National Code of Health Research Ethics

National Health Research Ethics Committee of Nigeria (NHREC)

FEDERAL MINISTRY OF HEALTH
DEPARTMENT OF HEALTH PLANNING AND RESEARCH

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Foreword

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About NHREC

The National Health Research Ethics Committee (NHREC) is the apex body responsible for the provision of and ensuring adherence to guidelines that govern ethical research practice in order to ensure the protection of human research participants in Nigeria.

The committee was inaugurated in October 2005 by the Hon. Minister of Health in line with Mr. President's directive for the strengthening of a mechanism that will ensure the protection of Nigerians as they participate in researches.

The committee was an offshoot of the dormant Health Research Ethics Committee which had been in existence since early 1980's.

The terms of reference for the committee are to:

(a) set norms and standards for conducting research on humans and animals, including clinical trials;

(b) adjudicate in complaints about the functioning of health research ethics committees and hear any complaint by a researcher who believes that he has been discriminated against by any of the health research ethics committees;

(c) register and audit the activities of health research ethics Committees;

(d) refer to the relevant statutory health professional council, matters involving the violation or potential violation of an ethical or professional rule by a health care provider;

(e) recommend to the appropriate regulatory body such disciplinary action as may be prescribed or permissible by law against any person found to be in violation of any norms and standards, or guidelines, set for the conduct of research under this Act; and

(f) advise the Federal Ministry of Health and State Ministries Health on any ethical issues concerning research on health.

Section A

To whom does this code apply?

This code applies to all health research involving human participants, conducted, supported or otherwise subject to regulation by any institution in Nigeria.

Definition of Research and Coverage of Code:

Research here is defined as systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. It may consist of:

(a) Therapeutic procedures – interventions administered with the intent of providing direct benefit to the research participant
(b) Non-therapeutic procedures – interventions that are not administered with therapeutic intent and are only intended to answer the scientific question of the study

Activities which meet this definition constitute research for purposes of this code, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activities.

Health research that is conducted anywhere in Nigeria must comply with all sections of this code.

Section B

Exemption

Research activities in which the only involvement of human participants will be in one or more of the following categories are exempt from health research ethics committee oversight:

(a) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as:

(1) Research on regular and special education instructional strategies, or

(2) Research on the effectiveness of or comparison among instructional techniques, curricula, or classroom management methods.

(b) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behaviour, unless:

(1) Information obtained is recorded in such a manner that human participants can be identified, directly or through identifiers linked to the participants; and

(2) Any disclosure of the human participants' responses outside the research could reasonably place the participants at risk of criminal or civil liability or be damaging to the participants' financial standing, employability, or reputation.

(c) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are *publicly available* (note that this refers to availability of data and not the status of the custodian

of the information/data) or if the information is recorded by the investigator in such a manner that participants cannot be identified, directly or through identifiers linked to the participants.

(d) Studies that are meant to evaluate the outcome of procedures, programs and services are exempt because they are designed to produce information leading to improvement in delivery of procedures, programs and services. Such studies usually evaluate measures that are already in use and considered part of standard practice. They may include collection and analysis of data or collection of new data but they do not involve allocation into groups or randomisation.

(e) Studies that are designed to evaluate or assess quality of services, programs and procedures and formulate guidelines leading to their improvement are exempt. Such studies may involve the collection and analysis of some data.

(f) Innovative or non-validated medical treatment – treatment that is designed solely for the benefit of the patient but in which the ability of the treatment to result in the desired result is to some degree not proven. Such activities are exempt while recommending that they should be subjected to research in order to generate information about their efficacy as soon as possible.

(g) Clinical audit, where the study is designed and conducted solely to define or judge only current care, without reference to a standard. It may involve the collection and analysis of data but there is no allocation to intervention groups or randomisation and the services have been delivered before the audit is initiated.

Who determines exemption?

All exemptions shall be determined by the Health Research Ethics Committee (HREC) - *vide infra*. In summary, applicants conducting research that may be exempt shall submit the proposal or a written summary that contains enough information for judgement to be made, to the HREC. The HREC Chairperson or his designee, in consultation with HREC Administrative Officer – where one exists, shall decide whether the research is exempt. Where the Chairperson is uncertain and the uncertainty is unresolved after request for and provision of more information by the applicant, the proposal or summary should be referred to HREC. All applications for exemption must be brought to the notice of HREC at its regular meeting for discussion as may be deemed necessary by members of HREC.

Section C

Registration of Health Research Ethics Committees

In order for an institution to be able to conduct health research, the institution must have a registered health research ethics committee (HREC). The following are the guidelines for registration:

(a) Registration with National Health Research Ethics Committee (NHREC) shall require:

(1) An application by the authorized head of the institution or their authorized designee which among other things should include that the line of reporting authority of the Chairman of the HREC is directly to the Chief Executive of the proposing institution.

(2) A list of members of the proposed health research ethics committee identified by:

i. Name

ii. Qualifications

iii. Representative capacity

iv. Indications of experience such as trainings, certifications, licenses, etc., sufficient to describe each member's chief anticipated contributions to HREC deliberations.

v. Any employment or any other relationships (including stock ownership, receipt of grants, honorariums or support from potential research sponsors) that may be construed as conflict of interest within the context of membership of the HREC.

(3) All members of the proposed HREC must have completed NHREC approved training programs in research ethics. Additional training in research methodology and research administration is recommended. Copies of the certificates of completion of such programs must be submitted along with the application. The institution setting up the HREC must provide resources for such training.

(4) Statement of agreement to comply with the Nigerian Code of Health Research Ethics subsequently referred to as “the code”, governing HREC in the discharge of its responsibilities for protecting the rights and welfare of human participants of research conducted at or sponsored by the institution.

(5) Statement of commitment to provide meeting space of sufficient quality, office and storage space, sufficient staff and funds to support the HREC review and recordkeeping duties in order to guarantee that these duties can be accomplished with sensitivity and confidentiality.

(6) A statement of commitment to take full responsibility for all actions of each member of HREC in the course of performance of duties related to membership. The institution shall provide coverage for any liability of any member arising from service on HREC.

(b) The lifespan of any HREC shall be two years, after which the institution shall apply for re-registration. The application for re-registration must be submitted within the last 6 months of the expiry of the current registration. During the re-registration process, the institution shall submit:

(1) A current list of members of the health research ethics committee identified by:

i. Name

ii. Qualifications

iii. Representative capacity

iv. Indications of experience such as trainings, certifications, licenses, etc., sufficient to describe each member's chief anticipated contributions to HREC deliberations.

v. Any employment or any other relationships (including stock ownership, receipt of grants, honorariums or support from potential research sponsors) that may be construed as conflict of interest within the context of membership of the HREC.

(2) Certificates of completion of National Health Research Ethics Committee approved training programs in research ethics completed within 6 months of the expected start date of the registration of the HREC. Additional training in research methodology and research administration is recommended. Copies of the certificates of completion of such programs must be submitted along with the application.

(3) Copy of the primary statement of agreement to comply with the National Code of Health Research Ethics previously endorsed by the institution and the NHREC.

(4) Report of fulfilment of previously stated commitment to provide infrastructure and logistics to support the HREC review and recordkeeping duties.

(5) Complete record of the activities of the committee, including financial records, attendance register at statutory meetings, complaints, litigations, number, and titles of protocols received, reviewed, approved, rejected and pending, and the mean time from protocol submission to approval in each of the preceding 2 years.

(c) Where a registered HREC does not apply for re-registration during the life of its current registration, the HREC shall be considered de-registered and may apply anew to NHREC. No research may be conducted in the institution during this period of de-registration.

(d) Institutions may propose to have more than one HREC. In such instances, the jurisdiction of each of the HREC should be clearly defined and there should be open channels of communications between them that will allow transfer of proposals to the HREC with appropriate expertise. Researchers must not submit the same protocol simultaneously to more than one HREC within the same institution.

(e) The authority of HREC shall be limited to the boundary of the proposing institution or the activities of its permanent members of staff, unless otherwise specified by the NHREC. Where a permanent member of staff is the principal investigator of a study taking place outside the boundaries of the proposing institution, the researcher shall seek ethical oversight only from the institution in which he/she is a permanent member of staff. This provision does not preclude co-investigator(s) from seeking ethical oversight from their institution(s) where there is more than one study site.

(f) In lieu of an institution being able to constitute a health research ethics committee and where such institution desires to engage in research:

(1) Such institution shall establish a cooperative agreement with a registered HREC located within the same state of the federation as the institution.

(2) Where there is no registered HREC within the same state of the federation, agreement can be established with any HREC within the same geopolitical zone of the country as the institution.

(3) In the eventuality that there is no registered HREC within the same geopolitical zone, the institution should consult the NHREC for guidance.

(4) Where a registered HREC agrees to review proposals emanating from another institution, this arrangement shall last only for the period covered by the collaborative agreement and this cannot extend beyond the period of registration of the HREC by the NHREC.

(5) Institutions seeking to establish collaborative agreements with a registered HREC must submit an application to the NHREC.

(6) The reviewing HREC must be currently registered and must attest that it will maintain its registration status for the period covered by the proposed collaborative agreement.

(7) The applicant institution can have collaborative agreement with only one HREC at any given time, while the reviewing HREC can have multiple collaborative agreements subject to NHREC approval.

(g) Categories of HREC. The NHREC shall establish categories of HREC on the basis of the size of the committee, qualifications, training and experience of its members in research ethics and science, history of the committee (when established, past review activities, record keeping and compliance with requirements of the Code), resources available to the committee, supporting personnel and infrastructure of both the committee and the proposing institution.

(1) NHREC shall outline from time to time detailed criteria for categorization of HREC.

(2) Categorization of HREC shall be approved during regularly scheduled meetings of the NHREC.

(3) NHREC shall outline the types of research that different categories of HREC shall review.

Section D

HREC membership

(a) The authority to establish a HREC and the procedure of selecting members is vested in the Headship of the proposing institution.
(b) Each HREC shall have at least five members and if more, then the total membership must always be an odd number.
(c) The HREC shall be sufficiently qualified through the experience, expertise and diversity of its members, including consideration of age, gender, socio-cultural backgrounds, religion and sensitivity to such issues as community attitudes, to promote respect for its advice and counsel in safeguarding the rights and welfare of researchers and research participants. Members should have varying academic and professional backgrounds to promote complete and adequate review of health research conducted by the promoting institution.
(d) In addition to possessing the professional competence necessary to review specific research activities, the HREC shall be able to ascertain the acceptability of proposed research in terms of institutional regulations, applicable laws, and standards of professional conduct and practice. The HREC shall therefore include persons knowledgeable in these areas and whenever feasible, a lawyer.
(e) Each HREC shall include at least one member whose primary concerns are in scientific areas and at least one member whose primary concerns are in non-scientific areas.
(f) Each HREC shall include at least one member who is not affiliated with the institution and who is not part of the immediate family of a person who is affiliated with the institution.
(g) No HREC may have a member participate in the HREC initial or continuing review of any project in which the member has a conflicting interest.
(h) If HREC wishes to review research that involves vulnerable participants, such as children, prisoners, pregnant women, physically and psychologically disabled persons, the HREC shall co-opt one or more individuals knowledgeable about and experienced in working with

these participants for the review process. These individuals may not vote during the HREC meeting.

(i) Each HREC member must pledge to maintain confidentiality regarding all meetings, deliberations, applications, information on research participants and related matters that shall come to his/her knowledge during service on HREC even after leaving the HREC assignment. There is no time limit for this prohibition.

Section E

HREC functions and operations

In order to fulfil the requirements of this code, each HREC shall:

(a) Operate in accordance with the provisions of the current version of the National Code of Health Research Ethics issued by the NHREC. Additional guidance may be obtained from the Standard Operating Procedure (SOP) issued by the NHREC.

(b) Except when an expedited review procedure is used, research proposals shall be considered at regularly convened ordinary meetings of HREC at which a majority of the members are present, including at least one member whose primary concerns are in non-scientific areas.

(c) Where a member cannot physically attend a meeting, the member shall be accounted as being present if he/she can participate electronically, for example by teleconferencing for the majority of the duration of the meeting.

(d) **Process for regular research approval**

(1) HREC shall review prescribed application materials and have authority to approve, require modifications in (to secure approval) or disapprove all health research activities covered by this code.

(2) In order for research to be approved, the decision shall ordinarily be arrived at by discussion and consensus or it shall receive the support of a simple majority of those members present at the meeting.

(3) HREC may, at its own discretion, invite representations from the applicant(s), sponsor(s), institution(s) or any other person(s) that it may consider relevant to provide information pertinent to the research during the review process.

(4) HREC shall notify investigator(s) in writing of its decision to approve, disapprove or require modifications of the research activity.

(5) HREC shall have a maximum of 3 months from the date of receipt of a valid application to give its decision to the applicant. An application shall be considered valid only after receipt of all materials required by HREC to give a determination.

(6) Where HREC considers an application of such complexity that it cannot conclude the review, the application shall be referred to NHREC and the applicant duly informed within the stipulated 3 months.

(7) Where HREC does not conclude its review in 3 months and has not referred the case to the NHREC, the applicant shall have the right to complain to NHREC with the possibility of re-allocation of the proposal to another HREC and sanction of the concerned HREC

(8) Where HREC decides to disapprove a health research activity, it shall include in its written notification, a statement of the reason(s) for its decision and give the applicant an opportunity to respond in person or in writing within 3 months of receipt of the notification.

(9) Where HREC has received representation from the applicant in response to an existing decision, HREC may decide to uphold or modify its previous decision and shall communicate this decision to the applicant within 3 months of the representation.

(10) HREC is mandated to keep all records related to its decision(s) for a minimum of 10 years after completion of the research activity.

(e) **Process for continuing oversight of research**

(1) HREC shall conduct continuing oversight of research covered by this code at intervals adjudged by HREC as being appropriate to degree of risk involved in participation in the research.

(2) HREC shall have authority to examine all aspects and documents including consent forms, questionnaires, case report forms etc. that are related to the research and necessary for the HREC to conduct its oversight function.

(3) This shall be at least once a year or at least once during the lifetime of the research where the duration of the research is less than a year.

(4) HREC shall have authority to observe or cause to be observed on its behalf, the research and its consent process to ensure compliance with the highest scientific and ethical standards.

(5) HREC may initiate process of oversight of research in the event of receipt of complaints, information or data relevant to the research from any source.

(f) **Process for expedited review**

(1) HREC may expedite review of research in the following circumstances:

(a) Research is found to involve no more than minimal risk – meaning that the probability and magnitude of harm is no greater than that encountered in the daily lives of all (or the great majority) persons in the population (under normal circumstances) from which research participants are to be recruited. Note that minimal risk is applicable in non-therapeutic research only.

(b) Research does not involve vulnerable populations such as children, prisoners, pregnant women etc.

(c) Research does not contain serious methodological or ethical flaws

(d) Minor changes in previously approved research during the period for which approval is authorized.

(2) Expedited review may be carried out by the HREC chairperson or his designee from among members of HREC. In reviewing the research, the reviewer(s) shall exercise all of the authorities of HREC except that the reviewer(s) may not disapprove the research.

(3) The Chairman of HREC shall bring all research reviewed expeditiously to the next meeting of HREC for notice, discussion and ratification.

(g) **Process for amendment of research**

(1) HREC shall require that applicants apply for permission to amend protocols in any of the following circumstances:

(a) Where there are changes in any part of the research protocol that alters the risk benefit ratio of the research.

(b) Where there are changes in the named members of the team conducting the research.

(c) Where there are changes in research sites.

(c) Where there are changes in sponsorship, institutional guidelines, institutional structure, HREC requirements, national laws or exigencies that impact on the ethical conduct of research.

(2) HREC shall require that researcher submit an application for original research approval where in its opinion, the proposed amendments are substantial, such as but not limited to, change(s) in inclusion or exclusion criteria, randomization, interventions and outcome measures.

(3) Under no circumstance shall a researcher deviate from approved protocol, except such as is necessary to eliminate immediate hazard to research participants. The researcher shall notify the Chairman of HREC within 24 hours of such changes.

(4) In such circumstances as described in section (3) above, the researcher shall stop the research and the HREC shall conduct a thorough review of the research before authorizing suspension, continuation or modifications to the research.

(h) **Process for exemption**

(1) HREC may grant exemption from review in any of the conditions enumerated above (*vide supra*).

(2) Applicants seeking exemption shall submit the proposed research or adequate information about it to the HREC, sufficient, in HREC judgement, to make a determination.

(3) Exemptions may be granted by the HREC chairperson or his designee from among members of the HREC, in consultation with the HREC Administrative Officer – where one exists.

(4) In granting exemption, the reviewer(s) shall exercise all of the authorities of the HREC except that the reviewer(s) may not disapprove the research.

(5) Where the reviewer is uncertain and the uncertainty is unresolved after request for and provision of more information by the applicant, the proposal or summary should be referred to the HREC.

(6) The Chairman of HREC shall bring all exempted research to the next meeting of HREC for notice, discussion and ratification.

(i) **Process for suspension of research**

(1) HREC shall have authority to suspend research that is not being conducted:

(a) In accordance with HREC requirements or
(b) In accordance with existing legislation or
(c) In accordance with existing institutional guidelines; or
(d) Where research is associated with unexpected serious harm to participants.

(2) Any suspension of research shall include a statement of the reason(s) for the HREC action and shall be reported within 2 weeks to the researcher(s), institution(s), sponsor(s) and the NHREC.

(3) Researcher(s), institution(s) or sponsor(s) shall be entitled to ask for a reconsideration of the decision of HREC to suspend research within 2 weeks of receipt of notification**.**

(j) **Process for revision of suspension**

(1) HREC may reverse its decision to suspend research if the precipitant(s) of the action is resolved to HREC satisfaction

(2) The HREC will determine the case at its next regular meeting and may require that the researcher sign an agreement with HREC on its finding(s) and agreed remedial measure(s).

(3) Where HREC allows resumption of research, an oversight review of the research shall be carried out within 6 months or at least once during the lifetime of the research if it is shorter than 6 months.

(k) **Process for termination of research**

(1) Where the researcher(s), sponsor(s) or institution(s) is unable to offer or the HREC is unable to ascertain or enforce satisfactory remediation of the precipitant, HREC shall terminate the research.

(2) HREC shall indicate the reason(s) for the termination of research in writing within 2 weeks to the researcher(s), institution(s), sponsor(s) and the NHREC.

(3) Researcher(s), institution(s) or sponsor(s) shall be entitled to appeal the decision of HREC to terminate research to the NHREC within 2 weeks of receipt of notification.

(l) **Process for appeal of HREC decision to terminate research**

(1) Upon receipt of an appeal of the decision of a HREC to terminate research, NHREC may, at its discretion, take up such an appeal.

(2) Where the appeal is sustained,

a. NHREC may with reasons and in consultation with the institutional HREC, direct the institutional HREC to approve the research.
b. NHREC may with reasons and in consultation with the institutional HREC mandate modifications, which if undertaken, can allow the research to proceed or resume as the case may be.
c. Where NHREC mandates restoration of the research, the institutional HREC shall have powers of continuing oversight as outlined in relevant sections of this code

(3) NHREC may sustain the decision of the HREC and dismiss the appeal.

(m) **Process for review of multi-institutional research**

In the conduct of multi-institutional research, each institution is responsible for safeguarding the rights and welfare of human participants in its institution and for complying with this code.

(1) Where there are no more than 3 Nigerian research sites:

(a) The principal investigator at each research site may apply to the institutional HREC for review.

(b) HREC may, at its own discretion, adopt the approval of research by another HREC rather than conduct a fresh review and approve the research.

(c) Where the outcome of review is discordant (that is, some HREC approve while others disapprove the research), the applicant shall submit the comments from the different HREC to their institutional HREC for consideration and possible reconciliation.

(d) Where the outcome of review by different institutional HREC is favourable but different modifications are requested, the applicant shall submit the comments their institutional HREC for reconciliation.

(e) HREC shall, as much as possible, consult with each other in order to resolve discordant reviews and generate consistent single response to multi-site research.

(2) Where there are more than 3 Nigerian research sites:

(a) Applicant(s) may follow the steps outlined above or

(b) Applicant(s) may apply to NHREC directly.

(3) In international collaborative research

(a) Only applicant(s) with qualification(s) and background sufficient to serve as principal investigator(s) and based in a registered institution in

Nigeria that is capable of carrying out the proposed research shall apply for review of research.

(b) HREC may adopt the approval of another HREC or that of any other local or international ethics review committee (to the degree that such approvals comply with the requirements of the code and take account of local circumstances) and approve the research.

(c) Where the outcome of review is discordant, the applicant shall submit the comments from the different HREC or ethics committees their institutional HREC for consideration and possible reconciliation.

(d) Where the outcome of review is favourable but different modifications are requested, the applicant shall submit the comments from the different HREC or ethics committees their institutional HREC for consideration and possible reconciliation.

(e) HREC and ethics committees shall, as much as possible, consult with each other in order to resolve discordant reviews and generate consistent single response to multi-site research.

(n) **Materials Transfer Agreement**

Transfer of samples and biological materials such as animals, herbs and plants out of Nigeria shall require a Materials Transfer Agreement (MTA) detailing the type of materials, anticipated use, location of storage outside Nigeria, duration of such storage, limitations on use, transfer and termination of use of such materials subject to any law, regulations and enactment in Nigeria.

The purpose of MTA is to protect the interests of local researchers and Nigeria's human and natural resources in all its biodiversity as well as how they can be legitimately used. It ensures that the interests of all relevant parties, human

and community participants in research and the Nigerian nation are protected from exploitation and egregious harm.

(a) The MTA shall be signed by all parties involved in the research including local and international principal investigators, heads of local institutions, research sponsors and other relevant parties.

(b) HREC shall review the MTA to ensure consistency with the stated objectives of the research, the contents of the informed consent documents and the principles enumerated above. The HREC shall grant provisional approval pending the submission of MTA to NHREC and receipt of acknowledgement from the NHREC.

(c) The applicant for research review shall file a copy of the MTA and provisional approval by the institutional HREC with the NHREC for record purposes only.

(d) NHREC shall acknowledge receipt of the MTA to the applicant who shall inform the institutional HREC.

(e) Institutional HREC shall grant final approval to research involving international transfer of Nigerian samples after all other criteria stated in this code for approval of research has been met and upon receipt of acknowledgement of MTA.

(f) The MTA does not vitiate the right of research participants or communities to request that their samples be withdrawn from research according to the terms of the informed consent process.

(g) Where there is any change in the MTA, a request for amendment of protocol shall be submitted to HREC and HREC shall consider this in the usual manner used for amendment of protocol.

(h) Where there is verifiable proof that the applicant has sent a copy of the MTA to the NHREC and has not received an acknowledgement in 2 weeks, the applicant shall file evidence of this with the institutional HREC who shall proceed to issue the final approval for the research.

(o) **Communication with other regulatory agencies**

HREC(s) shall have the authority to communicate with other ethics regulatory agencies and institutions about matters relevant to review of research. In such instances, HREC shall notify researcher(s), sponsor(s) and institution(s) about the communication(s).

(p) **Process for NHREC review of research**

(1) The NHREC may decide to review a research where:

(a) The research is nation-wide in coverage or

(b) The research involves more than 3 sites in Nigeria or

(c) The research was referred to NHREC by HREC(s) or

(d) There is no HREC in an institution and the institution does not have a HREC cooperative agreement or

(e) The researcher considers the researcher of such complexity that there may be inadequate expertise in any one local institution or

(f) At its discretion.

(2) The NHREC may review research by:

(a) Mandating review by any HREC in the country to act as a “HREC of record” and review the research on its behalf.

(b) Constituting itself into a review committee and exercising all the powers applicable therein as outlined for HREC in this code.

(c) Constituting an *ad hoc* HREC at its discretion.

(3) Where NHREC utilizes any of these methods, it shall assign continuing oversight of research to institutional HREC.

(4) Where NHREC assigns continuing oversight functions to institutional HREC, the institutional HREC shall have all the authority of oversight function as outlined in relevant sections of this code

(q) **Fees**

HREC may charge fees for any or all of its activities, at its discretion and in consultation with the principal officers of the institution.

(1) Fees may vary depending on the size, complexity, duration, status of researcher and sponsor of the researcher.

(2) Fees must be commensurate with anticipated expenses required for adequate oversight of research.

(r) **Protection of participants in the research enterprise**

HREC must protect the rights of researcher(s)

(1) HREC shall protect the right of researcher(s) to publish their research.

(a) In certain situations, this will require the submission of an agreement between sponsor(s), institution(s) and researcher(s) allowing researcher(s) to use the outcome of research in manner consistent with current practice within the research community.

(b) HREC shall evaluate whether such agreement is necessary when the research is being reviewed and if found necessary, request same before approval is given.

(2) HREC shall protect researchers from exploitation.

(a) In certain situations, this will require the submission of an agreement between sponsor(s), institution(s) and researcher(s) indicating rights to, ownership of and rights of access to data, resources, intellectual property and infrastructure generated in the course of the research.

(b) HREC should evaluate whether such agreement is necessary when the research is being

reviewed and if found necessary, request same before approval is given.

(3) HREC shall protect communities participating in research from exploitation.

(a) In certain situations, this will require the submission of an agreement between sponsor(s), institution(s), researcher(s) and the community indicating adequate community consultation and agreement with the proposed research.

(b) HREC should evaluate whether such agreement is necessary when the research is being reviewed and if found necessary, request same before approval is given. This implies that the HREC has ordinarily found the study approvable but requires that the community should be engaged and their assent sought before research is allowed to proceed. In this circumstance, the HREC cannot change its decision on the approval status of the research once the community engagement process has commenced. If the community engagement fails, then the research cannot proceed in that community

(c) Where applicable, such community assent or engagement efforts shall be documented and evidence of same submitted to HREC during the research review process.

(d) In some instances, it will be necessary to set up a community advisory board (CAB). Such boards may be established by the study investigators in consultation with the community.

(e) Members of CAG shall be selected by the community through their usual consultative process and it shall include broad representation of community members based on age, sex, religion and other community parameters that may be relevant to the study. It may include relatively more representation from population of interest to the study. It may include representatives from the research group and

other non-community members whose special knowledge or expertise may be considered necessary for effective functioning of the community advisory group. In all instances, members of the community must constitute a simple majority of the CAB.

(f) The function of the CAB is to provide community members opportunity to share their views about ethical issues that proposed research raises for individual community members, community as a whole, neighbouring communities and their region/nation. The CAB also provides a forum for dissemination of pre, intra and post-research information to the community. Members of CAB may provide advice and support as needed for the successful implementation of research.

(g) The definition of community shall vary with research and shall be based on application of the best scientific principles.

(4) HREC must protect researcher(s) from undue pressure from sponsor(s), institution(s), participant(s) or any other source by ensuring that no researcher enters into an agreement or is subjected to circumstances that limits his/her legal rights, freedoms and obligations under Nigerian law to pursue his/her research activities.

Section F

Ethical Principles and Guidelines for HREC approval of research

In order to approve research covered by this code the HREC, shall determine a balance between the various principles guiding the ethical conduct of research, some of which are outlined below. Since some of these will inevitably conflict, judgement and consensus are essential in determining whether a research should be conducted.

a. Research must have **social or scientific value** to either participants, the population they represent, the local community, the host country or the world, in order to justify the use of finite resources and risk exposure of some participants to harm. Research should evaluate issues that lead to improvements in health and contribute to meaningful knowledge. Such knowledge should be disseminated to all relevant stakeholders during and after the conduct of research. In certain instances, for example in some international collaborative studies, research should be integrated with comprehensive capacity building, technology transfer and health care delivery strategies that address significant local health problems and add value to local participants of research, including researchers, institutions, communities and the country.

b. For research to be ethical, it must be have **scientific validity**. Research lacking clear scientific objective(s); using invalid methodology; that is underpowered; lacking equipoise (for clinical studies); whose operationalizing plans are inadequate within the context of the environment where research would be conducted; lacks plausible data analysis plan (including a specific role for a Data and Safety Monitoring Board [DSMB] in clinical trials) and research with biased measurement(s) of outcome(s) is unethical.

c. Ethical research must ensure **fair selection of participants based on the scientific objective(s) of the research** while minimizing risk. This requirement refers to both who is included and who is excluded from recruitment and the strategies employed for participants' recruitment (including choice of research sites and communities). Regardless of this requirement, participants who are at

excessively increased risk of harm should be excluded. Children, pregnant women, socially, culturally, economically, politically, educationally, physically and psychologically disadvantaged groups, groups with constrained autonomy and other vulnerable populations should not be excluded from research without explicit reasons for doing so; particularly from studies that can advance their health and well being. However specific safeguards should be included to protect the vulnerable, appropriate to degree of risk. Groups, communities, participants and researchers who bear the burden of research should share in the benefits.

d. All research involve risks; to be ethical therefore, there must be **valid attempts to minimize risks and maximize health related benefits** (as distinguished from risks and benefits of therapies that participants would be exposed to even if they were not participating in research or incidental risks or benefits) to participants in order to engender favourable risk benefit ratio within the context of where the research is being conducted.

(1) Where the risks outweigh the benefits to the participants, other criteria outlined in this code must justify such risks.

(2) Risks and benefits should be considered at the level of individual research participants and at the community, whenever appropriate.

(3) Comprehensive delineation of risks and benefits should be done for participants during the research, the population hosting the research and for both participants and population after completion of research

(3) Therapeutic procedures must fulfil requirements of clinical equipoise – there must be genuine uncertainty, among at least a significant minority of unbiased acknowledged experts who are not associated with the study under consideration, about preferred treatment.

(4) The risks associated with non-therapeutic procedures must be minimized by:

(a) Procedures consistent with sound research designs

(b) Procedures that do not expose participants to undue risk

(c) Using procedures already being performed on participants for diagnostic or therapeutic purposes, whenever appropriate

(d) Applying risk-knowledge calculus to ensure that risks are reasonable compared to the knowledge to be gained from the study.

e. For research to be ethical, it must undergo **independent review**. Research participants, researcher(s), sponsor(s) and institution(s) have multiple and overlapping interests which can generate conflicts and distort judgements. Independent review, through a system of ethical review and oversight of such systems assures society that reasonable attempts have been made to minimize the potential impacts of these conflicting interests and ensure balanced judgements.

f. **Informed consent** is a *sine qua non* for ethical conduct of research. In order for consent to be valid, it must have the following components

(1) Adequate information must be provided at the educational level no higher than that of individuals with at most 9 years of education in Nigeria.

(2) The design of the consent process must be appropriate for the type of research, expected participants, risks anticipated and the research context.

(3) Consent forms shall not be longer than 8 pages in order to ensure comprehensibility and enhance recall of pertinent information. Unnecessary verbiage, legalisms, jargons and truth-dumping are to be avoided. The recommended format for each page of the consent form is as follows:

i. Paper size – A4
ii. Font – Times New Roman or similar
iii. Font Size – 12

iv. Spacing – 1.5
v. Margins – 2.5 cm, no gutter

(4) Where indicated, additional information can be provided on supplementary information sheets.

(5) The informed consent document shall contain the following aspects:

i. Title of the research
ii. Name(s) and affiliation(s) of researcher(s) of applicant(s)
iii. Sponsor(s) of research
iv. Purpose(s) of research
v. Procedure of the research, what shall be required of each participant and approximate total number of participants that would be involved in the research.
vi. Expected duration of research and of participant(s)' involvement.
vii. Risk(s)
viii. Costs to the participants, if any, of joining the research
ix. Benefit(s)
x. Confidentiality
xi. Voluntariness
xii. Alternatives to participation
xiii. Incentive (inducement) to participants
xiv. Consequences of participants' decision to withdraw from research and procedure for orderly termination of participation.
xv. Modality of providing treatments and action(s) to be taken in case of injury or adverse event(s).
xvi. What happens to research participants and communities when the research is over.
xvii. Statement about sharing of benefits among researchers and whether this includes or exclude research participants.
xviii. Any apparent or potential conflict of interest.
xix. Detailed contact information including contact address, telephone, fax, e-mail and

any other contact information of researcher(s), institutional HREC and head of the institution.

(6) Research participants are entitled to retain a copy of the consent form.

(7) Where appropriate, researcher(s) may be required to undertake a re-consenting process during the course of research as determined by the HREC.

(8) Where, in ordinary circumstances, participant(s) are unable to provide written consent, researcher(s) must propose a process of consent that adequately records participants' informed decision such as witnessed thumb-printing or witnessed audio recording. The process proposed must be approved by the HREC before the research commences.

(9) HREC may require that all or some types of consent process be witnessed.

(10) Researcher(s) must keep all copies of consent form and make them available for examination by participant(s), sponsor(s), institution(s), HREC and NHREC.

(11) Where appropriate, HREC may require researchers to provide translations of consent processes appropriate to the socio-cultural characteristics of the population to be studied.

(12) All consent activities must be documented.

(13) Consent in other situations, including research involving children, persons with diminished autonomy, vulnerable populations and other extraordinary situations, including waiver of consent, are described in other guidance documents issued by NHREC.

(g) For research to be ethical there must be **respect for potential and enrolled participants**. This implies that potential participants be treated with respect from the

moment that they are approached to the conclusion of the research should they choose to participate. Their right to privacy may not be needlessly compromised. Participants must know that their involvement is voluntary and that they can withdraw at any time without penalties. However, data, samples, etc. already contributed to the research up to that point may not needlessly be withdrawn as this may jeopardise the scientific validity of the research, unjust to those who remain in the study and all or part of their sample or data may have been used or modified into different form(s), including presentation at meetings or publications by the researchers.

Respect entails that participants must be treated as partners in the research enterprise with every opportunity taken to inform them of the progress of the research and any new finding that may have potential impact on their health and well being, and on their continued participation in the research. It also entails protection of the welfare of research participants. This means that the process of research must be carefully monitored to ensure that participants are not exposed to excessive risk and all adverse events are examined in detail and promptly. Such adverse events must also be reported to HREC and efforts made to prevent future occurrences. Full medical care must be provided to participants who have suffered such adverse events and where warranted compensations paid.

The requirement to respect both enrolled and potential participants means that researchers should engage with communities where research is being conducted whenever this is appropriate. In certain instances, community consultation or assent may have to precede research activities in order to engender community buy-in and to respect the socio-cultural values of the community and its institutions. It may also be necessary to inform the community from time to time about the progress of the research, pertinent findings that may influence their health and well being, and the outcome of the research.

(h) For research to be ethical, nothing must be done to undermine the **trust relationship** that is at the heart of the researcher(s)-participant(s) relationships. This requires that

there is transparency in all matters relating to the research enterprise including clear description of goals, risks, benefits, alternatives to participation and voluntariness. It is also necessary to determine the social value of the research and engage in creative approaches for effective representations and involvement of researchers and communities in the entire enterprise. Strategies for dynamic and reciprocal collaboration that leads to transformation of essential relationships based on reciprocity are also essential. This trust principle encourages the engagement of individual participants and communities, respects local socio-cultural values and encourages the provision of relevant and timely feedback to communities.

(i) For research to be ethical, **the interest of participants, researchers, sponsors and communities must be protected.** This will ensure that the research has lasting impact, transfers technology where appropriate, contributes to capacity building and demonstrates respect for socio-cultural and other differences. Risks, benefits and responsibilities of research must be shared during the development, planning, conduct, dissemination of results. Intellectual property, indigenous knowledge and contributions of all parties must be taken into consideration, adequately protected and compensated particularly where research leads to tangible or intangible benefits. Satisfactory parameter(s) that shall determine sharing of commercial and other benefits should be clearly articulated and where indicated, benefit sharing agreements, materials transfer agreements, patent rights, intellectual property and royalties' distribution agreements should be signed before initiation of research.

(j) For research to be ethical, it must be conducted in accordance with the principles of **good clinical and laboratory practices**. These are international standards for designing, conducting, and reporting clinical trials that involve human participants. Compliance with these standards is additional assurance that the rights, safety and well-being of trial participants are protected in a manner that is consistent with the highest ethical and scientific standards.

Section G

HREC Education and Training Responsibility

(a) HREC shall organise, cause to be organized on its behalf, sponsor, support or associate with training and educational programs for biomedical, social and behavioural sciences' researchers.

(b) In order for such programs to be accepted for purposes of membership of HREC and as evidence of satisfactory training of biomedical researchers for purposes of research review, the curriculum must be certified by NHREC.

(c) Suitable educational programs must contain modules on national code of health research ethics, principles of research ethics, functions of HREC, research integrity and misconduct. Additional training in research methodology and research administration may also be provided.

(d) NHREC may from time to time certify short courses and diplomas in health research ethics in Nigeria

Section H

Independent Educational and Training Activities in Research Ethics

(a) Suitably qualified individuals and organizations shall have the right to provide training programs in research ethics for biomedical, social and behavioural sciences' researchers.
(b) For such programs to be acceptable for the purposes of membership of HREC and considered adequate training of biomedical researchers applying for review of research, the curriculum must be certified by the NHREC.
(c) Suitable educational programs must contain modules on national code of health research ethics, principles of research ethics, functions of HREC, research integrity and misconduct. Additional training in research methodology and administration may also be provided.

Section I

HREC Research Ethics Consultation and Clinics

(a) HREC may conduct ethics' clinics and consultations, at its own discretion, and upon payment of fees, as it may determine, for the purposes of providing advice to researchers during the development of research protocols or during the conduct of research.
(b) Such clinics and consultations shall be rigidly separated from the process of ethical review of research and shall not have any effect on HREC review or oversight functions.
(c) NHREC shall certify and maintain a record of all individuals authorized to provide ethics consultation and run ethics consultation clinic in Nigeria

Section J

Independent Research Ethics Consultation and Clinics

(a) Suitably qualified individuals or organizations may conduct ethics consultations and clinics, for fees, during the course of protocol development or during the conduct of research.
(b) All independent ethics consultations and clinical services must be certified by NHREC according to guidelines that it may release from time to time

Section K

HREC Records and Reports

HREC shall prepare and maintain adequate documentation of all its activities, including the following:

(a) All materials pertinent to research review such as:

(1) Copies of all research proposals reviewed.

(2) All reviews that accompany the proposals.

(3) Copies of approved consent documents, including forms, adverts etc.

(4) All progress reports submitted by researcher(s), institution(s) and sponsor(s).

(5) All reports of injuries to participants and adverse events.

(6) Attendance at meetings.

(7) Date proposals submitted and date approval given.

(8) Financial records.

(b) Minutes of HREC meetings which shall be in sufficient detail to show:

(1) Attendance at the meetings.

(2) Actions taken by the HREC.

(3) The vote on these actions including the number of members voting for, against, and abstaining.

(4) The basis for requiring changes in or disapproving research.

(5) A written summary of the discussion of controversial issues and their resolution.

(c) Records of continuing oversight activities.

(d) Copies of all correspondence between the HREC and applicants, researchers, sponsors, and any other agent consulted by HREC in the discharge of its duties.

(e) Statements of complaints or information/data used to determine decision(s) on research.

(f) The applicant applying for ethics review must submit the following:

(1) Copy of the research proposal.

(2) Copy of all materials to be used for the consent process such as consent forms and advertisements, including but not limited to promotional materials, advertisements, notices in newspapers, trade publications, audio, video and web advertisements.

(3) Copy of brief curriculum vitae (2 – 3 pages) of the principal investigator(s) sufficient to judge ability to carry out the proposed research.

(4) Copy of letter(s) of support from co-investigator(s), laboratories and sources of required resources.

(5) Where applicable, letter of sponsorship.

(6) One page plain language summary of the research.

(7) Copies of all questionnaires and instruments to be used for the study.

(8) Other ethics committee(s)' review of the study and their decisions, where applicable.

(9) Evidence of NHREC certified informed consent training by applicant and co-investigator(s) undertaken within 2 years of the date of submission of a valid application to HREC.

(10) Copies of all agreements such as the MTA etc. where indicated.

(g) Investigator(s) must submit an annual report on their research to HREC within 3 months of expiry of their current research approval. This report shall contain brief summary statistics about the research – number of participants recruited and their breakdown, number of adverse events, complaints and their resolution, any ongoing investigation or review and copies of any publications, reports or abstracts arising from the research. Failure to submit annual report within the stipulated period shall lead to termination of research by HREC. HREC may issue letters of notification advising researchers of the need to submit annual reports.

(h) HREC shall determine the form and number of copies of materials to be submitted by applicants for research review.

(i) All HREC records shall be accessible for inspection and copying by NHREC and through NHREC by other agencies at the discretion of NHREC and in a reasonable manner.

Section L

NHREC oversight of HREC functions

NHREC shall exercise oversight of HREC functions in order to promote the health and well being of research participants.

(a) NHREC shall review annual reports of HREC functions including:

(1) Record of attendance at HREC meetings to ensure that forums are formed, membership is diverse, outsiders are co-opted as indicated etc.

(2) Record of all materials pertinent to approval of research and their determinations.

(b) NHREC shall review materials from HREC to ensure that registration status is maintained.

(c) NHREC shall review the commitment of institution(s) to provide resources for proper functioning of HREC.

(d) NHREC shall, at its own discretion, conduct oversight visits to HREC.

(e) NHREC shall conduct any other activities in the exercise of its functions as enumerated in the relevant laws and guidelines.

Section M

HREC Compliance and Disciplinary Powers

HREC shall have the power to recommend to NHREC that disciplinary action is taken against researcher(s) who violates the norms, standards and guidelines set out in this code, institutional guidelines, rules and regulations and the law.

(a) Such recommendations shall be made after exhaustion of all steps outlined in this code for resolution of problems identified in research.

(b) Such recommendations shall be made after the matter is discussed at a regularly convened ordinary meeting of the HREC.

(c) All records pertinent to the matter shall be forwarded to the NHREC within 2 weeks of the HREC meeting at which the decision is taken to recommend the matter to NHREC and a formal notice shall be issued to the researcher(s), institution(s) or sponsors(s) by the HREC.

(d) Such recommendation shall not preclude the HREC from reporting acts that are clear violations of civil and criminal law such as fraud, assault and battery to constituted authorities or clear violations of institutional rules and guidelines to the institution where the researcher is based.

Section N

NHREC Compliance and Disciplinary Powers

(a) NHREC may advertise all cases of research misconduct reported to it, its plan of action and the resolution of cases to the public.

(b) NHREC shall recommend disciplinary action against researcher(s) to the institutional and legally constituted authorities.

(c) NHREC shall report all cases of fraud, deception, infamous conduct, plagiarism, fabrication, falsification to the appropriate regulatory, the police and other relevant authorities.

(d) NHREC shall bar researchers from conducting research for variable periods of time depending on the severity of findings of misconduct.

(e) NHREC shall cause researchers to make restitution appropriate to the case under consideration to research participants, collaborators, institutions, sponsors or any other persons as may be required by the facts of the case.

(f) NHREC shall institute legal action against researchers and institutions found in violation of these guidelines

(g) In international collaborative research, NHREC shall report its findings of misconduct against researchers, sponsors and collaborators to the national ethics regulatory agency of the country of origin of the researcher. This does not preclude the institution of appropriate legal action, where indicated, against such researchers, his/her representatives, collaborators or agents in Nigeria.

Section O

Continuing Review of the National Code of Health Research Ethics and sub-codes

The NHREC shall regularly update, revise, edit and modify the National Code of Health Research Ethics in accordance with new developments in international research ethics, local laws and enactments and at its discretion.

The most recent version shall always be posted on the index page of the web site of the NHREC (http://www.nhrec.net) and shall be dated. The existence of a code with a more recent date invalidates all the previous codes and their provisions. The new code shall be enforced from the date indicated on it. Its provisions shall not be retroactive.

Sub-codes provide additional guidelines and where their provisions appear to conflict with that of the National Code of Health Research Ethics, the latter shall be the superior authority.

The National Code of Health Research Ethics shall be available in different Nigerian languages but the English version shall be the only correct interpretation of the provisions of the code.