exclusion criteria

Indicate the category of the eligibility criteria not met: ________________________________
Figure 12-2. IMPAACT Protocol Deviation Reporting Form (continued)
(Note that the fields presented below are for reference only; reportable deviations should be entered into CRFs as described above)

Please describe the deviation, explain the reason for the deviation, and how the deviation affected the:

- Risk/benefit ratio for the participant(s)
- Integrity of the research data
- Participant’s willingness (or parent/legal guardian’s willingness) to continue study participation

__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

Describe any corrective actions taken to address this deviation:
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

Describe any preventive actions taken to prevent recurrence:
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

Deviation reported by (staff name): __________________________________________________________

Note the deviation should be reported by the responsible/communicating site staff member (IoR or other designee).

Please submit any additional supplementary materials to IMPAACT.Deviation@fstrf.org along with the PDF of the submitted CRF.
### 13 STUDY OVERSIGHT

Oversight of IMPAACT studies occurs at many levels, consistent with US and international regulations, policies, and guidelines applicable to human subjects research funded by the National Institutes of Health (NIH):

- At each clinical research site, the Investigator of Record (IoR) and delegated study staff are responsible for continuous monitoring of participant safety as well as the quality of study conduct and study data.
- As network sponsors, the National Institute of Allergy and Infectious Diseases (NIAID) and National Institute of Child Health and Human Development (NICHD) contract with clinical site monitors who conduct on-site monitoring activities and have established procedures to ensure that monitoring findings are addressed as needed at each site.
- For each study, the protocol chair and other team members monitor the quality of study implementation to identify emerging issues and address these with study sites as needed.
- The IMPAACT Network leadership has established oversight procedures that are continuously carried out for all studies by the Management Oversight Group (MOG).
- An independent IMPAACT Study Monitoring Committee (SMC) or NIAID Data and Safety Monitoring Board (DSMB) may also review IMPAACT studies when applicable.

Each of these levels of oversight is further described in this section.

#### 13.1 On-Site Clinical Quality Management

Per the Division of AIDS (DAIDS) policy on Requirements for Clinical Quality Management Plans (CQMP), all sites conducting or participating in DAIDS-supported and/or DAIDS-sponsored clinical research must develop and implement a CQMP. The CQMP must describe the quality assurance (QA) and quality control (QC) activities that will be performed at the site for each study and describe the types of tools and checklists that will be used in the QA and QC processes. The CQMP must also state the frequency with which QA and QC activities will be performed. Further details can be found in the DAIDS policy at [https://www.niaid.nih.gov/research/daids-clinical-site-implementation-operations](https://www.niaid.nih.gov/research/daids-clinical-site-implementation-operations).
13.2 On-Site Monitoring

As the sponsor of IMPAACT studies, the NIH has a regulatory responsibility for oversight of IMPAACT studies under the US Code of Federal Regulations (CFR) Title 45, Parts 46, 160, and 164; Title 21, Parts 11, 50, 54, 56, and 312; and International Conference on Harmonization (ICH) Guidelines E6. As part of fulfilling these responsibilities, NIAID and NICHD contract with clinical site monitors to perform on-site monitoring at the IMPAACT sites that they fund. Contracted monitors visit study sites to inspect study facilities and review participant study records including consent forms, paper-based case report forms (CRF, if used), electronic case report forms (eCRFs, if used), medical records, laboratory records, and pharmacy records, to ensure protection of study participants, compliance with the Institutional Review Boards/Ethics Committees (IRB/EC) approved protocol, and accuracy and completeness of records. Monitors also review essential document files to ensure compliance with all applicable regulatory requirements. Site investigators must make study facilities and documents available for inspection by the monitors.

All sites are monitored at least once annually. The extent and frequency of monitoring will depend on the size, risk, and complexity of studies conducted at the site and may change over time depending on study status and performance of the site. Monitoring reports are prepared following each visit and provided to the sponsor (NIAID or NICHD) and the site, and sites are required to respond to monitoring findings in a timely manner and in accordance with sponsor-specific (NIAID or NICHD) procedures.

13.3 Protocol Team Monitoring

IMPAACT protocol teams are responsible for actively monitoring both participant safety and the quality of study conduct, and for working with sites to address any issues or concerns that may arise. Quality indicators typically include participant accrual and retention, adherence to study regimen/intervention, endpoint evaluability, specimen availability, and data quality and completeness.

Monitoring at the protocol team level is typically accomplished through review of study-specific reports generated by the Statistical and Data Management Center (SDMC) as defined in the Study Progress, Data, and Safety Monitoring Plan (SPDSMP); other study-specific monitoring plans may be developed as described in the protocols (e.g., pharmacokinetic or qualitative monitoring plans). In addition, the protocol chair and protocol team members from the Operations Center, Data Management Center (DMC), and Laboratory Center (LC) may visit sites to assess study implementation and/or provide training and other technical assistance to site staff. As needed, issues or problems identified during such visits are brought to the attention of the protocol team for discussion and development of corrective action plans.

If any issues arise at any level during the study that cannot be resolved at the protocol team level, or if the protocol team determines that corrective action plans may require additional network resources, the protocol chair or other protocol team members may refer the issues to the MOG for further review, guidance, and decision-making.

Designated protocol team members are responsible for monitoring participant safety. Each IMPAACT protocol and corresponding SPDSMP specifies the roles and responsibilities of protocol team members for monitoring participant safety. These roles and responsibilities may differ, for example, based on the phase of the study and whether the study involves comparative groups. Team members are generally expected to review safety data at least monthly, and more frequently if specified by the protocol. Team members may also review other study data (e.g., pharmacokinetic parameters). For some studies, again depending on protocol specifications, team members are also responsible for identifying when the criteria for pausing a study or convening a safety review are met. If at any time a safety issue or concern is identified, the designated protocol team members are responsible for taking appropriate action to address
that concern. Such actions may include, for example, requesting additional review of study data by the SMC or DSMB, modifying the dosing of study agents, and modifying other protocol specifications. The protocol team is also responsible for informing study sites in the event that any changes in study conduct are required.

Importantly, the data upon which protocol team and other study oversight reviews are based are generated at the site level, based on evaluations performed by site clinicians and other study site staff. Site staff are responsible for monitoring the safety of each study participant and entering clinical and laboratory data into eCRFs in a timely manner, so that current data are available for review at the protocol team level. Site staff are also responsible for alerting designated protocol team members to any safety-related issues or concerns that may arise, consistent with protocol requirements.

SDMC staff also play a key role in monitoring participant safety, through their roles in reviewing and coding safety data, querying sites as needed to ensure that accurate and complete data are available for review, generating safety data reports for review, generating interim analysis reports for independent review committee review and identifying when study pause or stopping rules specified in the protocol have been met.

Designated protocol team members typically review study data and progress during conference calls, although reviews may also take place during in-person meetings or by email. When team member assessments are required for the study database, these are recorded by the study data manager following standard DMC procedures. Otherwise, reviews are documented in the form of conference call or meeting summaries. Documentation of these reviews is not typically provided to study sites. However, as noted above, sites are notified if a safety issue is identified that necessitates a change in study conduct; such notifications also address notification of IRBs/ECs and other relevant review bodies. Similar notifications may also be provided following safety reviews in studies with multiple sequential cohorts of participants, if specified in the study protocol. Should a study site require a safety-related summary in order to meet IRB/EC requirements for continuing review, this may be requested from the protocol team, with the request emailed to the clinical trial specialist (CTS). During the ongoing conduct of a study, available information will be limited.

### 13.4 IMPAACT Leadership Oversight

The IMPAACT MOG monitors network studies with regard to protocol development, implementation, analysis, and reporting.

Routine MOG oversight includes evaluation of study progress with respect to key implementation milestones as well as resource allocation and use across studies. In support of the MOG’s oversight function, a Study Operations Report is generated each month by the Operations Center with updates on the status of each study, participant accrual and retention, and study implementation issues and problems. Other data reports required by the MOG are generated by the SDMC as needed. Members of the MOG who represent the SDMC, LC, and Operations Center may also bring issues to the attention of the MOG for discussion. The MOG reviews proposals from protocol teams to modify protocols and/or study implementations plans (e.g., to expand to additional sites) as needed (see Sections 9 and 10). MOG discussion and decision-making is documented in conference call and meeting summaries, and decisions and recommendations are formally communicated to protocol teams when applicable. Also, when applicable, the MOG coordinates with NIH to assess and respond to needs for additional resources, for example, because of unexpected costs associated with planned study procedures or to support additional sites or ancillary studies.
The MOG is also supported in its oversight role by independent SMC reviews of selected studies, as described in Section 13.5 below.

13.5 IMPAACT Study Monitoring Committee Review

In support of the management and oversight functions of the MOG, for designated studies an SMC monitors participant safety and the progress and quality of IMPAACT study conduct and makes recommendations related to study continuation, including cohort progression and dose escalation/dose selection when applicable. The scope of SMC reviews varies across studies, depending on protocol specifications and the specifications of the SPDSMP. The policies and procedures included in this section are to be followed for all IMPAACT studies subject to SMC oversight, in lieu of study-specific SMC charters; these procedures may be supplemented or amended, if needed, consistent with protocol specifications.

13.5.1 SMC Membership

For each study that is subject to SMC review, SMC membership will include:

- SMC chair
- IMPAACT Network chair or vice chair
- IMPAACT Scientific Committee (SC) representative
- IMPAACT Operations Center representative
- IMPAACT Statistical and Data Analysis Center (SDAC) representative
- DAIDS representative
- NICHD representative

In addition to the above, other relevant content area reviewers (e.g., pharmacology reviewer) may be added as needed. When applicable, SMC members may fill multiple roles; for example, when the SMC chair is a member of the relevant SC, he or she may serve as both the SMC chair and SC representative. While SMC membership may vary across studies, every effort will be made to maintain consistent composition for each study over time.

SMC members will be independent of each study under review. They may not be members of the protocol team or directly involved in the conduct of the study at a study site.

The SMC chair and the representatives of the IMPAACT Operations Center, SDAC, and DAIDS comprise the quorum for SMC reviews; these members must take part in each review. For reviews that take place via conference call, these members must attend the call or provide written review comments in advance if they cannot attend the call. In the latter scenario, an alternate representative of the IMPAACT Operations Center, SDAC, and DAIDS may be designated to attend the call (written review comments must still be provided in advance by the SMC member). Alternatively, the NICHD representative may serve in place of the DAIDS representative. If quorum requirements are not met, the review will be postponed.

13.5.2 SMC Review Process

SMC reviews typically take place via conference call, although in-person or email reviews may also occur. The Operations Center will schedule and coordinate all reviews. In the event that an SMC member is not available to take part in a review, he or she may provide written review comments in advance of the review (see Section 13.5.1 for quorum requirements).
For each review, the protocol chair, DAIDS and NICHD medical officers, and CTS generally attend the open session of the review. The protocol statistician attends both open and closed sessions. Other team members who are designated in the SPDSMP to receive open SMC data reports may attend open sessions at the discretion of the protocol chair.

The required timing of SMC reviews will be coordinated by the Operations Center and the SDAC, specifically the protocol statistician assigned to each study. SMC review requirements are identified in the Study Operations Reports generated each month by the Operations Center and will serve as a general reference for when reviews may be required. In addition, the protocol statistician will proactively coordinate with the Operations Center to identify potential review dates and establish timelines for when review materials will be provided for each review. The statistician is responsible for preparing and distributing these materials, using secure means when analysis results are included.

A summary of roles, responsibilities, and timelines associated with SMC reviews is provided in Table 13-1, with additional description provided below. For each study, roles, responsibilities, and the scope of SMC oversight are directed by the protocol and the SPDSMP. The SMC typically monitors the quality of study conduct, participant safety, and other key issues through review of indicators such as participant accrual, participant retention, adherence to the study intervention, data quality, data completeness, specimen availability, endpoint evaluability, and adverse events; PK findings and other study outcome measures may also be reviewed if specified in the protocol and/or SPDSMP. Reviews may evaluate the safety, efficacy, and/or feasibility of the study as designed and determine whether modification may be required to minimize risks to study participants or meet the study objectives.

Table 13-1. Summary of SMC Roles and Responsibilities

<table>
<thead>
<tr>
<th>Person Responsible</th>
<th>Role/Responsibility</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMC chair</td>
<td>• Review data reports and other submitted materials</td>
<td>• Prior to each review</td>
</tr>
<tr>
<td></td>
<td>• As needed, request clarification of materials submitted for review via email (copying other SMC members)</td>
<td>• Prior to each review (as needed)</td>
</tr>
<tr>
<td></td>
<td>• Lead all review sessions, ensuring input and discussion as needed from all SMC members</td>
<td>• During each review</td>
</tr>
<tr>
<td></td>
<td>• Ensure that findings, recommendations, action items, and next steps are agreed upon prior to the close of each review</td>
<td>• During each review</td>
</tr>
<tr>
<td></td>
<td>• Coordinate with Operations Center representative to finalize SMC review reports</td>
<td>• Ideally within 3-5 working days after each review</td>
</tr>
<tr>
<td></td>
<td>• Coordinate with Operations Center representative to receive and review protocol team responses to review reports (as applicable)</td>
<td>• Following each review</td>
</tr>
<tr>
<td></td>
<td>• Coordinate with Operations Center representative to finalize a memo documenting the review for study sites</td>
<td>• Ideally within 7 working days after each review</td>
</tr>
<tr>
<td></td>
<td>• As needed, liaise with the IMPAACT MOG regarding SMC operations, review findings, and recommendations</td>
<td>• As needed</td>
</tr>
<tr>
<td>SMC members</td>
<td>• Review data reports and other submitted materials</td>
<td>• Prior to each review</td>
</tr>
<tr>
<td></td>
<td>• As needed, request clarification of materials submitted for review via email (copying other SMC members)</td>
<td>• Prior to each review (as needed)</td>
</tr>
<tr>
<td></td>
<td>• Provide review comments and recommendations</td>
<td>• During each review</td>
</tr>
<tr>
<td>Person Responsible</td>
<td>Role/Responsibility</td>
<td>Timeline</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
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<td>-------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Operations Center representative to the SMC (in addition to other SMC member roles and responsibilities) | • Optionally review and provide feedback on draft SMC review reports  
• Coordinate with protocol statistician and CTS to schedule SMC reviews  
• Coordinate review conference calls; distribute administrative information in support of each review  
• Draft SMC review reports and coordinate with the SMC chair to finalize review reports  
• Distribute final SMC review reports to protocol teams  
• Coordinate with SMC chair to receive and review protocol team responses to SMC review reports (as applicable)  
• Coordinate with the SMC chair to prepare a memo documenting the review for study sites and coordinate with the CTS to distribute the memo to participating sites  
• Coordinate with the CTS to include relevant information in Study Operations Reports | • Typically within 2 working days after receipt of draft review report  
• Ongoing based on study-specific needs  
• Approximately 2-4 weeks prior to each review  
• Following each review  
• Ideally within 3-5 working days after each review  
• Following each review  
• Ideally within 7 working days after each review  
• Monthly when applicable |
| Protocol statistician                                                          | • Coordinate with the Operations Center to schedule SMC reviews  
• Prepare and distribute draft data reports for protocol team member review  
• Finalize and distribute data reports and other submitted materials for SMC review  
• Take part in open and closed review sessions; provide an overview of the data report during review sessions | • Ongoing based on study-specific review needs  
• At least 9 working days prior to each review  
• At least 3 working days prior to each review  
• During each review (open and closed sessions) |
| Protocol chair                                                                  | • Review draft data reports prepared by the protocol statistician and other materials to be submitted for review when applicable  
• Take part in open review sessions; during these sessions, provide a brief synopsis of study status, key issues and problems (if any), and strategies undertaken or planned to address these; identify issues that the protocol team would like to bring to the SMC’s attention for consultation and feedback; respond to SMC questions | • 5-9 days prior to each review  
• During open review sessions |
| Other designated protocol team members including medical officers              | • Review draft data reports prepared by the protocol statistician and other materials to be submitted for review when applicable  
• Take part in open review sessions; respond to SMC questions when applicable | • 5-9 days prior to each review  
• During open review sessions |
13.5.2.1 Open Review Sessions

SMC reviews typically include an open session to provide an opportunity for the protocol chair (and other protocol team members if applicable) to discuss the study with the SMC. For such sessions, protocol team members are provided an open report containing relevant monitoring data as defined in the SPDSMP. For reviews that include both open and closed sessions, the data contained in open and closed reports are based on the same dataset, but open reports present data pooled across study arms.

During open review sessions, protocol chairs are not expected to provide a formal presentation to the SMC but should be prepared to provide a brief synopsis of study status, key issues and problems (if any) with respect to study implementation, and strategies undertaken or planned to address these. With respect to safety and PK data (when applicable), the protocol chair may summarize the team’s overall assessment of currently available data. The protocol chair may also identify issues that the protocol team would like to bring to the SMC’s attention for targeted consultation and feedback. SMC members may ask questions of the protocol chair (and other team members who attend open review sessions if applicable), requesting their insights into data presented in open reports and further clarifying issues, problems, and strategies to address these.

For non-comparative studies, SMC members may provide assessments of the quality of study conduct, participant safety, and other key issues during open sessions or they may choose to further discuss these assessments in closed review sessions before providing consensus findings and recommendations to the protocol team.

13.5.2.2 Closed Review Sessions

In closed sessions, SMC members assess the quality of study conduct, participant safety, and other key issues and agree upon consensus findings and recommendations. For comparative studies, closed sessions include review of closed reports with data presented by study arm. When applicable, the study arms are coded to avoid unnecessary unblinding, but coding keys are provided in the event that the SMC determines that unblinding is necessary to protect participant safety or evaluate study integrity. If an SMC member wishes to discuss results by unblinded study arm, the SMC chair must first confirm that all members of the SMC agree to being unblinded.

Participation in closed review sessions is limited to SMC members and the protocol statistician, unless exceptions are specified in the SPDSMP. Closed data reports are considered confidential, to be distributed only to designated SMC members and destroyed following each review. However, distribution to others may be permitted on a case-by-case basis in consultation with the SMC chair and the IMPAACT MOG.

13.5.2.3 Executive Review Sessions

SMC reviews may include an optional executive session, attended only by SMC members, to review selected data or otherwise take part in discussions that are limited to SMC members only. These sessions differ from closed sessions in that the protocol statistician is not included.
13.5.3 Types of SMC Review

13.5.3.1 Protocol Initiation Review

Studies subject to SMC review will undergo an initial review in which the final draft SPDSMP will be reviewed and discussed in detail with the protocol chair, statistician, CTS, and other team members. This review is expected to take place before or soon after the protocol is finalized and prior to the enrollment of any study participants. The purpose of this review is to agree upon key specifications of the SPDSMP, the required frequency of SMC reviews for the study, and the data to be presented in SMC review reports. The protocol statistician will finalize the SPDSMP after this initial SMC review takes place.

13.5.3.2 Reviews During Study Implementation

Routine Reviews

For most studies, the primary purpose of SMC reviews is to assess whether the study is proceeding as expected with respect to participant safety and the timeliness and quality of study conduct. Routine reviews should occur at least annually, or more frequently per the study protocol or as requested by the SMC or IMPAACT MOG.

Event-Driven Reviews

Some study protocols and monitoring plans may specify more limited SMC review, (e.g., to review data relevant to cohort progression or dose escalation). Other studies may require SMC review only if certain safety triggers or other pre-specified criteria are met. For this type of review, timelines for scheduling, preparation and distribution of data reports, and documentation of review findings and recommendations may be truncated.

Critical emergent safety issues may also require SMC review. These reviews generally take place on short notice and are limited in scope to the emergent issue that required review. For this type of review, timelines for scheduling, preparation and distribution of data reports, and documentation of review findings and recommendations will be truncated.

Interim Analysis Reviews

For some studies, the protocol and monitoring plans may require interim analyses, for example, comparing data across arms for purposes of determining whether the study should continue, or reviewing PK data to confirm dosing prior to opening a new cohort. The timing of these reviews may be periodic (e.g., at least annually), event-driven (e.g., when a certain number of person-years or endpoints has been accumulated), or upon request by the protocol team or IMPAACT MOG.

13.5.4 Documentation and Response to SMC Reviews

As part of each review, the SMC will agree upon consensus findings, recommendations for ongoing conduct of the study, action items, and next steps. With respect to ongoing conduct of the study, recommendations will typically be made within the following categories:

(A) continue as currently designed
(B) continue with recommended modifications
(C) discontinue study implementation
Review findings, recommendations, action items, and next steps will be documented in a summary review report drafted by the Operations Center and reviewed by the SMC chair prior to distribution. Other SMC members who took part in the review will be provided an opportunity to review the draft report prior to finalization; however, this review is optional and review is required only from the SMC chair. Every effort will be made to finalize and distribute the review report to protocol team members within three to five business days after the review; the final report will also be provided to all SMC members. Members of the IMPAACT MOG will be informed of review outcomes and recommendations at the time of their next scheduled call or meeting unless a more immediate notification is required (e.g., when recommendations involve significant protocol modifications or discontinuation of study implementation). A memorandum documenting each SMC review will also be provided to participating study sites by the Operations Center for submission to their IRBs/ECs.

When requested by the SMC, protocol teams will respond to SMC findings and recommendations, with responses to be reviewed for adequacy and completeness by the SMC chair, with support from the Operations Center. Completion of this process will be documented by the Operations Center in the next monthly Study Operations Report. In the event that the SMC chair assesses that the team’s response is not adequate or complete, this will be noted in the Study Operations Report and communication with the team will continue until satisfactory resolution.

13.6 Sponsor Oversight

As sponsor of IMPAACT studies, the NIH has regulatory responsibility for oversight and monitoring of IMPAACT studies. As part of fulfilling these responsibilities, NIAID requires IMPAACT sites to develop and implement clinical quality management plans and NIAID and NICHD contract with clinical site monitors to perform on-site monitoring at the IMPAACT-affiliated sites that they fund, as described in Sections 13.1 and 13.2 above. NIAID and NICHD staff (or their contractors) work with study sites as needed to address monitoring findings and other study implementation issues or problems. When necessary, NIAID and NICHD may suspend or terminate site participation in an IMPAACT study, for example in response to serious and/or persistent non-compliance with protocol, regulatory, and/or contract or grant requirements.

NIAID, NICHD, and the National Institute of Mental Health (NIMH) Medical Officers/Medical Monitors and Program Representatives are also active in overseeing study implementation as part of protocol teams and as members of the IMPAACT leadership (see Sections 13.3 and 13.4 above).

For some IMPAACT studies, NIAID convenes DSMB reviews as part of its study oversight responsibilities, as described in Section 13.7 below.

13.7 Data and Safety Monitoring Board Reviews

DSMB reviews are most commonly convened for large-scale randomized controlled studies; however, other types of IMPAACT studies may be subject to DSMB review. NIAID coordinates all DSMB activities; for studies that are subject to DSMB review, reviews are conducted at least annually and in accordance with relevant NIAID standard operating procedures, which can be found at https://www.niaid.nih.gov/research/data-and-safety-monitoring-boards, and DSMB charters, which can be found at https://www.niaid.nih.gov/research/daiids-clinical-research-event-reporting-safety-monitoring. DSMB members are independent of the studies they review, with no financial interest in the outcomes of the studies they review. Members include experts in the fields of biostatistics and medical ethics, clinicians, other scientists who are experts in HIV transmission, and ad hoc members. Appointments to the DSMB are made by NIAID.
13.7.1 Preparation for and Participation in Reviews

The SDMC prepares data reports for DSMB review; other materials may also be prepared for the DSMB by the protocol team (e.g., memos, slide presentations). Protocol chairs and other key protocol team members including medical officers and CTSs who are designated in the SPDSMP to receive open DSMB data reports are provided an opportunity to review drafts of data reports and other materials planned to be discussed in open review sessions.

Representatives of the protocol team — including the protocol chairs, statisticians, CTSs, and MOs — attend DSMB reviews in person or via telephone. Similar to the procedures described above for SMC reviews, team members designated in the SPDSMP to receive open DSMB data reports typically attend open review sessions to discuss study progress, present blinded (pooled across randomization arms) data, and respond to questions from the DSMB. Statisticians also attend closed review sessions to present data by coded randomization arm and respond to additional questions from the DSMB.

Prior to each review, the Operations Center coordinates with the DAIDS Maternal, Adolescent and Pediatric Research Branch (MAPRB) Chief to schedule a conference call with the IMPAACT leadership approximately 1-2 working days after the review date to discuss any significant DSMB recommendations. If, based on the review findings and recommendations, the call is not required, it will be canceled. If the call is required, participants will include:

- IMPAACT network chair and vice chair
- Relevant SC chair
- Protocol chair(s)
- Operations Center Director and protocol CTS
- SDMC principal investigator (PI) and protocol statistician
- LC PI
- DAIDS Prevention Science Program Director
- DAIDS MAPRB Chief
- DAIDS MO, NICHD MO, and NIMH Program Officer
- Others as required

13.7.2 Review Findings and Recommendations

At the close of each review, the DSMB’s findings and recommendations may be provided to team members who attended the review, depending on the nature of the recommendations (see Section 13.7.3). The findings and recommendations are communicated within DAIDS/NIAID, with NIAID leadership having ultimate responsibility for determining whether to accept the recommendations. Recommendations may involve continuing a study as currently designed or may involve modifications of a study, for the following types of reasons:

- The study question has been answered (early termination of part of or the entire current protocol)
- The study question will not be answered (futility of part of or the entire current protocol)
- The study question is no longer relevant
- Unacceptable risk to participant safety
- New information from other research is now available

Within approximately two weeks after each review, a summary report of the review is distributed to the protocol team and participating study sites by DAIDS and its contractors. If requested in the summary
report, the protocol team will submit a written response to the DSMB; otherwise, the team response will be included in the data reports for the next DSMB review. All study sites must submit a copy of the summary review report to their IRBs/ECs and other relevant review bodies; protocol teams may also provide supplemental materials for submission along with the summary report.

13.7.3 Response to Significant Recommendations

If the DSMB recommends significant modifications of a study (e.g., early termination, closure of one or more randomized groups), this information will be immediately communicated to DAIDS/NIAID leadership, and NIAID leadership will determine whether to accept the recommendations. IMPAACT leadership and protocol team members will be informed of the recommendations and the NIAID decision during the conference call (described in Section 13.7.1) scheduled to take place within 1-2 working days after the review. During this call, immediate next steps, action items, and timelines will be agreed upon. Subsequent communications among the protocol team and with study sites will generally be coordinated by the Operations Center in close collaboration with the protocol chair; however, NIAID will assume primary responsibility for any public statements or press release associated with the DSMB recommendations.

In the event that a press release is planned, DSMB review findings and recommendations should remain confidential prior to the public release. Nonetheless, site investigators must be informed of the findings and recommendations with adequate advance notice to inform their IRBs/ECs and other review bodies in a timely and appropriate manner. In addition, priority should be given to informing study participants and other community stakeholders as soon as possible. To facilitate timely and appropriate communication, protocol teams should establish tentative communications plans (roles, responsibilities, timelines). See Section 12.3 for additional information on protocol team communications that may be applicable in this context.
Section 14, Study Close-out, is not yet available.
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15 **ANCILLARY STUDIES AND INVESTIGATIONS**

15.1 Scope and Definitions

This section describes the requirements for the development, submission, review, and approval of Data Requests (DR), Data Analysis Concept Sheets (DACS), and New Work Concept Sheets (NWCS). The requirements for completion of Specimen and Data Usage Agreements (SDUA) are also included.

The procedures apply to IMPAACT and non-IMPAACT investigators.

Information on available biological specimens for concluded studies can be accessed on the interactive AIDS Clinical Trials Group (ACTG)/IMPAACT specimen repository website at [http://www.specimenrepository.org/home.html](http://www.specimenrepository.org/home.html). IMPAACT protocol documents and study completion status may be found on the IMPAACT website ([http://impaactnetwork.org/](http://impaactnetwork.org/)) or requested from the Operations Center at IMPAACT.OperationsCenter@fstrf.org. Operations Center support for the development of DRs, DACSs, or NWCSs is not provided unless otherwise directed by the IMPAACT Management Oversight Group (MOG).
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15.2 Data Requests

15.2.1 Responsibilities for Data Requests

**Proposing Investigators**

- Confirm that the data they require are not available in public use datasets, if available, for the IMPAACT study of interest. Guidance on available public use datasets may be obtained by contacting the SDAC at sdac.data@sdac.harvard.edu.
- Consult with the protocol chair and relevant scientific committee (SC) for input regarding potential overlap of a proposed research project with approved IMPAACT research prior to developing a DR.
- Develop and submit a proposal using the DR form available on the IMPAACT website at http://impaactnetwork.org/resources/study-proposals.htm. Completed forms are to be submitted to impaact.capsubmissions@fstrf.org.

NOTE: There is no IMPAACT-funded SDAC statistical support for the design and development of DRs other than guidance on public use datasets noted above.

**Operations Center Proposals Coordinator**

- Receives and processes the proposed DR (assigns ID number and primary SC, notifies Statistical and Data Management Center (SDMC) of receipt at specified email addresses); initiates IMPAACT review.
- Communicates with proposing investigators, SDMC, and relevant SC coordinators regarding next steps, review status, and outcomes.

**Relevant Protocol, DACS, and NWCS Chairs**

- For proposals involving existing data from an IMPAACT study that is not yet concluded, review the proposed DR with respect to potential overlap with protocol objectives or approved secondary analyses and send comments to the Operations Center proposals coordinator.
- For proposals involving existing data from an approved DACS that is not yet completed, review the proposed DR with respect to potential overlap with the DACS objectives and send comments to the Operations Center proposals coordinator.
- For proposals involving existing data generated under a NWCS, review the proposed DR with respect to potential overlap with the NWCS objectives and consistency with approval for use of samples and send comments to the Operations Center proposals coordinator.

**Scientific Committee**

- The relevant SC reviews and renders a decision on the proposed DR (approve, disapprove, or defer).
- A DR may be disapproved because it:
  - Might jeopardize the completion of the relevant protocol(s) or the publication of the primary results.
  - Overlaps with objectives of the protocol(s) or with approved secondary analyses, DACSs, or NWCSs.
  - Raises significant concerns about the appropriateness of using data from the IMPAACT protocol(s) to address the proposed study objectives.
- A DR may be deferred if further information is required from the investigators to address potential issues concerning overlap or appropriateness of using data from IMPAACT protocol(s) to address the proposed study objectives.
- The SC chair and vice chair may determine that full committee review is not necessary and approve the DR for network leadership review on the SC’s behalf.
**Management Oversight Group (MOG)**

- If the network chair and SDMC principal investigator (PI) determine that full MOG review is required, the MOG reviews DRs approved by the relevant SC and renders a decision (approve, disapprove, or defer). DRs may require full MOG review if more than minimal SDMC or other network resources are being required to prepare the datasets or as otherwise determined by the network chair and SDMC PI.

**15.2.2 Procedures for Data Requests**

**15.2.2.1 Submission of Data Requests**

**Proposing Investigators**

- Develop a proposal using the DR form available on the IMPAACT website at [http://impaactnetwork.org/resources/study-proposals.htm](http://impaactnetwork.org/resources/study-proposals.htm), adhering to the specified page limit.
- Electronically submit the completed DR form to the Operations Center at impaact.capsubmissions@fstrf.org.

**Operations Center Proposals Coordinator**

- Reviews the proposed DR to ensure that all required elements are included. If the document is missing information, returns the proposed DR to the investigators for completion.
- Assigns the DR an ID number
- Assigns the DR to the relevant SC(s) – in consultation with the network chair, if needed – and distributes it to the SC coordinator
- Notifies the SDMC of receipt of the DR via the specified email aliases
- For DRs requesting data from an IMPAACT protocol, DACS, or NWCS that is not complete, distributes the proposed DR to the relevant protocol, DACS, or NWCS chair for review and comments
- Distributes relevant protocol, DACS, or NWCS chair comments to the SC coordinator prior to their reviews, if available

**15.2.2.2 Review of Data Requests**

**Relevant Protocol Chairs**

- The relevant protocol chair or designee reviews the proposed DR and provides comments to the Operations Center proposals coordinator within 7 days of receipt. If the protocol chairs do not comment within the 7-day period, they forfeit the right to comment on the proposed DR. Protocol chairs do not have authority to approve or disapprove unless the study is ongoing, the primary analyses are not complete, or the secondary analyses have not been defined.

**SC Review**

- The relevant SC reviews the DR to ensure that
  - It will not jeopardize the completion of the relevant protocol(s) or the publication of the primary results.
  - It does not compete with objectives of the protocol(s) or with approved secondary analyses, DACSs or NWCSs.
  - It is an appropriate use of IMPAACT study data.
- The SC may provide feedback on the scientific merit of the research project, including any significant limitations that might arise in addressing the proposed objectives in using data from IMPAACT protocol(s).
• The SC chair and vice chair may determine that full committee review is not necessary and approve the DR for network leadership review on the SC’s behalf (or they may determine that additional information is needed from the proposing investigators before full committee review).
• If the DR is deferred pending receipt of additional information, the SC coordinator will inform the proposing investigators and request the specific information needed.
• If the DR is disapproved by the SC, the SC coordinator communicates the outcome to the proposing investigators, specifying the reasons and including the SC’s comments, as confirmed by the SC chair and vice chair.
• The SC coordinator notifies the Operations Center proposals coordinator of the final SC review outcome of the SC review and, if approved, provides the SC-approved version of the DR for network leadership review.

**IMPAACT Network Leadership Review**

• DRs approved by SCs are forwarded by the Operations Center proposal coordinator to the network chair and SDMC PI for discussion of SDMC resources required and determination of the need for review by the full MOG; if the network chair and SDMC PI agree that review by the full MOG is not indicated, the network chair can approve the DR on behalf of the MOG. Full MOG review may be required for DRs if more than minimal SDMC or other network resources are required for data preparation or as otherwise determined by the network chair and SDMC PI.
• If the network chair or SDMC PI determines that additional information is needed before the review process can be considered complete and approval granted, the DR will be returned to the proposing investigators with the specific request.
• The final review outcome is communicated to the proposing investigators and the SDMC by the Operations Center proposal coordinator, along with instructions to the proposing investigators regarding the need for completion of an SDUA.

15.2.2.3 **After IMPAACT SC and Leadership Review of Data Requests**

**Proposing Investigators**

• If a DR is deferred by the SC or by the MOG, unless otherwise directed, investigators may submit a revised DR that addresses the overlap or concerns raised by the SC or network leadership within 4 months following the deferral notice for re-review. If this is not done within 4 months, the Operations Center proposals coordinator will send a notice to the investigators indicating the DR will be withdrawn.

**SDMC**

• If the DR is approved by the MOG, an SDAC coordinator will be named by SDAC. The SDAC Coordinator will work with the DMC to facilitate transfer of data upon confirmation by the Operations Center that the Specimen and Data Usage Agreement (SDUA) process is complete and will serve as the contact person for any questions.
• The SDMC will inform the proposing investigators of any costs associated with providing data in formats other than those in which they already exist (these costs will need to be covered by the proposing investigators).
15.2.2.4 Special Considerations for Data Requests Requiring Genetic Analyses

A DR that involves use of existing IMPAACT human genetic data must be clearly linked to the protocol and/or NWCS(s) under which the human genetic data were created and should also specify:

(A) the frequency and expected range of individual polymorphisms
(B) the rationale for studying the polymorphisms, including evidence of association with outcome

Investigators who receive IMPAACT genome-wide association studies (GWAS) data under a DR should not submit these sequences to an NIH GWAS data repository. In compliance with the NIH policy, NOT-OD-07-088, for sharing of data obtained in NIH-supported or -conducted GWAS, SDMC will have already submitted to the NIH GWAS data repository (named the database of Genotypes and Phenotypes, or “dbGaP”) GWAS data that were generated with IMPAACT funding, and only from participants who have consented to dbGaP submission.

15.2.2.5 Specimen and Data Usage Agreements for Data Requests

For data to be exported under a DR by the SDMC, a SDUA is typically required in accordance with Section 15.6 below. The Operations Center proposal coordinator will notify the DR investigators of this requirement with the final approval notification. The completed SDUA must be submitted to the Operations Center by the proposing investigator(s) who will receive and be responsible for the data, before the data are released. The SDMC will be notified upon receipt of the completed SDUA via the specified email aliases.

15.2.2.6 Publications Resulting from Data Requests

Any publications associated with the DR should include acknowledgement of provision of data by IMPAACT.

15.3 Data Analysis Concept Sheet

15.3.1 Responsibilities for DACS

Proposing Investigators
- Review the IMPAACT research agenda on the network website
- Encouraged, but not required: Consult with the protocol chair or relevant SC regarding research ideas and potential overlap of a proposed research project with approved IMPAACT research prior to developing a DACS, particularly if significant SDMC resources will be needed
- Develop and submit a proposal using the DACS form available on the IMPAACT website at http://impaactnetwork.org/resources/study-proposals.htm. Completed forms are to be submitted to impaact.capsubmissions@fstrf.org

Operations Center Proposals Coordinator
- Receives and processes the proposed DACS (assigns ID number, notifies SDMC of receipt at specified email aliases); initiates IMPAACT review
- Communicates with proposing investigators, SDMC, and relevant SC coordinators

Relevant Protocol Chair (or designee)
- Review the proposed DACS and send comments to the Operations Center proposals coordinator
Scientific Committee (SC)
- Conducts scientific review and renders a decision on the proposed DACS (approve, disapprove, or defer). Ensures that the proposed data analyses do not:
  - Jeopardize the completion of the relevant protocol(s) or the publication of the primary results
  - Compete with already approved DACSs or secondary analyses
- With the SDMC representatives on the SC, verifies the estimated SDMC resources requested for completion of work in the DACS
- Assesses the appropriateness of using data from the IMPAACT protocol(s) to address the proposed study objectives

Network Leadership (MOG or SLG)
- Reviews DACSs approved by the relevant SC, evaluates the requested SDMC and other resources, and renders a decision on the proposed DACS (approve, disapprove, or defer). Full MOG (or SLG) review may be required if more than minimal SDMC or other network resources are being requested or as otherwise determined by the network chair and SDMC PI.

15.3.2 Procedures for DACS

15.3.2.1 Submission of DACS

Proposing Investigators
- Develop a proposal using the DACS form available on the IMPAACT website at http://impaactnetwork.org/resources/study-proposals.htm, adhering to the specified page limit.
- Collaborate with the SDAC statistician performing the analysis.
- Electronically submit the completed DACS to the Operations Center at impaact.capsubmissions@fstrf.org.

Operations Center Proposals Coordinator
- Reviews the proposed DACS to ensure that all required elements are included. If the document is missing information, returns the proposed DACS to the investigators for completion.
- Assigns the DACS an ID number
- Assigns the DACS to the relevant SC(s) – in consultation with the network chair, if needed – and distributes it to the SC coordinator
- Notifies the SDMC of receipt of the DACS via the specified email aliases
- For DACS requesting use of data from an IMPAACT protocol that is not complete, distributes the proposed DACS to the relevant protocol chair for review and comments
- Distributes relevant protocol chair’s comments to the SC coordinator(s) prior to their reviews, if available

15.3.2.2 Review of DACS

Relevant Protocol Chairs
- The relevant protocol chair (or designee) reviews the proposed DACS and provides comments to the Operations Center proposals coordinator within 7 days of receipt. If the protocol chairs do not comment within the 7-day period, they forfeit the right to comment on the proposed DACS. Protocol chairs do not have authority to approve or disapprove unless the study is ongoing, the primary analyses are not complete, or the secondary analyses have not been defined.
**SC Review**

- The relevant SC reviews the science and feasibility of the DACS and decides whether to approve it for submission for network leadership (MOG) review, disapprove it or defer. Also reviews the DACS for SDMC time and verifies or provides an updated estimate.
- The SC chair and vice chair may determine that full committee review is not necessary and approve the DACS for network leadership review on the SC’s behalf (or they may determine that additional information is needed from the proposing investigators before full committee review).
- If the DACS is deferred pending receipt of additional information, the SC coordinator will inform the proposing investigators and request the specific information needed.
- If the DACS is disapproved by the SC, the SC coordinator communicates the outcome to the proposing investigators, specifying the reasons and including the SC’s comments, as confirmed by the SC chair and vice chair.
- The SC coordinator notifies the Operations Center proposals coordinator of the final SC review outcome and, if approved, provides the SC-approved version of the DACS for network leadership (MOG) review.

**IMPAACT Network Leadership Review**

- DACSs approved by SCs are forwarded by the Operations Center proposal coordinator to the network chair and SDMC PI for discussion of SDMC resources and determination of the need for review by the full MOG (or SLG); if network chair and SDMC PI agree that full group review is not indicated, the network chair can approve the DACS on behalf of the leadership. Full MOG or SLG review may be required for a DACS if more than minimal SDMC or other network resources are being requested or as otherwise determined by the network chair and SDMC PI.
- If the network chair or SDMC PI determines that additional information is needed before the review process can be considered complete and approval granted, the DACS will be returned to the proposing investigators with the specific request.
- The final review outcome is communicated to the proposing investigators and to the SDMC by the Operations Center proposal coordinator, with instructions to the investigator regarding the need for completion of an SDUA.

**15.3.2.3 After IMPAACT SC and Leadership Review of DACS**

**Proposing Investigators**

- If a DACS is deferred by the SC or by the MOG/SLG, unless otherwise directed, investigators may submit a revised DACS that addresses the concerns raised by the SC or network leadership within 4 months following the deferral notice for re-review. If this is not done within 4 months, the Operations Center proposals coordinator will send a notice to the investigators indicating the DACS will be withdrawn.
- Must comply with the timelines for analyses and manuscript preparation procedures specified in Section 19 of the IMPAACT MOP.

**SDMC**

- If the DACS is approved by the MOG (or SLG), an SDAC statistician will be named by SDAC (or confirmed if already identified). This statistician will work with the other investigators to complete and publish the proposed analyses.
15.3.2.4 Special Considerations for DACSs requiring Genetic Analyses

A DACS that involves use of existing IMPAACT human genetic data must be clearly linked to the protocol and/or NWCS(s) under which the human genetic data were created. See Section 15.2.2.4 for additional details.

15.3.2.5 Specimen and Data Usage Agreements for DACSs

In the event that data used in a DACS need to be exported from SDAC or the Data Management Center (DMC) to the investigators, an SDUA may be required in accordance with Section 15.5 below. The Operations Center Proposal Coordinator will notify the DACS investigators of this requirement, with the final approval notification. The completed SDUA must be submitted to the Operations Center by the proposing investigator(s) who will receive and be responsible for the data, before the data are released. The SDMC will be notified upon receipt of the completed SDUA via the specified email aliases.

15.3.2.6 Publications resulting from DACSs

It is the responsibility of the investigator/author to ensure that development of manuscripts results from DACS follow the procedures specified in Section 19 of the IMPAACT MOP, including timelines, authorship, network review, and citations.

Any publications associated with a DACS should include acknowledgement IMPAACT.

15.4 New Work Concept Sheets

15.4.1 Responsibilities for NWCS

Proposing Investigators

- Review the IMPAACT research agenda on the network website.
- Use the interactive ACTG/IMPAACT specimen repository website (http://www.specimenrepository.org/home.html) to determine availability of specimens.
- Consult with the protocol chair or relevant SC regarding research ideas and potential overlap of a proposed research project with approved IMPAACT research prior to developing a NWCS, particularly if significant SDMC, assay support, or other resources will be needed.
- Develop and submit a proposal using the NWCS form available on the IMPAACT website at http://impaactnetwork.org/resources/study-proposals.htm. Completed forms are to be submitted to impaact.capsubmissions@fstrf.org.

Operations Center Proposals Coordinator

- Receives and processes the proposed NWCS (assigns ID number, notifies SDMC of receipt at specified email addresses); initiates IMPAACT review
- Communicates with proposing investigators (e.g., confirms receipt and provides ID number), SDMC and relevant SC coordinators

Relevant Protocol, DACS and NWCS Chairs

- Review the proposed NWCS and send comments to the Operations Center proposals coordinator

Scientific Committee (SC)

- Conducts scientific review and renders a decision on the proposed NWCS (approve, disapprove, or defer). Ensures that the proposed data analyses do not:
o Jeopardize the completion of the relevant protocol(s) or the publication of the primary results
  o Compete with already approved DACS, NWCSs or secondary analyses
• With the SDMC representatives on the SC, verifies the estimated SDMC resources requested for completion of work in the NWCS
• Assesses the appropriateness of using data from the IMPAACT protocol(s) to address the proposed study objectives

Network Leadership Group (MOG or SLG)
• Reviews NWCSs approved by the relevant SC, evaluates the requested resources, and renders a decision on the proposed NWCS (approve, disapprove, or defer)

15.4.2 Procedures for NWCS

15.4.2.1 Submission of NWCS

Proposing Investigators
• Develop a proposal using the NWCS form available on the IMPAACT website at [http://impaactnetwork.org/resources/study-proposals.htm](http://impaactnetwork.org/resources/study-proposals.htm), adhering to the specified page limit
• Use the interactive ACTG/IMPAACT specimen repository website ([http://www.specimenrepository.org/home.html](http://www.specimenrepository.org/home.html)) to determine availability of specimens
• Collaborate with the SDAC statistician performing the analysis, if applicable
• Electronically submit the completed NWCS form to the Operations Center at [impaact.capsubmissions@fstrf.org](mailto:impaact.capsubmissions@fstrf.org)

Operations Center Proposals Coordinator
• Reviews the proposed NWCS to ensure that all required elements are included. If the document is missing information, returns the proposed NWCS to the investigators for completion.
• Assigns the NWCS an ID number
• Assigns the NWCS to the relevant SC(s) – in consultation with the network chair, if needed – and distributes it to the SC coordinator
• Notifies the SDMC of receipt of the NWCS by sending it to the specified email aliases
• For NWCS requesting use of specimens or data from an IMPAACT protocol that is not concluded, distributes the proposed NWCS to the relevant protocol chair for review and comments.
• For NWCS requesting the use of specimens from an IMPAACT protocol that has other ongoing NWCSs, contacts the DMC for their review and comments
• Distributes relevant protocol chair and DMC comments to the SC coordinator(s) prior to their reviews, if available.

15.4.2.2 Review of NWCS

Relevant Protocol Chairs
• The relevant protocol chair (or designee) reviews the proposed NWCS and provides comments to the Operations Center proposals coordinator within 7 days of receipt. If the protocol chairs do not comment within the 7-day period, they forfeit the right to comment on the proposed NWCS. Protocol chairs do not have authority to approve or disapprove unless the study is ongoing, the primary analyses are not complete or the secondary analyses have not been defined.
SC Review

- The relevant SC reviews the science and feasibility of the NWCS and decides whether to approve it for submission for network leadership (MOG) review, disapprove it or defer. Also reviews the NWCS for SDMC time and verifies or provides an updated estimate, if applicable, and evaluates other requested resources.
- The SC chair and vice chair may determine that full committee review is not necessary and approve the NWCS for network leadership review on the SC’s behalf (or they may determine that additional information is needed from the proposing investigators before full committee review).
- If specimens from an IMPAACT study that has other ongoing NWCSs are being requested, the SC coordinator may contact the DMC for input on specimen availability.
- If the NWCS is deferred pending receipt of additional information, the SC coordinator will inform the proposing investigators and request the specific information needed.
- If the NWCS is disapproved by the SC, the SC coordinator communicates the outcome to the proposing investigators, specifying the reasons and including the SC’s comments, as confirmed by the SC chair and vice chair.
- The SC coordinator notifies the Operations Center proposals coordinator of the final SC review outcome of the SC review and, if approved, provides the SC-approved version of the NWCS for network leadership (MOG or SLG) review.

IMPAACT Network Leadership Review

- A NWCS approved by the SC is forwarded by the Operations Center Proposal Coordinator to the Laboratory Center PI and SDMC PI for discussion of resources and determination of the need for review by the full MOG or SLG; if the Laboratory Center PI and SDMC PI agree that full group review is not indicated, the Laboratory Center PI (or network chair) can approve the NWCS on behalf of the MOG/SLG. Full MOG or SLG review is required for a NWCS for which significant resources are being requested or as otherwise determined by the LC PI and SDMC PI.
- If the LC PI or SDMC PI determines that additional information is needed before the review process can be considered complete and approval granted, the NWCS will be returned to the proposing investigators with the specific request.
- The final review outcome is communicated by the Operations Center proposal coordinator to the proposing investigators and to the SDMC via the specified email aliases, with instructions to the investigators regarding the need for completion of an SDUA.

15.4.2.3 After IMPAACT SC and Network Leadership Review of NWCS

Proposing Investigators

- If a NWCS is deferred by the SC or by the MOG/SLG, unless otherwise directed, investigators may submit a revised NWCS that addresses the concerns raised by the SC or network leadership within 4 months following the deferral notice for re-review. If this is not done within 4 months, the Operations Center proposals coordinator will send a notice to the investigators indicating the NWCS will be withdrawn.
- The investigators must comply with the timelines and procedures for analyses and manuscript preparation and review specified in Section 19 of the IMPAACT MOP.
- The investigators must submit to the DMC any data generated from assays performed on IMPAACT specimens.

SDMC

- If the NWCS is approved by the MOG or SLG and SDAC will be performing associated analyses, an SDAC statistician will be named by SDAC (or confirmed if already identified). This statistician will work with the other investigators to complete and publish the proposed analyses.
• If the NWCS is approved by the MOG or SLG and the data are to be exported to the investigators for analysis, an SDAC Coordinator will be named by SDAC. The SDAC Coordinator will work with the DMC to facilitate transfer of specimens and, if applicable, associated clinical data upon confirmation by the Operations Center that the Specimen and Data Usage Agreement (SDUA) process is complete and will serve as the contact person for any questions.

• A Laboratory Data Manager (LDM) from the DMC is assigned to each approved NWCS. The LDM will assist the proposing investigators (and SDAC Coordinator, if assigned) by coordinating the shipment of specimens to the testing laboratories.
  o Specimens from participants who did not consent to non-protocol testing of their specimens will not be shipped for NWCS testing.
  o Specimens collected at CRSs located outside the United States whose IRB, ethics committees, or equivalent have not approved the NWCS will not be shipped.
  o Specimens will not be shipped until the DMC has received confirmation from the Operations Center that the Specimen and Data Usage Agreement (SDUA) process is complete and that the Proposing Investigator has IRB approval (or waiver) for the NWCS research project.

• The LDM will work with the testing laboratory to transfer assay results back to the DMC regardless of whether an SDAC statistician will be performing analysis or not.

15.4.2.4 Special Considerations for NWCSs requiring Genetic Analyses

A NWCS that involves use of existing IMPAACT human genetic data must be clearly linked to the protocol and/or the NWCS(s) under which the human genetic data were created. See Section 15.2.2.4 for additional details.

Investigators who will be performing human genetic testing on IMPAACT specimens must clearly specify this in their NWCS proposal. Only specimens from participants who have consented to non-protocol human genetic testing of their specimens will be available for NWCS human genetic testing.

Investigators who produce new GWAS data under a NWCS using IMPAACT specimens may submit these data sets to an NIH GWAS data repository (such as dbGaP). This requirement must be clearly stated in the NWCS proposal, and if approved by IMPAACT leadership, must only be done for those participants who have consented to dbGaP submission.

15.4.2.5 Specimen and Data Usage Agreements for NWCS

An SDUA is required for all approved NWCSs. The Operations Center Proposal Coordinator will remind the NWCS investigators of this requirement, with the final approval notification. The completed SDUA must be submitted to the Operations Center by the proposing investigator(s) who will receive and be responsible for the data, before associated data and specimens are released. The SDMC will be notified upon receipt of the completed SDUA via the specified email aliases.

15.4.2.6 Publications resulting from NWCS

It is the responsibility of the investigator/author to ensure that development of manuscripts results from NWCS follow the procedures specified in Section 19 of the IMPAACT MOP, including timelines, authorship, network review, and citations.

Any publications associated with a NWCS should include acknowledgement IMPAACT.
15.5 Specimen and Data Usage Agreements (SDUA)

SDUAs are defined in Section 15.2 above and the form can be accessed on the IMPAACT website at [http://impaactnetwork.org/resources/study-proposals.htm](http://impaactnetwork.org/resources/study-proposals.htm).

15.5.1 Projects that require an SDUA

An SDUA is required for the following:
- Any export of human genomic data
- Any NWCS
- Export of data under a DR or DACS
- Shipment of specimens and/or data sets for an approved IMPAACT protocol if the activity has not been described in the protocol or DAIDS Clinical Trials Agreement
- Export of data from multiple studies for a meta-analysis or other grouped analysis, even if not developed as a formal DR or DACS

15.5.2 Projects that do not require an SDUA

- The use of data that have been moved to the public repository at the National Technical Information Service or de-identified per requirements for public use datasets
- Shipment of specimens and/or data if the send-out has been described in an approved IMPAACT protocol and therefore, did not require a DR, DACS, or NWCS
- Shipment of specimens and/or data to pharmaceutical companies when covered by DAIDS Clinical Trials Agreements
- Shipment of specimens and/or data for the purposes of quality assurance
- Shipment of specimens to an IMPAACT funded site, laboratory, or repository for the purpose of long term storage

15.5.3 Procedures for Completion and Submission of SDUAs

Operations Center will notify investigators for projects that require an SDUA with the final approval notification. However, timelines for projects that must have an SDUA (as indicated in section 15.5.1 above) will be facilitated if a completed SDUA is submitted with the initial proposal.

When the SDUA for a DR, DACS, or NWCS is complete, the IMPAACT Operations Center will notify the SDMC at the specified email aliases and copy the relevant statistician(s); the completed SDUA will be attached to the notification.

Data and/or specimens for projects requiring an SDUA will not be released or shipped until the SDMC has confirmation that the IMPAACT Operations Center has received a signed SDUA.
16 TRAINING

16.1 Human Subjects Protection (HSP) Training

16.2 Good Clinical Practice Training

16.3 Laboratory Related Training

16.3.1 Laboratory Data Management System

16.3.2 International Air Transport Association (IATA)

16.3.3 Biohazard and Containment Training

16.3.4 Other Requirements for Laboratory Personnel

16.4 Data Management Training

16.5 Research Ethics Training for Community Representatives

16.6 Study-Specific Training

16.6.1 Development of Study-Specific Training Plan

16.6.2 Scheduling Study-Specific Site Training

16.6.3 Site Preparation for Training

16.6.4 Implementation of Study-Specific Training

16.6.5 Continuing Study-Specific Training

16.7 Documenting Training

16 TRAINING FOR SITE KEY PERSONNEL AND OTHER SITE AND LABORATORY STAFF

The IMPAACT Network is committed to developing qualified, trained staff to conduct IMPAACT studies. For each IMPAACT study, the site Investigator of Record (IoR) is responsible for ensuring that study site staff are appropriately qualified and trained to carry out their delegated duties and that all training is adequately documented; Clinical Trial Unit (CTU) Principal Investigators and Clinical Research Site (CRS) Leaders are responsible for ensuring that IoRs fulfill this responsibility. Per the DAIDS policy on Requirements for Manual of Operational Procedures, all sites must establish and follow standard operating procedures (SOPs) for personnel training and certification documentation; IoRs must maintain adequate training documentation and make training documentation available to NIAID or NICHD Program Officers and to site monitors, inspectors, and/or auditors acting on behalf of study sponsors, regulatory authorities, site IRBs/ECs, and other applicable review bodies.

Key personnel (key site staff) are defined in the Glossary of DAIDS Clinical Research Terms as individuals who are involved in the design and conduct of NIH funded human subjects’ clinical research. This includes all individuals named on the Form FDA 1572 or Division of AIDS (DAIDS) Investigator of Record (IoR) Form and any clinical research site personnel who have more than minimal involvement with the conduct of the research (performing study evaluations or procedures or providing intervention) or more than minimal study conduct-related contact with study participants or confidential study data record, or specimens. Key personnel must complete Human Subjects Protection (HSP) training (Section 16.1) as well as Good Clinical Practice (GCP) training (Section 16.2).

Further training requirements related to laboratory specifications are presented in Section 16.3; related to data management specifications are presented in Section 16.4; and related to research ethics training for community representatives are presented in Section 16.5.

IMPAACT requires study-specific site training prior to study initiation (Section 16.6).

IMPAACT sites are expected also to provide training for new staff and continuing training for current staff. Sites are required to maintain up-to-date and accurate training records of all required network and study-required trainings. The DAIDS policy on Requirements for Human Subjects Protections (HSP) and...
Good Clinical Practice (GCP) Training for Clinical Research Site Personnel gives further detail. DAIDS provides multiple training options to meet such requirements.

An overview of mandated training is found in Table 16-1 with further details in the following sections.

Table 16-1. IMPAACT Training Requirements

<table>
<thead>
<tr>
<th>Training</th>
<th>Required Personnel</th>
<th>Timing/Frequency</th>
<th>Sources for Training</th>
</tr>
</thead>
</table>
| Human Subjects Protection (HSP)       | All key personnel  | Prior to awards being made for clinical research and every three years thereafter | • DAIDS-sponsored HSP training sessions
   |                                    |                    | (for new staff, within 90 days of assignment and prior to functioning without direct supervision) | • Online training courses provided by:
   |                                    |                    |                                                                                  |   - HIV/AIDS Network Coordination (HANC) |
   |                                    |                    |                                                                                  |   - FHI 360 Research Ethics Training curriculum |
   |                                    |                    |                                                                                  |   - NIH GCP learning center |
   |                                    |                    |                                                                                  |   - CITI Program |
   |                                    |                    |                                                                                  |   - Association of Clinical Research Professionals |
   |                                    |                    |                                                                                  | • Online university-based training modules |
   |                                    |                    |                                                                                  | • Commercial training programs |
| Good Clinical Practice (GCP)          | All key personnel  | Prior to awards being made for clinical research and every three years thereafter | • DAIDS-sponsored GCP training sessions
   |                                    |                    | (for new staff, within 90 days of assignment and prior to functioning without direct supervision) | • Online training course provided by:
   |                                    |                    |                                                                                  |   - NIH GCP learning center |
   |                                    |                    |                                                                                  |   - CITI Program |
   |                                    |                    |                                                                                  | • Online university-based training modules |
   |                                    |                    |                                                                                  | • Commercial training programs |
| International Air Transportation Association (IATA) training | All staff who transport, ship, or receive infectious substances and diagnostic specimens | Prior to handling infectious substances and specimens as part of an IMPAACT study (certification of staff members required for study activation at the site); regulations reviewed annually and certification every two years thereafter | • Resources listed in Section 16.3.2 |
| Laboratory Data Management System (LDMS) training | IMPAACT laboratory staff | At time of installation of LDMS and as needed | • Frontier Science Foundation (FSTRF) training at network meetings and regional meetings, onsite, online, or at FSTRF |
Table 16-1. IMPAACT Training Requirements

<table>
<thead>
<tr>
<th>Training</th>
<th>Required Personnel</th>
<th>Timing/Frequency</th>
<th>Sources for Training</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Good Clinical Laboratory Practice (GCLP)</strong></td>
<td>Laboratory Director, Laboratory Manager/Supervisor and/or quality assurance/quality control (QA/QC) technologists</td>
<td>Prior to involvement in an IMPAACT study and then as needed</td>
<td>• GCLP courses provided by the DAIDS contractor (at annual and/or regional meetings) or online</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Courses available from private training companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NOTE: these may not cover the appropriate DAIDS related regulations</td>
</tr>
<tr>
<td><strong>Study-specific training</strong></td>
<td>All site staff involved in the study</td>
<td>Prior to initiation of study (for new staff, prior to performing study-specific tasks/duties without direct supervision)</td>
<td>• Protocol clinical trials specialist (CTS), data manager, Laboratory Center (LC) representative, and other protocol team members, as applicable and as described in Section 16.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• IoR or designee for new staff</td>
</tr>
</tbody>
</table>

16.1 Human Subjects Protection (HSP) Training

All key personnel must receive HSP training prior to awards being made for clinical research and every three years thereafter. New key personnel must receive HSP training within 90 days of any assignment involving the conduct of IMPAACT clinical research and prior to functioning without direct supervision.

Training of all IMPAACT site staff is encouraged. Sources and options for HSP training are included in Table 16-1, above. Additional information related to human subjects protection and relevant training is provided in Section 8.

16.2 Good Clinical Practice Training

All key personnel must receive GCP training meeting International Conference on Harmonisation (ICH) E6 standards prior to study initiation and every three years thereafter. New key personnel must receive GCP training within 90 days of any assignment involving the conduct of IMPAACT clinical research and prior to functioning without direct supervision.

Training of all IMPAACT site study staff is encouraged. Sources and options for HSP training are included in Table 16-1, above.

16.3 Laboratory Related Training

To ensure quality research and safeguard study participants, DAIDS requires that all IMPAACT studies be conducted in accordance with GCLP. The LC also requires that key laboratory personnel receive GCLP training prior to involvement in an IMPAACT study. Training of all IMPAACT key laboratory staff is facilitated through the provision of regional GCLP training as well as through an online training program. Refer to Section 17 for further details on IMPAACT Network Laboratory requirements.

All IMPAACT studies rely heavily on the capacity of IMPAACT laboratories to handle, process, and ship participant specimens. The work of qualified and trained laboratory staff at the research sites is essential.
The IMPAACT Network requires the training described in the remainder of this section for laboratory personnel.

16.3.1 Laboratory Data Management System

The LDMS is the laboratory software installed at each of the sites to assist with specimen management, storage, and shipping. LDMS training is provided by FSTRF when the site is provided access. If travel is required, this is a site expense.

Opportunities for refresher training are provided. At the request of the LC, FSTRF may provide refresher training on the LDMS at annual meetings, regional meetings, protocol-specific trainings, or through web-based trainings. FSTRF may also provide refresher training at the regional DAIDS training sessions. The LC staff members are typically available at these training sessions to provide information related to IMPAACT and also to answer questions from site representatives. Site representatives are expected to share the information learned with other site staff. FSTRF also hosts trainings at their headquarters in Amherst, New York, at regular, published intervals.

As part of study monitoring and oversight, the protocol team and network leadership routinely review specimen testing and availability as well as data quality and completeness; if any issues or concerns are identified during these reviews, additional training or other corrective actions may be required (see Section 13).

Sites, at their expense, may also request additional training if needed, for example, when new laboratory personnel are hired.

16.3.2 International Air Transport Association (IATA)

IATA regulates the safe transportation of dangerous goods by air in accordance with the legal requirements of the International Civil Aviation Organization (see Section 17 for further details). IMPAACT, in accordance with IATA requirements, requires training and certification for all IMPAACT laboratory staff involved with the handling, transporting (by air and ground), and receiving and shipping of infectious substances and diagnostic samples. Certification of all site staff members, who transport and/or ship dangerous goods, is required prior to study activation at a site.

Site personnel should review the IATA regulations annually as well as complete required training in hazardous materials (HAZMAT) regulations as they pertain to IATA shipping regulations.

Each site is responsible for training the pertinent staff members on IATA shipping regulations and is required to have a current IATA manual onsite. Sites are required to provide documentation of IATA certification of personnel upon request by the LC or a DAIDS contractor. The site’s Primary Network Laboratory (PNL) is responsible for assuring that the laboratory has a current IATA Dangerous Goods Manual and appropriate training materials. See Section 17 for a complete listing of additional laboratory-specific training resources.

16.3.3 Biohazard and Containment Training

Clinical and laboratory personnel are expected to complete annual clinical safety training including training on blood borne pathogens and infection control. It is the responsibility of the site to provide the training to all clinical and laboratory staff using information and materials provided by their institutions as well as DAIDS contractors and cross-network training groups.
16.3.4 Other Requirements for Laboratory Personnel

Laboratory personnel are also expected to participate and complete training as specified in this section for site personnel. For key laboratory personnel, this includes HSP training, GCP training, GCLP training, and study-specific training.

Sites will be notified of relevant laboratory issues and developments which may affect multiple IMPAACT protocols or network activities by the IMPAACT Operations Center, LC, and/or Data Management Center (DMC). Such issues may also be discussed, with training opportunities, at the annual meetings or through other methods of communication.

16.4 Data Management Training

Site personnel are responsible for providing study data that are correct and of high quality to the DMC. Knowledge of data management systems, quality assurance tools, and reports are necessary to meet this requirement. Data management training is offered to site personnel through routine trainings at the DMC, regional trainings, trainings offered at annual network meeting demonstration rooms, web-based trainings, and in-person study-specific trainings. Training resources may be found on the DMC portal website at http://www.frontierscience.org.

16.5 Research Ethics Training for Community Representatives

The FHI 360 Research Ethics Training Curriculum for Community Representatives is designed to educate community representatives about their roles and responsibilities and inform community representatives, members of research teams, CABs, and research ethics committees, about the general principles of research ethics. It also reviews the need for ethics committees, their importance, and the roles and responsibilities of community representatives in the research process. The curriculum includes easy-to-use materials, such as slides, case studies, activities, facilitator notes, as well as an ethics training certificate. Community education staff, community advisors, and partners are encouraged to complete this training.

Additional details related to community participation and engagement in the IMPAACT Network is described in Section 5.

16.6 Study-Specific Training

Site IoRs are responsible for ensuring that site study staff members are adequately trained to serve their delegated study-specific functions. Designated members of IMPAACT protocol teams — including but not limited to Operations Center, SDMC, and LC staff — collaborate with IoRs to fulfill this responsibility in preparation for initiation of new IMPAACT studies by conducting study-specific training.

Each site IoR is responsible for ensuring that study site staff receive required training and that all training is documented. Protocol team members may assist with this, for example, by providing copies of signature sheets from an in-person training. Presented training materials will also be provided, typically by posting on the study-specific web page; if any materials are not suitable for public posting, copies will be emailed to site representatives. Documentation of all study staff training must be maintained in each site’s Essential Document files.
Self-study of study-specific documents and/or training materials (alone) is not considered adequate training for IMPAACT studies; participation in training conducted by the protocol team is required. However, self-study may be included in study-specific training plans in conjunction with other training approaches (e.g., as a precursor to in-person training).

Blinded studies should include review of the Network Manual of Procedures (MOP) Appendix I, Unblinding Procedures, as part of study-specific training.

16.6.1 Development of Study-Specific Training Plan

For each IMPAACT study, the protocol team agrees on a study-specific training plan that is tailored to the needs of the study and participating study sites. Discussion of training plans is generally initiated within the protocol team around the time of IMPAACT Multidisciplinary Protocol Review Group (MPRG) review of the protocol and plans are further developed as sites work on completing site-specific study activation requirements, as described further in Section 11. Input on training plans is also obtained from site representatives to ensure that all perceived training needs are considered. Once a study-specific training plan is finalized, the operational approach is communicated to the study sites, and training timelines and materials are developed. The Operations Center coordinates this training with the protocol chair, SDMC, and LC to lead these efforts, with input from other key protocol team members as needed.

The objectives of study-specific training are to:

- Establish a common understanding of key aspects of the study, including the background and rationale, objectives and outcomes, design, intervention, and schedule of evaluations
- Ensure that site study staff are informed and familiar with:
  - Day-to-day study implementation requirements, in accordance with the protocol, study-specific MOP, Laboratory Processing Chart (LPC), case report forms (eCRF) completion guide, other relevant study implementation materials, and relevant regulations, guidelines, policies and procedures
  - Study-specific communication procedures and operational resources and utilities available to support day-to-day study implementation
- Ensure standardization of study implementation across sites so that data can be combined for analysis

Team members to be consulted regarding study-specific training plans include but are not limited to protocol chairs, protocol pharmacists, data managers, laboratory specialists, and medical officers. For studies involving specialized procedures and/or interventions, relevant content area experts are also consulted; these persons may be members of the protocol team or may be external to the team. Site input may be obtained using any of several methods, including telephone and email communications and online surveys.

Study-specific training plans may include the following:

- Self-study of training materials developed by the protocol team
- Remote participation in conference call and/or webinar training sessions
- In-person participation in centralized, regional, or site-specific training sessions

When centralized or regional in-person trainings are planned, a train-the-trainer approach is typically taken, with site staff who attend the trainings being responsible for training other study staff members at their site. When site-specific in-person trainings are planned, it is expected that most if not all key site staff will attend the training.
When key site staff are not available to attend study-specific training for any reason, the site IoR is responsible for ensuring adequate and appropriate training of these staff.

Study-specific training plans should also:

- Identify members of the study-specific training team (i.e., protocol team members and others who will be involved in providing training).
- Specify the extent to which translation into languages other than English may be required and indicate whether translation may need to be arranged centrally or performed locally at one or more study sites.
- Specify minimum requirements for sites to be considered adequately trained as a condition for site-specific study activation. Although it is generally expected that the same training will be provided for all sites, when necessary, different approaches and requirements may be specified for different sites (e.g., less experienced sites may require additional training).

Initial draft training agendas are prepared as part of study-specific training plans. These should minimally include a listing of training topics to be covered and a designation of persons responsible for each topic; other details may be specified later, as agendas are further developed and finalized. Key considerations for training agendas include the following:

- Address community-related as well as scientific and operational training needs.
- Involve site staff as well as training team members in presenting/leading training topics.
- Allow adequate time for each topic, including time for questions and answers and discussion.
- Consider the overall training time as well as the amount of time scheduled for each topic (shorter sessions with breaks in between are usually advantageous for learning).
- Include interactive sessions when possible and applicable.
- Incorporate time for cross-site interaction and problem-solving when possible.

If a study design is straightforward and the participating sites have experience with similar studies, the training plan may specify telephone or web-based training. In contrast, if the study design is unique or complex, or if sites are less experienced, an in-person training may be required. In-person training may also be required when training on specialized study procedures is needed. A combination approach can also be taken. For example, telephone and web-based training could be planned for experienced sites while in-person training would be offered to less experienced sites or for a targeted study-related purpose, such as specialized laboratory procedures. Cost-efficiency and training effectiveness are also key considerations in determining the best approach.

When in-person training is planned, options include regional trainings for study staff from multiple sites as well as individual on-site trainings. Study-specific trainings may include sessions for community educators and Community Advisory Board (CAB) members, focused on such topics as community education and outreach, participant recruitment and retention, human subjects and participant safety protections, community perceptions and potential misconceptions of the study.

16.6.2 Scheduling Study-Specific Site Training

The responsibility for scheduling study-specific training is shared among designated members of protocol teams in conjunction with site representatives.

Training is conducted as closely as possible to the time when one or more clinical research sites will have met all other site-specific study activation requirements, such that activation and initiation of the study
will occur upon (or very soon after) completion of training. Generally, a study will be open to accrual or the majority of requirements to open a study to accrual will be met prior to training. One or more sites should have completed the DAIDS protocol registration process for the study and, if applicable, should have received supplies of the investigational study drug or product on-site. All other activation requirements should also be completed or nearly completed. For example, required site SOPs may be fully drafted prior to training with the expectation of finalization immediately following training (to incorporate information provided during the training). See Figure 16-1 for required and recommended study- and site-specific elements to be completed prior to training. Introductory overview sessions may be conducted prior to this timepoint, as webinars or at pre-convened meetings, like the Network Annual Meeting.

If site activation is delayed following training, site IoRs are responsible for conducting retraining (see Section 16.6.5).

**Figure 16-1. Guidelines for Scheduling IMPAACT Study-Specific Training**

<table>
<thead>
<tr>
<th>To be completed prior to scheduling study-specific training (as applicable to the study; see Section 11 for details related to study specific pre-implementation activities):</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Completion of US FDA 30-day review period/safe to proceed notice</td>
</tr>
<tr>
<td>• Signed Clinical Trials Agreement(s) (CTA)</td>
</tr>
<tr>
<td>• Study product(s) available at the DAIDS Clinical Research Product Management Center (CRPMC)</td>
</tr>
<tr>
<td>• Study specific Manual of Procedures (MOP) for use as a reference during training (Note: a draft version may be used for training purposes)</td>
</tr>
<tr>
<td>• At least one site close to meeting all activation requirements, such that activation and initiation of the study will occur upon (or very soon after) completion of training</td>
</tr>
</tbody>
</table>

Note: Sites that have made significant progress towards meeting study-specific site activation requirements, as outlined in Section 11, will be prioritized when scheduling study-specific training. However, other sites may be invited to participate in training sessions, as determined in the training plan.

### 16.6.3 Site Preparation for Training

In addition to completion of requirements for scheduling study training, site study staff will carry out other activities to prepare staff for study training and, ultimately, the conduct of the study. Under the supervision of the IoR, the following items are generally completed by sites as they prepare for study implementation:

- Hire staff (if needed)
- Designate site study staff team and assess local training needs
- Provide orientation and background training locally, as needed, including:
  - Local staffing and organizational plan (including roles and responsibilities)
  - Local site operations
  - Local role-specific training and certification
  - Other local requirements
- Complete “mock visits” using study implementation materials, ideally in clinic and laboratory facilities that will be used for the study
- Discuss and develop SOPs (as needed) and other local study implementation materials
- Review and become thoroughly familiar with the study protocol, informed consent documents, CRFs, training materials, other study implementation materials, and site Standard Operating Procedures (SOPs)
• Review and become familiar with the study-specific specimen management plan and the “chain of custody” for study samples
• Identify questions, issues, and problems requiring training team input

Depending on the training plan, expectations of site study staff prior to study-specific training include:

• Work with training team to plan training and finalize agenda
• Work with training team to identify and meet translation and interpreter needs
• Arrange staff backup for staff who will attend training sessions
• Arrange access to training rooms and any required equipment

16.6.4 Implementation of Study-Specific Training

Training team members are responsible for developing training agendas, developing training materials, and conducting training sessions. Topics to be covered for all IMPAACT studies are listed in Figure 16-2. Ideally, all site staff members who have been delegated duties or responsibilities for a study will take part in study-specific training; however, a train-the-trainer approach may also be considered for centralized or regional trainings, which all site staff may not be able to attend. The training plan will clearly identify required attendees.

Figure 16-2. Minimum Topics to be Covered for IMPAACT Study-Specific Trainings

- Study Overview including Rationale and Objectives
- Study-Related Communications
- Informed Consent Considerations
- Eligibility Criteria
- Screening and Enrollment Process
- Study Procedures (covering protocol Section 6 and the Schedules of Evaluation)
- Pharmacy and Study Drug Considerations
- Data Management Considerations
- Laboratory Considerations
- Toxicity/Participant Management
- Adverse Event and EAE Reporting
- If needed, network structure and procedures overview (including deviation reporting)
- Other study- or site-specific topics may be added

During training sessions, site study staff are expected to:

• Present training topics (if specified in the training agenda)
• Present site-specific operational plans and/or SOPs (if specified in the training agenda)
• Attend all required training sessions (by study-specific role if applicable) per the study training plan
• Fully engage in the training (ask questions; identify issues requiring additional clarification; describe site-specific study implementation plans, materials, and tools; etc.)

Failure of study staff to attend required training sessions typically will delay site-specific study activation, as additional training will be required before study activation can occur. Therefore, every effort should be made to avoid absences from required sessions.
16.6.5 Continuing Study-Specific Training

Site IoRs are responsible for ensuring that new site study staff members are adequately trained to serve their delegated study-specific functions. Study-specific training teams typically do not provide training for newly hired site staff following the initial study training. However, team members will make every effort to be available to answer questions and provide technical assistance to new key personnel as needed. Teleconference discussions and/or targeted webinar trainings can be provided, if requested by the site.

Once a study is underway, designated protocol team members — typically Operations Center, DMC, and LC staff — issue study-related communications, answers to frequently asked questions, and other similar documents to guide study implementation at each site (see Section 12). IoRs are responsible for ensuring that study sites have SOPs in place for receipt and filing of these communications and for ensuring that all relevant study staff are informed of and trained on these materials, as needed, and incorporating the content into day-to-day study operations.

When necessary, designated protocol team members will provide study-specific “refresher” training to site staff. This may be done via teleconference or webinar, at in-person meetings (e.g., IMPAACT annual meeting) or during site visits. Recordings of prior training sessions may also be options for continuing training at study sites.

16.7 Documenting Training

Site IoRs are responsible for ensuring that study site staff members are appropriately qualified and trained to carry out their delegated duties and that all training is adequately documented. Per the DAIDS policy on Requirements for Manual of Operational Procedures, all sites must establish and follow SOPs for personnel training and certification documentation. Site SOPs may specify the use of training logs, training certificates, meeting summaries with participant lists, and/or other documents as applicable. All training documentation must be maintained in on-site Essential Document files.

Sites may use institutional templates; the National Center for Complementary and Integrative Health (NCCIH) also provides a template as part of their Clinical Research Toolbox. Recommendations for best practice include the following (adapted from the NCCIH Training Log Tool):

- Record training in the log as it is completed, to ensure completeness and accuracy of the data.
- This log need not include training that is documented by a completion certificate or other written documentation.
- The site study staff member listed on each line should sign to verify that the training has been completed.
- Number each page and maintain this log in the Essential Documents files.
- Store pages in reverse chronological order, with the newest pages of the log placed at the front of the section.
- At the conclusion of the study, identify the final page of the log by checking the box in the footer.

For study-specific trainings, as noted in Section 16.6, the CTS may help document completed training; for example, by providing the sign-in log from an in-person training and by providing training materials as posted files on the study-specific web page or via email to site representatives. For webinars, sites are responsible for ensuring webinar-specific training documentation is available on-site; summarizing participation in a webinar series is not adequate for training documentation. See Figures 16-3 and 16-4 for
examples of a training documentation message and of a training log documenting attendance for study-specific webinars.

**Figure 16-3. Example of Training Message from CTS Documenting a Study-Specific Webinars**

```
Dear All –

This message serves to document the study-specific training webinar conducted for IMPAACT 2040, Phase I/II Study of Drug X in Children, on 18 January 2018 for approximately one and a half hours.

The training, entitled “IMPAACT 2040 Cohort 1 Overview,” was led by Emily Jones, Study Chair, and Sarah Adams, CTS. The training was intended primarily for Cohort 1 site staff; however, participation was not restricted and other study site staff were welcome to attend.

The objective of this training was to establish a common understanding of the following:

- Study design, rationale, and objectives
- Cohort 1 eligibility criteria and study-specific procedures for recruitment, screening, and enrollment
- Cohort 1 procedures and evaluations

The training also provided an opportunity to address questions and to share key information, operational, tips, and reminders across sites.

The training materials presented as part of this webinar have been posted on the study-specific web page (http://impaactnetwork.org/studies/IMPAACT2040.asp) and are available upon request from the IMPAACT Operations Center.

Study site Investigators of Record are responsible for ensuring that a copy of this message, the associated training materials, and site-specific attendance documentation are filed in on-site training files for IMPAACT 2040. As a reminder, per the DAIDS policy on Requirements for Manual of Operational Procedures, all sites must establish and follow a standard operation procedure (SOP) for personnel training and certification documentation. Each site is responsible for preparing attendance documentation for this webinar in accordance with this SOP.

Thank you for your participation in the webinar; please contact me with any questions you may have about this message.

Sarah Adams
```
Figure 16-4. Example of Training Documentation for Attendance at Study-Specific Webinar

Note: This is an example training log; any format consistent with site SOPs may be used.
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17 LABORATORY CONSIDERATIONS

17.1 IMPAACT Laboratory Center

The IMPAACT Laboratory Center (ILC) is affiliated with the University of California Los Angeles (UCLA), in Los Angeles, California. The ILC is responsible for the oversight of laboratory activities associated with the conduct of IMPAACT protocols at both United States (US) and non-US sites.

The ILC provides oversight to site laboratories and IMPAACT specialty laboratories that are sponsored by the National Institute of Allergy and Infectious Diseases (NIAID) and facilitates laboratory activities for laboratories that are sponsored by the  *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) in conjunction with Westat. Westat manages the oversight of laboratories supported by NICHD.
The ILC is responsible for the following activities:

- Providing oversight of network laboratories responsible for the collection, testing, and reporting of clinical trial results from biological specimens.
- Managing clinical laboratory documents using an electronic document management system and database.
- Assisting in the development and quality assurance assessment of local laboratory capacity at the Clinical Trials Units (CTUs) participating in IMPAACT studies.
- Identifying and facilitating the implementation of state-of-the-art assays and technologies to advance IMPAACT’s scientific agenda through specialty, focus, and site-support laboratories.
- Reviewing and providing guidance on validation reports for new assays.
- Tracking of regulatory and quality assurance documentation for all laboratories affiliated with NIAID CTUs sponsored by IMPAACT.
- Preparing international (non-US) NIAID laboratories to implement specific IMPAACT studies.
- Confirming that all laboratory testing in support of IMPAACT clinical trials meets the Division of AIDS (DAIDS) and ILC laboratory requirements, including generating and overseeing study-specific Protocol Analyte Lists (PALs) and DAIDS Clinical Laboratory Oversight Team (DCLOT) laboratory approval.
- Developing and coordinating laboratory training(s) and materials.
- Conducting laboratory visits and assessing laboratory capabilities to conduct IMPAACT studies.
- Liaising with External Quality Assurance (EQA) providers, vendors, and DAIDS contractors.
- Providing continuous monitoring of laboratory performance throughout the duration of IMPAACT studies.
- The ILC members oversee all NIAID laboratories by performing ongoing review of Quality Assurance / Quality Control (QA/QC) and proficiency testing. Deficiencies, deviations, and poor performance on proficiency testing that cannot be resolved, or serious breaches of Good Clinical Laboratory Practice (GCLP), will be brought to the IMPAACT Network Leadership by the ILC as they are identified. The ILC will also have primary responsibility for working with protocol teams to ensure appropriate regulatory compliance for all laboratory tests, and will provide site laboratories with training, support, and oversight.

In coordination with the ILC, Westat is directly responsible for NICHD-supported laboratories. Westat conducts the following tasks associated with their responsibility:

- Providing oversight of NICHD-supported laboratories responsible for the collection, testing, and reporting of clinical trial results from biological specimens.
- Tracking of regulatory and quality assurance documentation for all laboratories affiliated with NICHD CTUs sponsored by IMPAACT.
- Preparing international (non-US) NICHD laboratories to implement specific IMPAACT studies.
- Confirming that all laboratory testing in support of IMPAACT clinical trials meets the DAIDS and ILC laboratory requirements, including study specific PALs and DCLOT laboratory approval.
- Conducting laboratory visits and assessing laboratory capabilities to conduct IMPAACT studies.
- Liaising with EQA providers, vendors, and DAIDS contractors. This includes oversight of NICHD laboratories and performing ongoing review of QA/QC and proficiency testing. Deficiencies, deviations, and poor performance on proficiency testing that cannot be resolved, or serious breaches of GCLP, will be brought to the IMPAACT Network Leadership by the Westat Laboratory Consultant as they are identified.
- Providing continuous monitoring of laboratory performance throughout the duration of IMPAACT studies.
The ILC is comprised of the IMPAACT Laboratory Center Principal Investigator (PI) and other personnel involved in the quality assurance oversight of IMPAACT laboratories participating in DAIDS-sponsored clinical trials within the IMPAACT Network.

Scientific progress by the Specialty and Focus Laboratories is periodically reviewed in conjunction with the ILC PI, representatives from the Scientific Leadership Group (SLG) and external advisors, as needed.

The ILC works closely with the AIDS Clinical Trials Group (ACTG)/IMPAACT Laboratory Technologists Committee (LTC), the ACTG Laboratory Center PI, and the Cross-Network Laboratory Focus Group (LFG) via the Office of HIV/AIDS Network Coordination (HANC) to harmonize IMPAACT policies and procedures with those of the ACTG, other networks, and NICHD. Site laboratory training and support will be coordinated with the Patient Safety Monitoring in International Laboratories (pSMILE) and DCLOT. In addition, collaborations and participation by Specialty Laboratory Directors and other Network Scientific Committees will be sought as appropriate.

The ILC oversees and coordinates three types of laboratories that are distinguished by the types of assays they perform, their regulatory requirements, and their funding mechanisms. There are also multiple partners affiliated with IMPAACT and the ILC. These groups are described in Table 17-1, below.

<table>
<thead>
<tr>
<th>Laboratory Types</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialty Laboratories*</td>
<td>• Focus on supporting and advancing IMPAACT’s research agenda through the development and validation of novel and unique assays and/or the application of standard assays to probe pathogenic mechanisms</td>
</tr>
<tr>
<td></td>
<td>• IMPAACT currently supports several Specialty Laboratories in the areas of HIV Pathogenesis, Pharmacology, and Tuberculosis (TB) Diagnostics</td>
</tr>
<tr>
<td>Focus Laboratories (FLs)*</td>
<td>• Funded on a contractual basis to support specific, unique assays that are not available at a funded Site or Specialty Laboratory, but are necessary to support the activities of IMPAACT trials</td>
</tr>
<tr>
<td>Site Laboratories*</td>
<td>• Perform routine study assays, such as hematology, chemistry, HIV RNA and DNA, ARV resistance testing, CD4 cell enumeration, etc.</td>
</tr>
<tr>
<td>Network Laboratories (NL)</td>
<td>• Comprised of the network laboratory principal investigators and other network laboratory personnel involved in the quality assurance of the non-US laboratories participating in DAIDS-sponsored clinical trials</td>
</tr>
<tr>
<td></td>
<td>• NL for IMPAACT is the ILC (Westat laboratory representative is the primary contact for the NICHD-supported laboratories)</td>
</tr>
</tbody>
</table>
### Table 17-1. Types of Laboratories and Groups Affiliated with IMPAACT

<table>
<thead>
<tr>
<th>Laboratory Types</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Primary Network Laboratory (PNL)**     | • DAIDS NL assigned to specific non-US laboratories and is responsible for all non-US laboratory related communications  
• Each PNL may have an assigned contact person and/or a PNL email address (e.g., impaact.gqc@fstrf.org) to facilitate communication  
• Non-US laboratories have been instructed to direct all queries and requests for assistance to their PNL contact. Multiple networks may rely on the services of a particular non-US laboratory. It is the responsibility of the assigned PNL for communicating all laboratory relevant information to the other NLs, which may utilize these shared services.  
• A list of the PNL assignments can be found on the HANC website at: www.hanc.info/labs/labresources/qualitymanagement/Lists/PNL%20Assignments/AllItems.aspx  |
| **Cross-Network Laboratory Focus Group (LFG)** | • Comprised of members from DAIDS-funded networks: ACTG, HPTN, MTN, HVTN and IMPAACT  
• Individuals from Westat, who represent NICHD sponsored IMPAACT sites also participate in this group  
• Receives support from HANC for cross network laboratory activities  
• Activities include: communication processes for critical information across NLs; standardized quality assurance practices across networks; harmonization of laboratory processes and procedures to increase efficiency, especially at the shared laboratory sites  |
| **DAIDS Clinical Laboratory Oversight Team (DCLOT)** | • Comprised of DAIDS staff members who serve as laboratory points-of-contact to the DAIDS-funded Networks  
• Mission is to harmonize lab-related guidelines and requirements for establishing new laboratories; ensure that protocols are conducted in accordance with GCLP; provide central guidance in clinical laboratory matters to various DAIDS entities; and optimize the contribution of DAIDS laboratory-related support contracts to network labs  |
| **Regionally Qualified Labs (RQLs)** | • Laboratories that may be used to centrally perform testing (e.g., genotyping resistance testing) to reduce resource burden on clinical laboratories within the IMPAACT Network  
• Assays can include routine or specialty assays as needed to support IMPAACT sponsored studies  |
| **Laboratory Directors Group (LDG)** | • Comprised of IMPAACT Specialty Lab Directors  
• Primary objective of the LDG is to exchange ideas and identify scientific opportunities  
• Meets periodically via conference calls and during the IMPAACT Annual Meeting  |

*ILC oversees these laboratories.*
17.2 IMPAACT Laboratories

The following section applies to all laboratories affiliated with the IMPAACT Network or any study being performed under the guidance of the ILC. Information on policies and standard procedures related to requirements for DAIDS-supported laboratories and specimens derived from DAIDS-supported and/or-sponsored clinical trials are available at:

https://www.niaid.nih.gov/research/daids-clinical-research-laboratory-specimens-management

All laboratories affiliated with the IMPAACT Network are required to adhere to standards of DAIDS GCLP and local Standard Operating Procedures (SOPs) for proper collection, processing, labeling, transportation, and storage of laboratory specimens. The CRS and CTU laboratories should also have in place a well-defined Quality Management Plan (QMP) that comprehensively covers specimen management issues including specimen acquisition, tracking, processing, storage, back up plans (e.g., instrumentation, staffing, equipment, etc.), assay validations, and aspects of quality assessment and quality control.

The Requirements for DAIDS Funded and/or Sponsored Laboratories in Clinical Trials Policy (No: DWD-POL-LB-005.04/Effective 12 DEC 13) outlines specific requirements for laboratory quality assessment procedures and QC activities. These policies cover required quality assessment activities for the laboratory and laboratory QC including handling of reagents and conducting of assays. References for applicable US federal and international regulations are also included.

In accordance with DAIDS policy, all laboratory tests used for: 1) safety monitoring (e.g., hematology, chemistry), 2) patient management decisions (e.g., CD4, drug levels), 3) protocol eligibility (e.g., pregnancy tests), 4) primary study endpoints (e.g., HIV RNA) or 5) diagnosis (e.g., HIV, CMV, Syphilis, Hepatitis B), must:

- Be performed in a GCLP-compliant laboratory:
  - If in the US, must be College of American Pathologists (CAP) and/or Clinical Laboratory Improvement Amendments (CLIA) equivalent certified
  - For non-US laboratories, International Standardization Organization (ISO) 15189 compliance is suggested
- Meet DAIDS requirements, including age- and sex-appropriate reference ranges for study populations, verification studies for the U.S. Food and Drug Association (FDA) approved tests and validation studies for non-FDA approved test;
- Be quality assured using DAIDS-approved EQA programs, or if not available, alternate proficiency assessments must be approved by DAIDS and the ILC;
- Successfully pass at least one round of EQA for each clinical analyte to be tested as part of an IMPAACT clinical trial and satisfy all other network-specific requirements PRIOR to testing in the conduct of an IMPAACT clinical trial. Demonstrate ongoing successful performance in EQA programs for all study analytes (e.g., passing two of the most recent three EQA panels through CAP/OWA, VQA, IQA, etc.).

The compilation of these criteria, which include Safety, Patient management, Eligibility, Endpoints and Diagnosis are referred to as SPEED criteria.
17.3 Protocol-Specified Testing

Each protocol team determines the laboratory procedures, assays, and analytic approaches in accordance with the protocol-specified aims of the study. All protocol teams have an ILC Representative assigned to ensure that proposed analytes and procedures are feasible and meet the DAIDS regulatory requirements as outlined below. Inclusion in the early stage of protocol development provides the ILC with lead time to ensure that proposed testing methods are available, meet regulatory requirements, and if not, work with the DAIDS and others to develop appropriate plans to ensure compliance. The protocol team determines which laboratory assays are required including those pertaining to primary, secondary, and/or exploratory endpoints. Studies may also be conducted in research relevant geographic regions, which may be reflected in specific sites being selected for participation. The ILC may be asked to determine the study-specific testing capabilities of a site lab and assist in exploring options to ensure protocol specific testing can be performed.

Protocol teams have an LTC member assigned to prepare a Laboratory Processing Chart (LPC) that outlines the specimen collection, processing, and shipping requirements. The analytes required by the protocol and LPC are reflected in the study-specific PAL. Some IMPAACT studies have an accompanying manual of procedures (MOP) that is developed for a specific study, which may contain supplemental information and instructions, related to laboratory procedures that need greater detail than what is included in the LPC.

17.4 IMPAACT Laboratory Network Requirements: US Laboratories

All laboratories located within the Unites States (i.e., domestic laboratories) are required to provide the ILC with documentation that verifies their current abilities to conduct trial specific testing prior to the site/lab being activated, as shown in Figure 17-1. This documentation should include current copies of:

- CAP and/or CLIA certifications as well as any state-required certification
- Laboratory Director’s CV
- International Air Transport Association (IATA) training
- Local reference ranges (adult and/or pediatric) and
- Any IMPAACT study-specific training requirements (e.g., Dried Blood Spot [DBS] collection, etc.).
17.5 IMPAACT Laboratory Network Requirements: Non-US Laboratories

17.5.1 Good Clinical Laboratory Practices (GCLP)

IMPAACT requires that each laboratory perform IMPAACT protocol testing in a manner that meets protocol sponsors’ requirements and that of the Network. All laboratories should perform testing and conduct operations to meet GCLP standards at a minimum. Adherence to GCLP standards ensures consistent, reproducible, reliable, and auditable laboratory results.

For additional information on GCLP, (including recommended GCLP training), refer to the DAIDS Clinical Research Policies and Standard Procedures Documents website:

https://www.niaid.nih.gov/research/daids-clinical-research-policies-standard-procedures

The DAIDS and/or its contracted Laboratory Monitoring Group (LMG; currently PPD) will conduct regular laboratory audit visits to determine laboratory adherence to GCLP standards. Each laboratory will be notified of a pending audit and will confirm the dates of the audits with the LMG. The length and duration of these audits are determined by the scope of testing conducted at the laboratory. After the audit, the laboratory will receive an audit report and Action Plan (AP). The AP is reviewed by each affiliated Network Laboratory: for IMPAACT, this is the ILC for NIAID-supported sites and Westat for NICHD-supported sites to determine which items, if any, are deemed critical to the respective network.
the event that an item is determined to be critical, the laboratory cannot begin new protocols until the relevant issue has been resolved.

Laboratories are expected to resolve audit report findings deemed critical within 90 days following receipt of the DAIDS audit report and associated AP. The laboratory will work with DAIDS, pSMILE and applicable NL, as needed, to resolve the audit report findings. Outstanding issues, even if within the 90-day completion window, which have been deemed as critical may prevent laboratories from being activated to participate in new studies if they have the potential to inhibit the laboratory’s ability to conduct the study according to GCLP and Sponsor standards. Action items not denoted as critical are to be completed within 180 days.

17.5.2 Protocol-Specific Challenges

IMPAACT requires that laboratories address all protocol-specific challenges prior to beginning testing in support of IMPAACT protocols. These challenges include (but are not limited to): specialized or non-standard EQA testing, validation and verification of new equipment/assays (for non-US laboratories), and specialized training. The laboratory will work with ILC (NIAID) or Westat (NICHD) to make sure these challenges have been addressed.

Laboratories must perform testing in accordance with the version of the protocol and any Letters of Amendment (LoAs) that are currently Institutional Review Board (IRB)-approved at their CRS. Minor LPC updates not related to a protocol version change or LoA should be implemented immediately. Protocols and related study documents, such as LPCs and LoAs, are posted on the IMPAACT website:

http://impaactnetwork.org/studies/index.asp

17.5.3 Non-US Laboratory-related Protocol Activation Requirements

Prior to site implementation, the ILC (NIAID) or Westat (NICHD) works with each site laboratory to confirm laboratory readiness for non-US laboratories. The following are part of the IMPAACT laboratory-specific study activation requirements:

- Completion and DCLOT review of a study-specific PAL
- Confirmation of successful proficiency testing performance for all study analytes
- Review and provide feedback concerning study-specific HIV testing algorithm for infant and adult participants
- Successful completion of all relevant outstanding Investigation Reports for all study analytes
- Completion of all relevant Critical Action Items from the most recent DAIDS-contracted Laboratory Audit
- Current age- and sex-appropriate normal reference ranges
- Confirmation of appropriate validation for protocol-specified tests
- Local laboratory backup arrangements
- Confirmation of IATA specimen shipping certifications for at least two members of the site laboratory staff (may be confirmed via recent DAIDS-contracted Audit Report)
- Confirmation of ability to obtain necessary documentation (i.e., MTA/STA, regulatory permit, etc.) to allow export of specimens to the testing laboratories or repositories as required by the protocol
- Confirmation of relevant SOPs for local specimen handling and “chain of custody” maintenance related to primary study endpoints (May be confirmed via recent DAIDS-contracted Audit Report)
- Current Laboratory Director CV (signed and dated)
• Successful completion of the appropriate proficiency testing (EQA Program) for all assays required to conduct the study
• Study-specific training documentation (To be determined on a study by study basis)

For studies conducted under an Investigational New Drug (IND), laboratory testing is expected to be conducted using FDA-approved methods and kits, as appropriate and available. The use of non-FDA approved test methods will be reviewed by the ILC on a case-by-case basis in consultation with DCLOT, the Network, and EQA providers to determine if additional assay validation requirements may be needed.

Upon completion of all study-specific Laboratory Activation requirements, the ILC (NIAID) or Westat (NIAID) notifies the laboratory, relevant site staff, and the IMPAACT Operations Center contact.

17.5.4 Protocol Analyte List (PAL)

Prior to site laboratory activation, each non-US site laboratory must submit a PAL for review, which includes the names of the processing and testing laboratories, the methodology, FDA approval status and EQA procedures used for each analyte, and any back-up laboratories. The ILC, (for the NIAID sites/labs) Westat (for NICHD sites/labs) and representatives from DCLOT (for both NIAID and NICHD sites/labs) carefully review each PAL to ensure it accurately reflects the protocol-specific testing requirements. The PAL also captures information provided by the site laboratory about the protocol-specific specimen management and testing workflow.

The ILC is responsible for developing a protocol-specific PAL template for each protocol based on the current master PAL template provided by DCLOT and posted on https://psmile.org/index.cfm. The PAL template may be distributed by the ILC/Westat as a spreadsheet (IMPAACT 2009 and prior studies) or entered into the MiPAL system. The purpose of the MiPAL system is to facilitate and expedite the completion, review, and approval process for the PAL in a web-based format. Through the use of the MiPAL system, the site-associated laboratories can submit their PAL data along with supporting assay and laboratory documents. Sites and designated laboratories can complete their assigned MiPALs online at MiLabCentral.org.

Depending on the site affiliation, the ILC (NIAID sites) or Westat (NICHD sites) will be responsible for distributing the protocol specific MiPALs/PALS for completion to laboratories sites that have been approved to participate in a given study (see Figure 17-2: PAL Distribution). The site will submit the completed MiPAL/PAL to either the ILC or the Westat representative for initial review and subsequent review and finalization by DCLOT (See Figure 17-3: PAL Review and Approval Process). Following finalization of the PAL, the completed PAL along with any remaining associated documentation (e.g. normal reference ranges, updates on outstanding action plan items, etc.) will be sent to DCLOT for additional review and final laboratory approval. DAIDS-reviewed PALS are returned to the submitting laboratories; all finalized PALS are posted to the pSMILE website and copies are maintained by the ILC and Westat and within the MiPAL system.
Labs must submit updated PALs for review whenever testing methods, instrumentation, or backup testing plans change. Laboratories must receive approval from the (ILC or Westat) and DCLOT prior to implementing the new testing methods or instrumentation or adding a new laboratory (See Figure 17-4).

IMPAACT studies that are conducted under an IND Application are subject to additional regulatory requirements. All testing for IND studies should be conducted utilizing FDA-approved assays and kits. Exceptions to this will be considered on a case-by-case basis in consultation with DAIDS.
Figure 17-3. PAL Review and Study Specific Laboratory Approval Process

- **Protocol PAL Distributed**
  - ILC (NIAID) and Westat (NICHD) will send PAL Template/MiPAL to their respective sites upon distribution of the protocol to the sites.

- **PAL Completion**
  - ILC (NIAID) or Westat (NICHD) will ensure that PAL has been appropriately completed and will submit to DLCOT for initial review and posting to www.pSMILE.org upon finalization.

- **Submission to DLCOT**
  - Following completion of PAL, ILC (NIAID) or Westat (NICHD) submit final PAL and associated laboratory documentation (i.e., normal ranges, EQA results, APs, etc.) to DLCOT for review.

- **DCLOT Review**
  - ILC (NIAID) and Westat (NICHD) will facilitate communication with their respective sites to resolve any issues identified by DAIDS.

- **DCLOT Approval**
  - DAIDS representative will notify ILC (NIAID), or Westat (NICHD) as applicable, of DCLOT approval. ILC/Westat will notify laboratory(ies), site, and CTS of laboratory sign-off following DCLOT approval and completion of any study-specific training requirements.
Figure 17-4. Non-US Laboratory Approval

**NICHD / Westat Responsibilities**
- Confirm capabilities / proficiency of proposed NICHD labs
- Manage PAL completion, review, and submission to DCLOT
- Confirmation of completion of non-US laboratory requirements as outlined in Section 17.5. Archive relevant documentation at Westat.
- Notify Laboratory, relevant site staff, and IMPAACT Operations Center of completion of laboratory activation requirements

**NIAID / ILC Responsibilities**
- Confirm capabilities / proficiency of proposed NICHD labs
- Manage PAL completion, review, and submission to DCLOT
- Confirmation of completion of non-US laboratory requirements as outlined in Section 17.5. Archive relevant documentation at Westat.
- Notify Laboratory, relevant site staff, and IMPAACT Operations Center of completion of laboratory activation requirements
17.6 Laboratory Data Management System (LDMS)

IMPAACT uses the LDMS for IMPAACT studies to assist with data collection, generating specimen labels, specimen storage, and entry of results for certain assays. For each study, the LPC indicates which specimens are to be stored locally and which are to be shipped for testing or for storage at the central repositories. IMPAACT laboratories are required to use the LDMS Storage, Shipment, and Export modules for all network clinical specimens that will be stored or used for research laboratory assays. Laboratories using LDMS for Windows are expected to export at least once per week.

LDMS is managed by the IMPAACT Data Management Center (DMC) at Frontier Science Foundation, Inc. (FSTRF). Information on LDMS is available at https://www.ldms.org.

The DMC sends queries to processing and testing laboratories to inquire about data discrepancies or missing data. IMPAACT laboratories are required to resolve and respond to DMC queries within two weeks.

Laboratories have access to LDMS preloads (also called quick add templates) for most IMPAACT protocols. The use of LDMS preloads for available protocols makes it easier for laboratory staff to enter specimens into LDMS by pre-populating the specimen entry screen with expected specimens. Laboratories are expected to log all expected specimens for a visit into LDMS, and then use the appropriate condition codes and comments in order to document when expected specimens are not available.

IMPAACT laboratories are required to label specimens using a two-dimensional LDMS-generated barcode label. Labels should be applied at the earliest possible time point in specimen accessioning and processing or per the protocol requirements.

IMPAACT laboratories that process viable peripheral blood mononuclear cells (PBMCs) are required to use the LDMS Specimen Management and Storage modules to provide information on specimen processing and storage conditions for all logged PBMC specimens. The following additional fields are required for all viable PBMCs: Processing Date, Processing Time, Processed By Tech Initials, Total Cell Count, and Frozen Time. Additional information about entering PBMC specimen information into LDMS is available via the following online tutorial as part of FSTRF Films at https://www.ldms.org/resources/videos/.

IMPAACT laboratories performing assays that are supported by LDMS are required to submit those assay results using LDMS.

17.7 Specimen Accessioning and Processing

IMPAACT prohibits changes in the Patient Identification Number (PID) labeling for specimens that have already been collected and sent to the IMPAACT Specimen Repository (BRI for NIAID and Fisher for NICHD) or to another testing laboratory. If mislabeling is identified, then the sites are asked to immediately notify the protocol Data Manager and Laboratory Data Manager. Following data management review, the ILC leadership is consulted by the data management division chief for determination on how to handle the sample.
17.8 External Quality Assurance (EQA) Participation and Proficiency Testing Providers

Proficiency testing programs, also referred to as EQA programs, are used as an external check on the quality control and quality assessment of a test system.

Laboratories are required to participate in proficiency testing programs for each test performed in the laboratory. Non-US laboratories participating in IMPAACT studies must participate in the appropriate proficiency panels provided via the CAP, One World Accuracy (OWA), the Immunology Quality Assessment (IQA) program, the United Kingdom National External Quality Assessment Service (UK NEQAS) – administered by the IQA, the DAIDS Virology Quality Assessment (VQA) programs, the Clinical Pharmacology Quality Assurance (CPQA) program for pharmacology testing, as well as other approved proficiency providers. Panels are sent to the sites based on the assays performed for the specific IMPAACT study in which the site is participating.

Laboratories work directly with each EQA provider to ensure that the appropriate testing panels have been ordered and are being tested by the laboratory. The ILC (NIAID) or Westat (NICHD) will follow all correspondence between the laboratory sites, pSMILE (for CAP or OWA issues), IQA (for UK NEQAS/PBMC Cryopreservation issues) and the VQA regarding any issues or problems with proficiency testing results, and work in collaboration with other network laboratories and the site laboratory to monitor the follow up and resolution of corrective actions, as needed. IMPAACT Network Pharmacology Specialty laboratories coordinate with the CPQA on review of their assay validation plans and SOPs and associated EQA.

Laboratories must test all proficiency specimens in the same manner as patient specimens with no specified technologist assigned to run these specimens. The laboratory manager or designee shall review the final result forms before they are submitted to the proficiency-testing provider within the specified deadline for submission of results. All proficiency testing reports must be reviewed and signed off by the laboratory director or manager. Prior to study activation, the laboratory needs to pass one round of proficiency testing. Once a site is participating in a study, the process for monitoring proficiency testing performance for each of the EQA programs (e.g., CAP, VQA, and IQA) follows the processes listed in Section 17.8.1. The status of pharmacology testing and assay validation is provided to the ILC monthly via the Drug Assay Directory.

Laboratories should be using DAIDS approved EQA providers (e.g., CAP, CPQA, UKNEQAS, IQA, and VQA).

For additional information on DAIDS approved EQA providers please refer to the DAIDS Requirements for Non-U.S. Laboratories website:

https://www.niaid.nih.gov/research/daids-clinical-research-policies-non-us-labs
https://psmile.org/index.cfm

17.8.1 College of American Pathologists (CAP)

CAP or OWA – pSMILE is responsible for the enrollment and monitoring of site laboratories in the CAP or OWA programs for chemistry, hematology, microbiology, viral markers, urinalysis, etc. Most CAP and OWA panels are sent out three times per year, although some analytes only have two panels per year. A score of less than 80% for an analyte constitutes unsatisfactory performance in a panel event. If a site laboratory fails to report that a panel has not been received, this will be considered unsatisfactory.
For analytes monitored by pSMILE, IMPAACT considers successful EQA performance to be the passage of the previous 2-of-3 EQA panels. For those panels that receive a percent grade, this means passing with 80% or greater unless otherwise specified.

**Example:** Laboratory X submitted three CAP Chemistry panels in 2015. Albumin, Lactate, and Total Bilirubin were tested in this panel. The following results were received:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Albumin</td>
<td>20%</td>
<td>100%</td>
<td>60%</td>
<td>No</td>
</tr>
<tr>
<td>Lactate</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>Yes</td>
</tr>
<tr>
<td>Total Bilirubin</td>
<td>100%</td>
<td>60%</td>
<td>80%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

In this example, Laboratory X does not demonstrate successful EQA performance for Albumin in 2015.

### 17.8.2 DAIDS Virology Quality Assessment (VQA)

Information on the VQA program, scoring and certification criteria are available at:

[https://www.hanc.info/labs/labresources/vqaResources/ptProgram/Pages/default.aspx](https://www.hanc.info/labs/labresources/vqaResources/ptProgram/Pages/default.aspx)

**Virology Testing**

When specified in the protocol that a VQA-certified laboratory is to be used for a virologic assay, laboratories are required to demonstrate successful performance in the VQA program. VQA monitored assays include: HIV viral load (HIV RNA quantification), HIV DNA assays (Whole Blood and DBS), and HIV-1 genotypic resistance assays (including Geno-integrase). The ILC (NIAID) or Westat (NICHD) will assist with enrollment in this EQA program for network affiliated laboratories, as deemed necessary, by protocol participation and testing requirements.

Laboratories must be in good standing with the VQA for each virology assay they plan to use for protocol testing, as required. Laboratories must complete Investigational Reports (IR) from the VQA when performance issues are identified.

For additional information on the VQA program and virology testing requirements, refer to:

[https://www.hanc.info/labs/labresources/vqaResources/Pages/default.aspx](https://www.hanc.info/labs/labresources/vqaResources/Pages/default.aspx)

### 17.8.3 Immunology Quality Assessment (IQA)

The IQA is responsible for the enrollment and monitoring of site laboratories in the in the UK NEQAS Immune Monitoring Program for lymphocyte subsets and cryopreservation of PBMCs.

**Lymphocyte Subset Testing**

When specified in the protocol that an IQA-certified laboratory is to be used for an immunologic assay, laboratories must demonstrate successful performance for CD4, CD8, and CD19 testing, if applicable, via...
flow cytometry by continued participation and proficiency in the IQA Flow Cytometry PT program or the United Kingdom National External Quality Assessment Service (UKNEQAS) (for non-US laboratories). The ILC (NIAID) or Westat (NICHD) will assist with enrollment in this EQA program for Network affiliated laboratories, as deemed necessary by protocol participation and testing requirements.

Laboratories are evaluated for their ability to perform the measurement and absolute count on blinded specimens. These specimens include replicates, allowing for inter- and intra-laboratory performance evaluation. Laboratories must be in good standing with the IQA for the respective assay they plan to use for protocol testing, as required. Laboratories must complete IRs from the IQA when EQA performance issues are identified.

Flow cytometry must be performed using standard flow cytometric measurements and in accordance with Centers for Disease Control (CDC) guidelines for flow cytometry. The CDC guidelines are available at [Morbidity and Mortality Weekly Report (MMWR) 1997; 46 (No. RR-2) and MMWR 2003; 52(RR-02)].

17.9 Peripheral Blood Mononuclear Cell (PBMC) Separation and Cryopreservation

Laboratories performing cryopreservation for IMPAACT studies should demonstrate successful performance of PBMC separation and cryopreservation. The laboratory must be able to separate viable PBMC and to pellet cells in accordance with the Cross Network PBMC Processing SOP, available via HANC website at [https://www.hanc.info/labs/labresources/procedures/Pages/pbmcSop.aspx](https://www.hanc.info/labs/labresources/procedures/Pages/pbmcSop.aspx) (If asked for a username and password, click “Cancel”).

Successful performance for PBMC processing is demonstrated by continued participation and proficiency testing with the IQA Cryopreservation PT program for viability and viable recovery of cells. The ILC (NIAID) or Westat (NICHD) will assist with enrollment in this EQA program for Network affiliated laboratories, as deemed necessary by protocol participation and testing requirements. Laboratories must complete IR from the IQA when performance issues are identified.

IMPAACT requires that all laboratories performing cryopreservation of PBMCs must use approved lots of Fetal Bovine Serum (FBS), per the Cross Network PBMC Processing SOP. Only validated lots of FBS may be used. Two lots of IQA validated FBS are held in reserve at their respective vendors for ordering. Updated information on ordering FBS is available at the HANC website at [https://www.hanc.info/labs/labresources/procedures/Pages/ActeImpaaactFbsOrdering.aspx](https://www.hanc.info/labs/labresources/procedures/Pages/ActeImpaaactFbsOrdering.aspx) (If asked for a username and password, click “Cancel”).

Laboratories are approved to conduct viable PBMC processing for IMPAACT clinical trials if they are in good standing with the IQA and as mandated by the protocol. The ILC (NIAID) or Westat (NICHD) reviews grading for viability and viable recovery. Information on the IQA PBMC Cryopreservation program is available at [https://iqa.center.duke.edu/programs/cryopreservation](https://iqa.center.duke.edu/programs/cryopreservation).

17.10 Mycobacterium Tuberculosis Quality Assessment Program (TBQA)

The newly formed *Mycobacterium Tuberculosis* (*M.tb*) Quality Assessment Program (TBQA), operated by MRI Global, provides appropriate resources to assess the ability of laboratories located both in the US and non-US to accurately and reliably perform *M.tb* testing (organism based and hot-based) to diagnose active and latent *M.tb* infection, monitor disease progression, and assess treatment response and vaccine efficacy in direct support of clinical trials sponsored by the IMPAACT Network. The TBQA program provides assistance and training to laboratories that are having performance difficulties. As new tests/methodologies are developed, the TBQA program will facilitate their adaptation, standardization, and quality assessment prior to inclusion in NIAID-sponsored clinical investigations.
Additional updates on the program will be included as the program evolves.

17.11 Testing Backup Plans

IMPAACT requires all laboratories to establish/identify a backup testing plan (e.g., a second instrument or alternative laboratory) for all routine protocol testing. Laboratories must identify a testing backup for each analyte (or instrument) tested for a particular protocol to ensure that protocol testing is not interrupted due to an instrument or laboratory issue. For non-US laboratories, this information is to be included in the PAL.

- All backup instruments or laboratories should either participate in EQA programs or have documented comparison testing performed between the primary and backup instruments to ensure integrity of testing.
- When a laboratory does not meet the minimum requirements for testing specimens based on their EQA results, it is necessary for them to use the back-up lab as defined by their approved PAL (see Figure 17-5).
- More information regarding establishment of backup laboratories for DAIDS sponsored sites is available at https://www.hanc.info/labs/labresources/qualityManagement/Pages/guidelinesPlanBackupLabs.aspx.

Figure 17-5. Moving to Back-up Status

<table>
<thead>
<tr>
<th>Failure of EQA</th>
<th>Move to Back-up Status</th>
<th>Re-qualify Assay</th>
<th>Return to use of Primary Testing Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Less than 80% for more than one of the last three panels (pSMILE monitored analytes) or a status of not approved (IQA or VQA monitored analytes)</td>
<td>• As defined by the PAL (Submit updated PAL if changes are required)</td>
<td>• Work with pSMILE/IQA/VQA and the ILC (NIAID) / Westat (NICHD)</td>
<td>• After passing requisite EQA panels and upon approval by ILC (NIAID) / Westat (NICHD)</td>
</tr>
</tbody>
</table>

All laboratories must perform internal investigations for any EQA performance that is less than satisfactory. This process includes the timely submission of an IR form. The IR process will be facilitated by the IQA, VQA, pSMILE, protocol teams or either the ILC (NIAID) or Westat (NICHD). Unless otherwise stated on the IR form, the laboratory should complete an IR within 30 days.
17.12 Instrument and Method Validation

DAIDS and IMPAACT require laboratories to perform validation a) prior to implementing a new method or instrument into routine use, b) whenever the conditions change for which the method/instrument has been validated or c) if the change is outside the original scope of the method/instrument. Validation testing should include diagnostic accuracy, precision, sensitivity, specificity, linearity, and reference range.

Each laboratory should prepare a validation plan for the new method/instrument that will be established. Validation plans should be submitted to the EQA provider coordinator (pSMILE, IQA, VQA, etc.) and the ILC (NIAID) or Westat (NICHD) for review. In some case, the ILC or EQA provider may work with the laboratory in advance to establish a validation plan.

Once validation testing has been completed, the laboratory should submit a validation summary report that includes testing results and evaluation criteria used to the ILC (NIAID) or Westat (NICHD) for review and approval before the new method is used for IMPAACT clinical trial testing.


Resources are also available at the pSMILE website at http://resources.psmile.org/resources/equipment.

17.12.1 Change of Test Method/Kit/Instrument Mid-Protocol

Any change of test method, kit or instrument after a protocol has begun (aka mid-protocol) is not encouraged for IMPAACT laboratories. If a change in method/kit/instrument amidst protocol testing cannot be avoided:

IMPAACT laboratories should notify the ILC, as well as NICHD/Westat representatives as applicable, of a planned change in testing method/kit/instrument mid-protocol before implementing the change. This notification should include documentation to support the change:

- A summary of any validation performed for the method/kit/instrument as outlined above.
- A written summary of the comparison between methods/kits/instruments which addresses the reason for the change, information on methods/kits/instruments compared, summary of study results, and conclusion of the study.
- Demonstration of successful EQA performance using new method/kit/instrument. Prior to implementing a new method/kit/instrument, IMPAACT laboratories should demonstrate successful EQA performance using the new method/kit/instrument. Please refer to the section above on EQA for additional information.
- A validation should be completed prior to implementing a new method or instrument.
- Any change in testing method/kit/instrument should be recorded on an update to the PAL. The updated PAL must be sent to the ILC and approved by DCLOT prior to the change(s) being implemented.

Please refer to the section above on instrument and method validation for additional information.
17.12.2 IND Studies

The use of FDA-approved testing kits in all IMPAACT IND studies is preferred by IMPAACT. The FDA approval status of testing kits should be documented on each protocol specific testing plan (PAL) for IMPAACT IND studies. The ILC (NIAID) and/or Westat (NICHD) will work with DAIDS to determine how to proceed in the event that a laboratory is unable to complete testing with a FDA-approved kit.

17.13 Management and Testing Plans

In accordance with IMPAACT requirements all laboratories performing IMPAACT protocols should have a Specimen Management Plan, a Laboratory Data Management Plan, and a Laboratory Quality Management Plan.

- The Specimen Management Plan should describe specimens acquisition, recording, testing, storing, and shipping; including specimen flow charts for specific protocols, QA oversight and corrective action procedures.
- The Data Management Plan should describe the systems and processes for acquisition, data entry, recording, exporting, reporting, modification, security and archiving of laboratory test results. The plan should describe the QA oversight and corrective actions, and how all laboratory test results will be integrated into the general protocol database.
- The laboratory Quality Management Plan should describe the overall quality control and quality assurance systems in place for clinical trial testing within the laboratory.
- For additional information on quality management plans please refer to the DAIDS Requirements for Non-U.S. Laboratories:

  https://www.niaid.nih.gov/research/daids-clinical-research-policies-non-us-labs
  http://resources.psmile.org/resources/process-control

17.14 Shipping Capabilities

IMPAACT requires that laboratories maintain international shipping capabilities in accordance with International Air Transport Association (IATA) regulations and additional local country requirements. This includes adherence to International Civil Aviation Organization (ICAO)/ IATA and Department of Transportation (DOT) regulations on Category A/B shipments and shipping supplies.

Laboratories need to be capable of shipping required protocol specimens to facilities as outlined in each protocol LPC which is available on the IMPAACT website. Laboratories must have the capacity to use LDMS to create the required shipping documents and files.

17.15 Specimen Shipping

IMPAACT requires laboratories to adhere to the shipping guidelines established in the ACTG/IMPAACT Laboratory Manual when shipping IMPAACT protocol specimens. Details on shipping requirements for IMPAACT are available in the ACTG/IMPAACT Laboratory Manual at:

  https://www.hanc.info/labs/labresources/procedures/Pages/actnShippingDemo.aspx
17.15.1 Shipping Frequency and Monitoring

Shipments to the NIAID (BRI) and NICHD (Fisher) Repositories must be prepared and shipped as per the shipping instructions posted on the HANC and/or IMPAACT websites, including the protocol-specific LPC.

- NIAID/BRI: https://www.hanc.info/labs/labresources/procedures/Pages/actnShippingDemo.aspx
  Shipments to BRI will be evaluated according to the procedures described in the Shipment Evaluation SOP [LTC SOP 073].
- NICHD/Fisher: https://www.hanc.info/labs/labresources/procedures/Pages/actnShippingDemo.aspx
  (NICHD Repository Shipping SOP)

17.15.2 Specimen Label Requirements

Specimens must be uniformly labeled according to an LDMS-specified format, which requires a computer-generated label that contains IMPAACT specified identifiers and a barcode. All processing sites/laboratories must use LDMS to generate labels. However, under emergency conditions, legible hand-labeled specimens will be accepted, provided that the specimens are accompanied by the LDMS-generated electronic shipping file.

All specimen labels must include:

- PID
- Global Specimen ID (for specimen dates after September 1, 2005; not required for hand-written specimen labels)
- Protocol Number
- Specimen Date
- Primary/Additive/Derivative/Sub-Add-Der
- Specimen Time (24 hour)
- Two-dimensional LDMS-generated Barcode (for specimen dates after October 1, 2008)

Both the LDMS-generated electronic shipping file and storage boxes must be labeled with the batch number(s), protocol number(s), laboratory LDMS number, and clinic site number. Multiple boxes can be put into the same shipping batch and on a single electronic file.

All processing sites/laboratories should make sure to QC all specimen labels, whether computer generated or handwritten, to ensure they are legible and can be read at the NIAID (BRI) and NICHD (Fisher) repositories and protocol testing laboratories.

17.15.3 Shipping Box Requirements

Laboratories should send -70°C full boxes when possible to the Repository in order to avoid unnecessary specimen manipulation associated with re-packaging and consolidating boxes at the Repository. Before shipping, laboratories need to check and confirm that the box positions of all specimens match the box positions assigned in LDMS and shown on all the shipping documents.

Laboratories may ship specimens from multiple protocols (designated for storage in -70°C freezers) together to BRI or Fisher in the same freezer storage box.
IMPAACT CRS laboratories that are conducting protocol testing for both the ACTG and IMPAACT networks may not ship ACTG and IMPAACT specimens together in the same shipment to BRI for specimen storage.

17.16 Specimen Destruction

The DAIDS-supported and/or -sponsored laboratories and repositories receive and store samples from NIAID (DAIDS)-supported and/or -sponsored clinical research conducted both domestically and internationally. If a clinical research participant does not provide consent for the samples to be retained, all laboratory specimens provided by the participant should be destroyed as indicated by the IRB/Ethics Committee (EC) or as dictated by institutional policies or governmental agencies. The necessity to destroy specimens may be associated with the following:

- Individual participants do not consent, or withdraw consent, for future use of specimens (i.e., non-protocol specific testing).
- Protocol informed consent (IC) did not include consent for future use of specimens associated with non-protocol testing.
- NIAID (DAIDS) requests that specimens be destroyed.
- Regulatory agencies limit the storage and use of specimens obtained during the course of a DAIDS-supported and/or -sponsored clinical research project.

In cases where NIAID owns the research samples, the appropriate DAIDS Contracting Officer Representative (COR) knowledgeable about the contract that supported the clinical research determines which specimens the laboratory or repository can either destroy or maintain in storage.

DAIDS is responsible for making decisions about the storage, future use, and destruction for DAIDS clinical research specimens owned by NIAID, consistent with the protocol, informed consent, and relevant regulations, and for notifying the investigator/laboratory/repository of its decisions.

Laboratory or repository staff are responsible for ensuring that the specimens from NIAID (DAIDS)-supported and/or -sponsored clinical research are stored according to protocol requirements in a GCLP compliant manner. Once DAIDS notifies the laboratory or repository to destroy specimens, laboratory or repository staff are responsible for implementing this DAIDS procedure and following instructions for specimen destruction.

The Principal Investigator (PI) of the laboratory or repository is responsible for ensuring laboratory specimens from NIAID (DAIDS)-supported and/or -sponsored clinical research are stored and ultimately destroyed in accordance with all IMPAACT Network and institutional polices and any applicable local or country laws in a GCLP compliant manner.

The PI for the contract for the clinical research is responsible for assisting NIAID/DAIDS in determining which specimens owned by NIAID may be discarded, in compliance with the requirements in the protocol, the informed consent and relevant regulations.

Laboratory/repository staff will check specimen inventories to ensure the specimens are stored in the facility. Laboratory/repository staff will note and resolve any discrepancies such as specimen type, numbers, source protocol, etc., before destruction.
If the laboratory/repository uses LDMS, specimens will be removed from the specimen storage section of the LDMS:

- Comments should be made in the specimen management section about the destruction of the samples along with the sample destruction date and identification of responsible staff.
- Copies of the storage reports will be kept by the laboratory/repository.

All applicable institutional policies, and local or national regulations are to be followed when handling or discarding specimens.

Confirmation of destruction will be sent to DAIDS as per DAIDS instructions.

17.17 National Approval Requirements and Material Transfer Agreements

IMPAACT requires laboratories to obtain any required national approvals necessary for testing in support of IMPAACT protocols, including Material Transfer Agreements (MTAs), Specimen Transfer Agreements (STAs) and permits (when applicable to site and protocol).

- MTAs between testing/end user laboratories are the responsibility of the laboratory organizations/institutions (ex. Laboratory X in South Africa and Laboratory Y in Uganda). Final copies of the executed MTAs/STAs should be provided to the ILC (NIAID) or Westat (NICHD) for archiving.
- MTAs/STAs between site laboratories and the Network repositories, BRI (NIAID) /Fisher (NICHD), will be facilitated by the ILC (NIAID) and Westat (NICHD) for their respective laboratories. The ILC (NIAID) and Westat (NICHD) review these documents to confirm that the specimen types and proposed testing for the respective protocol is accurate. MTAs between repository/shipping laboratories are the responsibility of the laboratory repositories/organizations/institutions. Final copies of the executed MTAs/STAs should be provided to the ILC (NIAID-supported sites) or Westat (NICHD-supported sites) for archiving.
- NICHD/Westat may use the IMPAACT/BRI repository as a pass through to US-based end user labs when deemed appropriate or as outlined in the LPC.

17.18 IMPAACT Quality Assessment Monitoring

Site laboratories, including specimen-processing laboratories, are aligned with and chosen by the CTUs. The capabilities and performance of these labs are reviewed by the ILC (NIAID)/Westat (NICHD) to ensure regulatory compliance.

By law, all US (i.e., domestic) laboratories performing clinical testing must be CLIA certified or equivalent (e.g., CAP, etc.) and are inspected every two years. HANC posts available, current CLIA/CAP certifications for US site laboratories on their website.

All laboratories outside of the US (i.e., Non-US, international) are assessed continuously to ensure that they meet minimum standards for GCLP compliance as described at https://www.niaid.nih.gov/sites/default/files/gclp.pdf.
17.18.1 Laboratory Monitoring by DAIDS

DCLOT monitors and/or contractors (e.g., PPD) conduct routine audits of laboratories performing IMPAACT studies, usually on an annual basis. The DMC may provide the monitoring contractor with site-specific laboratory information to enable them to conduct expected monitoring of specimen processing and storage of study specific archived specimens.

17.18.2 Laboratory Monitoring by IMPAACT

ILC (NIAID)/Westat (NICHD) personnel conduct periodic laboratory visits to assess the implementation of IMPAACT protocols, laboratory quality control procedures, including proper maintenance of laboratory testing equipment and appropriate use of reagents. The purpose and scope of the visit is discussed with laboratory site personnel prior to the visit. Whether on site or centrally located, ILC (NIAID)/Westat (NICHD) staff work directly with IMPAACT site staff to address and resolve any quality control or quality assurance problems identified through proficiency testing or site visits or by the site during study preparation or implementation.

17.19 Introduction of Novel/Non-Standard Analytes into IMPAACT Studies

When a “non-standard” analyte is incorporated into an IMPAACT clinical trial, the ILC identifies and investigates potential laboratories that can perform the test, establishes the certification status of potential laboratories, determines the regulatory status of the analyte or test that is needed (FDA-approved or cleared), verifies whether the study is under an IND or not, and assures appropriate EQA. The ILC then works with DAIDS, DCLOT, and the appropriate EQA provider to bring the new tests on board. This process is outlined in Figure 17-6.
All new assays and methods implemented for use with clinical specimens from IMPAACT trials must be validated and/or verified before being put into service. Decisions regarding the use of a new assay are made by protocol teams, Scientific Committees, IMPAACT Leadership and/or DAIDS. Once the need for a new assay has been identified and appropriate laboratories identified, the ILC oversees the process using standards set-forth by DAIDS, the CAP, CLIA, the Clinical and Laboratory Standards Institute (CLSI), and the FDA.

The processes and procedures to bring on a new test depend on the type of “test system” being introduced. CLIA regulations recognize three types of “test systems”:

1) Test systems that are FDA cleared or approved and run by the laboratory without modification,
2) Test systems that are FDA-cleared or approved and run after modification by the laboratory, and
3) Test systems that have not been subject to FDA clearance or approval. These tests are often referred to as Laboratory Developed Tests (LDTs).
Prior to testing clinical specimens, the testing laboratory using an unmodified FDA-approved or FDA-cleared tests, must verify that test(s) perform(s) as expected by obtaining data on:

- Analytic accuracy
- Precision
- Reportable range (clinical reportable range and linearity).

For IND studies, FDA-approved tests are preferred. Any tests that are not FDA-approved, or which have been modified, must be approved prior to use in an IND study. CLIA does not define the term “modified,” but modifications are generally considered to include changes in test components (extraction, amplification, and/or detection), procedural parameters, assay cutoff values, specimen types or collection devices, etc.

If the new assay or test meets regulatory criteria for modified FDA-approved tests or for non-FDA cleared tests (e.g. LDT) the laboratory must perform a validation study. The validation study must establish the test’s:

- Accuracy
- Precision
- Analytical sensitivity (lower limit of target detection, as appropriate)
- Analytical specificity (including interfering substances)
- Reportable range of test results
- Reference intervals (normal values) and
- Efficiency or call rate for genotyping assays (for assays in which a large number of specimens are available).

These performance specifications are established through the following experiments:

- A comparison-of methods experiment to estimate inaccuracy/bias (may include a recovery experiment) [accuracy]
- A replication experiment to estimate imprecision [precision]
- A linearity experiment to determine reportable range and lower limit of quantification (LLOQ) (for quantitative assays) [analytic sensitivity]
- A limit-of detection experiment to estimate the lowest concentration that can be detected [analytic sensitivity]
- An interference experiment to determine constant interferences [analytic specificity]
- A reference value study to determine reference range(s) [reference interval] that is compliant with ILC SOP PRJSTR 002 Establishment of Pediatric Reference Ranges

The method selected for determining performance specification depends on the particular test method but must be scientifically defensible and should be based on methods employed by colleagues or as reported in the literature. The ILC proposes validation and verification study plans in consultation with DCLOT. Prior to initiating testing, the validation and/or verification reports must be approved by the LC and DCLOT.

If no EQA program can be identified a plan that meets study specific regulatory requirements for proficiency testing is developed based on CLSI guidelines (GP29-A2 Vol. 28 No.21) and submitted for approval.
17.20 Changes in Laboratory Personnel

IMPAACT requires that laboratories notify the network of changes in key laboratory personnel. Key personnel include the Laboratory Director (usually an MD or PhD scientist, who reviews and signs all operating procedures and reports and is ultimately responsible for a laboratory’s performance and capabilities) and Laboratory Manager/Supervisor (one or more persons responsible for overseeing daily laboratory operations, review and release of testing results, proficiency testing results, and writing laboratory SOPs). Other personnel that are critical contacts for IMPAACT should also be considered key personnel.

In the event that key personnel are no longer associated with a laboratory, new key personnel are appointed, or key personnel roles change, an email needs to be sent to the impaact.qaqc@fstrf.org and to the NICHD/Westat representative if applicable, notifying them of this change. It is critical that the Network be aware at all times of the communication structure and appropriate contacts at each laboratory.

The notification should include:

- The name of the key personnel who has either left or whose role has changed
- The effective date of the change and whether it is permanent or temporary
- Information about whom to contact during any transition period
- In the case of departure of key personnel, the name and contact information for their replacement.

IMPAACT laboratories should notify the DMC about any personnel changes using the Submit Contact Changes utility available on the DMC Portal (https://www.frontierscience.org/IMPAACT/).

17.21 Laboratory Relocation

IMPAACT requires that laboratories notify the Network of any laboratory relocations affecting IMPAACT testing (including equipment moves within the laboratory/inter-laboratory). If a laboratory plans to relocate, notification must be sent to DAIDS and the ILC (NIAID) or Westat (NICHD) before the move occurs and again once the move is complete:

- Notification should be sent to impaact.qaqc@fstrf.org and to the NICHD/Westat representative if applicable.
- In addition, non-US laboratories are required to complete the Laboratory Relocation Planning Guide-Move Checklist available on the pSMILE website:


Please submit a copy of the relocation checklist to impaact.qaqc@fstrf.org and the NICHD/Westat representative if applicable.

IMPAACT laboratories should notify the DMC about any address, phone, or email changes using the Submit Contact Changes utility available on the DMC Portal (https://www.frontierscience.org/IMPAACT/).
17.22 Additional Resources

Websites for general information related to topics covered in this section, as well as those specifically cited in this section, are listed below.

General Information

DAIDS and NIH have established specific requirements for laboratory processing and testing specimens from clinical trial participants enrolled in studies that are funded by DAIDS.

The policy referenced above has specific requirements for both US and non-US laboratories which are as follows:

- US Laboratory Requirements: https://www.niaid.nih.gov/research/daids-clinical-research-policies-us-labs
- Non-US Laboratory Requirements: https://www.niaid.nih.gov/research/daids-clinical-research-policies-non-us-labs

Additional references and links are as follows:

- IMPAACT CL Resource Documents: http://impaaactnetwork.org/about-us/LabCenter/LabGuidance.htm
- HIV/AIDS Network Collaboration: https://www.hanc.info/Pages/default.aspx

Specimen Shipping, Shipping Materials, and Information

- CDC Shipping Regulations: http://www.cdc.gov/laboratory/specimen-submission/shipping-packing.html
- US Postal Service: http://www.usps.com
- Saf-T-Pak: http://www.saftpak.com
- International Air Transport Association: http://iata.org/index.htm
- Dangerous Goods: http://www.dangerousgoods.com
- US Department of Transportation: http://www.dot.gov/

Risk Group Assessments

- American Biological Safety Association: http://www.absa.org/
- CDC Select Agent Listings and Regulations: http://www.selectagents.gov/
Other Resources


HIV Antibody Testing Algorithm

Definition of Inclusion Criteria for HIV-1 Infection for Enrollment into an IMPAACT Clinical Trial: https://impaactnetwork.org/about-us/LabCenter/LabGuidance.htm
18 NETWORK EVALUATION

The IMPAACT Network is committed to excellence in all aspects of its research. The Management Oversight Group (MOG) is responsible for overseeing a comprehensive process for evaluation of the network with both ongoing and periodic components. The purpose of the evaluation process is to ensure that IMPAACT-affiliated NIAID-funded and NICHD-funded clinical research sites and other network entities are functioning appropriately and contributing to successful development, execution, oversight, completion, and publication of studies and other activities that advance the IMPAACT research agenda. The evaluation serves to document the success of network entities in meeting evaluation standards and identifies areas for improvement. It informs leadership decisions about changes that may be necessary to improve functioning and performance while ensuring participant safety and data integrity. It also provides information needed to facilitate appropriate allocation of network resources.

The overall scientific direction and leadership of the network, including the work of the Scientific Committees (SCs), may be evaluated periodically by an external scientific advisory group. The MOG evaluates the performance of the Operations Center, Statistical and Data Management Center (SDMC), and Laboratory Center (LC); the LC evaluates the specialty laboratories. The performance of sites is evaluated approximately annually. A Network Evaluation Group (NEG), chaired by the IMPAACT vice chair and supported by a Network Evaluation Coordinator from the Operations Center, is responsible for developing and carrying out a network evaluation program that achieves the aims stated above. Other members of the NEG include representatives from the Operations Center, SDMC, LC, and network sponsors.

The NEG develops performance metrics for the various network entities and, as each evaluation is completed, the NEG develops an evaluation report that is submitted to the IMPAACT MOG. Evaluation reports are shared with the entities whose work was evaluated and with network sponsors, as appropriate. A primary component of network evaluation is the Site Performance Report. This report focuses on critical aspects of study implementation at the site level, such as participant accrual and retention, data quality, laboratory performance, and regulatory issues. Site community engagement programs will be evaluated separately as determined by the IMPAACT Community Advisory Board (ICAB) in consultation with the MOG. At the request of the MOG, the NEG may evaluate and report on other network entities in a similar manner.

**Ongoing Evaluation**

On an ongoing basis, the MOG reviews the progress of network studies through review of monthly Study Operations Reports and Accrual and Retention Reports generated by the Operations Center and SDMC, respectively; ad hoc reports from the LC; and information from other sources, with recommended actions identified and communicated to sites, study teams, and network committees or groups. The SDMC also provides monthly accrual, retention, data management quality, and laboratory data and specimen management reports to sites. The LC closely monitors the performance of specialty and site laboratories. As needed, problems and deficiencies are reported to the MOG. This ongoing review permits rapid identification of problems and therefore enables study sites, teams, and other entities to take early corrective action.
Periodic Evaluation

On behalf of the MOG, the NEG oversees periodic evaluations of all IMPAACT-affiliated sites, as described in the remainder of this section. A comprehensive evaluation report is generated and submitted to the MOG for review and action.

18.1 Network Evaluation Plan and Performance Measures

The approach described below is followed for each periodic evaluation:

- Objectives, and the activities necessary to achieve them, are identified, reviewed, and adjusted as needed prior to each periodic evaluation by the NEG to determine their appropriateness and relevance to the performance of the Network at the time of the review.
- For each activity, the NEG identifies indicator(s) of whether objectives are being satisfactorily met; see Table 18-1. These are reviewed and adjusted as needed prior to each periodic evaluation to determine their appropriateness and relevance to the performance of the Network at the time of the review.
- Indicator data are compiled to determine the extent to which objectives are being met; see Table 18-1.
- Based on the compiled data, the NEG submits an evaluation report to the MOG, highlighting successes and making recommendations for improvement.
- Evaluation reports are also sent to NIAID clinical trials unit (CTU) principal investigators (PIs) and CRS leaders (for their site), NICHD site PIs (for their site), the network sponsors, and the network Operations Center, SDMC, and LC.
- Sites are provided the opportunity to confirm the accuracy of their evaluation results and are requested to respond to the NEG’s findings and recommendations, as needed. Responses are reviewed by the NEG and recommendations for any follow-up actions are provided to the MOG. See Section 18.4 for a description of follow-up actions and possible outcomes.

18.2 Performance Criteria for IMPAACT-affiliated NIAID-funded Clinical Research Sites

Site performance within each study and across studies is reviewed for the period of evaluation (a twelve-month time period, generally), with consideration of the number and stage of studies in which each is participating, recency of site engagement, and external factors that may impact site readiness and accumulation of sufficient data for meaningful evaluation. Site performance measures include the following, as determined by the NEG:

- Protocol implementation timelines
- Participant accrual and retention
- Clinical data management, including data timeliness, data quality, and query responsiveness
- Laboratory data and specimen management, including LDMS export timeliness, lab query responsiveness, and BRI repository shipment evaluations
- Laboratory quality assurance, including safety testing, VQA test performance, IQA test performance, and PBMC cryopreservation
- Outstanding laboratory critical action items
- Protocol deviations

Site performance measures and standards are specified in Table 18-1 below, except where in development.
<table>
<thead>
<tr>
<th>Criterion</th>
<th>Measure(s)</th>
<th>Standard</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol Implementation Timeline</td>
<td>Time to enrollment once site receives the final protocol for submission to the IRB/EC and other regulatory entities: Date protocol distributed to site; Date of protocol registration approval; Date of study-specific activation; Date of first enrollment at site. Note: Includes protocols finalized for implementation during the evaluation period.</td>
<td>Informational only</td>
<td>Operations Center, NIAID CRMS, SDMC</td>
</tr>
<tr>
<td>Participant Accrual</td>
<td>Number of participants enrolled across the life of the study and within past 12 months compared to site-specific accrual target for study. Note: Includes studies currently enrolling (or open to accrual) and studies closed to accrual during the evaluation period.</td>
<td>Projected number versus actual number (projected number is based on site-provided goals); goal is &gt;90% over the study accrual period for studies that have closed to accrual in the evaluation period. Note: For NIAID-funded sites: DAIDS may consider discontinuing core funding for sites with &lt;5 new enrollments or &lt;3 in complex or high-priority studies.</td>
<td>SDMC (with projections provided by the sites through the Operations Center)</td>
</tr>
<tr>
<td>Participant Retention</td>
<td>Number of participants on study for the past 12 months; Number of participants reported to the data management center (DMC) as lost to follow-up for any reason (e.g., participant withdrawal, participant did not return/could not be located by the site) in past 12 months and over life of the study. Note: Includes studies currently enrolling (or open to accrual) and studies closed to accrual during the evaluation period.</td>
<td>&gt;90% overall retention or as per protocol</td>
<td>SDMC</td>
</tr>
<tr>
<td>Criterion</td>
<td>Measure(s)</td>
<td>Standard</td>
<td>Source</td>
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</tr>
<tr>
<td>Clinical Data Management</td>
<td>Composite score of data timeliness, data quality, and query responsiveness</td>
<td>≥ 70 composite score</td>
<td>SDMC</td>
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<tr>
<td></td>
<td>• Data timeliness:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Percentage of expected data submitted</td>
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<td></td>
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<tr>
<td></td>
<td>- Average time (in weeks) to submit data based on expected</td>
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<tr>
<td></td>
<td>data submission timeline</td>
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<tr>
<td></td>
<td>• Data quality:</td>
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<tr>
<td></td>
<td>- Reported as site data error rate compared to overall IMPAACT</td>
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<td>error rate. The data error rate compares the total number of errors to</td>
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<td>the number of transactions submitted, which may be form data entry,</td>
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<td></td>
<td>form correction or form deletion.</td>
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<tr>
<td></td>
<td>• Query responsiveness:</td>
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<tr>
<td></td>
<td>- Percentage of total potential errors resolved</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>- Average time (in weeks) to resolve potential errors</td>
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<tr>
<td></td>
<td>- Percentage of total queries answered</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Average time (in weeks) to respond to queries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Data and Specimen Management</td>
<td>• LDMS Export Timeliness: Export LDMS data and retrieve</td>
<td>≥ 80%</td>
<td>SDMC</td>
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<tr>
<td></td>
<td>deploys once a week</td>
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<td></td>
<td>• Lab Query Responsiveness:</td>
<td>≥ 90%</td>
<td>SDMC</td>
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<tr>
<td></td>
<td>- Respond to queries within two weeks</td>
<td></td>
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<tr>
<td></td>
<td>• BRI Repository Shipment Evaluations:</td>
<td>≥ 90 composite score</td>
<td>SDMC</td>
</tr>
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<td></td>
<td>- Overall resolution and responsiveness to shipment problems based on</td>
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<tr>
<td></td>
<td>the total number of shipments. See Shipment Evaluation SOP.</td>
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</tr>
<tr>
<td>Laboratory Quality Assurance</td>
<td>• Safety Testing (50% of score)</td>
<td>≥ 90% composite score</td>
<td>LC</td>
</tr>
<tr>
<td></td>
<td>• VQA Test Performance (25% of score)</td>
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<tr>
<td></td>
<td>• IQA Test Performance (12.5 % of score)</td>
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<tr>
<td></td>
<td>• PBMC Cryopreservation (12.5 % of score)</td>
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</tr>
<tr>
<td>Outstanding Laboratory Critical Action Items</td>
<td>• Resolution of critical action items within 90 days of notification</td>
<td>≤ 90-day resolution</td>
<td>LC</td>
</tr>
<tr>
<td>Protocol Deviations</td>
<td>• Listing of reportable protocol deviations per site (see Section 12)</td>
<td>No protocol deviations</td>
<td>SDMC</td>
</tr>
</tbody>
</table>
18.3 Overall Network Productivity

Overall network function and productivity are evidenced in a number of ways including but not limited to development, review, and approval of new study proposals (capsules, concept sheets, data analysis concept sheets [DACS], new works concept sheets [NWCS]) and protocols; initiation of new studies and completion of ongoing studies; results reporting, presentation, and publication; and evidence of impact on public health policy and/or product licensure or labeling changes. The NEG will report on these outcomes periodically as requested by the MOG as part of the comprehensive network annual evaluation.

18.4 Outcomes and Actions

As noted above, each network entity evaluated will be provided an opportunity to review evaluation findings and confirm their accuracy.

Sites with below-standard performance measures will generally have 30 days to provide the NEG with a written plan for corrective action in the relevant performance areas. The NEG may offer technical assistance and guidance and may recommend actions to facilitate improvement. Improvement must be demonstrated within six months or reasons provided for why this cannot be achieved. In such cases, an alternate time period must be agreed to by the NEG.

If a site fails to meet a standard for a specific measure(s) in two or more consecutive periodic evaluation cycles, the NEG may recommend to the MOG specific actions such as temporary closure of enrollment screens, pending review of site or laboratory procedures in that area(s).

A site is unable to meet the network’s performance requirements in two consecutive comprehensive evaluation cycles – or by an earlier timepoint as determined by the MOG – may result in the withdrawal of protocol funds and/or a recommendation that network affiliation with the site be terminated, with appropriate close-out activities to be completed. A site that is not meeting performance standards and is at risk of losing network affiliation is provided the opportunity to summarize any extenuating circumstances that they would like considered before a final decision is made. The final decision on the site status with the network will be determined by the MOG in consultation with the sponsors after considering the recommendations made by the NEG.

Network sponsors’ requirements and/or cross-network evaluation of site performance and contributions – including determination of whether the site is needed to support the scientific agenda of one or more networks – may result in a change in funding status, irrespective of the network’s evaluation.
19 PUBLICATIONS REQUIREMENTS AND PROCEDURES

19.1 Overview, Key Principles, and Definitions

Publications in peer-reviewed journals and presentations at scientific conferences represent the most significant products of the International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Network’s research. The results of IMPAACT studies are to be published and shared in a timely manner in accordance with the National Institutes of Health (NIH) Public Access Policy. This section describes the process and requirements for preparation and review of abstracts, manuscripts, executive summaries, and other documents through which study-related results are disseminated. These procedures are intended to ensure timely development and dissemination of high quality products reporting the results of IMPAACT studies or otherwise using IMPAACT-related data.

All abstracts and manuscripts using IMPAACT data must undergo an IMPAACT Network review before being submitted to a conference or journal. The results of the main study (primary manuscript) must be submitted – and ideally published – prior to those of sub-studies and secondary manuscripts, unless otherwise approved by the IMPAACT Management Oversight Group (MOG).

These procedures should be reflected in the terms of Clinical Trials Agreements (CTA), Memoranda of Understanding (MOU), or alternative agreements approved by the IMPAACT MOG for studies with co-sponsoring agencies, companies, or other clinical trials networks, and studies in which data are collected and analyzed by a network or group other than the IMPAACT Statistical and Data Management Center (SDMC).
All IMPAACT publications must meet the criteria for authorship, disclosure, scientific integrity, and other requirements of peer-reviewed scientific journals.

**Protocol Chair Responsibilities**

The protocol chair assumes overall responsibility for ensuring publication of the study findings in a timely manner. The results of each study should be reported in at least one peer-reviewed publication addressing the primary objective(s) within a reasonable time frame as outlined below. The protocol chair may designate a writing team to draft manuscripts or abstracts; the writing team chair is then responsible for completion and submission for IMPAACT review within the timeline specified below, with continued oversight by the protocol chair. The protocol chair will ensure that analysis and publication of secondary or sub-study results do not interfere with the analysis or publication of the primary study results and will work closely with the publications coordinator at the Operations Center to track the manuscript development progress and to address any concerns that may arise.

For studies likely to generate multiple manuscripts, the protocol chair may elect to designate a subset of the protocol team to function as a study-specific publications committee to assist in performing the responsibilities described for the protocol chair. This committee will review and prioritize manuscript/abstract proposals from team members and others and would minimally include the protocol chair and statistician(s), with other protocol team members included as needed. The SDMC will contribute to the planning and prioritization of various manuscripts for a study, ensuring that analyses for each can be completed as scheduled. Prioritization is critical as all planned primary and secondary analyses cannot be expected to proceed at once. The list of secondary analyses will need to be carefully reviewed and prioritized, and in some cases, the analyses may have to be completed by someone outside of SDMC.

<table>
<thead>
<tr>
<th>Table 19-1. Definitions</th>
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</thead>
<tbody>
<tr>
<td><strong>Primary manuscript</strong></td>
<td>Manuscript that reports findings related to the primary study objective(s) and outcome measures as described in the study protocol. Findings associated with secondary objectives may also be included. A protocol may have more than one primary publication. For example, a protocol may have more than one primary publication when a study is conducted in multiple stages and has a primary objective for each stage. For each IMPAACT study, the primary manuscript must be submitted for publication prior to secondary and sub-study manuscripts unless otherwise approved by the IMPAACT MOG.</td>
</tr>
<tr>
<td><strong>Secondary manuscript</strong></td>
<td>Manuscript that reports findings related to secondary study objectives and outcome measures as described in the study protocol, or scientific questions outside the primary objectives, e.g., baseline data reports, secondary objectives specified in the protocol, cross-protocol data, or analysis of specimens collected as part of a study but used for analyses not previously specified in the study protocol.</td>
</tr>
<tr>
<td><strong>Abstract</strong></td>
<td>Brief report of IMPAACT study data prepared for submission to a conference; may be classified as a regular abstract or a late-breaker abstract</td>
</tr>
<tr>
<td><strong>Table 19-1. Definitions</strong></td>
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<tr>
<td><strong>New Works Concept Sheet (NWCS)</strong></td>
<td>A proposed investigation involving use of existing biological specimens from an IMPAACT (or PACTG) study (or studies) that may or may not require IMPAACT funding and may or may not involve analysis work by SDAC. Unless the IMPAACT Network has designated the study as concluded or openly available for use by investigators outside of the protocol team, the objectives of the proposed investigation should not overlap with the objectives stated in the study protocol or with secondary analyses defined by the protocol team after receipt of the final analysis report. The objectives should not overlap with those specified in an approved IMPAACT NWCS that is not yet completed.</td>
</tr>
<tr>
<td><strong>Data Analysis Concept Sheet (DACS)</strong></td>
<td>A proposed investigation involving analysis of existing data from an IMPAACT (or PACTG) study (or studies) to be undertaken by SDAC with IMPAACT funding. Unless the IMPAACT Network has designated the study as concluded or openly available for use by investigators outside of the protocol team, the objectives of the proposed investigation should not overlap with the objectives stated in the study protocol or with secondary analyses defined by the protocol team after receipt of the final analysis report. The objectives should also not overlap with those specified in an approved IMPAACT DACS or NWCS that is not yet completed.</td>
</tr>
<tr>
<td><strong>Data requests (DR)</strong></td>
<td>A proposed investigation for which existing data from an IMPAACT (or PACTG) study are being requested for analyses to be performed without IMPAACT funding. (Note that a Statistical and Data Analysis Center [SDAC] statistician may be among the proposing investigators, but would not be seeking IMPAACT support for the work.) Unless the IMPAACT Network has designated the IMPAACT study as concluded or openly available for use by investigators outside of the protocol team, the objectives of the proposed investigation should not overlap with the objectives stated in the study protocol or with secondary analyses defined by the protocol team after receipt of the final analysis report. The objectives should also not overlap with those specified in an approved IMPAACT DACS or NWCS that is not yet completed. The statistical design of the research project and associated data analyses must be undertaken by the proposing investigators without IMPAACT funding.</td>
</tr>
<tr>
<td><strong>Primary Completion Date</strong></td>
<td>The date that the final participant was examined or received an intervention for the purposes of final collection of data for the primary outcome measure (may or may not be the same as the closed to follow-up date, depending on the study design)</td>
</tr>
<tr>
<td><strong>Closed to Follow-up Date</strong></td>
<td>The date that the final participant completed the last study follow-up visit</td>
</tr>
<tr>
<td><strong>IMPAACT Publications Group</strong></td>
<td>Group responsible for reviewing IMPAACT manuscripts and abstracts on the behalf of the network prior to journal/conference submission. The Publications Group includes the IMPAACT network chair and vice chair, the SDMC principal investigator (PI) or designee, the Laboratory Center (LC) PI, representatives of National Institute of Allergy and Infectious Diseases (NIAID), National Institute of Child Health and Human Development (NICHD), and National Institute of Mental Health (NIMH), and the relevant scientific committee (SC) chair</td>
</tr>
<tr>
<td><strong>Protocol team</strong></td>
<td>The team members whose names appear in the protocol roster, which usually includes pharmaceutical/industry representatives and other study sponsors/collaborators</td>
</tr>
</tbody>
</table>
**Table 19-1. Definitions**

| Writing team | A subgroup of the protocol team who collaborate to write an abstract or manuscript. Under certain circumstances, specialists who are not protocol team members may be included. |
| Masthead authors | Individuals listed as authors on a manuscript or abstract |
| Publications coordinator | Operations Center staff member who facilitates and tracks development, submission, review, and outcome of manuscripts and abstracts that use IMPAACT data, through the following address: impaact.pubscoord@fstrf.org |
| Executive Summary | Summary of the results of Phase III or certain other IMPAACT studies that could alter the standard of care for HIV-related treatment or prevention or the design or conduct of ongoing or future clinical trials; prepared by the protocol chair, statistician, medical officer (MO), clinical trials specialist (CTS), and other team members based on the final analysis report for dissemination to site investigators/staff and industry or other collaborators prior to or at the same time as public presentation or publication of the results, as needed |
| Site Investigator Letter | Limited scientific summary of the main trial results; disseminated to participating sites prior to public presentation or publication of the results, if a full Executive Summary is not warranted, or when changes to an ongoing study are necessitated by emergent findings from that study, another investigation, or other external factors such as a relevant change in treatment guidelines |
| Participant Letter | A letter for study participants (or parents/legal guardians) summarizing or describing the study results and their implications or changes to an ongoing study necessitated by emergent findings from that study, another investigation, and/or other external factors such as a relevant change in treatment guidelines |
| Lay Summary | A brief document summarizing information (study results, etc.) presented in a manuscript – written in language appropriate for the communities in which the research is conducted and prepared by the manuscript authors. Lay summaries are required for manuscripts reporting study findings that have clinical implications, as determined by the writing team chair, are reviewed by the IMPAACT Community Advisory Board (ICAB), and are to be disseminated prior to or at the same time as publication of the results. |
| National Institutes of Health Manuscript Submission System (NIHMS) | An online system for submitting and managing final, peer-reviewed manuscripts in accordance with the NIH Public Access Policy |
| PubMed Central (PMC) | The NIH digital archive of full-text, peer-reviewed journal articles; its content is publicly accessible and integrated with other databases ([http://www.ncbi.nlm.nih.gov/pmc/](http://www.ncbi.nlm.nih.gov/pmc/)) |
| Publication costs | Author fees associated with publishing peer-reviewed manuscripts |
19.2 Development and Review of Manuscripts

19.2.1 Primary Manuscripts

The timeline and process for development and review of the primary manuscripts are outlined in Table 19-1 and described starting in Section 19.2.1. Manuscripts reporting the primary results of IMPAACT studies are generally expected to be developed and submitted for internal IMPAACT review within 9 months (36 weeks) after the primary completion date or closed to follow-up date (whichever comes first) as follows:

- Data entry complete: 4 weeks from primary completion or closed to follow-up date
- Data cleaned and ready for analysis (considered the “study data complete” date): 8 weeks after data entry is complete
- Data analyzed and results provided to protocol chair and writing team: 8-12 weeks after data are cleaned and ready for analysis
- Draft manuscript submitted for IMPAACT review: 12 weeks after the final analysis report is received by the writing team (with the general expectation that the manuscript will be fully prepared within 8 weeks after the protocol chair’s receipt of the final analysis report, leaving 4 weeks for all masthead authors, protocol team members, corporate sponsors/collaborators to sign off, unless otherwise specified in the CTA or other third party agreement). Text describing the background, study design, and other trial aspects can be drafted while data analysis is underway; i.e., need not await availability of results.

As further described in Section 7, results for all primary outcome measures must be entered into ClinicalTrials.gov within one year of the primary completion date. Results for secondary outcome measures with completion dates prior to or concurrent with the primary completion date must also be entered within one year after the primary completion date. These entries are required regardless of whether the results have been published.

19.2.2 Secondary Manuscripts

The timeline and process for development and review of secondary manuscripts are outlined in Table 19-2 and described starting in Section 19.2.2. Following receipt of the primary final analysis report by the protocol chair, the protocol team (or designated subset) begins developing the list of proposed secondary analyses, potential manuscripts and writing teams. Within eight weeks after receipt of the primary final analysis report, the protocol chair submits this list to the publications coordinator for tracking purposes.

The list should include the following for each secondary manuscript:

- Proposed writing team chair and brief title and description of each manuscript,
- List and status of laboratory samples and assay results required for the manuscript, and
- Expected timeline for analysis completion, considering the steps outlined above for primary manuscripts. As all secondary data analyses cannot proceed at the same time, preparation of secondary manuscripts typically requires prioritization.

The writing team chair for each secondary manuscript will work with the Statistical and Data Analysis Center (SDAC) to determine the statistical analysis plan – with some relevant analyses expected to have been completed as part of the primary analysis and the rest to be completed within a specified time frame. The timeline for secondary data analysis and manuscript development relative to the primary manuscript may vary depending on overall prioritization, completion of necessary laboratory assays, and other factors.
affecting data availability and/or analyses; however, the general expectation is similar to that for primary manuscripts; once the analysis report is submitted to the writing team chair, the draft manuscript is expected to be submitted to the publications coordinator for IMPAACT review within 12 weeks, inclusive of eight weeks for manuscript development and four weeks for review by masthead authors, protocol team members, and corporate sponsors/collaborators (unless otherwise specified in the CTA or other third party agreement, as described for primary manuscripts).

The results of the main study/project primary manuscript must be submitted for publication prior to those of secondary (or sub-study) manuscripts, unless otherwise approved by the IMPAACT MOG (e.g., based on the recommendation of a Data and Safety Monitoring Board [DSMB]). The protocol chair will ensure that analysis and publication of secondary or sub-study results do not interfere with the analysis or publication of the primary study results and will work closely with the publications coordinator at the Operations Center to track the manuscript development progress and to address any concerns that may arise.

The IMPAACT review process for secondary manuscripts is the same as for primary manuscripts.

As further described in Section 7, results for any secondary outcome measures with completion dates after the primary completion date must be entered into ClinicalTrials.gov within one year after the respective completion dates for the secondary outcome measures. These entries are required regardless of whether the results have been published.

### 19.2.3 Manucripts from DACS and NWCS

Procedures for submission and review of DACS and NWCS are detailed in Section 15. The timeline and process for development and review of the manuscripts from DACS and NWCS are outlined in Table 19-4. The timeline for preparation of the relevant analysis report may vary depending on a number of factors including availability of data and assay completion. However, once the analysis report is available, the expectations and procedures for manuscript development and review are the same as for primary and secondary manuscripts.

### 19.2.4 Manucripts from DR

Procedures for submission and review of DR are detailed in Section 15. Any publications associated with a DR should include acknowledgement of provision of data by IMPAACT; however, the timeline and process for development and review of the manuscripts from a DR need not follow the procedures outlined in Table 19-4 or described in Sections 19.2.5-19.2.7. Any abstracts or manuscripts resulting from a DR should be sent to the IMPAACT publications coordinator prior to journal submission for review by the IMPAACT Publications Group and to confirm the appropriate acknowledgements.
<table>
<thead>
<tr>
<th>Event</th>
<th>Timeline</th>
<th>Procedures</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| Formation of writing team (see Section 19.2.5) | Approximately 4 months (16 weeks) before anticipated primary completion date or closed to follow-up date (whichever comes first) | • Notify CTS and protocol chair of upcoming closure  
• Remind protocol chair of timeline and need to designate a writing team  
• Hold pre-closure conference call(s) to include discussion of writing team formation and agree on communications plan (e.g., whether an executive summary or lay summary is needed, how sites/participants are to be notified) | Protocol statistician  
Protocol chair, CTS |
| Finalization of statistical analysis plan   | 3 months (12 weeks) before anticipated primary completion date or closed to follow-up date (whichever comes first) | • Update/finalize the statistical analysis plan prior to initiation of final analyses | Protocol statistician, writing team chair and other members |
| Primary completion date or closed to follow-up date (whichever comes first); final data entry period begins | Day 0                                                                   | • Notify CTS & Publications Coordinator | Protocol statistician |
| Receipt of final analysis report by protocol chair/writing team chair | 5-6 months (20-24 weeks) after primary completion/closed to follow-up date | • Submit primary analysis report to Writing Team/Protocol Team Chair (any additional analyses needed will be provided in a timely manner so that the overall timeline is not adversely affected)  
• Notify CTS and Publications Coordinator that the analysis report has been transmitted | Protocol statistician |
| Manuscript preparation begins; 3-month (12 week) clock starts | Writing period should take no more than 8 weeks after the protocol chair’s receipt of the final analysis report, leaving at least 4 weeks for review by masthead authors, writing team, protocol team (including NIH, pharmaceutical company representatives, etc.) and incorporation of comments/ revisions | • Remind protocol chair/writing team chair of manuscript submission deadline  
• Oversee timely completion of manuscript and adherence to timelines  
• Determine number and order of masthead authors  
• Develop full manuscript within 8 weeks  
• Distribute for review by team/authors/sponsor/site IoRs/pharmaceutical representatives and incorporate comments within 4 weeks  
• Begin compilation of the appendix of contributors | CTS or publications coordinator  
Protocol chair  
Protocol chair/writing team chair and other members  
Protocol chair/writing team chair and CTS |
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<tr>
<th>Event</th>
<th>Timeline</th>
<th>Procedures</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| Manuscript submission for IMPAACT review (with lay summary, if needed) | 12 weeks after analysis report provided to writing team | • Submit manuscript (with lay summary, if required) to publications coordinator (impaact.pubscoord@fstrf.org) indicating protocol number, primary/second manuscript, and to which journal the team will be submitting, if known:  
  - If submitting to an Open Access journal, notify the publications coordinator for determination of Open Access fee coverage (see Section 19.11 for more information)  
  • Forward manuscript to IMPAACT Publications Group and relevant SC chair (if applicable) for review, with notification to the writing team chair  
  • Confirm appropriate appendix of contributors and inclusion of Network and NIH acknowledgements | Writing team chair          |
| IMPAACT review complete (unless revision/re-submission required)     | 10 business days after submission for IMPAACT review | • Forward review comments and approval (or resubmission request) to writing team chair  
  • If manuscript is approved, address reviewer comments and proceed with next step  
  • If approved with revision and resubmission requested, submit response and revised manuscript within 4 weeks to publications coordinator  
  • If disapproved, submit a revised manuscript within 8 weeks (substantial changes to be agreed upon by authors, protocol team (including pharmaceutical company representatives, if applicable), primary reviewer, and IMPAACT Publications Group chair) | Publications coordinator  |
| IMPAACT-approved primary manuscript submitted to journal             | Within 4 weeks of IMPAACT approval | • Submit manuscript to journal and send copy to publications coordinator  
  • Ensure authors’ disclosure of potential conflicts of interest as required by journal policy  
  • See Section 19.5 for additional guidance related to journal submission and procedures for various outcomes | Writing team chair         |
<table>
<thead>
<tr>
<th>Event</th>
<th>Timeline</th>
<th>Procedures</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| Acceptance for publication   | Following journal submission | • Communicate outcome of submission to publications coordinator  
• Ensure publishing agreement allows the paper to be posted to PubMed Central, in accordance with NIH policy, prior to signing the journal publication agreement (or similar copyright transfer agreement)  
• Ensure authors’ disclosure of potential conflicts of interest as required by journal policy  
• If the manuscript is being published in a journal that does not deposit final published articles in PubMed Central:  
  – submit a request with the final peer-reviewed version (e.g., Microsoft Word document), all tables, figures, and supplementary information, and a copy of the signed publication agreement (or similar copyright transfer agreement) to the publications coordinator  
  – submit manuscript to PubMed Central via the NIHMS on behalf of the corresponding author and supply the author with a NIHMS ID  
  – approve the release and PubMed Central formatting of manuscript upon receipt of the email notification from NIHMS | Writing team chair  
Publications coordinator  
Lead/corresponding author |

Note: For more information on study closure procedures, refer to Section 14. The impaact.pubscoord@fstrf.org address should be used for all communication with the publications coordinator.
<table>
<thead>
<tr>
<th>Event</th>
<th>Timeline</th>
<th>Procedures</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination of secondary analyses, secondary writing teams, prioritization and timelines</td>
<td>Within eight weeks after final primary analysis report is received by the protocol chair</td>
<td>Submit list of secondary analyses specified in the protocol, newly planned analyses, and potential secondary manuscripts to the publications coordinator. List should include: - Proposed writing team chair and brief title and description of each manuscript - List and status of laboratory samples and assay results required - Expected timeline for analysis completion, considering the steps outlined above for primary manuscripts - Where necessary, IMPAACT Publications Group guidance will be sought on prioritization of secondary analyses/manuscripts and/or which analyses may need to be completed without SDMC support - Monitor adherence to timelines; update as necessary</td>
<td>Protocol chair</td>
</tr>
<tr>
<td>Writing team formation (see Section 19.2.5)</td>
<td>May vary</td>
<td>• Form writing team • Notify publications coordinator of writing team chair</td>
<td>Protocol chair/ writing team chair</td>
</tr>
<tr>
<td>Preparation of statistical analysis plan</td>
<td>May vary</td>
<td>• Define analysis plan prior to initiation of data analyses</td>
<td>Protocol statistician, writing team chair, and other members</td>
</tr>
<tr>
<td>Receipt of final secondary analysis report by protocol chair/writing team chair</td>
<td>May vary based on prioritization and data availability (e.g., completion of lab assays)</td>
<td>• Submit analysis report to writing team/protocol team chair • Notify CTS and publications coordinator that the analysis report has been transmitted</td>
<td>Protocol statistician</td>
</tr>
</tbody>
</table>
Table 19-3. Timeline for Development and Review of Secondary Manuscripts, including Timetable for Writing Team Formation and Manuscript Development and Review

<table>
<thead>
<tr>
<th>Event</th>
<th>Timeline</th>
<th>Procedures</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manuscript preparation begins;</td>
<td>Writing period should take no more than 8 weeks after</td>
<td>• Remind protocol chair/writing team chair of manuscript submission deadline &lt;br&gt; • Oversee timely completion of manuscript and adherence to timelines &lt;br&gt; • Determine number and order of masthead authors &lt;br&gt; • Develop full manuscript within 8 weeks &lt;br&gt; • Distribute for review by team/authors/sponsor and incorporate comments/revisions &lt;br&gt; • Begin compilation of the appendix of contributors</td>
<td>CTS or publications coordinator &lt;br&gt; Protocol chair &lt;br&gt; Protocol chair/writing team chair and other members &lt;br&gt; Protocol chair/writing team chair and CTS</td>
</tr>
<tr>
<td>3-month (12 week) clock starts</td>
<td>the protocol chair's receipt of the final analysis report, leaving at least 4 weeks for review by masthead authors, writing team, protocol team (including NIH, pharmaceutical company representatives, etc.) and incorporation of comments/revisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manuscript submission for IMPAACT review</td>
<td>12 weeks after analysis report provided to writing team</td>
<td>• Submit manuscript (with lay summary, if required) to publications coordinator (<a href="mailto:impaaact.pubscoord@fstrf.org">impaaact.pubscoord@fstrf.org</a>) indicating protocol number, primary/second manuscript, and to which journal the team will be submitting, if known: &lt;br&gt; - If submitting to an Open Access journal, notify the publications coordinator for determination of Open Access fee coverage (see Section 19.11 for more information) &lt;br&gt; • Forward manuscript to IMPAACT Publications Group and relevant SC chair (if applicable) for review, with notification to the writing team chair &lt;br&gt; • Confirm appropriate appendix of contributors and inclusion of Network and NIH acknowledgements</td>
<td>Writing team chair</td>
</tr>
<tr>
<td>(with lay summary, if needed)</td>
<td></td>
<td></td>
<td>Publications coordinator &lt;br&gt; Publications coordinator</td>
</tr>
<tr>
<td>IMPAACT review complete (unless revision/re-submission required)</td>
<td>See Table 19-2</td>
<td>• See Table 19-2</td>
<td>See Table 19-2</td>
</tr>
<tr>
<td>IMPAACT-approved secondary manuscript</td>
<td>See Table 19-2</td>
<td>• See Table 19-2</td>
<td>See Table 19-2</td>
</tr>
<tr>
<td>submitted to journal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acceptance for publication</td>
<td>See Table 19-2</td>
<td>• See Table 19-2</td>
<td>See Table 19-2</td>
</tr>
</tbody>
</table>

Note: For more information on study closure procedures, refer to Section 14. The impaaact.pubscoord@fstrf.org address should be used for all communication with the publications coordinator.
Table 19-4. Timeline for Development and Review of Manuscripts from DACS and NWCS, including Timetable for Writing Team Formation and Manuscript Development and Review

<table>
<thead>
<tr>
<th>Event</th>
<th>Timeline</th>
<th>Procedures</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>DACS or NWCS submitted and approval based on availability of data/</td>
<td>Unless otherwise determined by the protocol team and MOG, one year after</td>
<td>▪ Once the study data are openly available for use by investigators outside of the protocol team, proposals for use of data and specimens are</td>
<td>Proposing investigators (may be protocol team members or investigators outside of</td>
</tr>
<tr>
<td>specimens for use by investigators outside of the protocol team</td>
<td>protocol team confirmation of secondary analyses to be completed and published</td>
<td>submitted via a DACS or NWCS and reviewed as described in Section 15</td>
<td>the team)</td>
</tr>
<tr>
<td>(See Section 15)</td>
<td>by the team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing team formation</td>
<td>May vary</td>
<td>▪ Form writing team</td>
<td>Writing team chair</td>
</tr>
<tr>
<td>Preparation of statistical analysis plan</td>
<td>May vary</td>
<td>▪ Notify publications coordinator of writing team chair</td>
<td></td>
</tr>
<tr>
<td>Receipt of final secondary analysis report by protocol chair/writing</td>
<td>May vary based on prioritization and data availability (e.g., completion</td>
<td>▪ Submit analysis report to writing team/ protocol team chair</td>
<td>Statistician</td>
</tr>
<tr>
<td>team chair</td>
<td>of lab assays)</td>
<td>▪ Notify CTS and publications coordinator that the analysis report has been transmitted</td>
<td></td>
</tr>
<tr>
<td>Manuscript preparation begins; 3-month (12 week) clock starts</td>
<td>Upon receipt of analysis report; timeline same as specified above for primary and secondary manuscripts</td>
<td>▪ See Table 19-2</td>
<td>See Table 19-2</td>
</tr>
<tr>
<td>Manuscript submission for IMPAACT review (with lay summary, if needed)</td>
<td>See Table 19-2</td>
<td>▪ See Table 19-2</td>
<td>See Table 19-2</td>
</tr>
<tr>
<td>IMPAACT review complete (unless revision/re-submission required)</td>
<td>See Table 19-2</td>
<td>▪ See Table 19-2</td>
<td>See Table 19-2</td>
</tr>
<tr>
<td>IMPAACT-approved secondary manuscript submitted to journal</td>
<td>See Table 19-2</td>
<td>▪ See Table 19-2</td>
<td>See Table 19-2</td>
</tr>
<tr>
<td>Acceptance for publication</td>
<td>See Table 19-2</td>
<td>▪ See Table 19-2</td>
<td>See Table 19-2</td>
</tr>
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</table>

Note: For more information on study closure procedures, refer to Section 14. The impaaact.pubscoord@fstrf.org address should be used for all communication with the publications coordinator.
19.2.5 Formation of Writing Team

For primary and secondary manuscripts, the protocol chair is responsible for designating writing team chair and members, which typically include the protocol chair or co-chairs, vice-chair(s), statisticians, clinical trials specialists, and other protocol team members, e.g., immunologist, virologist, pharmacologist, or other content expert(s), as appropriate. It is understood that others (e.g., protocol team members, etc.) may contribute to the manuscript as needed; however, the writing team is responsible for developing a complete manuscript.

The writing team for the primary manuscript is typically designated at the time of the pre-closure conference call; if a study is prematurely terminated such that a pre-closure conference call is not held according to the planned timeline, the writing team will be formed as soon after study closure as is feasible.

The writing teams for secondary manuscripts are typically designated within 6 months after receipt of the primary analysis report by the protocol chair. Specifically, the process of developing the list of proposed secondary analyses (new or specified in the protocol), potential manuscripts and writing teams is expected to begin when the primary analysis report is received by the protocol chair and be completed within 6 months. As noted above, the secondary analyses must be prioritized by the protocol team (or designated sub-group), with guidance from the IMPAACT Publications Group as needed, with identification of any analyses to be performed without SDMC support.

The protocol chair will communicate the writing team membership to the protocol team and the publications coordinator. The publications coordinator or CTS will provide the writing team chair the link to this section of the IMPAACT Manual of Procedures to ensure awareness of the expectations.

The formation of writing teams for DACSs, NWCSs, and DRs will vary but the process is generally as described in Table 19-4.

19.2.6 Preparation of Analysis Plan

For primary and secondary manuscripts, under the overall direction of the protocol chair, a statistical analysis plan is prepared for each writing team prior to the initiation of data analysis. For the primary manuscript, the statistical analysis plan should be updated/finalized approximately 12 weeks prior to closure to follow-up (or the primary completion date, whichever comes first). The senior protocol statistician is responsible for developing the analysis plan, in close collaboration with the other protocol statistician(s), the protocol chair, writing team chair and other writing team members. Although there may be many specific analyses mentioned in the analysis plan, the team should specify which components of the analysis are necessary to begin preparation of the parts of the manuscript describing the findings and this must be agreed to by the writing team chair and the statisticians. Text describing the background, study design, and other trial aspects should ideally be drafted while data analysis is underway.

The following components of the analysis constitute a core set of information that should be sufficient to begin describing the study findings in the manuscript:

- Participant accrual information
- Participant retention and completeness/status of follow-up
- Baseline characteristics
- Major outcome measures
- Safety/toxicity outcomes
The writing team may decide to expand this list, as appropriate; any additions should be specified in the analysis plan.

Note that not all analyses must be completed before beginning manuscript preparation (e.g., analyses of secondary outcome measures could be completed while the manuscript is in preparation). Supplementary information may also be sent during the writing period; however, manuscript development should proceed/continue once the core materials, and any agreed-upon additions, have been sent to the writing team by the SDMC.

If the team has not prepared an analysis plan, or if the analysis plan does not specify which components comprise the information necessary to begin manuscript preparation, then the above core set will be the default.

The preparation of analysis plans for DACSs, NWCSs, and DRs will vary but the process is generally as described in Table 19-4.

19.2.7 Completion of Analysis and Manuscript Preparation

For primary and secondary manuscripts, SDAC (or the non-SDAC statistician where applicable) will notify the publications coordinator and CTS upon completion of the required (core) analyses and transmittal to the writing team. The publications coordinator will notify the writing team chair that a final manuscript draft should be submitted for IMPAACT review within 12 weeks of receipt of the analysis report. The remaining analyses specified in the analysis plan, as well as others that may become important once the results become known, may be completed and sent to the writing team for inclusion in the manuscript during the writing period.

SDAC, NIH, and pharmaceutical company protocol team representatives are responsible for ensuring that any necessary reviews internal to their respective institutions are completed well within this time frame.

The completion of analysis and manuscript preparation for DACSs, NWCSs, and DRs will vary but the process is generally as described in Table 19-4.

19.3 Tracking of Manuscript Preparation

The guidelines and procedures outlined in this section apply to primary and secondary manuscripts as well as manuscripts developed from DACS or NWCS. Timelines may vary for DRs.

If the publications coordinator does not receive a final draft manuscript within 12 weeks following distribution of the final analysis report for the primary analyses by the SDMC, the publications coordinator will query the protocol chair and writing team for an explanation and proposed new timeline in writing. Requests for extensions must be approved by the IMPAACT Publications Group chair.

Further delays without sufficient justification may result in replacement of the writing team chair, as determined by the protocol chair (if different from the writing team chair) and the Publications Group chair in consultation with other members and endorsed by the SLG. The new writing team chair will be given a reasonable amount of time to complete the manuscript.
19.4 IMPAACT Manuscript Review Process

Manuscripts based on IMPAACT data must be reviewed and endorsed internally prior to journal submission. The writing team chair must submit a final draft, the lay summary (if applicable), appendix of contributors, Network and NIH acknowledgements, and the name of the journal targeted for submission to the publications coordinator to initiate the review process. The publications coordinator will review the submission to ensure that all applicable materials are included. The publications coordinator will submit the draft to the Publications Group, with a copy to the relevant SC chair. A primary reviewer is assigned by the Publications Group chair to review the manuscript in detail and determine whether to endorse it for journal submission. The primary reviewer may be a member of the Publications Group, a SC chair or vice chair, a member of the IMPAACT SLG, or another reviewer with specific expertise in the topic area.

The primary reviewer and Publications Group have 10 working days from receipt of the manuscript in which to comment. Comments are sent to the publications coordinator, who will compile and forward comments to the submitting author at the end of the comment period. All Publications Group members are not required to comment, but forfeit their right to do so after 10 days. The review will result in one of the following outcomes:

- Endorsed for journal submission with or without comments for author consideration; no further review required
- Revision and re-review required with comments to be addressed
- Disapproval

Endorsement for submission must be obtained before the manuscript may be submitted to a journal. If the manuscript is endorsed for journal submission with reviewer comments, the writing team will address those comments as appropriate and then proceed with preparation for submission.

If revision and resubmission is requested, a response and revised manuscript must be submitted by the writing team chair to the publications coordinator within four weeks of receipt of the review comments. Substantial changes must be agreed upon by the writing team, masthead authors, and protocol chair and may require re-review and sign-off by the pharmaceutical company or other sponsors/collaborators prior to resubmission for Publications Group review.

If disapproved, the publications coordinator will arrange for a discussion of potential next steps by the primary reviewer, Publication Group chair, writing team chair, and other writing team members, as needed. If agreement cannot be reached, the matter may be referred to the SLG. It is generally expected that a revised manuscript will be re-submitted within eight weeks. Substantial changes must be agreed upon by the writing team, masthead authors, and protocol chair and may require re-review and sign-off by the pharmaceutical company or other sponsors/collaborators prior to resubmission to the publications coordinator for Publications Group review.

**Review of Manuscripts from Laboratory Projects**

Manuscripts from IMPAACT laboratory projects must undergo IMPAACT review as described above; however, for these manuscripts, the LC PI or designee will serve as the primary reviewer.
19.5 Journal Submission

The final manuscript is submitted to the journal selected by the writing team chair in consultation with the protocol chair, and a copy is sent to the publications coordinator.

If a journal requests a statement about access to data, use the following:

“The data cannot be made publicly available due the ethical restrictions in the study’s informed consent documents and in the International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Network’s approved human subjects protection plan; public availability may compromise participant confidentiality. However, data are available to all interested researchers upon request to the IMPAACT Statistical and Data Management Center’s data access committee (email address: sdac.data@fstrf.org) with the agreement of the IMPAACT Network.”

Revisions
Comments from the journal reviewers should be handled at the writing team level. If significant changes are required, the writing team chair is responsible for notifying the publications coordinator, who will work with the Publications Group chair to determine if additional IMPAACT review is required.

Rejections
If the manuscript is rejected, the writing team chair must inform the publications coordinator of future plans for the manuscript. Generally, manuscripts should be resubmitted within 8 weeks, unless additional major analyses are required. The writing team chair must circulate the revised manuscript to the protocol chair and masthead authors for sign-off prior to resubmission. In addition, if there are substantive changes (e.g., differences in the conclusions or findings described), re-review by the protocol team, pharmaceutical companies, and other sponsors/collaborators is required, and a copy of the reviewers' critique and the revision should be sent to the publications coordinator for transmittal to the Publications Group, with re-review and approval by the primary reviewer required prior to re-submission.

Accepted manuscripts
Upon acceptance of the manuscript for publication by the journal, the writing team chair is responsible for providing an electronic copy of the manuscript to the publications coordinator, masthead authors, and the protocol team.

If the manuscript is being published in a journal that does not deposit final published articles in PubMed Central, the writing team chair should follow the Public Access Policy described in Section 19.8, below.
19.6 Authorship

The guidelines and procedures outlined in this section apply to primary and secondary manuscripts as well as manuscripts developed from DACS or NWCS as well as abstracts.

19.6.1 Guidelines for Authorship

The masthead should include those individuals who have made substantial intellectual contributions to the specific manuscript, as defined in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals (http://www.icmje.org/icmje-recommendations.pdf):

“Authorship credit should be based only on:

- Substantial contributions to conception and design; or acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or revising it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

In addition to being accountable for the parts of the work he or she has done, an author should be able to identify which co-authors are responsible for specific other parts of the work. In addition, authors should have confidence in the integrity of the contributions of their co-authors.

All those designated as authors should meet all four criteria for authorship, and all who meet the four criteria should be identified as authors. Those who do not meet all four criteria should be acknowledged. These authorship criteria are intended to reserve the status of authorship for those who deserve credit and can take responsibility for the work. The criteria are not intended for use as a means to disqualify colleagues from authorship who otherwise meet authorship criteria by denying them the opportunity to meet criterion #s 2 or 3. Therefore, all individuals who meet the first criterion should have the opportunity to participate in the review, drafting, and final approval of the manuscript.”

19.6.2 Decision for Authorship and the Author Order

The list and order of names on the masthead is to be determined by the writing team chair as the manuscript is in preparation and finalized by the time the manuscript is ready for submission; the decision should be a reflection of individuals’ intellectual contributions. The masthead for authorship of an article may be limited to journal guidelines, which may allow a range of 6 to 20 names. When authorship must be limited, it is preferable for each organization involved to be represented by a single author. The first author of the manuscript is usually the writing team chair.

It is recommended that site investigators at sites that enrolled large numbers of participants or IMPAACT investigators with specific expertise in the topic of the manuscript be invited to participate on the writing team early in the analysis plan development process so that they have the opportunity to meet these authorship criteria. Specifically, for studies that enrolled participants from fewer than six institutions, one investigator from each institution contributing study participants may be considered for masthead authorship. For studies involving more than six institutions, institutions with high participant enrollment may have one investigator considered for masthead authorship. Site representation may also be determined based on the number of participants included in a specific sub-analysis. The address of each co-author should reflect his/her own site. If the protocol chair or vice chair is from a high enrolling
institution and is already an author, he/she can place another investigator from that institution on the masthead. In cases where the large numbers of enrollees render the inclusion of a single representative from each site with high accrual infeasible, the team may consider developing an alternative plan for allowing masthead authorship by investigators from participating sites. This plan should be presented to the Publications Group chair.

In instances where study work is completed or substantially conducted at one institution and a masthead author relocates to another institution prior to the manuscript being submitted to a journal, both the author’s current and former institutions should be cited. It is the responsibility of the relocated author and the site leader of the former CRS to ensure that both institutions are cited in the publication.

The relative roles of each member of the writing team will be determined as soon as the writing team is formed. Any disputes regarding study authorship or position on masthead should be addressed first with the writing team chair and protocol team chair. Decisions concerning authorship may be appealed, if necessary, to the Publications Group chair.

19.6.3 Appendix of Contributors

In addition to the authors listed on the masthead, study-related primary and secondary manuscripts must include an appendix acknowledging contributors who were not listed on the masthead. Other contributors (e.g., protocol team members who are not masthead authors, site investigators/staff) will be listed in the appendix. All participating site institutions enrolling participants will be acknowledged in the article and generally listed in order according to the number of participants enrolled. The listing will include up to four persons per participating institution, including SDAC, DMC, LC, Operations Center, sponsoring NIH institutes, and industry or other collaborators as well as the participating sites. The listing will be compiled by the writing team chair, protocol team chair, and CTS. The Publications Coordinator will confirm that there is an appropriate appendix of contributors upon submissions for IMPAACT review.

For NWCS, DACS, and minor secondary manuscripts, a statement acknowledging the participating clinical research sites of the parent studies is sufficient.

If no appendix of contributors is allowed by the journal, the acknowledgements should include those specified in this section, with the number of individuals cited per institution to conform to the journal’s specifications.

In general, this policy to acknowledge contributors applies to any Conference Presentation Materials (as described further in Section 19.9).
19.7 Acknowledgements

19.7.1 Network and NIH Acknowledgements

The IMPAACT Network and the specific protocol number should be included in the title and body of the manuscript (e.g., IMPAACT XXXX).

The grant acknowledgment and disclaimer on behalf of NIH should be as follows:

“All support for the International Maternal Pediatric Adolescent AIDS Clinical Trials Network (IMPAACT) was provided by the National Institute of Allergy and Infectious Diseases (NIAID) with co-funding from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) and the National Institute of Mental Health (NIMH), all components of the National Institutes of Health (NIH), under Award Numbers UM1AI068632 (IMPAACT LOC), UM1AI068616 (IMPAACT SDMC) and UM1AI106716 (IMPAACT LC), and by NICHD contract number HHSN27520180001I. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.”

Any publications associated with a DACS, NWCS, or DR should include grant acknowledgement of IMPAACT and disclaimer of NIH, as described above.

19.7.2 Other Acknowledgements

If the work represented by the manuscript was directly supported by other sponsors, they should be acknowledged accordingly and in keeping with the terms of any applicable CTAs, MOUs, or other collaboration and sponsor agreements. For example, if study products were supplied by the manufacturer free of charge for use in the study, this should be acknowledged. It is the responsibility of the writing team chair and protocol team chair to ensure appropriate acknowledgement of contributors, sponsors, and collaborators.

19.8 Public Access Policy

The IMPAACT Network will comply with the NIH Public Access Policy. The complete information on this policy is available at the following website: http://publicaccess.nih.gov/index.htm. The Public Access Policy requires that all manuscripts accepted for publication that are based on studies with NIH funding be submitted to the PubMed Central digital archive, where they will be available to the public. The final, peer-reviewed manuscript accepted for journal publication is the version to be submitted.

Some journals have made arrangements with the NIH to submit manuscripts accepted for publication without any further required action by the authors. The list of these journals can be reviewed at the following website: http://publicaccess.nih.gov/submit_process_journals.htm. For manuscripts submitted to journals not on this list (not already complying with the Public Access policy), authors must inform the journal that the manuscript is subject to the Public Access Policy when submitting it for publication, and make sure that any copyright transfer or other publication agreement allows the final peer-reviewed manuscript to be submitted to NIH in accordance with the policy. When the final peer-reviewed manuscript has been accepted for publication, the author must send a copy of this version of the manuscript and a copy of the signed publication agreement (or similar copyright transfer agreement) to the publications coordinator, who will submit the manuscript to PubMed Central via the NIHMS on behalf of the corresponding author and supply the author with a NIHMS ID, copying the SDMC’s
publications tracking group ([cbar.pubs@sdac.harvard.edu](mailto:cbar.pubs@sdac.harvard.edu)). The lead author approves the release and PubMed Central formatting of manuscript when receiving the email notification from NIHMS.

The publications coordinator will follow up with authors on the status of manuscripts that have been approved for journal submission by the IMPAACT Publications Committee and will track the progress on journal submission, submission to PubMed Central and assignment of ID numbers.

### 19.9 Abstracts

Abstracts reporting results of IMPAACT studies or otherwise based on IMPAACT study data may not be presented at a conference or other public venue without IMPAACT Publications Group review and approval. Abstract authorship should generally follow the guidelines as included in Section 19.6, above. Prior to submission to the publications coordinator for this review, draft abstracts reporting study or study-related results must receive sign-off by the co-authors and the protocol team and undergo any necessary review by industry or other sponsors/collaborators as specified in the CTA or other third party agreement. If results of a sub-study are being reported, the protocol team (minimally, the protocol chair(s), protocol statistician(s), MO(s), and pharmaceutical representatives) should review the draft abstract. The writing team chair is responsible for ensuring that all applicable reviews are completed and approvals are obtained prior to conference submission.

Unless otherwise directed for conferences with a large number of abstracts expected, the writing team chair must submit the draft abstract to the publications coordinator at least 5 working days prior to the deadline for the abstract to be submitted to the conference organizer. If this is not feasible due to the need for last-minute data collection or analyses, the abstract should be submitted for review at the earliest possible time, and no later than two working days prior to the abstract submission deadline. If the data necessary to complete the abstract are not available within the designated time frame, an alternate review process may be determined by mutual agreement of the writing team and the IMPAACT Publications Group chair.

An IMPAACT review will be conducted by the Publications Group chair or a designated reviewer within 3 days of receipt unless agreed otherwise as noted above. Review outcomes and other comments will be compiled by the publications coordinator and then forwarded to the submitting author.

The corresponding author will inform the publications coordinator of acceptance of abstract and its number, if known, within 10 days of notification by the conference organizer and provide a copy of the final accepted version.

If the abstract is accepted and the protocol team determines that an executive summary, a site investigator letter, and/or participant letter are needed, these will be prepared and typically distributed to participating study sites at least 2 days in advance of the conference presentation; however, the terms of any NIH or conference embargo will take precedence. If NIH or the network leadership determines that a press release should be issued, its development and release will follow the procedures outlined in Section 6.

If an abstract is rejected by the conference organizer and the authors decide to revise and resubmit, it must undergo re-review by the protocol team and the IMPAACT Publications Group prior to resubmission if substantive changes are made.

**Preparation of Conference Presentation Materials**

If an abstract is accepted, the writing team chair/lead author must circulate the draft slides and/or poster to the protocol team (minimally, the protocol chair(s), protocol statistician(s), MO(s), CTS(s) and
pharmaceutical representatives), including NIH representatives and pharmaceutical industry and other collaborators, for review. Posters and slides do not need to be reviewed by the IMPAACT Publications Group. Use of the IMPAACT logo (available on the website, http://impaactnetwork.org/resources/templates.htm, or from the Operations Center) and appropriate contributors (Section 19.6.3) and acknowledgements (Section 19.7) are required on all abstract posters and presentations.

The accepted abstract will typically be sent to the PIs of all participating sites at least one day before conference presentation by the publications coordinator or CTS; however, the terms of any NIH or conference embargo will take precedence.

Within two weeks of the conference presentation, the writing team chair/lead author should send a copy of the final materials presented to the publications coordinator for posting on the IMPAACT website.

19.10 Communications Plans and Dissemination of Study Results

With input from the NIH sponsors and other collaborators, the protocol team (minimally, the protocol chair(s), protocol statistician(s), MO(s), CTS(s) and pharmaceutical representatives) is responsible for determining the appropriate plans and timing for communication of study results depending on the nature and status of the study, whether the findings may impact study participants or the standards of care for HIV-related treatment or prevention. This determination should be made around the time that the core analysis report is provided to the writing team and protocol chair by SDAC or before. The timing of development and implementation of the communications plan and materials may be dictated by a recommendation for early release of findings by the DSMB or Study Monitoring Committee overseeing the study. Study results may be shared with participating sites, sponsors, and collaborators through a number of means, including Executive Summaries, Site Investigator Summaries, Participant Letters, Lay Summaries, talking points, and question and answer documents.

19.10.1 Executive Summaries and Accompanying Materials

For Phase III studies and for certain other studies with results that could alter the standard of care for HIV infected or affected populations or influence the design or conduct of ongoing or future clinical trials, selected members of the protocol team, led by the protocol chair and statistician and including the vice chair(s), CTS(s), and MO(s), will prepare a draft Executive Summary based on the core analysis report (See Table 19-1). The primary purpose of an Executive Summary is to disseminate data generated from IMPAACT studies to site investigators, study participants, sponsoring industry collaborator(s), and key stakeholders in a timely fashion before or at the same time as they are released to the general public. The draft Executive Summary will be reviewed and agreed by the protocol team (minimally, the protocol chair(s), protocol statistician(s), MO(s), CTS(s), and pharmaceutical representatives), the IMPAACT Publications Group, and NIH before being distributed to participating investigators and others, and the terms of any NIH or conference embargo will take precedence.

The Executive Summary should be as concise as possible and summarize the final data analysis. The following information should be included:

- Abstract – a brief summary of the study design, hypotheses, conduct, and results
- Trial design – summary of the study design, including information such as the objectives, outcome measures, drug doses and schedule, eligibility, and important protocol changes
- Statistical methods – a summary of the original power and sample size calculations, information about interim monitoring, and methods used for analyses presented in the Executive Summary
• Study population – accrual information, demographics, any differences in baseline characteristics, and eligibility violations
• Results
• Conclusions/Implications

Members of the protocol team (noted above) will review the draft within 5 working days of receipt and provide comments to the protocol chair, or designated team member, for incorporation into a final draft. The draft must clearly state that the material is confidential and not for public distribution. Team members may not disseminate the results prior to release of the Executive Summary.

The CTS or publications coordinator will then forward the final draft Executive Summary to the Publications Group and the relevant SC chair for review. These reviews should be concurrent and occur within 5 working days. An Executive Summary cannot be disseminated until it has been through this IMPAACT review process and approved by the Publications Group and MOs.

In the event of a disagreement between the reviewers and the protocol team, other members of the Publications Group should be consulted.

If an urgent Executive Summary is required, this timeline may be altered based on the circumstances, as approved by the Publications Group chair.

Typically, an Executive Summary will be accompanied by other documents reflecting the same messages in an appropriate format; these may include a Participant Letter, talking points, or question and answer documents intended primarily for use by participating study sites. These documents will be developed and reviewed by members of the protocol team in parallel with the Executive Summary; consistency with the final version of the Executive Summary will be confirmed.

Once the Publications Group and MO(s) review the Executive Summary, then it and any accompanying documents will be disseminated, with instructions for sites. The minimum electronic distribution list is as follows:

• Investigators of Record at participating sites
• Protocol team members, including the MOs
• Network chair, vice chair, LC PI, SDMC PI, and Operations Center Director
• Relevant SC chair
• Industry sponsor(s), if the company’s sponsorship/support is listed on the protocol document but there is no industry representative on the protocol team distribution list

A copy will be sent by the CTS to DAIDS Regulatory Support Center for submission to the Food and Drug Administration for studies conducted under an IND held by DAIDS.

Final approved Executive Summaries and accompanying materials will be disseminated at least 48 hours prior (2 days) to release to the general public (e.g., issuance of a press release by the sponsor or presentation at a conference), with instructions to sites for notification of/submission to their IRBs/ECs and other regulatory entities. Participant Letters and other materials provided to participants must be approved by the site IRBs/ECs prior to use.

NIH has the authority to embargo any/all information in Executive Summaries and accompanying documents, Site Investigator Letters, Participant Letters, and press releases, until information is made public (i.e., abstract presentation or manuscript publication).
19.10.2 Lay Summaries

For all IMPAACT-related manuscripts that may have clinical relevance to study participants and communities, as determined by the writing team chair, a Lay Summary must be prepared unless the findings have been communicated to the sites and participants earlier, according to the communications plan agreed upon by the Protocol Team and MOG. Lay summaries would generally be expected for primary and secondary manuscripts in which the findings being reported may have a clear impact on clinical care. The lay summary should be submitted to the publications coordinator when the manuscript is submitted for review by the Publications Group. If no lay summary accompanies the manuscript and there is no explanation, the publications coordinator will request that the lay summary be prepared and submitted or an explanation provided. The manuscript will not be sent forward for review and endorsement until the lay summary or explanation has been submitted. If the explanation provided for not including a lay summary is deemed insufficient by the IMPAACT Publications Group chair, the writing team chair will be notified and asked to prepare the summary.

The writing team and protocol chair are responsible for developing the Lay Summary. The publications coordinator coordinates the review and approval of the summary by the ICAB chair. The CTS is responsible for dissemination of the approved summary to participating study sites and team members.

- The Lay Summary should be as concise as possible (ideally one page in length), written in 6th to 8th grade level language, and follow the outline provided in Figure 19-1.
- Once the summary is approved by the protocol chair and other team members, the writing team chair submits it to the publications coordinator along with the manuscript for review.
- The publications coordinator submits the summary to the ICAB chair (or designee) for review. A 10-day period is allowed for review of the lay summary, concurrent with the review period for the manuscript. If the substance of a publication changes after review, the author is responsible for updating the lay summary accordingly.
- After the manuscript and summary have been endorsed by the Publications Group and ICAB chair, respectively, the publications coordinator notifies the CTS for that protocol. The CTS will send the Lay Summary to the protocol team and participating study sites prior to or when the manuscript is accepted for publication, with the relative timing to be agreed upon by the protocol chair, medical officers, and other team members. The accompanying message will note that the findings in the lay summary are preliminary and may change as the study continues (if relevant) and that no public statements can be made about the information contained in the summary until the manuscript is published or abstract presented, and instructions regarding its intended dissemination will be provided. If the manuscript is not accepted, the lay summary will not be distributed.
- When the manuscript is published or abstract is presented, the lay summary will be posted on the protocol-specific and community pages of the IMPAACT website.
Figure 19-1. Lay Summary Components

- Protocol Number and Title
- Study Description: *purpose/goal of the study and why it is important, number and location of study participants, current status*
- Key Findings and Potential Implications: *no figures or tables to be included*
- Support: This study was supported by the US National Institutes of Health, National Institute of Allergy and Infectious Diseases, Division of AIDS, the National Institute of Child Health and Human Development, the National Institute of Mental Health and sponsoring drug company (insert name, if applicable).
- Authors and their affiliations

19.10.3 Press Release by Pharmaceutical, Biomedical Industry or External Collaborators

Review and issuance of press releases developed outside the IMPAACT Network (e.g., pharmaceutical, biomedical industry, or external collaborators) will follow the terms included in any applicable CTAs with DAIDS. A copy of the published press release should be sent to the Publications Coordinator.

19.11 Publication Costs

Through the Operations Center, IMPAACT will cover review fees and pages charges for primary and secondary manuscripts if they have been primarily funded by the network and properly credited to the network. Any additional author fees charged for approved manuscripts, including costs for publishing in an Open Access journal and charges for color figures, will covered on a case-by-case basis as determined by the Publications Group chair.

IMPAACT will not cover Open Access costs for publishing in journals that do not require Open Access. Authors submitting a request for IMPAACT to cover Open Access costs in a journal that requires Open Access (e.g., PLOS ONE), must provide justification for submitting to this type of journal. If the publication cost is for a color figure(s), provide justification for publishing in color.

Once confirmation is received that the IMPAACT Operations Center will cover the publication costs, the publications coordinator will provide the author with information for the invoice. Costs associated with ordering reprints will not be covered by IMPAACT and remain the responsibility of the author.

Publication costs for manuscripts resulting from NWCS and DACS will not be covered.
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APPENDIX I UNBLINDING PROCEDURES

I.1 Purpose

This appendix provides guidelines for unblinding the treatment assignments of participants enrolled in IMPAAACT studies.

I.2 Scope

This appendix defines the concepts of “blinding” and “unblinding” the treatment assignment of study participants (and/or their parents/guardians), provides guidelines for when to unblind, and outlines procedures for how to unblind when it is determined that unblinding is appropriate.

I.3 Definitions

I.3.1 Blinding

The term “blinded” refers to a study in which knowledge of individual participant treatment assignments is withheld from certain individuals. These individuals may include study participants (and/or their parents/guardians), study site staff, and protocol team members.

- Single-blinded study: The site investigator is aware of which treatment the participant is receiving, but the participant is not, or vice versa
- Double-blinded study: The participant, site investigator, other site staff, and protocol team are unaware of the treatment assignment
- Partial-blinded study: Within a study arm, some of the study drugs are blinded and others are open-label (e.g., known active drugs [open] plus active drug or placebo [blinded])
The terms “unblinded” and “open-label” refer to studies in which participant and study site staff are aware of participant treatment assignments.

### I.3.2 Unblinding

For purposes of this appendix, “unblinding” means revealing the treatment to which an individual participant has been assigned. This may include revealing the treatment assignment to the participant, study site staff, primary care physician and/or protocol team members.

- **Full unblinding at completion of the study:** Under normal circumstances, all the treatment assignments of all participants will be unblinded once the study data are complete per instructions in the protocol document. Full unblinding also occurs when sudden (or unplanned) unblinding is required due to interim results of the study or results of another study.

- **Partial unblinding:** When not all arms on a study are unblinded or when one or more drugs are unblinded across arms but others remain blinded. Thus, some aspect of the treatment assignment of some participants is still blinded.

- **Emergency unblinding of an individual participant’s treatment assignment for medical reasons:** Urgent, unplanned unblinding prior to full study unblinding is performed to protect participant safety when, as determined by the site Investigator of Record (IoR) or designee, knowing the participant’s treatment assignment would affect immediate medical management of the participant, e.g., for drug identity during an acute reaction.

- **Early unblinding of an individual participant’s treatment assignment for non-urgent medical/safety reasons:** Unplanned unblinding of a participant’s treatment assignment before full study unblinding is performed for reasons that are not urgent and would not affect immediate medical management but may affect other aspects of a participant’s medical care/safety. Examples include:
  - A participant becomes pregnant or contracts an illness before full study unblinding, and the participant or her medical care provider requests the treatment assignment because this information might affect decisions regarding the participant’s medical management.
  - A participant who is or becomes HIV-infected wants to enroll in another study in which prior receipt of an investigational product is exclusionary.
  - A participant wants to donate an organ or stem cells to a relative, and documentation of treatment assignment would facilitate evaluation as a donor.

### I.4 Roles and Responsibilities

Table I-1 outlines team member roles and responsibilities for unblinding.

<table>
<thead>
<tr>
<th>Table I-1. Roles and Responsibilities for Unblinding</th>
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<tbody>
<tr>
<td><strong>Team Member</strong></td>
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<td>Protocol Team</td>
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<tr>
<td>Data and Safety Monitoring Board (DSMB) or Study Monitoring Committee</td>
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## Table I-1. Roles and Responsibilities for Unblinding

<table>
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<th>Team Member</th>
<th>Responsibility</th>
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<tr>
<td>(SMC)</td>
<td><strong>Data Management Center (DMC) User Support</strong>&lt;br&gt;• Provides emergency unblinding information to the Investigator of Record (IoR) or designee when the site pharmacist of record (PoR) is otherwise unavailable to provide this information and the IoR or designee cannot access the Emergency Unblinding Utility on the DMC Portal. Available 24 hours a day/7 days a week, except for five holidays (New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, and Christmas Day).&lt;br&gt;• Grants access to the Emergency Unblinding Utility to IoR. Grants access to the Emergency Unblinding Utility to designees, with approval of the IoR.</td>
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<td></td>
<td><strong>NIAID/DAIDS</strong>&lt;br&gt;• Reviews DSMB recommendations to unblind all or part of a study prematurely (for studies overseen by a NIAID DSMB).</td>
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<tr>
<td></td>
<td><strong>IMPAACT Management Oversight Group (MOG)</strong>&lt;br&gt;• Reviews Study Monitoring Committee (SMC) recommendations to unblind all or part of a study prematurely (for studies overseen by an SMC)&lt;br&gt;• Aids the protocol team in reaching a decision to unblind, as needed</td>
</tr>
<tr>
<td>Protocol Chair</td>
<td><strong>Emergency Unblinding of Individual Participant’s Treatment Assignment for Medical Reasons</strong>&lt;br&gt;• If consulted by a site IoR (not required), may provide input on the need for unblinding of an individual participant; however, protocol chair approval is not required.&lt;br&gt;&lt;br&gt;<strong>Early (Non-Urgent) Unblinding of Individual Participant’s Treatment Assignment for Medical/Safety Reasons</strong>&lt;br&gt;• Discusses early unblinding of an individual participant with the site IoR and relevant protocol team members, usually on a conference call or through email&lt;br&gt;• Communicates the team’s decision in writing (email is sufficient) to the site IoR, with a copy to relevant protocol team members&lt;br&gt;• In consultation with the protocol statistician, approves release of treatment assignments&lt;br&gt;&lt;br&gt;<strong>Partial Unblinding Based on Interim Study Monitoring Review Recommendation</strong>&lt;br&gt;• If a DSMB or SMC recommends partial unblinding due to interim analysis results or results of another study, decides whether to unblind the relevant arms in consultation with relevant protocol team members, network leadership and study sponsor.</td>
</tr>
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</table>
| Protocol Statistician                            | **Full or Partial Study Unblinding**<br>• Obtains treatment assignments for a study prior to initiation of planned analyses<br><br>**Early (Non-Urgent) Unblinding of Individual Participant’s Treatment Assignment for Medical/Safety Reasons**<br>• Actively takes part in discussing early unblinding with other relevant protocol team members<br>• Along with the protocol chair, approves the release of treatment assignments
<table>
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<tr>
<th>Team Member</th>
<th>Responsibility</th>
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| Medical Officer (MO) or Medical Monitor (MM) | *Emergency Unblinding of Individual Participant’s Treatment Assignment for Medical Reasons*  
  - If consulted by a site IoR (not required), may provide input on the need for unblinding of an individual participant; however, MO/MM approval is not required.  
*Early (Non-Urgent) Unblinding of Individual Participant’s Treatment Assignment for Medical/Safety Reasons*  
  - Actively takes part in discussing early unblinding with other relevant protocol team members |
| Investigational New Drug (IND) Holder | *Full or Partial Study Unblinding*  
  - Provides input in unblinding discussions, as appropriate  
*Early (Non-Urgent) Unblinding of Individual Participant’s Treatment Assignment for Medical/Safety Reasons*  
  - Provides input in unblinding discussions, as appropriate |
| Protocol Data Manager               | *Full or Partial Study Unblinding*  
  - In all situations except emergency unblinding of an individual participant’s treatment assignment, transmits unblinding request to the chief data manager or designee  
  - Prepares unblinding memo(s) for team review and finalizes memo(s) incorporating team input |
| Chief Data Manager or Designee      | *Full or Partial Study Unblinding*  
  - In all situations except emergency unblinding of an individual participant’s treatment assignment, is responsible for revealing the treatment assignment  
*Early (Non-Urgent) Unblinding of Individual Participant’s Treatment Assignment for Medical/Safety Reasons*  
  - Receives team-approved request for individual unblinding from the protocol data manager and provides treatment assignment to site IoR or designee |
| Protocol Pharmacologist             | *Full or Partial Study Unblinding*  
  - Requests approval from the protocol team to receive treatment assignments required for pharmacokinetic (PK) analyses (e.g., to identify participants on a specific drug for targeted assay). This may not require full unblinding. |
| Clinical Research Site (CRS) Coordinator | *Full or Partial Study Unblinding*  
  - Follows study-specific communication guidance (typically provided in the study-specific MOP) with respect to inclusion of treatment assignment information when contacting protocol team members and/or the Data Management Center (DMC)  
  - Along with the IoR, receives unblinding information from the DMC for full or partial study unblinding and forwards to the site personnel specified in the unblinding memo (see Section I.5.1) |
### Table I-1. Roles and Responsibilities for Unblinding

<table>
<thead>
<tr>
<th>Team Member</th>
<th>Responsibility</th>
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| **Site Investigator of Record (IoR) or designee** | *Emergency Unblinding of Individual Participant’s Treatment Assignment for Medical Reasons*  
- Determines need for emergency unblinding (input of study sponsor or protocol team not required)  
- Requests treatment assignment for individual participant from the site pharmacist of record (PoR) or, if the PoR is not available, uses the Emergency Unblinding Utility on the DMC portal. Access to the Utility is granted to IoRs listed in the NIAID Clinical Research Management System (CRMS). If the IoR or designee cannot access the Emergency Unblinding Utility, contacts the DMC User Support Department.  
- Approves DMC User Support requests for designees access to the Emergency Unblinding Utility on the DMC portal.  
- Documents the unblinding and notifies relevant individuals/groups designated in the study protocol (copying the PoR)  
- Ensures that relevant IRB/ECs and other regulatory authorities are notified  
- Ensures that treatment assignments are shared only with persons who need to know and that no other unblinding is performed  

*Early (Non-Urgent) Unblinding of Individual Participant’s Treatment Assignment for Medical/Safety Reasons*  
- Determines need for early unblinding in consultation with the group or individuals designated in the protocol  
- Requests treatment assignment using the Unblinding Request Program on the DMC website  
- If request is approved, receives treatment assignment memo from the Chief Data Manager at the DMC  
- Ensures that relevant IRB(1/s)/EC(s) and other regulatory authorities are notified  
- Ensures that treatment assignments are shared only with persons who need to know and that no other unblinding is performed  |
| **Site Pharmacist of Record (PoR)** | *Emergency Unblinding of Individual Participant’s Treatment Assignment for Medical Reasons*  
- Provides treatment assignment for individual participant to site IoR or designee upon request  
- Files copies of the unblinding request and the treatment assignment provided in the pharmacy records for the study  
- Notifies the DAIDS PAB Protocol Pharmacist of the unblinding  
- Ensures that the requested treatment assignment is shared only with the IoR or designee and that no other unblinding is performed |
I.5 Reasons and Guidelines for Unblinding

Conventionally, full unblinding takes place after all study data have been entered into the database for all participants, data cleaning has been completed, endpoints have been reviewed (if applicable per protocol), and the protocol team has declared the study dataset to be complete. On a date pre-determined by the protocol team, treatment assignments are provided to all participating sites for each participant enrolled in the study.

It is critical to the objectives of any blinded study that the objectivity of the Protocol Team, site IoRs, other site staff, and participants (and/or their parents/guardians) be maintained. Any unblinding prior to the conventional full unblinding date can result in bias and should therefore be avoided. Unblinding of individual participant treatment assignments as participants reach study endpoints or come off study may severely compromise the integrity or objectivity of the trial. Unplanned unblinding prior to the conventional full unblinding date should be undertaken only to protect participant safety or to fulfill safety reporting and other regulatory obligations. Unblinding plans that deviate from this appendix must be approved by the protocol statistician and the IMPAACT MOG.

Planning to unblind the treatment assignments of all participants individually as they come off study is unconventional, as the potential for bias in the reporting of results for other participants is substantial. If a protocol team plans to perform unblinding in this fashion, this must be stated in the protocol so the plan can be reviewed and approved by the IMPAACT Multidisciplinary Protocol Review Group (MPRG).

Unblinding to obtain stratification information for randomization is not permitted. The purpose of stratification is to maintain balance of prognostic factors between treatments; even if blinded participants must be stratified as “unknown,” analyses can still be conducted with very little loss in efficiency, and balancing is not likely to be affected. The Subject Enrollment System can provide blinded treatment information internally to inform assignment to subsequent steps of the same study and to pre-specified rollover studies.

I.5.1 Guidelines for Emergency Unblinding of Individual Participant Treatment Assignments for Medical Reasons

The need for emergency unblinding of individual participant treatment assignments is expected to be extremely rare.

If needed immediately to guide management of a serious illness or medical emergency occurring in a study participant, the site IoR or designee may obtain a participant’s treatment assignment from the site PoR - independent of the study sponsor or protocol team. If the site PoR is not available, the IoR or designee may obtain the treatment assignment – also independent of the study sponsor or protocol team – from the DMC. The IoR or designee should use the Emergency Unblinding Utility on the DMC Portal (www.frontierscience.org). IoRs listed in the NIAID Clinical Research Management System (CRMS) are given access to the Emergency Unblinding Utility on the DMC Portal. Designees must request Emergency Unblinding Utility access through DMC User Support, and will be granted access upon approval by the IoR. If the IoR or designee does not have access to the Emergency Unblinding Utility, they may obtain the treatment assignment from the DMC’s User Support Department, which is available 24 hours a day, 7 days a week (+716 834-0900, ext. 7302; user.support@fstrf.org), except for five holidays (New Year’s Day, Memorial Day, Independence Day, Thanksgiving Day, and Christmas Day).

Note: The guidelines in this section do not apply for participants who have died, because knowledge of treatment assignment will not affect immediate management in such cases.
Requests for unblinding should be made to the PoR in writing, and the PoR should provide the participant’s treatment assignment directly to the requesting IoR or designee in writing. In cases of extreme emergency in which it is not possible for the unblinding request to be made in writing to the PoR, the IoR or designee may make the request orally but must provide a written statement of the request to the PoR within 24 hours, including the reason why the request could not initially be made in writing.

In cases of extreme emergency when the PoR is unavailable, the IoR or designee may perform the unblinding via the Emergency Unblinding Utility on the DMC portal.

In cases of extreme emergency when the PoR is unavailable and it is not possible for the treatment assignment to be obtained via the Emergency Unblinding Utility, the IoR or designee may request the unblinded treatment from the DMC in writing by emailing DMC User Support and alerting them of the request via phone. In cases of extreme emergency in which it is not possible for the unblinding request to be made in writing to the DMC, the IoR or designee may make the request orally but must provide a written statement of the request within 24 hours to the DMC, including the reason why the request could not initially be made in writing.

In cases of extreme emergency when the DMC receives an oral or written unblinding request from the IoR or designee, the DMC will provide the unblinded treatment in writing. In cases of extreme emergency when requested by the IoR or designee, when it is not possible for the treatment assignment to be delivered by the DMC in writing, it should be provided orally by the DMC. The DMC will provide a written confirmation of the unblinded treatment within 24 hours.

The IoR or designee must notify the relevant group or individuals specified in the study protocol (e.g., the Clinical Management Committee) of the emergency unblinding within 24 hours of the unblinding via email. The notification should include the PID, date/time of the request and reason for the unblinding but should NOT include the unblinded treatment assignment; the site PoR should be copied on the notification. Relevant site Institutional Review Board(s)/Ethics Committee(s) and regulatory authorities must also be notified. The written request for unblinding and the PoR’s or DMC’s written response (with the treatment assignment) must be filed in the site’s pharmacy records for the study. The PoR must notify the DAIDS Pharmaceutical Affairs Branch (PAB) protocol pharmacist (via email) of the emergency unblinding within 24 hours of the unblinding.

Unblinded treatment assignments should be shared with as few individuals as possible on a need-to-know basis. Care should be taken to prevent additional unblinding to maintain study integrity. The site IoR and site PoR are responsible for preventing additional unblinding beyond those who need to know and for protecting information that may identify the participant.

1.5.2 Guidelines for Early (Non-Urgent) Unblinding of Individual Participant Treatment Assignments for Medical/Safety Reasons

Unblinding information should be shared with as few individuals as possible.

Site IoRs or designees may request a participant’s treatment assignment before a study is fully unblinded for reasons that are not urgent and do not require immediate (emergency) unblinding but may affect the participant’s medical care/safety. Examples are provided in Section I.3.2 above.

The site IoR or designee will consult with the individuals or group specified in the study protocol regarding the need for unblinding (via email or teleconference) and then submit the request for unblinding using the Unblinding Request Program on the DMC website. Decisions will be made by the group or
individuals designated in the study protocol on a case-by-case basis (See Section I.6.1). Early unblinding for this reason should generally not occur until all primary outcome data have been entered and cleaned, all queries related to these data have been resolved, and any clinical endpoints have been reviewed by designated reviewers. In cases in which knowledge of a participant’s treatment assignment sooner may affect the participant’s medical care and/or would otherwise be in the participant’s best interest, this requirement can be waived.

When this type of unblinding is approved, the knowledge of the participant’s treatment assignment should be limited to the fewest number of people possible on a need-to-know basis. The Protocol Data Manager will inform the Chief Data Manager of the team’s decision and the Chief Data Manager will prepare a memorandum that provides the treatment assignment to the site IoR or designee and states, as determined by the protocol team, to whom the assignment may be provided by the IoR or designee. These individuals may include:

- Attending study or primary care clinician
- Study coordinator and/or study nurse
- Site PoR
- Participant

In some instances, only the site IoR (or designee) and participant’s treating clinician will need to be unblinded. Protocol team members, including the protocol chair(s) and data manager, should not be unblinded.

If eligibility determination for a new study requires unblinding of a treatment assignment from a study that is still ongoing, the decision of whether to unblind must be made by the original study team. In some cases, unblinding to determine eligibility may be inappropriate until all participants have completed the study and the data are declared complete. If the participant is on study, the participant will be interacting with the community and site personnel still involved in the trial, possibly biasing the site staff for the duration of the participant’s involvement in the trial.

I.5.3 Partial Unblinding for a Continuing Study

On occasion, a decision may be made to partially unblind one treatment arm or one aspect of several arms due to interim results or toxicity data. In cases such as these, the protocol team prepares a memorandum, which includes guidance regarding the aspects of data entry specified in Section I.5.4 below that need to be completed prior to unblinding. The chief data manager or designee sends the partial unblinding instructions and the memorandum to the sites.

I.5.4 Unblinding after a Study is Closed to Follow-Up

Unblinding a study may consist of:

- informing study participants (and/or their parents/guardians) of their blinded treatment codes
- informing the sites of the blinding codes for their study participants
- informing study chairs or other medical investigators of the study results
- informing study chairs or other medical investigators of treatment codes
- some combination of the above
When a study has been closed to follow-up, either at the scheduled closure or following a decision to close the study early, the conditions outlined below must be met before unblinding participants (and/or their parents/guardians), sites, and study investigators.

Data must be entered and cleaned for primary endpoints and toxicity. Endpoint verification must be complete. It is best if other secondary endpoint data are cleaned as well, but this requirement can be relaxed in circumstances where unblinding is deemed an immediate necessity by the protocol chair(s) and team. Laboratory samples must have been collected, but laboratory test results are not required to be finalized or keyed. The time necessary to finalize the data can be three months or more after study closure.

I.6 Procedures

I.6.1 Unblinding Individual Participant Treatment Assignments

Requests can be made to unblind individual participant treatment assignments, on a case-by-case basis, immediately for emergencies or for non-urgent situations as described in Sections I.5.1 and I.5.2.

In cases in which the site IoR or designee determines that an individual participant’s treatment assignment is urgently needed for immediate medical management, the treatment assignment is to be provided (by the PoR or the DMC) independent of the sponsor and protocol team and with no additional requirements as described in Section I.5.1.

For non-urgent early unblinding of a participant for medical/safety reasons, two requirements should be met:

- Case report forms that capture self-reported and subjective data (e.g., questionnaire responses, adverse events) must be entered into the study database. This requirement may be waived if the provision of the treatment assignment sooner is determined to be in the best interest of the participant.
- After initially conferring with the group or individuals designated in the study protocol (via email or teleconference), the participant’s treatment assignment must be requested using the Unblinding Request Program on the DMC website:
  - The purpose of this program is to collect information that protocol teams and the DMC need to promptly and efficiently process unblinding requests. All fields on the screen should be completed, including the study number, participant identifier, step number, site number, information about the IoR or designee, date the information is needed, and a detailed reason for the unblinding. Once the “Send Mail Message” is submitted, an email message will be automatically sent to the group designated in the study protocol and will provide site staff with a copy in the appropriate email account. It may take one or more days for the team to respond.
  - The protocol chair will communicate the team’s decision in writing (e-mail is sufficient) to the person who made the request, with a copy to the group or individuals designated in the study protocol.
  - After the team approves the unblinding request, the protocol data manager informs the chief data manager of the approval. The chief data manager (or designee) will send the treatment information to the IoR or designee via encrypted email within 24 hours of the team’s approval.
  - Documentation of the communication is to be maintained by both the site and the DMC.
I.6.2 Unblinding the Treatment Assignments of All Participants for a Study

Under normal circumstances, the treatment assignments of all study participants will be unblinded once the data are complete, as outlined in Section I.5.3.

Procedure to unblind the treatment assignments of all participants
During preparation of the closure timeline, the protocol team should confirm plans for unblinding. The unblinding date is usually determined in advance by study team along with the timetable for study closure. The team prepares any information it wishes site personnel to communicate to study participants (and/or their parents/guardians) when their treatment assignment is discussed. The DMC supplies a standard unblinding memorandum to the team for review and for the addition of any study-specific language the team wishes to include. The chief data manager (or designee) prepares unblinding listings for each site with the unblinding memorandum on the date the team has specified.

Unplanned or sudden closure unblinding
The following standard approach will be followed. Any changes to this standard will be protocol-specific and will be specified in the protocol and reviewed by the IMPAACT Multidisciplinary Protocol Review Group.

- Sudden (or unplanned) unblinding of one or more arms due to interim analysis results or results of another trial: The decision to unblind one or more arms of an ongoing study is made by the team in conjunction with the MOG (which includes NIH representatives and network leadership). This can occur based on a recommendation from the DSMB/SMC or the results of another trial.
- Participant contact: If the decision is made to unblind, participants (and/or their parents/guardians) should be unblinded as soon as possible. Unblinding is conducted through the DMC, which sends treatment assignments to the sites soon after the unblinding decision. Every effort should be made by the sites to contact participants (and/or their parents/guardians) who have completed follow-up (and/or their parents/guardians) in order to explain the study results.
- Implications of unblinding on study data: When a treatment comparison is unblinded based on an interim analysis, the results of that interim analysis are expected to be reported in publications. Data from visits that occurred before the interim review but that were not in the database at the data cutoff date have little potential for bias and may be reported with a comment. Data from visits that occurred after unblinding are potentially biased and must not be used if the intent is to claim that all the data are from a blinded study. In unblinding due to both “interim analysis” and the “other trial results” situations, if analyses are reported on clinical data or samples taken after the unblinding date, the conditions under which these data were gathered must be made clear in any publication.

It is important to note that, if all arms are not unblinded, participants on the remaining arm(s) (and/or their parents/guardians) are at a minimum partially unblinded in most cases.

I.6.3 Unblinding of External Entities for a Special Request

On rare occasions, an outside body such as the US Food and Drug Administration may request that certain information from a study be unblinded. Such requests must be approved by the study team and the MOG.
I.7 References

- DSMB or SMC guidelines (Section 13)
- Unblinding Request Program
- Emergency Unblinding Utility

I.8 Questions

Questions and comments regarding this policy may be directed to IMPAACT.OperationsCenter@fstrf.org.