

MINISTRY OF HEALTH, GHANA



Government of Ghana

**NATIONAL IMMUNISATION TECHNICAL ADVISORY GROUP, GHANA
(NITAG-GHANA)**

INTERNAL PROCEDURES MANUAL

EXPANDED PROGRAM ON IMMUNISATION

14 May, 2021

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ABBREVIATIONS/ACRONYMS

AMSTAR	A Measurement Tool to Assess Systematic Reviews
CAQR	The Critical Appraisal of Qualitative Research
CASP	The Critical Appraisal Skills Programme
COI	Conflicts of interest
EPI	Expanded Programme on Immunization
GES	Ghana Education Service
GHS	Ghana Health Service
GRADE	Grading of Recommendation, Assessments, Developments & Evaluations
HSMTDP	Health Sector Medium Term Development Plan
MoH	Ministry of Health
NITAG	National Immunization Technical Advisory Group
PHD	Public Health Division
PICO	Population or patient or problem; Intervention; Comparator; Outcome
RV	Rotavirus vaccine
SIGN	The Scottish Intercollegiate Guidelines Network
ToR	Terms of Reference
TWG(s)	Technical Working Group(s)
VPD(s)	Vaccine Preventable Disease(s)
WGs	Working Groups

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1 OVERVIEW

1.1 DEFINITION

The National Immunization Technical Advisory Group of Ghana (NITAG-Ghana) was established by the Ministry of Health on 16th May, 2018 to provide recommendations on vaccine/vaccine delivery technologies policy in accordance with the National Health Strategy and the National EPI Policy and Guidelines. This document is a work of the NITAG-Ghana on the development of standard operating procedures for its operations.

It is a body of national experts advising the Ministry of Health (MOH) and Partners on all technical and scientific matters related to vaccines and immunization in Ghana. The advisory group is technical and the decisions/recommendations made are evidence-based and independent of influence from political and industry/manufacturing sectors.

The group does not implement activities or supervise immunization programmes, but instead provides technical advice on policy analysis and strategy formulation for all vaccine-preventable diseases. The Group guides the MoH on identifying and monitoring important data and the latest scientific immunization recommendations and advancements.

1.2 APPOINTMENT OF MEMBERS AND CHAIR

NITAG-Ghana has 21 as members described as follows:

1. Eleven core members from nine different fields (paediatrics, immunization, epidemiology, health economics, microbiology, pharmacy, research, immunology, and social science),
2. seven ex-officio members (representing the Ministry of Finance and Economic Planning, Ministry of Health, Ghana Health Service, Ministry of Education/Ghana Education Service-GES, and Ministry of Environment Science and Technology, Food & Drugs Authority, and a representative from National Polio Committees), and
3. two liaison members from World Health Organization (WHO) and United Nations Children's Fund (UNICEF). The ex-officio and liaison are the non-core members.

NITAG-Ghana is supported by a technical and scientific secretariat located in office of the Expanded Programme on Immunization (EPI) of the Disease Control Department, Public Health Division (PHD), Ghana Health Service of the MoH. A 7-member team forms the Secretariat which is headed by a Public Health Specialist with much experience in vaccines and immunization related fields.

Core members are recognized experts who serve in their individual capacity and do not represent the interests of a particular group, stakeholder, private industry or government entity. They are neither supervised nor do they report, directly or indirectly, to MOH. Core members advise and decide on the final set of recommendations. Non-core members who on the other hand, represent either government (ex-officio) or non-government (liaison) entities may participate in all sessions but are not involved in final decision-making.

The MoH appointed the core members and its Chair from the pool. Members were selected for their independence and nationally recognized expertise in their area of specialization. They were appointed for four years with a renewal option for another single term.

The process for the selection of core member was as follows:

- Mapping of experts in the country
- An interview was conducted for the short-listed candidates
- The list of successful candidates was presented to the Minister of Health
- Appointment letters were issued by the Minister of Health
- Appointed members were inaugurated by the Minister of Health on May 16, 2018

1.3 TERMS OF REFERENCE OF NITAG-GHANA MEMBERS

The terms of reference have been provided by the MoH. The NITAG-Ghana serves as a scientific and technical advisory body to the MoH on matters relating to vaccines/ vaccine delivery technologies and immunization policy, within its overall terms of reference.

The terms of reference assigned to the NITAG-Ghana are to provide technical expertise on the following:

1. Review existing national policies and recommend the best options.
2. Provide guidance to the national immunization programme on the formulation of strategies for the control of Vaccine Preventable Diseases.
3. Provide guidance on monitoring and evaluation of the impact of immunization programmes
4. Advise on the surveillance on Vaccine Preventable Diseases
5. Advise on strategies to assess the coverage and effectiveness of the vaccination programme
6. Provide guidance, where appropriate to Ministries, Departments and Agencies (MDAs) in the formulation of policies, plans and strategies for research, development and introduction of new vaccines and vaccine delivery technologies for the future.

The MoH will review, prioritize, and make final decisions on all recommendations provided by the NITAG-Ghana.

1.4 ROLES AND DUTIES

Core members shall participate in the functioning of NITAG-Ghana including participation in technical working groups. They are the only ones entitled to vote.

Ex-officio and liaison members (non-core members) may participate in meetings and working groups but will not vote. The role of these liaison members is to bring the point of view of their institution to NITAG-Ghana, propose agenda items on behalf of their institution, and report back to their institution on NITAG-Ghana decisions.

The technical and scientific secretariat of the NITAG-Ghana is located in the office EPI. The secretariat of NITAG-Ghana is responsible for organising meetings in consultation with the Chair and ensures the smooth running of NITAG-Ghana and the quality of work produced. The responsibilities of the NITAG-Ghana secretariat shall include the following:

- Submission of requests from EPI to NITAG-Ghana through the Chair
- Forwarding NITAG-Ghana recommendations to the MOH
- Preparation of the meetings' agenda and convening meetings in consultation with the Chair
- Taking minutes, drafting and finalizing reports resulting from NITAG-Ghana deliberations
- Distributing on time finalized minutes and reports to the NITAG-Ghana
- Archiving documents, including declaration of interest forms and confidentiality agreements
- Facilitating and coordinating the work of NITAG-Ghana technical working groups (TWG) by preparing background documents and technical reports
- Preparing regular annual technical and financial reports
- Creating and regularly updating the NITAG-Ghana website
- Any other responsibility so assigned by the Chair

The Chair shall communicate with NITAG-Ghana members about the meetings and all relevant issues concerning NITAG-Ghana. He/she or a delegated representative shall be responsible for official communication with national authorities and the public. He/she leads deliberations during meetings. He/she monitors members' performance by keeping track of elements such as: members' attendance to meetings; prompt response to requested comments on documents; and participation and contribution in working groups. The Chair coordinates the development of the annual work plan and ensures it is implemented effectively and efficiently.

1.5 TERM OF OFFICE AND PROCEDURE FOR REPLACEMENT

The first term for core members will consist of four years. A core member (including the Chair) may be replaced in circumstances where the core member is unable to participate in the activities of NITAG-Ghana such as missing three (3) consecutive meetings without due process of adequate and timely notification to the Secretariat; non-performance of the core member as per decision of the group; or resignation following three months' notice.

Absenteeism of a NITAG-Ghana core member for three consecutive meetings is discussed at a NITAG-Ghana meeting before initiating proceedings for replacement of the member.

NITAG-Ghana members may be invited to propose names for the positions to be replaced. In this case, the NITAG-Ghana will propose a list of three names for each position to be replaced. The Chair or a delegated representative will forward the same to Secretariat for onward submission to the MoH for final selection. Should the three (3) names be unacceptable to the appointing authority, NITAG-Ghana may be given another opportunity to forward three other names.

Non-core members and other groups may be invited to propose names for positions of replacement.

In the event that the Chair has to leave before the end of his/her term, the MoH will appoint a new Chair proposed by the core members. In the interim period the NITAG-Ghana core

members shall select an Acting Chair till a substantive Chair is appointed.

The first term will be automatically renewed for all core members for another four years unless by reason of non-performance or resignation. This will ensure continuity at the beginning of a steep learning curve, and maximum productivity. For the second term, the NITAG-Ghana Chair is proposed by the core members and appointed by the MOH.

At the end of the second term, renewal of core members will take place for a maximum of fifty percent of them. These members will be selected through volunteering and/or balloting. The Secretariat will suggest to NITAG-Ghana up to three (3) names for each member to be replaced; the Chair will forward to the NITAG-Ghana selection for onward submission to the MoH.

At the end of the second term, the process for the selection of core member shall be as described in Section 1.2

Liaison and ex-officio (non-core) members will be nominated by the institutions that they represent and will have no term limits.

1.6 CONFLICT OF INTEREST AND BIAS

Each member including the Chair will declare their interests and let members judge whether there is conflict of interest. Members then sign a conflict-of-interest declaration form (Refer to Appendix 4: Conflict of Interest). This form shall be signed at each meeting by members.

Participation of NITAG-Ghana members and other experts who have identified conflicts of interest in NITAG-Ghana activities including in TWGs shall be managed according to the procedures outlined in the NITAG-Ghana Conflict of Interest Declaration Form (Refer to Appendix 4: Conflict of Interest).

CONFIDENTIALITY AGREEMENT

The confidentiality agreement is applicable throughout the period during which the undersigned is involved in the group activities, irrespective of form, and for a period of four years running till the end of their term of office, unless otherwise specified by the institution/individual. The general confidentiality agreement is to be signed once. (Refer to Appendix 3: Confidentiality Agreement).

In addition, NITAG-Ghana may require from other institutions specific information relevant to their deliberations, which might have some intellectual property rights. To guarantee suitable use of such information by NITAG-Ghana whilst safeguarding the rights of property of the institutions or individuals, NITAG-Ghana members may be required to sign information specific confidentiality agreements.

2 OPERATIONS AND PROCEDURES

2.1 DRAWING UP WORK PLANS

NITAG-Ghana will develop an annual work plan before the beginning of each fiscal year. The work plan will outline and prioritize topics to be discussed based on requests from MoH and partners in line with the EPI comprehensive Multi-Year Plan (cMYP), regional and global

immunization strategies and the Health Sector Medium Term Development Plan (HSMTDP). In addition, NITAG-Ghana will be proactive in identifying any topic that may require MoH attention in the future. The topics to be included in the following year work plan will be discussed at the last meeting of the current fiscal year.

The Secretariat of NITAG-Ghana is responsible for drawing and presenting the work plan within two weeks of the last meeting of the previous year. The work plan will be adopted at the first meeting of the new fiscal year by NITAG-Ghana core members. The plan remains a living document and may be reviewed every half year or as the case may be. The revision of the plan will be informed by quarterly monitoring reports as well as periodic evaluation reports.

Under certain circumstances, a special meeting may be called to review work plans. Otherwise review of the work plan can be addressed as an agenda during half-yearly meetings, which are the planned periods for holding meetings.

2.2 MONITORING AND EVALUATION FRAMEWORK

The work plan will be backed up with a monitoring and evaluation plan with appropriate indicators. The indicators may be selected from the list proposed by WHO (*Reference: Indicators to assess National Immunization Technical Advisory Groups, Blau et al., 2013*) and must allow for the monitoring and evaluation of the work plan implementation. The elements to be evaluated include inputs, processes, outputs, outcomes and impact.

To ensure that the objectives of NITAG-Ghana are met, the following will form part of the monitoring and evaluation process indicators: -

- Declaration of conflicts of interests by members
- Agenda and background materials distributed ahead of meetings in a timely manner (at least two weeks prior to any meeting)
- Number of meetings planned and successfully conducted confirmed by presence of minutes
- Number of recommendations provided to MOH

The secretariat shall prepare a half-yearly monitoring report that will inform review and revision of the work plan. An internal review will be conducted annually. At the end of the second year there shall be an external review. The secretariat, in consultation with the NITAG-Ghana Chair will be responsible for drawing up terms of reference for the evaluation.

2.3 MEETINGS

Tentative dates for NITAG-Ghana meetings will be identified at the start of each operational year.

The NITAG-Ghana Chair, through the secretariat will invite members at least two weeks prior to any meeting. The invitation should indicate;

- Whether the meeting is open to core members only or to all members

- If persons outside NITAG-Ghana are invited
- The proposed agenda of the meeting
- Minutes of previous meeting

All meetings will be chaired by the Chair or in his/her absence a delegated representative. The agenda will be set by the secretariat in consultation with the Chair and core members and shared during the invitation.

However additional agenda items may be proposed during the meeting. Quorum at a meeting is reached with at least six of the core members physically present. The meeting venue will be determined by the Secretariat in consultation with the Chair.

The NITAG-Ghana will meet not less than twice in a year. The Chair in consultation with the secretariat may call for an extraordinary or emergency meeting to discuss urgent matters. Any other core member may propose to the Chair via the secretariat to call an extraordinary or emergency meeting to discuss specific urgent matters. There will not be more than three extraordinary or emergency meetings in a year.

Documents to be discussed should be sent by e-mail or any other means agreeable to the group at least two weeks before the meeting. During the meeting, the secretariat will serve as the rapporteur. At the beginning of each meeting the Chair shall call for and reaffirm declarations of conflicts of interest or bias from all members present.

The Chair or the delegated representative shall coordinate meeting discussions and allow each matter to be debated exhaustively before a decision is taken by core members. Where a consensus cannot be reached, items can be put to a vote with only a simple majority needed. In this case, only the core members shall vote. The Chair of the meeting will abstain from voting except in the case of a tie, where he/she will be allowed to cast his vote.

Payment

During day meetings, a transport reimbursement will be provided to all NITAG-Ghana members as well as lunch and snacks as the case may be. During residential meetings a transport reimbursement, full board accommodation and incidental allowance will be provided to all members.

2.4 MEETING MINUTES AND REPORTS

Meeting deliberations will be captured by the secretariat in form of minutes that will be circulated to the members at most **one week** after the meeting for comment and input. These minutes are again circulated the second week among members for endorsement and approval by the Chair.

Minutes of meetings remain confidential and will not be disclosed to the public at any time. NITAG-Ghana reports will not be disclosed to the public for a period of 6 months to give time to the MoH to receive, review and act on them. Expert opinions and recommendation notes developed by NITAG-Ghana will be signed by all core members attending the meeting that endorsed the document or by the Chair on their behalf. The document will then be forwarded by the Chair to the MoH. Annual reports may include a section referring to certain process indicators.

A website will be created by the Secretariat as referred to in Section 1.4 above where all

members will have an exclusive link for access to confidential documents including meeting minutes and reports.

3 PREPARATION OF RECOMMENDATIONS AND DECISION-MAKING

This section describes the methods and steps that NITAG-Ghana will use when developing recommendations.

3.1 ORGANISATION OF WORKING GROUPS

When a topic is put on the agenda for decision, the Chair will task one or more working groups (WGs) to review available evidence and prepare a technical report on the issue to be presented to NITAG-Ghana. The Chair and the Secretariat will propose clear terms of reference for the working groups including timeframes for completion of work, which will be shared with Members. Working groups will be appointed for a set period of time that will be decided at the meeting of the working group's appointment.

Depending on the complexity of the question, more than one working group can be formed based on the elements of the recommendation framework.

Members of the working group will include both core and non-core members with the relevant expertise. Working groups will always be chaired by a core member and will be supported by the secretariat for coordination of activities. When necessary, external technical support will be sought including support from other technical committees - e.g., polio, measles/rubella.

Signing of declaration of conflicts of interests and bias forms and confidentiality agreements will also apply to external members of the working group.

Payment of services to external members of the working group, if required, will be facilitated by the secretariat (*Refer to Appendix 1 for a detailed description of working group terms of reference*).

3.2 DEVELOPMENT OF TECHNICAL REPORTS

The first step for the working group is to review the issue and develop the recommendation framework and questions for each element selected. When the question is related to vaccine efficacy, effectiveness or safety, the WG will use the Population Intervention Comparator Outcome (PICO) approach in searching for evidence to answer the assigned question.

The WG will develop the recommendation framework for the formulation of recommendations on the topic involved. This framework outlines the elements that will inform which evidence should be gathered. For each element, specific research questions must be formulated.

Elements of the recommendation framework will include the types of vaccine outcome such as safety, efficacy and effectiveness by population or subgroups. Other criteria of the recommendation framework will include:

- disease specific criteria such as burden of disease,
- costs of healthcare,
- alternative preventive measures;
- vaccine and immunization characteristics such as vaccine presentation and use,
- vaccine indirect effects;

- economic considerations;
- health policy and programmatic issues such as interactions with other existing interventions and control strategies,
- feasibility, affordability and sustainability,
- ability to evaluate, regional and international considerations;
- acceptability and equity.

The elements are ranked as critical (high priority), important (intermediate priority) or non-critical (low priority). For each element, specific research questions will be formulated. Systematic reviews of evidence are conducted for critical and important safety, efficacy and effectiveness related elements.

NITAG-Ghana will approve this framework (elements and research questions) in a plenary session.

The working group will then start the literature review, and document the following four steps while searching for the evidence for the elements and research questions in the recommendation framework. The WG via the Secretariat will keep NITAG-Ghana informed of the results of each step. The Secretariat will support the literature search.

- Step 1: They will select the sources of evidence including both published and grey literature.
- Step 2: They will collect the evidence for each criterion (critical and important criteria) in the recommendation framework using existing databases with priority given to most recent reviews less than 3years.
- Step 3: They will keep the record of the search process/method and its results by completing the search process and search results form. The document recording the search strategies, the screening and selection process will be shared with NITAG-Ghana
- Step 4: They will assess the quality of the evidence using specific tools and checklists. In order to do this, individual studies and reviews (meta-analysis) will be retrieved and assessed to determine their quality. If the WG plans to conduct systematic reviews of epidemiological/clinical studies or intervention outcome/effect, studies included will be assessed using GRADE methodology. The WG may contract out systematic reviews to institutions who guarantee high quality standards. Review of existing systematic reviews or meta-analysis will be carried out using AMSTAR, CASP, SIGN tools or *checklists (Refer to NITAG-Ghana document: Checklists for evaluating studies)*. Review of individual studies (RCT, non-epidemiological or clinical studies on the other criteria for recommendation) will be carried out using CASP, CAQR, or SIGN quality checklists.

Once the quality of evidence collected has been assessed, the evidence will be analysed and judged focussing on two main attributes. Firstly, judgement on the effect of the intervention and its outcomes is carried out to analyse the balance between benefits and downside of alternative management strategies, confidence in estimate of the effect of the intervention, confidence in estimates of values and preference, and resource use. Secondly, judgement on other criteria of the recommendation framework such as organization and leadership, infrastructure, human and financial resources, quality of care, quality of data and enabling factors.

The working group will then prepare a technical report for presentation to NITAG-Ghana in line with the elements and research questions outlined in the recommendation framework.

All technical reports will have the following general structure;

- i.* executive summary,
- ii.* introduction,
- iii.* context of the question,
- iv.* general information on the subject,
- v.* methods for obtaining the evidence,
- vi.* report on analysis of the evidence,
- vii.* presentation of options,
- viii.* conclusions,
- ix.* references,
- x.* annexes (*Refer to Appendix 2: Detailed description of recommendation frameworks and technical reports for more information*).

3.3 PRESENTATION/DISCUSSION OF TECHNICAL REPORTS

The technical report once finalized will be circulated to Members at least 2 weeks prior to the meeting. The report with the proposed options will be discussed and a decision taken by consensus of core members only, considering all studies taken into account and the evaluation of the quality of the evidence.

Following the meeting, WG Chair will prepare a recommendation note for approval by the NITAG-Ghana Chair. The recommendation note is to be signed by all core members who attended the meeting endorsing the recommendations.

Approved reports will be forwarded by the NITAG-Ghana Chair to the Secretariat for onward submission to the MoH. They may be disseminated in any public forum including association journals, regional and international scientific journals after 6 months (e.g. Vaccine) and health training courses. The MoH shall ensure proper dissemination of recommendations within the ministry and to relevant stakeholders with due acknowledgement to NITAG-Ghana. EPI will report to the implementers (MoH, ICC) on these recommendations.

It is the expectation of NITAG-Ghana that the recommendation notes will form the basis for changes in national vaccination policy and will provide needed justification to the Ministry of Health when requesting funding and other support from Government and Partners for new vaccines and/or services.

3.4 SUBMISSION OF APPROVED RECOMMENDATIONS TO THE AUTHORITIES

Recommendation notes are to be signed by all core members present during the endorsement of the document. Recommendations will be forwarded to the relevant authorities within two weeks of the meeting and channelled via Secretariat. The communication will be signed by the Chair. The secretariat shall keep track of communications and dates of dispatch to the MoH and the actions taken by the MoH following the receipt of the recommendations. The secretariat will subsequently report to NITAG-Ghana any feedback from MoH.

3.5 ETHICS

NITAG members and external parties are bound by the confidentiality of the decisions. In

addition, members are expected to follow rules of precautionary principles.

The only person entitled to communicate externally on behalf of NITAG-Ghana is the Chair or a duly authorised representative.

4 FINANCIAL PARTICULARS

An annual budget is drawn up for the operation of NITAG-Ghana.

4.1 SECTIONS OF THE BUDGET

They include the costs for:

- Functional Secretariat Support
 - Recruitment of administrative and technical human resources
 - Office equipment
- Strengthening capacities
 - Attendance of the secretariat and/or members at regional and international meetings and workshops and study trips
- Scientific production including costs of
 - Working sub-group meetings
 - Recruitment of consultants
 - Research
- NITAG-Ghana operations:
 - Orientation and training workshops on the tools and guidelines for the operation of the group
 - Organisation of statutory and extraordinary meetings
 - Hiring of Meeting venue/Conference Room
 - Travel expenses incurred by all members
- Performance review
 - Organisation of an external review according to the intervals (two years) as indicated in the operation section

4.2 SOURCES OFFUNDING

The MoH, with the support of partners will provide funding for NITAG-Ghana. Activities that ensure financial viability should be specified in the work plan.

REVIEW OF DOCUMENT

The NITAG-Ghana internal procedures manual will be reviewed and amended as needed following internal and external reviews of NITAG-Ghana operations.

5 ORGANISATIONAL STRUCTURE



Figure 1: The Organisational structure of NITAG-Ghana

5.1 NITAG-Ghana MEMBERS 2018 –2022

Core members

N°	Specialties/field of work	Proposed members
1	Pediatrician	Prof. Lorna Renner
2	Pediatrician	Dr. Anthony Enimil
3	Immunization Expert	Dr K.O Antwi-Agyei
4	Immunization Expert	Mr. Stanley Diamenu
5	Epidemiologist	Dr. S. O Sackey
6	Health Economics	Dr Alfred Yawson
7	Microbiology &	Prof George Armah
8	Pharmacy	Dr Priscilla Nortey
9	Research	Prof Seth Owusu-Agyei
10.	Social Science	Prof Philip Adongo
11	Immunologist	

Ex-officio members

N°	Position/organization	Name
1	Ministry of Finance & Economic Planning	Mr Collins Kabuga
2	Ministry of Health	Dr Emmanuel Odame
3	Ministry of Education/Ghana Education Service	Ernest Amoah Ampah
4	Ministry of Environment	
5	Ghana Health Service	Dr Franklin Asiedu-Bekoe
6	Rep from Polio Committees	Dr Lawson Ahadzie
7	Food & Drugs Authority	Mrs Mimi Delese Darko

Liaison Members

N°	Position/organization	Name
1	WHO	Mr Fred Osei Sarpong
2	UNICEF	Mr Mrunal Shetye

Secretariat

N°	Position/organization	Name
1	EPI Manager	Dr Kwame Amponsa-Achiano
2	EPI Deputy Manager	Mr John Ebow Dadzie
3	EPI	Dr Naziru Tanko Mohammed
4	MOH	Mrs Rita Tandoh
5	EPI	Mr Dominic Nkrumah
6	MOH	Mrs Rahilu Haruna

APPENDIX 1: WORKING GROUP TERMS OF REFERENCE

BACKGROUND

The National Immunization Technical Advisory Group of Ghana (NITAG-Ghana) was established by the Ministry of Health in May 2018 to provide recommendations on vaccine/vaccine delivery technologies policy in accordance with the Health Sector Medium Term Development Plan 2018-2022 and the National Policy Guidelines for Immunization, 2016. The group provides technical advice on policy analysis and strategy formulation for all vaccine-preventable diseases (VPDs), guides the government on identifying important information for monitoring and evaluation. The Group is to provide regular updates to the Ministry of Health and Partners on the latest scientific recommendations and advancements with regards to vaccines and immunization activities in the country.

PURPOSE AND DECISION TO ESTABLISH NITAG-Ghana WORKING GROUPS

Working Groups (WGs) are established as resources intended to increase the effectiveness of NITAG-Ghana deliberations. They are to review and provide evidence-based information and options for recommendations in addition to implications of different immunization options.

The need and charge for a WG will be discussed and agreed during NITAG-Ghana meetings. WGs are expected to review available evidence and prepare a technical report on the assigned task for deliberation and endorsement by NITAG-Ghana.

TERMS OF REFERENCE OF THE WORKING GROUPS AND IDENTIFICATION OF NEEDED EXPERTISE TO SERVE ON THE WORKING GROUP

WGs will be appointed at a NITAG-Ghana meeting by core members in collaboration with the EPI Manager. The WGs will appoint their Chairs who should be core members.

Each Working Group (WG) will operate under specific terms of reference (TOR). The Chair of NITAG-Ghana and the Secretariat will propose clear terms of reference for the working groups including the expected timeframe for completion of the assigned task. WGs will be appointed for a set period of time, usually 6 months. These TOR are to be defined within 14 days of the NITAG-Ghana meeting leading to the establishment of the WG. The TOR will include:

- A background to the issue referred to the WG
- A description of the question to be examined by the NITAG and a general outline of the issues to be deliberated on by the WG
- The name of the WG Chair
- The expected duration of the WG

The WG Chair within four weeks of receipt of the WG TOR will propose to the NITAG-Ghana Chair and Secretariat the WG plan of activities including a list of recommended experts to serve on the WG as well as.

WORKING GROUP COMPOSITION AND SELECTION OF MEMBERSHIP

Each Working Group (WG) should include at least one core member, one EPI/Disease Surveillance Department staff member (who will function as Secretary to the WG), and additional subject matter experts serving in their own individual capacity and expertise for the group. This may include representatives from organizations, and members of regional and international technical consultative groups.

The size of the WG should have a minimum of five and not exceeding 10 members but may be adjusted based on the need for expertise and representation.

The proposed list should be accompanied by nominees' resumes and the rationale for the proposed selection. The WG Chair will also identify alternative names. Accompanying resumes for the names on the alternative list are not required unless these individuals are eventually nominated to the WG. Final decision regarding composition of the WG will be taken by the Chair, NITAG-Ghana in consultation with other core members at a meeting. Where the time frame for establishment of the WG is limited, the proposed WG members will be circulated on e-mail for comments by members of NITAG. Where no objection is received, WG members will receive provisional letters of appointment subject to final approval at a meeting.

Nominees approved by NITAG-Ghana will receive a letter of appointment to the WG outlining the task assigned and the roles and responsibilities of members. These appointment letters will be issued by the Chair, NITAG-Ghana. The letters of appointment will also state the name and contacts of the WG chair, the duration of the WG, and details of support to be provided by Secretariat.

Occasionally the WG Chair, in consultation with the NITAG-Ghana Chair, may request the participation of additional disease/vaccine experts who are not members of the WG. These may include NITAG-Ghana members, representatives of organizations, industry representatives/experts, public health officials, academia and other stakeholders. Other experts, including representatives of vaccine manufacturers may be asked to provide information to the WGs as needed.

MODUS OPERANDI

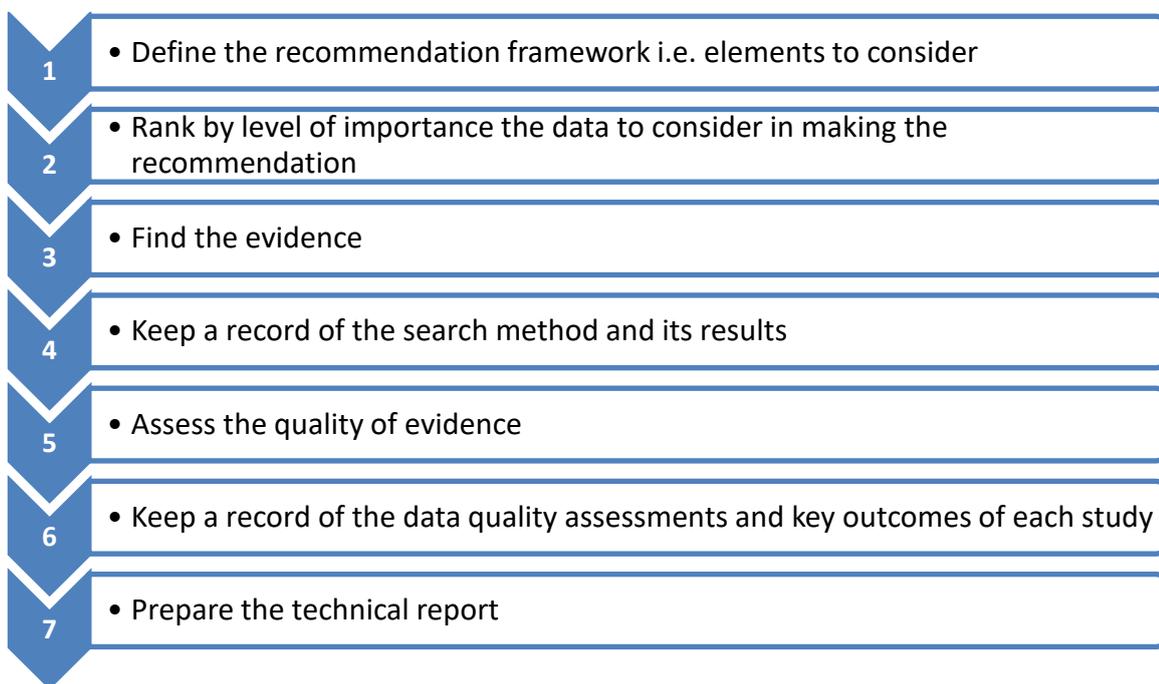
Establishment of working group operations

Individuals who take up the position of WG members will sign confidentiality agreements and conflicts of interest forms. Note that thereafter, at the start of each WG meeting, each member will verbally declare any conflicts of interest, the results of which will be noted in the summary report of the meeting.

The Secretary to the WG will develop a brief (1-2 pages) summary of each Working Group meeting. These summaries are to be submitted to the NITAG-Ghana secretariat for circulation so that all NITAG-Ghana members and senior EPI staff can be informed in real time of WG progress and issues.

Meetings of the WG will be facilitated by the NITAG-Ghana secretariat. Aside from day time meetings, provision should be made for a two-day residential meeting to review the interim technical report. Where physical meetings are not possible, teleconferencing facilities should be provided by the NITAG-Ghana secretariat.

Figure 2: Summary of process of issuing an evidence-based recommendation



Development of technical report

The first step for the WG is to review the question assigned. The WG will then develop their work plan and recommendation framework for formulation of the technical report. This recommendation framework outlines the elements on which evidence should be gathered. (*See Appendix 2 for additional details regarding formulating a recommendation framework and a technical report*). NB: When the question is related to vaccine efficacy, effectiveness or safety, the WG will use the PICO approach in searching for evidence to answer the assigned question (*See Appendix 2 for additional information regarding the PICO approach*).

NITAG-Ghana will approve the recommendation framework for the WG technical report and the WG work plan in a plenary session.

The working group will then start the process of collecting and reviewing evidence and writing the technical report. The WG may request NITAG-Ghana for the services of a consultant to assist in documentation, literature review and compilation of the technical report. The consultant may assist for a period not exceeding 21 days for each WG.

Submission of working group reports

The WG technical report will be presented to NITAG-Ghana for deliberations. The technical report will be circulated to members at least 2 weeks prior to the NITAG meeting. The report with the proposed recommendation or options will be discussed and decision taken by consensus, considering all studies taken into account and the strength of evidence.

WGs are not mandated to speak on behalf of NITAG-Ghana or render consensus advice or recommendations directly to the MoH. Rather, they are to gather and organize information upon

which NITAG-Ghana can deliberate and act on. Thus, while WGs can and should examine an area in detail and define the issues, including development of options for recommendations, the actual processes of group deliberation culminating in development of group consensus and recommendations must occur at a NITAG-Ghana meeting.

The NITAG-Ghana deliberations will be forwarded in the form of recommendation notes by the Chair, through the Secretariat to the MoH for dissemination, together with the technical report. They may be disseminated in any public forum.

Payment

During day meetings, a transport reimbursement will be provided to all WG members as well as lunch and snacks as the case may be. During residential meetings a transport reimbursement, full boarding, accommodation and incidental allowance will be provided to all WG members. WG members will also be given honoraria for their participation according to corporate governance tenets. Payment for services provided by consultants of the working group will be facilitated by the NITAG-Ghana Secretariat. This should be done employing corporate governance tenets.

Management of Conflict of Interest / Undue Influence

At the start of each WG meeting, participants will respond to a request to report conflicts of interest (COI) relevant to the focus of the WG. Note that COI form is only signed once at the establishment of the WG, thereafter, members are required to verbally declare any conflicts at the start of each WG meeting. This will be noted in the summary report of WG meetings.

Depending on the significance of the conflict of interest, NITAG-Ghana members and other experts who have identified COI may serve as core members of the WG charged with responsibility in the identified areas of conflict.

Persons who serve as consultants, may participate in the WG despite COI if, in the judgment of the WG Chair, NITAG-Ghana Chair and EPI Manager, these consultants are likely to bring specific expertise that is essential to the efforts of the WG.

However, conflicts, both personal and those of their liaison organization (in the case of liaison representatives), must be declared and recorded at the beginning of each WG meeting.

Participation of all persons with declared conflicts will be restricted by the WG Chair to the extent necessary for the WG to benefit from the expertise provided by the consultant.

No person with a significant conflict of interest will participate in drafting policy options or policy recommendations (*Refer to Appendix4 Conflict of Interest for additional information on managing conflicts of interest*).

The value and impact of NITAG-Ghana recommendations are critically dependent upon public trust in the integrity of the process. Thus, participation of any individual may be curtailed, even in the absence of a declared conflict of interest, if in the judgment of the WG Chair, NITAG-Ghana and any other member, a potential for the appearance of undue influence exists.

APPENDIX 2: DETAILED DESCRIPTION OF RECOMMENDATION FRAMEWORKS AND TECHNICAL REPORTS

RECOMMENDATION FRAMEWORK

The generation of evidence-based recommendations begins with defining a recommendation framework. The recommendation framework highlights the areas to be researched in developing a technical report. There are six broad areas to be considered in the recommendation framework:

1. Disease
2. Vaccine and immunization characteristics
3. Vaccine intervention outcome specific data
4. Economic considerations
5. Health policy and programmatic issues
6. Acceptability and equity

This recommendation framework outlines the elements on which evidence should be gathered. For each element, specific data is required. This data is ranked as critical (high priority), important (intermediate priority) or non-critical (low priority). Structured and comprehensive reviews of evidence are conducted for all critical and important data requirements.

Table 1 below describes key elements to be considered when addressing an immunization issue. These elements may be related to the disease, vaccine characteristics, economic or operational considerations, or health policy and programmatic considerations.

Table 1: Summary of elements in recommendation framework

I	Element	Specific data
1. DISEASE	Burden of disease	<ul style="list-style-type: none"> • Incidence of infection and sub-populations (age, sex, and comorbidity) with more severe forms of disease • Disease occurrence overtime/seasonality etc. • Epidemic potential • % of infected becoming carriers and risks factors • Short- and long-term consequences of infection and frequency • Social impact of the disease
	Use and costs of health care	<ul style="list-style-type: none"> • Short- and long-term use of health care (incl. treatments and hospitalization) • School and work absenteeism
	Alternative preventive measures	<ul style="list-style-type: none"> • Alternative preventive measures (e.g, health education, better hygiene, vector control) and their effectiveness, costs, and practicality • Other existing vaccines against the same disease and their effectiveness, costs, and practicality
2.VACCINE AND IMMUNIZATION	Vaccine presentation and ^a	<ul style="list-style-type: none"> • Vaccine presentation, storage volume and cold chain requirements

CHARACTERISTICS	use	<ul style="list-style-type: none"> • Dosage and route of administration • Administration schedule and possibility of combination with other vaccines • Flexibility or alternative vaccination schedules to accommodate the present EPI schedule
	Vaccine indirect effects	<ul style="list-style-type: none"> • Herd immunity • Impact on strain selection
3.VACCINE INTERVENTION OUTCOME SPECIFIC DATA	Safety	<ul style="list-style-type: none"> • Type, consequences and frequency of short- and long-term adverse events following vaccination • Type and frequency of risk groups or risk factors for adverse events • Contra-indications for vaccination • For live attenuated vaccines: risk of reversion to virulence
	Efficacy and Effectiveness by population and /or subgroups of population	<ul style="list-style-type: none"> • Type-specific protection afforded • Critical determinants of the immune response associated with protection • Duration of protection • Waning immunity if any • Optimal vaccination schedule (dosage, age, and booster) to protect the vaccinated individual?
4.ECONOMIC CONSIDERATIONS	Disease related costs	<ul style="list-style-type: none"> • Direct and indirect costs to patients and families • Productivity losses
	Vaccine related costs and resource use	<ul style="list-style-type: none"> • One-time start-up costs to implement the vaccine (i.e cold chain investments) • Annual incremental recurrent costs to administer the vaccine • Costs to monitor safety and effectiveness of the vaccine
	Net impact of intervention on immunization program as well as health sector	<ul style="list-style-type: none"> • Reduction in health care costs • Years Lived with Disability (YLD); Disability-Adjusted Life Years (DALYs) or Quality-adjusted life years (QALY) • Cost-effectiveness ratio of vaccination program
5.HEALTH POLICY AND PROGRAMMATIC ISSUES	Interaction with other existing interventions and control strategies	<ul style="list-style-type: none"> • Impacts of program (catch-up) on safety and efficacy of other vaccines and other health care sectors
	Feasibility	<ul style="list-style-type: none"> • Availability of the vaccine and long-term supply • Accessibility of target population
	Affordability and sustainability	<ul style="list-style-type: none"> • Availability of long-term human, technical and financial resources for distribution (including cold chain stability) • Partnerships

	Ability to evaluate	<ul style="list-style-type: none"> • Availability of information systems to measure coverage and vaccine utilization • Reliability of surveillance system
	Regional and international considerations	<ul style="list-style-type: none"> • Existence of regional and global recommendations • Potential of disease for international spread and pandemic potential
6.ACCEPTABILITY AND EQUITY	Acceptability	<ul style="list-style-type: none"> • Perception of the public and medical community about the disease
	Equity	<ul style="list-style-type: none"> • Universality, accessibility and gratuity of services for the most vulnerable groups

NB: Vaccine intervention outcomes should always be selected as an element within the recommendation framework.

PICO approach

The PICO approach provides a method of framing a research question by identifying four key components:

- P – population or patient or problem
- I – intervention
- C – comparator
- O – outcome

Example:

The German government asked its NITAG for advice as to whether Rotavirus vaccine should be introduced in the immunization program.

Research question: Should the rotavirus (RV) vaccine be introduced in the routine immunization schedule for children (aged 6 months or less)?

- Population: Children vaccinated against RV at age < 6 months in Europe or other industrialised countries. NB: Developing countries will be included for issues on safety
- Intervention: Introduction of RV vaccine licensed in Germany (Rotarix® or RotaTeq®)
- Comparator: No vaccination/placebo
- Outcome: RV-gastroenteritis, severe RV-gastroenteritis, RV-death
RV-hospitalization, nosocomial RV-gastroenteritis, Severe gastroenteritis (any pathogen)

DEVELOPING A TECHNICAL REPORT

Development of the technical report takes place after the data search is conducted and recorded with the selected studies graded and key outcomes summarised. The format of the technical report is provided below:

1. Executive summary

It is developed after the finalization of the technical report.

2. Introduction

2.1 Context of the question

Who put the topic on NITAG-Ghana's agenda?

- Was it in the annual work plan, or suggested by the Ministry of Health or a NITAG-Ghana member? Further clarification should be enquired if needed.
- If the topic was added to the NITAG agenda per official request from the MoH, the letter should be attached to the report

Why was the topic added to the agenda?

- Opportunity of introduction of a new vaccine, ongoing epidemic, new data on vaccine efficacy or disease burden?
- Does the Minister of Health exert leadership on the question?

2.2 General information on the subject

- Brief description of the problem identified
- Immunization situation

3. Methods

In developing an evidence-based recommendation, NITAG-Ghana members should always describe the research process which needs to be transparent and accessible to policymakers and a wide range of stakeholders who are mostly unfamiliar with the language of research. The methods section should clarify the following points:

- Does the technical report employ systematic and transparent methods to identify, select, and assess synthesized research evidence?
- Description of the recommendation framework (i.e. the PICO questions on the intervention and other identified elements taken into account)
- Description of how synthesized research evidence was identified, selected and assessed in ways that are easily understood. This objective can be achieved by using techniques such as explanatory 'boxes' within the report to clarify or highlight particular concepts, or through the inclusion of additional appendices. The methods should be systematic in nature and reported in a transparent and understandable way.

How was the technical report developed?

- Was a working group set up?

- How was the discussion organized and the recommendation/options adopted?
- Was the technical report reviewed for both scientific quality and system relevance?
What was the review process at NITAG-Ghana level?

4. Report on analysis of the evidence

This section refers back to the evidence of each element of the decision-making framework and the analysis of the findings e.g potential benefits, harms, cost and cost-effectiveness, efficiency, acceptability (by different stakeholders), equity, feasibility (expertise and human resources available? budget available? timeline for implementation suitable?), sustainability, Implementation considerations, with potential barriers to implementing the options assessed

Given that the report should be context-specific, it should ideally discuss the evidence on local applicability and equity considerations of the findings

5. Presentation of options

- Summary of benefits, harms, cost and cost-effectiveness of each option
- Summary of efficiency, acceptability, equity, feasibility, sustainability aspects
- Implementation considerations (barriers and potential solutions to overcome them)

6. Conclusion

Options are clearly formulated, and demonstrate how they are linked to the available evidence.

NB: The full report of the WG will include a reference list and annexes (evidence summary tables)

Table 1: Search process

Search No.	Element of the recommendation	Details of the criterion	Database/Date accessed	Search terms	Language restriction

Table 2: Search results

Search no.	Criteria for inclusion/exclusion	No. of reviewers	No. of studies identified before screening of titles and abstracts	No. Of unique studies Identified after screening of Titles and abstracts	No. Of studies retrieved in full text

Table 3: Search outcome

Search no.	No. of studies retrieved in full text	No. of full studies found relevant	Tools used to assess quality of study	No. of studies utilized after assessing quality of evidence

Table 4: Grading of studies

Search no.	Journal article	Author	Type of study	Rating tool used	Total score

APPENDIX 3: CONFIDENTIALITY AGREEMENT

MINISTRY OF HEALTH-GHANA

NATIONAL IMMUNIZATION TECHNICAL ADVISORY GROUP, GHANA

(NITAG-Ghana)

1. Commercial companies, university research centres, hereinafter referred to as "institutions" as well as scientists (individuals) regularly provide or present elements relating to the research, products and processes hereinafter referred to as "information" to the NITAG. Such information is considered by said commercial companies, research centres and individuals as their property. To guarantee suitable use of such information by NITAG-Ghana, whilst safeguarding the rights of property of the institutions or individuals, the undersigned hereby undertake to maintain the confidentiality of this information.
2. The information provided by such institutions or individuals, partners or other committees during meetings, via online collaborative work platforms, during conference calls or other channels, is to be considered by the Undersigned as confidential, unless otherwise specified by the institution or individual in question.
3. The Undersigned hereby undertakes to handle such confidential information as information covered by rights of property and undertakes not to make any copies or disclose such information either partially or in full to a third party unless authorised to do so.
4. The Undersigned undertakes to return any information considered as confidential to the institution/individual upon request thereof.
5. The Undersigned will not be bound to secrecy if he/she is able to prove:
 - a. that he/she had the information before the talk disclosing all or part of the confidential information owned by the institution/individual;
 - b. that the information was under public domain at the time it was disclosed by the institution or individual;
 - c. that the information has fallen into public domain by no fault of the Undersigned or
 - d. that the Undersigned was given access to the information by a third party, in compliance with the legal and confidential obligations of the institution/individual.
6. This confidentiality agreement is applicable throughout the period during which the Undersigned is involved in the NITAG-Ghana activities, irrespective of form, and for a period of four years running from the end of their term of office, unless otherwise specified by the institution/individual.

DESCRIPTION

Topic and source of information:

.....

.....

.....

.....

.....

Name, title and position of the Undersigned:

.....

.....

.....

Date:

Signature

MINISTRY OF HEALTH, GHANA NATIONAL IMMUNIZATION TECHNICAL ADVISORY GROUP-GHANA (NITAG-Ghana)

INTRODUCTION

To ensure integrity and trust by the authorities and the scientific community, the National Immunization Technical Advisory Group, GHANA (NITAG-Ghana) requires that its members as well as any invited resource persons (plenary session, extraordinary session, working groups etc.) declare their connection with any entity or organisation, public or private, whose field of expertise or intervention may create a conflict of interest (COI) with the expertise of the group.

A conflict of interest designates a conflict between public functions and private interests of an official, which could adversely affect the performance of his/her official duties¹. The declaration of conflict of interest from members of NITAG-Ghana will help avoid situations in which specific interests could affect their impartiality. Core members should not represent the interests of a particular group or of an interested party. They should refrain from advocating policies, opinions and products of the organisation in which they work.

Independence from government is defined by the absence of direct or indirect links of supervision in the immunisation program or preferably and more widely, within the program of the Ministry of Health. Members should feel free and encouraged to express their opinions even if they are in conflict with those of the immunisation program's officials or the policy of the Ministry of Health.

Some critical information for the group's work can only be obtained by establishing contact with vaccine producers. In addition, leading national experts in the field of vaccines and immunisation often have links with various interest groups, such as industry, professional associations and governments².

This search for conflicts of interest requires a certain level of rigour to distinguish between a potential bias caused by a conflict of interest and the need for expertise in vaccinology. The goal of such work is not only to identify people without conflict of interest, but also to prevent potential conflicts both in a transparent and ethical way.

¹ Bertok J, *Managing conflict of interest in public service: OECD guidelines and Country Experiences*, Organization for Economic Cooperation and Development (OECD) publications, Paris, 2003

² P. Duclos, *National Immunization Technical Advisory Groups (NITAGs): Guidance for their establishment and strengthening*, Vaccine 28S (2010) A18-A25.

TYPES OF CONFLICTS OF INTEREST

Personal Interests

"Personal interests" involve payment to a member. The main examples are:

- Consultancy: any consultancy, directorship, position in or work for the industry, which attracts regular or occasional payments in cash or kind.
- Fee-paid work: any work commissioned by the industry for which the member is paid in cash or kind.
- Shareholdings: any shareholding in or other beneficial interest in shares of the industry. This does not include shareholdings through unit trusts or similar arrangements where the member has no influence on financial management.

Non-personal Interests

"Non-personal interests" involve payment for the benefit of a department run by a member, but not to the member personally. The main examples are:

- Fellowships: the holding of a fellowship endowed by the industry.
- Support by the industry: any payment, other support or sponsorship by the industry which does not convey any pecuniary or material benefit to the member personally but which does benefit their position or department; for example:
 - A grant from a company for the running of a unit or department for which the member is responsible;
 - A grant or fellowship or other payment to sponsor a post or a member of staff in the unit for which the member is responsible. This does not include financial assistance for students;
 - The commissioning of research or other work by, or advice from, staff who work in a unit for which the member is responsible.

Members are required to declare their interests involved in meetings. They must state whether the interests are personal or non-personal and whether they are specific or non-specific to the topic or product considered by NITAG-Ghana. Interests are considered "relevant" if they occurred within the 12 months preceding the inauguration of the new members and existing members. Any members who have doubts about the statement of interest or the procedure are required to inform the Chair for review.

CONFLICT OF INTEREST DECLARATION PROCEDURE

This declaration is made through a form which all NITAG-Ghana members complete and update annually. It is sent to the Ministry of Health and released as needed. Before each NITAG-Ghana meeting (plenary session, extraordinary session), and when the working groups are appointed, an updated declaration is prepared by the Secretariat of NITAG-Ghana based on potential changes related to items on the agenda.

Members of NITAG-Ghana who did not complete a conflict-of-interest declaration must withdraw from the meeting or its working groups.

Any reported interests may be revealed during the meeting, or made available to the public upon request.

Affirmative answers to the questions on the form will not lead to the *de facto* exclusion or limitation of participation in NITAG-Ghana meetings of the member involved. The Chair of NITAG-Ghana is responsible for the analysis of the completed forms to determine the potential existence of a conflict of interest.

After examining the contents of the conflict of interest declaration form, the Chair may decide whether or not a conflict of interest applies and whether this is a minor or major. If the Chair reports a conflict of interest, the secretariat applies one or a combination of the following three options:

- The member may be invited to attend meetings or work on condition that his/her interest is disclosed before the meeting;
- The member may be asked not to take part in a portion of the meeting, discussions or work in relation to his/her interest or not to participate in related decision-making;
- The member may be asked not to take part in the meeting or work.

The usual procedure is as follows:

- Members with a specific personal interest will be asked to leave the room for the discussion and decision-making.
- Members with a non-specific personal interest may participate in discussions but may not take part in the decision-making.
- Members with specific non-personal interests may answer direct questions from the Chair but may not take part in the decision-making.
- Members with non-specific non-personal interest may take part in the discussions and the decision-making.

Any conflict of interest is publicly disclosed to other participants at the beginning of activities and in the report or any other document produced at the end.

If the Chair declares a COI, he/she will step aside and delegate a core member to perform his role for that portion of the meeting.

In an audit or further examination, the contents of a member's conflict of interest declaration form could be made available to persons who are not part of NITAG-Ghana if the member's objectivity is disputed and the Chair of NITAG-Ghana considers the revelation as a major concern for their credibility.

By completing the attached form, the member hereby agrees to these terms.

CONFLICT OF INTEREST DECLARATION FORM

First names and last name

.....

Meeting date of NITAG-Ghana:

.....

List of topics on the agenda of NITAG-Ghana:

A.....

B.....

C.....

D.....

1. Could the findings of this work positively or negatively affect the interests of persons with whom you are personally or professionally related (child over the age of majority, siblings, colleagues, etc.)?

Yes No

- i. If **YES**, explain:

.....
.....

2. Are there other factors that can affect your impartiality in the work relating to the items on the agenda?

Yes No

- i. If **YES**, which ones?

.....
.....
.....

Comments:

.....

3. Do you have any financial participation (shares, bonds or equity instruments) in the company producing or marketing the product under review or in the direct competitor, if applicable?

Yes No Not Applicable

4. Have you been owner, manager, partner, employee, member of a decision-making body of the company producing or marketing the product under review or of the direct competitor in the last three (3) years, if applicable?

Yes No Not Applicable

5. Have you been involved in any other types of regular activities for the company producing or marketing the product under review or for the direct competitor in the last three (3) years, if applicable?

Yes No Not Applicable

6. Have you been involved in any scientific work (tests, studies, evaluation etc.) funded by the company producing or marketing the product under review or with the direct competitor in the last three (3) years, if applicable?

Yes No Not Applicable

If **YES**, what kind?

Epidemiological studies related to the disease under study

Clinical trials

Other(specify):

7. Have you attended a meeting (conference, symposium, training, etc.) organised by the company producing or marketing the product under review or by the direct competitor in the past three (3) years, if applicable?

Yes No Not Applicable

i. If **YES**, in what context?

Speaker

Participant

Member of the organising/scientific committee

Other(specify):

ii. Under what conditions?

Travel and accommodation expenses covered by the company

Fees paid by the company

Other(specify):

8. Have you received financial support from a partner (organisation, institution, foundation etc.) in the past three (3) years for conducting an activity that might have a link with the topics on the agenda?

Yes No

9. Are any of your relatives employed by the company producing or marketing the product under review or in the direct competitor, if applicable?

Yes No Not Applicable

i. If YES,

Spouse

Child

Other(specify):

I declare on my word of honour that the information provided above is true and complete. I also undertake to inform the Secretariat of NITAG-Ghana of any subsequent changes and complete a new form to describe any applicable changes.

Date and signature:

UPDATED CONFLICT OF INTEREST DECLARATION FORM (to be filled by members in case of change related to specific topic on the agenda)

First names & last name:

.....

Meeting date of NITAG-Ghana:

List of items of the agenda of NITAG-Ghana:

1.

2.
3.
4.

Describe the type of conflict of interest:

.....

.....

.....

.....

.....

.....

I declare on my word of honour that the information provided above is true and complete.

Date and signature: