Report of External Assessment Zambia National Immunization Technical Advisory Group (ZITAG)

March 2023

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1. Background

Over the past decade, the Global Vaccine Action Plan 2011-2020 and the African Regional Immunization Strategic Plan (RSPI) 2014-2020 have both emphasized in their guiding principles and strategic objectives the need for countries introduce good governance and provide effective and efficient immunization services for all. The Addis Ababa Declaration on Immunization adopted by African Heads of State in June 2017 and its roadmap reaffirmed the essential role of NITAGs for the immunization program in countries. Current immunization frameworks, such as the global Immunization Agenda 2030 (IA2030) as well as the Regional Immunization Strategic Plan, reaffirm the need to build strong immunization systems on the basis of evidence-based decision-making to track progress and improve program delivery and to support decision-making at all levels including technical inputs from bodies such as Technical Advisory Groups national immunization programs.

National Immunization Technical Advisory Groups (NITAGs) are bodies composed of national independent experts that provide country-specific recommendations to political authorities, ministries of health, and/or immunization programs based on the most relevant evidence available at the national, regional, and global levels. Thus, these advisory bodies contribute to national decision-making on immunization by adapting the World Health Organization (WHO) global and regional guidance to the local context and help to strengthen the credibility and sustainability of the immunization policy and its acceptance by the population. These advisory bodies might also be leveraged as an advocacy group to strengthen immunization stakeholders' engagement in policy design and immunization strategies, as well as for partners supporting these strategies.

To fulfil this role, the NITAG must be well established and operate based on formal operating procedures and strong support from the secretariat and partners. NITAGs are monitored annually through the WHO/UNICEF Joint Reporting Form (JRF). Two tools assessing the NITAGs have been previously developed to assess process, output, and outcome through 17 indicators of NITAGs using the WHO/SIVAC or CDC's NITAG simplified assessment tool. These indicators are assessed, every three years during internal or external evaluation exercises.

The update of these tools was carried out between 2020 and 2021 by integrating other specific indicators and criteria in order to classify the NITAGs into five categories of maturity: Basic, in Developing, Intermediate, Advanced, Leading edge. Seven indicators are used to identify

the maturity level: establishment and composition, independence and non-bias, resources and secretariat support, operations, process for making recommendation, integration in the policymaking process and recognition by stakeholders. The NITAG Maturity Assessment Tool (NMAT) was), developed in 2021 by a working group of NITAG subject matter experts. The tool has the integrated the original 17 indicators, as well as other indicators and specific criteria.

It is in this context that WHO conducted an external assessment of Zambia's Technical Advisory Group (ZITAG) from 06 to 10 March 2023.

2. Objectives of the Assessment

The main objective of this external evaluation was to classify the degree of maturity of the NITAG in Zambia using the NMAT tool and to identify the appropriate actions for its strengthening.

- Describe and analyse the administrative and normative aspects of NITAG (composition, modus operandi, funding, secretariat support
- Assess standard operating procedures for Evidence to Recommendation (EtR) process
- Assess the level of NITAG integration into the health system and impact on immunization policies
- Identify best practices, challenges to strengthen the functioning of the NITAG and the evidence-based process

3. Deliverables

- NITAG maturity profile validated by all stakeholders
- An improvement plan, and implementation roadmap agreed
- Assessment report with input from NITAG members and stakeholders available

4. Methods and tools

In order to conduct an external assessment of ZITAG, a team composed by two experts from WHO AFRO and IST/ESA has been deployed in Lusaka, Zambia for the purpose between 06 to 10 March 2023. Background documents such as the NMAT data collection tool, the electronic version and the assessment terms of reference have been shared two weeks with the country team. In addition, for planning purpose, a draft agenda has been shared with the focal

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person in the Secretariat. The documents have been completed during the key informant interviews.

The evaluation consisted of desk review of NITAG materials and interviews with stakeholders.

Desk review: the assessment team reviewed the ZITAG functioning documents, such as the terms of reference, internal manual procedures (IMP), recommendation notes from 2017 to 2022 and meetings minutes.

Interviews were conducted in person and virtually. ZITAG Chairperson,

secretariat focal person, three core members, two ex officio members from Zambia Medicines Regulatory Authority (ZAMRA) and Zambia National Public Health Institute (ZNPHI), WHO

and UNICEF immunization focal persons as liaison members were interviewed. The data collection tool was used within the context of ZITAG. This was followed by scoring using the excel based NMAT electronic template and results from the assessment were used to prepare the insights for the stakeholders meeting. That meeting held on 09 of March 2023 with the

ZITAG members and secretariat. Consensus on the maturity level assigned for each NMAT indicator and sub indicator was agreed. These results collectively defined the next steps to plan the NITAG functionality improvement.

The NMAT has been developed as a practical planning, monitoring, and evaluation tool to guide, develop, and refine NITAG development and strengthening. The NMAT provides NITAG's and partners with a mechanism to assess the maturity of a NITAG and provides a framework for organizing and prioritizing tangible and achievable steps for NITAG strengthening activities. The NMAT provides measurable steps in NITAG maturity, designed as a logical flow of policies and procedures in place, to progress from beginning to leading edge. The tool is used to assess the level of maturity for seven indicators. Each level lays out criteria for the specific indicator assessed. The indicators are establishment and composition;

independence and non-bias; financial, administrative, and informational resources; operations; making recommendations; integration into policymaking process and stakeholder recognition. The NMAT have five levels of maturity that are basic, developing, intermediate, advanced, and leading edge. For each indicator, the appropriate maturity level is the one at which the NITAG meets all the criteria. If any criteria is checked under the basic maturity level, the indicator is assessed at basic maturity level. The overall maturity level assigned is the one lowest level checked for all the criteria. The next steps recommended address the criteria to meet the next highest maturity level for each indicator and others recommended next steps are those that address all unmet criteria.

Figure 1: NMAT paper-based questionnaire

5. Findings

The findings of this external assessment are presented by indicator. The level of maturity of an indicator has been assigned using criteria defined in each sub-indicator. The checked criteria (text in green) were considered as met by the assessment team and validated during the Stakeholders meeting.

5.1. Indicator 1, Establishment and Composition

Table I shows the level of maturity assigned for the indicator: Establishment and composition of ZITAG.

Table I: Indicator I, Establishment and Composition criteria met, ZITAG External Assessment March 2023.

		Basic	Developing	Intermediate	Advanced	Leading Edge	RESULTS
1	Official Status	N/A No **official measures or documents** have established the NITAG.	x Official measures or documents have established the NITAG.	x *Intermediate will automatically fill if you select Developing.*	*Advanced will automatically fill if you select Developing.*	x *Leading Edge will automatically fill if you select Developing.*	Leading Edge
2	Terms of Reference	N/A NITAG lacks written **Terms of Reference (TORs)**.	x NITAG has written TORs including a **mandate** defining scope of work.	x TORs address NITAG structure and are shared with members whenever updated. All members aware of TORs.	x TORs are reviewed and updated regularly.	x TORs are reviewed at least every 3 years and updated as needed.	Leading Edge
3	Diversity of Expertise	N/A Fewer than five areas of **expertise** represented among NITAG members.	x At least five areas of expertise represented among NITAG members.	x *Intermediate will automatically fill if you select Developing.*	Members' areas of expertise span life course. NITAG has access to additional areas of expertise.	There is a redundancy of experts among members so that the minimum areas of **expertise** are still represented when absences occur.	Intermediate
4	Membership	N/A There are no practices or processes in place regarding core member voting authority, recruitment, or term limits.	X **Core members** have voting authority, while **non-core members** do not.	x Core membership terms are limited and staggered.	There is **open competition** for membership spots.	There is a policy process for **terminating membership** prior to completion of membership term.	Intermediate
						OVERALL MATURITY LEVEL FOR THIS INDICATOR	**Intermediate**

ZITAG is considered at the intermediate level of maturity for indicator 1 on establishment and composition.

- **Official status:** The Zambia Minister of Health established the NITAG by Ministerial Statement in 2016.

- **Terms of Reference (ToR):** The Mission of the ZITAG is to advise the policy makers and program managers to make evidence-based immunization (all ages, all vaccines) related policy and program decision. The ZITAG has written terms of reference including the mandate which are to provide credible, transparent and independent evidence-based recommendations on vaccines and immunization (see Annex 1). All interviewees were aware on the existence of the ToR upon their appointment which have been updated in 2019 during the renewal of membership term.

- **Membership and diversity of expertise:** The core members constitute of fourteen experts co-opted and appointed by the Ministry of Health: Two Paediatrician, a Microbiologist, an anthropologist/sociologist, a vaccinologist, an Epidemiologist, two Public health experts, a virologist, a Demographer/statistician, an Ethics expert, Laboratory officer and Health economist (who did not join) and a Social Scientist (Health promotion from research and academia but passed away). Thus, there is 11 areas of expertise among core membership

and only two domains of expertise are overrepresented specifically paediatrics and public health. The mandated term of core members is limited to 3 years and is automatically renewable once for members that adhere to the Internal Manual Procedure. The renew of mandate is staggered (at least maintaining one third). The ZITAG follows the IP manual to guide the replacement (willingness to continue for extension following the criteria) through the Permanent Secretary of the MoH in consultation with the chair. The Chairperson is assisted by the Vice Chairperson and both have been elected by the core members of the ZITAG. Only the core members vote during deliberations.

5.2. Indicator 2, Independence and non-bias.

Table II shows the level of maturity assigned for the indicator independence and non-bias of ZITAG.

Table II: indicator 2, Independence and non-bias criteria met, ZITAG External Assessment, March 2023.

			Basic		Developing		Intermediate		Advanced		Leading Edge	RESULTS
1	Disclosure and conflict of interest process	N/A	**Declaration of Interests (DOI)** is not mandatory for core members.	X	DOI is mandatory for core members upon appointment.		DOI is mandatory for secretariat and working group members. DOIs are routinely updated. NITAG follows a formal, written **Conflict of Interest (COI)** policy with definitions of types of COI.		Conflict of Interest (COI) policy describes process(es) for assessing and managing COIs.		DOI is mandatory for non-core members, upon appointment and when a change arises. DOI is mandatory for core members before every meeting.	Developing
2	**Transparency**	x	NITAG documentation is not **publicly available**.		TORs and standard operating procedures are publicly available.		Agendas, **meeting summaries**, and records of decisions are publicly available.		Technical reports and position papers are publicly available. NITAG actively disseminates all publicly available materials (e.g., website, a journal, or bulletin).		Observation of meetings by non-members is permitted upon request or on a scheduled basis, or meetings are broadcast publicly.	Basic
3	Independence from primary workplace of members	N/A	There is no **policy** in place to ensure members do not promote their primary employer's priorities, views, and/or products.	X	A policy is in place to ensure members do not promote their primary employer's priorities, views, and/or products.	x	*Intermediate will automatically fill if you select Developing.*	x	*Advanced will automatically fill if you select Developing.*	x	*Leading Edge will automatically fill if you select Developing.*	Leading Edge
							OVERALL MATURITY LEVEL FOR THIS INDICATOR					Basic

ZITAG is considered at the basic level of maturity for the indicator 2.

❯ **Disclosure and conflict of interest process:**

The ZITAG internal manual procedures describe the declaration of interest policy. Thus, the declaration of conflict of interest is mandatory upon the appointment core members and non-core members of the ZITAG except the secretariat. This declaration of conflict of interest is regularly signed before each meeting of working groups as well for ZITAG regular meetings by core members and archived by the secretariat. The assessment of the Conflict of Interest

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(COI) are not explicit regarding the "how" and "by whom" these statements of conflict are evaluated and managed.

❷ Transparency

ZITAG recommendations as well as meetings minutes are not publicly available. However, the Ministry of health refers to the recommendation made by the ZITAG during official statements.

❷ Independence from primary workplace

According to the ToR ZITAG is an independent body and it was gathered in the interviews that all core members of the NITAG are independent of the immunization program and from their primary workplaces.

5.3.   Indicator 3, Resources and Secretariat support

The table II shows the level of maturity assigned for the indicator Resources and Secretariat Support of ZITAG

Table III: indicator 3, Resources and Secretariat support criteria met, ZITAG External Assessment March 2023.

			Basic		Developing		Intermediate		Advanced		Leading Edge	RESULTS
1	Secured Funding	N/A	There is no funding to cover **basic operational costs.**	x	There is funding to cover basic operational costs.		A **guarantee of funding** from the government covers basic operational costs.		Guaranteed funding is robust.		There is access to funding that can cover travel expenses for national and international NITAG strengthening activities (regional or global NITAG meetings, collaborations, training).	Developing
2	Access to Relevant Data and Other Necessary Tools	N/A	NITAG has inconsistent access to regional and global **information**; no access to local information.	x	NITAG has adequate access to regional and global information.	x	NITAG has consistent and comprehensive access to global and regional information, as well as adequate access to local information.	x	NITAG has consistent and comprehensive access to reliable local, regional, and global information.	x	NITAG has access to **raw data** or can request specific analyses of the data presented.	Advanced
3	Access to External Technical Expertise and Capacity-building Tools	N/A	NITAG does not solicit or accept input from external experts.	x	NITAG solicits or accepts input from **external experts.**	x	NITAG routinely gets input from external experts.	x	As appropriate, NITAG formalizes relationships with external experts through non-core membership.	x	*Leading Edge will automatically fill if you select Advanced.*	Leading Edge
4	Secretariat Support	N/A	There is no officially appointed **Secretariat** to support the NITAG.	x	Secretariat provides active administrative support.	x	Secretariat provides basic technical support.		Secretariat or designated support services are able to conduct and/or outsource advanced analyses.		Secretariat has multiple full-time staff members with a mix of skill sets.	Intermediate
									OVERALL MATURITY LEVEL FOR THIS INDICATOR			**Developing**

ZITAG is considered at developing maturity level for the indicator resources and secretariat support.

☑ Secure funding

Annual plan is drafted by the secretariat and financial support provided from GAVI TCA through CIDRZ (Center for Infectious Diseases Research in Zambia). The NITAG annual plan is incorporated in the EPI plan. The plan is not 100% funded and core activities such as NITAG

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meetings are prioritized (targeting 4 per year). The ZITAG secretariat uses the premises of the vaccination program and those are used to host NITAG meetings.

❯ **Access to data**

The exposure of the chair, some core members and the secretariat to the SAGE was opportunity to learn how to operate the NITAG work. The evaluation revealed consistent access to evidence from at the global and regional level. Access to local data was facilitated for COVID-19 vaccines recommendations notes by ZNPHI, which carried out analyses of the specific data requested by the NITAG; in addition to individual contribution of NITAG core members who mostly come from the academies. Therefore, there remains gap for other areas as local data details are insufficient.

❯ **Secretariat support**

The secretariat originally consisted of 4 staff from the Vaccination Program, currently a single staff, a trained pharmacist, provides technical and administrative support to the ZITAG in addition to her regular tasks within the vaccination program.

5.4.   Indicator 4, Operations

Table IV shows the level of maturity assigned for indicator operations of ZITAG

Table IV: Indicator 4 operations criteria met, ZITAG External Assessment March 2023.

		Basic		Developing		Intermediate		Advanced		Leading Edge		RESULTS
1	**Meeting logistics**	N/A	NITAG meets less than once a year.	X	NITAG meets about once a year. **Agenda** and **background documents** are circulated at least one week before meetings.	X	NITAG meets more than once a year, and as needed beyond regular schedule. NITAG members are invited to suggest agenda items for secretariat review.	x	Background documents are comprehensive.	x	*Leading Edge will automatically fill if you select Advanced.*	Leading Edge
2	**Standard Operating Procedures (SOP)**	N/A	**Standard operating procedures (SOPs)** are not formalized.	X	SOPs are formalized in an official NITAG document.	X	SOPs include or refer to COI policy.		SOPs include recommendations and tools for orienting and educating members. Orientation includes review of SOP.		SOPs are regularly reviewed, updated as needed, and updates are promptly circulated to all members. SOPs include the process to make a recommendation in an emergency situation.	Intermediate
3	**Evaluation**	N/A	There is no system for **evaluating** the NITAG.	X	NITAG is evaluated, but without a regular schedule or standardized tool.	X	NITAG has been evaluated at least once using a standardized tool.		NITAG is regularly evaluated using a standardized tool.		There is a process in place to monitor the implementation of evaluation recommendations.	Intermediate
									OVERALL MATURITY LEVEL FOR THIS INDICATOR		**Intermediate**		

ZITAG is considered as intermediate level of maturity for the indictor on operations.

Meeting logistics

Referring to the JRF, ZITAG held at least one ordinary meeting over the last 5 years with an annual average of three. The documents and the agenda of the meetings are shared at least two weeks before the meetings of the working groups and the statutory meetings of the NITAG with consideration of their suggestions from the members by the secretariat.

Internal manual of procedures:

The manual of procedures includes the SOPs related to membership, with the roles and responsibilities of each component of the NITAG, the procedures for developing the annual work plan, the holding of meetings, developing recommendation notes.

☑ **Evaluation:** The ZITAG had a self-assessment in 2018, the report was not available.

5.5. Indicator 5: Making recommendations

The Table V shows the level of maturity assigned for indicator making recommendation of ZITAG

Table V: Indicator 5, Making recommendations criteria met, ZITAG External Assessment, March 2023.

			Basic		Developing		Intermediate		Advanced		Leading Edge	RESULTS
1	Decision-making process	N/A	NITAG does not define or follow a standard set of elements as the **basis for decision-making for a recommendation** or use a formal structure for quality assessment of evidence.	X	NITAG defines and follows a limited set of elements as the **basis for decision-making** for a recommendation.	X	NITAG uses a formal structure for reviewing evidence and making recommendations, for example, **SAGE EtR framework** which can include graded evidence or systematic reviews from other groups.	x	*Advanced will automatically fill if you select Intermediate.*	x	NITAG uses tools to assess quality of evidence such as GRADE, CASP, SIGN, etc.	Leading Edge
2	Documentation and Communication	N/A	Recommendation documentation does not meet any of the criteria listed.	X	Recommendations are registered in meeting minutes.	x	Recommendations follow a consistent format and refer to peer-reviewed published material and local evidence or contextual information. Recommendations are also documented separately from minutes and systematically **archived**.	x	Recommendations are submitted to designated policymakers in the form of a policy brief conforming to country practices.	x	For recommendations that are not adopted, there is process for NITAG Chair (or designee) to discuss recommendations with policy decision makers.	Advanced
									OVERALL MATURITY LEVEL FOR THIS INDICATOR			**Advanced**

ZITAG is considered at the advanced level of maturity for the indicator on making recommendations.

Decision making process

Once request received from the MoH, the chair with support from the Secretariat set up a working group. The recommendation framework is drafted to fit the specific question

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framework with the support from the   secretariat. This framework is reviewed by the working group and other NITAG members when needed. The ZITAG uses the SAGE recommendation and peer-reviewed articles and uses the CASP tool for evidence appraisal.

 However, difficulties are noted on the economic evaluation, in absence of a health economist in the NITAG. The recommendation framework includes following components which are epidemiology and disease burden, vaccine safety, efficacy and effectiveness, Global and regional consideration, programmatic and policy considerations, resources uses and economic considerations, equity, social aspects.

❯ Outputs and documentation

Recommendations are separate from the meetings minutes. Once the recommendations have been adopted by the members of the ZITAG, the chairman communicates to the Minister of Health; ZITAG chair signs off to Permanent Secretary of MoH in policy briefing format including a summary of evidence, recommendation and conclusion. Since its establishment in 2016, ZITAG issued ten recommendations. Calls on external experts to respond to emerging questions about vaccination, and an ethicist and a modelling expert were included in the COVID-19 working group. The scientific productions of ZITAG are shown in the table VI.

Table VI: Recommendations notes issued by ZITAG_ External assessment March 2023

Origin of request	Domain	disease	Recommendation notes	Year of issuance	Timeline for recommendation issuance	status
MoH	Routine immunization	Pneumococcal diseases	Recommendation on PCV switch from PCV10 to PCV13	2017	10 months	implemented
MoH	Routine immunization	Typhoid fever	Recommendation on typhoid conjugate vaccine	2019	10 months	delayed
MoH	Health emergency	COVID-19	Recommendation on Additional Booster Doses and Alternative Vaccines for Pfizer for Children and adults requiring Pfizer in the absence of Pfizer	2022	1 month	implemented
MoH	Routine immunization	Hepatitis B	Recommendation on Hep B vaccination at birth:	2019	10 months	delayed
MoH	Routine immunization	Cervical cancer	Recommendation on single age cohort of HPV vaccine	2022	1 month	implemented
MoH	Routine immunization	Poliomyelitis	Recommendation on second dose of IPV	2022	18 months	implemented
MoH	Health emergency	Poliomyelitis	Recommendation on use of nOPV	2022	18 months	implemented
MoH	Logistic	N/A	Recommendation for the cold chain optimization platform	2018	1 month	implemented
MoH	Routine immunization	Diseases due to Rotavirus	Rotavirus vaccine switch from Rotarix to Rotavac	2022	3 months	implemented
MoH	Routine Immunization/ Measles Rubella Supplementary Immunization	Measles and Rubella	Recommendation on Measles Rubella SIA and switch from the 10 dose to the five dose vial	2019	3 months	implemented

5.6. Indicator 6, Integration into policymaking process

Table VII show the level of maturity assigned for indicator integration into policymaking process

Table VII: Indicator integration into policymaking process criteria met, ZITAG External Assessment March 2023.

		Basic		Developing		Intermediate		Advanced		Leading Edge	RESULTS
1	Government consideration and solicitation	N/A	There is no defined process for the MOH to officially request recommendations from the NITAG.	X	There is a defined process for the MOH to officially **request recommendations** from the NITAG. Process includes mutually agreed-upon timetable for NITAG response.		NITAG monitors the recommendations **accepted** by the MOH. When MOH does not accept a NITAG recommendation, a clear explanation for its refusal is provided in writing to the NITAG chair.		If warranted by MOH's explanation for not accepting NITAG recommendations, NITAG improves process for identifying new policy questions. NITAG considers topics suggested by the NITAG but not specifically requested by MOH, through mutually agreed upon process.	*Leading Edge will automatically fill if you select Advanced.*	Developing
2	Implementation	N/A	NITAG is not involved in reviewing or recommending any implementation, programmatic, or research activities.	x	NITAG is involved in ad hoc basis in reviewing or recommending any implementation, programmatic, or research activities.	x	NITAG requests reports or presentations on implementation efforts and vaccine coverage so members can understand if their recommendation is successful or if further considerations are necessary.	x	If appropriate, NITAG makes **evidence-based programmatic recommendations** (e.g. regarding logistics, delivery, access, vaccine hesitancy, etc.)	x	NITAG is involved in setting the policy agenda; i.e., recommendations for R&D, recommendation for filling gaps in programmatic implementation).	Advanced

OVERALL MATURITY LEVEL FOR THIS INDICATOR	Developing

ZITAG is considered at the developing level of maturity for the indicator integration on policy making process.

☑ **Government Consideration and solicitation**

ZITAG works based on an official request from the Ministry of Health addressed to the chairperson. From then, a working group is established in order to proceed with the development of the technical note of recommendation.

☑ **Implementation**

As of to date, delay in implementing recommendations remains, such as on hepatitis B birth dose and Typhoid conjugate vaccine. The internal procedures manual does not include a mechanism for monitoring recommendations implemented by the Ministry of Health; however, the EPI team updates the ZITAG members on the progress of the vaccination program implementation during regular meetings. In the recommendation notes, the ZITAG identifies the gaps on evidence and recommends ways to address them.

5.7. Indicator 7: Stakeholder recognition

Table VIII shows the level of maturity for indicator stakeholders' recognition of ZITAG.

Table VIII: Indicator, stakeholders recognition criteria met, ZITAG External Assessment March 2023.

		Basic	Developing	Intermediate	Advanced	Leading Edge	RESULTS
1	Relationship with Stakeholders	N/A **Stakeholders** and partners in the community are not aware of the NITAG.	X Members of the scientific and professional community are aware of the NITAG's role and activities.	X Members of the scientific and professional community are aware of the NITAG's role and activities and can easily access the NITAG's recommendations.	x In countries where multiple health authorities issue vaccine recommendations, NITAG's recommendations are recognized as the standard of care; grossly conflicting recommendations are not issued by other authorities. NITAG accepts input from the public, including organizations that are not represented among non-core members.	x NITAG members exchange information and collaborate with relevant partners based on partner expertise and focus.	Leading Edge
2	**Public Recognition**	x NITAG member names are not **publicly available**.	NITAG member names are publicly available.	NITAG chair is allowed to be interviewed in public media in his/her capacity of NITAG chair.	Members are co-authors or acknowledged in publications (peer-reviewed or non-peer-reviewed) of recommendations stemming from NITAG work.	Members are authors on peer-reviewed publications for research or recommendations stemming from NITAG work.	Basic

OVERALL MATURITY LEVEL FOR THIS INDICATOR	Basic

The ZITAG has been considered as a basic level of maturity on the indicator 7 on stakeholders' recognition. It is already planned by ZITAG to document their work so far for publication. The ZITAG is encouraged to develop the documentation as well as a website to increase visibility including dissemination of self-assessment.

5.8. Assessment Rating Summary

The table IX shows the overall criteria met by ZITAG

Table IX: Overall rating of assessment criteria, ZITAG External Assessment, March 2023

Percent of All Criteria Met — 63%

% of Criteria Met for Each Indicator

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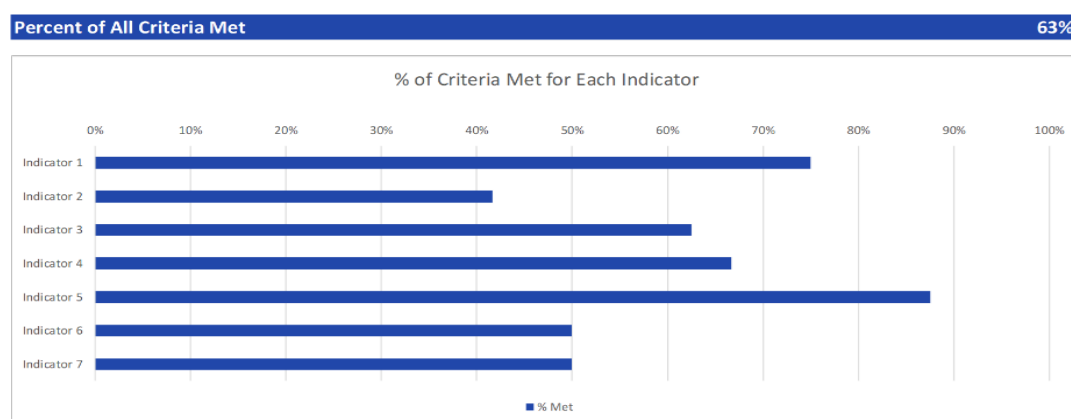
Establishment, composition and provision of recommendation scored the highest while the remaining indicators require attention for further improvement.

6. Strengths

☑ Commitment of the ZITAG members has sustained the functionality of the NITAG in ensuring standard evidence-based recommendations provided to the MoH.

☑ ZITAG has followed procedures laid out in the IMP through involvement of external expertise as required, close collaboration with Scientific societies (Paediatricians, Obstetrics and Gynaecologist), core members and Work Groups (WG) members sign the Declaration of interest for each meeting including confidentiality agreement.

☑ Experience gained by the ZITAG members through their term is contributing ably to the decision-making process and transfer skills to the new or co-opted members.

☑ ZITAG members responding to emergent and ad-hoc requests such as the pandemic, poliomyelitis outbreak response etc. to provide immediate guidance.

7. Challenges

The assessment identified challenges on the functioning and processes of ZITAG, these are.

☑ Funding sources to sustain ZITAG functionality needs to be committed and secured.

☑ Lack of systematic capacity building for the members. Identified area include new members and secretariat (Evidence to recommendation process, vaccinology, clinical trials, infodemics management, GRADE methodology, Economic evaluation).

☑ Secretariat strength is limited to support ZITAG adequately. Need to broaden the skills by adding epidemiologist support from ZNPHI and new EPI team.

☑ ZITAG work has limited visibility. Need to improve through publications of their work, use Ministers Statement for recommendations to provide summary to the public that can be included in the MOH Web site etc.

8. Best practices

☑ MOH systematically requesting the ZITAG for recommendation to guide policy in new vaccine recommendation and Immunization program related issues including emergency vaccination response (operations feasibility etc…).

☑ The mandate of the ZITAG has been renewed periodically with updating of the Implementation procedure manual.

☑ Request for external expertise input through co-opting experts into working groups to address the gaps.

9. Recommendations

Secretariat to update ZITAG Annual plan taking in account the adopted improvement plan (guided by current assessment).

NITAG Chair/EPI manager to share the Assessment findings with the Ministry of Health (audience with senior management of MoH)

WHO country office to coordinate quarterly follow up call for implementation plan monitoring (secretariat to provide quarterly update prior to the call)

Secretariat to register ZITAG to join Global NITAG network to facilitate access to global experiences sharing and new updates.

WHO AFRO and IST/ESA to facilitate capacity building need implementation

> WHO AFRO and IST/ESA to share links for online resources available for NITAG's capacity building.

10. Priority next steps

Next steps identified and validated during the stakeholder's consensus meeting

Table X: Next Priority Next Steps validated_ ZITAG external Assessment March 2023.

Indicator	Current Maturity Level*	Planned Actions	Responsible Party	Deadline
Indicator 1 Establishment & composition	Intermediate	Expertise expansion of members (vaccinologist, Immunologist, internal medicine and Health economist	MOH/EPI	June 2023
		Publish open advert to attract core members to join	MOH/EPI	June 2023
Indicator 2 Independence & Non bias	Basic	Declaration of interest for signature the TWG members to sign including external expert	ZITAG	June 2023
		Update of the Implementation Procedure manual; include Declaration of Interest, formalization of including external expert; provide new members orientation using the updated manual	ZITAG	June 2023
		Publish meeting summaries, Recommendations and IMP and any other relevant documents	ZITAG/EPI	
Indicator 3 Resources & Secretariat support	Developing	For sustainable financial support, include the NITAG workplan into the National Immunization strategic plan as well as Annual Workplan	MOH/EPI	April 2023
		Experience exchange with other NITAGs to strengthen the capacity of ZITAG members	WHO	July 23
		Facilitate refresher courses (identified areas; vaccinology, addressing 0infodemics and BeSD, etc..)		Q4

| Indicator	Current Maturity Level*	Planned Actions	Responsible Party	Deadline
		Strengthen support to the secretariat- ZNHPI to assign 02 officers epidemiology experts in the interim	MOH/EPI	July 2024
Indicator 4 Operations	Intermediate	To conduct self-evaluation every 2-3 years	ZITAG	2025
Indicator 5 Making recommendations	Advanced	To orient secretariat and core members as required on using the GRADE methodology as option (face to face and self-paced online training) WHO (to facilitate resources sharing)	ZITAG WHO	From June 2023
Indicator 6 Integration in policy making process	Developing	Formalize feedback from MOH to ZITAG on status of implementation of endorsed recommendations as well as non-endorsed	MOH/EPI	From July 2023
		MOH to involve ZITAG in Research and Development agenda	MOH/EPI	April 2023
Indicator 7 Stakeholder recognition	Basic	Increase visibility of ZITAG work by setting up a dedicated webpage on the MoH website	MOH/EPI	Q3 2023
		Publication of recommendations as scientific article;	ZITAG	Q4 2023
		Dissemination of approved recommendations during professional association meetings	WHO (to facilitate)	
		ZITAG to join the Global NITAG network (register)	ZITAG	Immediate

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Annex 1: List of Interviewees

NAME	Function-ZITAG	E-MAIL ADDRESS
Dr. Musaku Mwenechanya	Chairperson	mmusaku@gmail.com
Dr. Henry Njapau	Core member	hnjapau@hotmail.com
Prof. Evans Mpabalwani	Core member	evansmwila@gmail.com
Dr. Oliver Mweemba	Core member	mweemba2@yahoo.com
Dr. Muzala Kapina	Ex officio – ZNPHI	muzalakapina@gmail.com
Ms Mwewa Mondwa Siame	Ex officio, ZAMRA	mmsiame@gmail.com
Dr. Francis Dien Mwansa	Liaison member – UNICEF	fmdien@gmail.com
Dr. Penelope Masumbu	Liaison member – WHO	masumbup@who.int
Dr. Jacob Sakala	EPI manager	sakalajac57@gmail.com
Ms. Constance Sakala Banda	Secretariat	constancesakala@gmail.com

Annex 2: data collection tool

NITAG Maturity Assessment Data Collection Guide
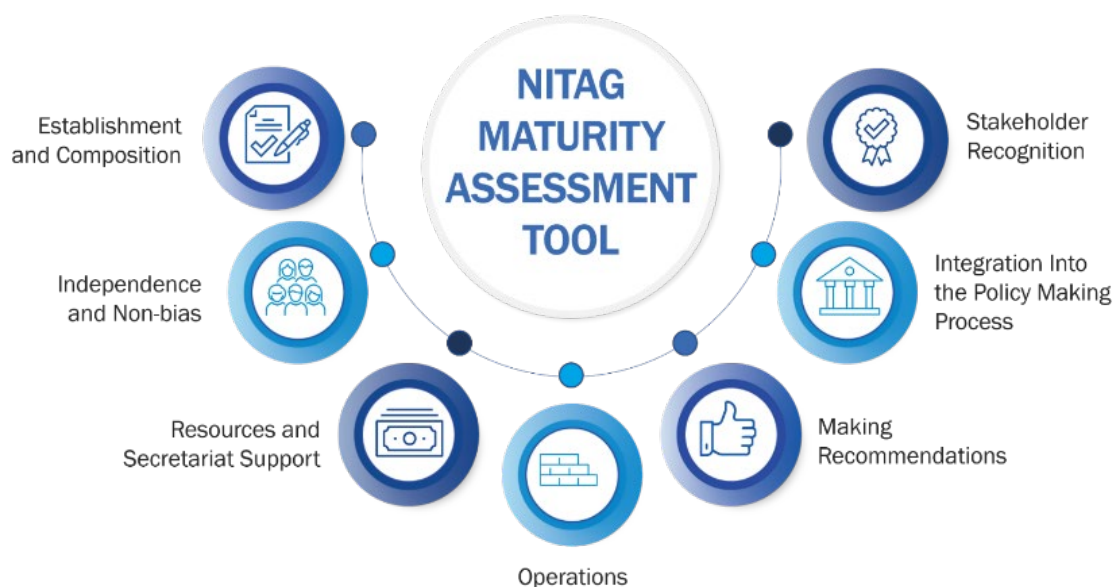
Data Collection Guide Overview

This tool is designed as a support for the NMAT *User's Guide.* Please see the *User's Guide* for complete instructions, then use this tool as desired during the data collection phase.

Country:

Assessment team members:

Dates:

Indicator 1: Establishment/composition

Official status

1	Are there official measures or documents that established the NITAG?	☐ Yes ☐ No

List any strengths, challenges, or other relevant comments:

Terms of reference (TOR)

1	Are there written terms of reference (TORs)?	☐ Yes (go to Q2) ☐ No (go to next section)
2	What does TOR incude?	☐ Mandate defining the NITAG's scope of work. ☐ Necessary aspects of NITAG structure and organization (see user's guide for details). ☐ Other (specify)
3	How often are TORs shared with members? Check all that apply.	☐ When joining the NITAG ☐ Whenever changes are made. ☐ Other (specify)
4	Which members are aware of the TORs? Check one.	☐ NITAG Chair only ☐ Some but not all members ☐ All members
5	How often are TORs reviewed and updated? (check all that apply)	☐ There is no policy for how often TORs are reviewed ☐ Reviewed at least every two years ☐ Updated as needed ☐ Other (specify)

List any strengths, challenges, or other relevant comments:

Diversity of expertise and Membership

1	How many areas of expertise are represented among the NITAG members (see user's guide for details)?	☐ Fewer than five areas of expertise (go to Q3) ☐ At least five essential areas of expertise are represented among NITAG members (go to Q2)
2	If there are at least five essential areas of expertise (see Q1 above), please note if:	☐ In addition to essential expertise, members possess expertise in topics and/or populations that span the life course and have access, via secretariat and/or invited guests, to additional areas of expertise. ☐ There is a redundancy of experts among members so that the minimum areas of expertise are still represented when absences occur.
3	Who has voting authority? Check all that apply.	☐ Secretariat members ☐ Core members ☐ Non-core members ☐ Others
4	How are members selected? Check one.	☐ They are appointed. ☐ There is open competition for membership spots.
5	Do core members have limited terms?	☐ Yes (go to Q4) ☐ No (go to Q5)
6	Are core members' terms staggered to ensure continuity; that is, terms do not all expire at once.	☐ Yes ☐ No

List any strengths, challenges, or other relevant comments:

INDICATOR 2: INDEPENDENCE/NON-BIAS

Disclosure and conflict of interest process

1	Does the NITAG have a policy on declaration of interests (DOIs)?	☐ Yes (go to Q2) ☐ No (go to Q4)
2	Who is required to complete declaration of interests DOIs? Check all that apply.	☐ There are no DOI requirements (go to Q3) ☐ Core members upon appointment ☐ Secretariat staff ☐ Working group members ☐ Non-core members
3	How often are DOIs updated?	☐ DOIs are not updated. ☐ DOIs are routinely updated.
4	Does the NITAG follow a formal written policy on conflict of interest (COI).	☐ Yes (go to Q5) ☐ No (go to next section: Transparency)
5	Does the COI policy describe process(es) for assessing and managing COIs?	☐ Yes ☐ No

List any strengths, challenges, or other relevant comments:

Transparency and independence from primary workplace of members

1	Are any NITAG documents shared with the public?	☐ Yes (go to Q2) ☐ No (go to Q3)

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2	What NITAG documents are shared and how are they shared? Check all that apply.	☐ TORs and standard operating procedures (SOPs) are publicly available. ☐ Agendas, meeting summaries, and records of decisions are publicly available. ☐ Technical reports and position papers are publicly available. ☐ NITAG actively disseminates all publicly available materials, e.g. on its website, through a journal, or via bulletin.
3	Are observations of meetings by non-members permitted?	☐ Yes (go to Q4) ☐ No (go to Q5)
4	Who can attend the meetings and how are the meetings observed? Check all that apply.	☐ Observations are permitted upon request and approval. ☐ Observations are permitted on a scheduled basis. ☐ Meetings are broadcast publicly. ☐ Other (specify)
5	Is there a policy in place to ensure members do not promote their primary employer's priorities, views, and/or products?	☐ Yes ☐ No

List any strengths, challenges, or other relevant comments:

INDICATOR 3: RESOURCES/SECRETARIAT SUPPORT

Secured funding

1	Is there secured funding?	☐ Yes (go to Q2) ☐ No (go to next section: Access to relevant data and information)
2	What statements below are correct regarding the secured funding? (check all that apply)	☐ Funding covers all basic operational costs. ☐ A guarantee of funding is in place from the government. ☐ Funding is robust. ☐ Funding can cover travel expenses for national and international activities related to NITAG strengthening (e.g. regional or global NITAG meetings, collaborations and training).

List any strengths, challenges, or other relevant comments:

Access to relevant data and information

1	What type of access does the NITAG have to relevant global data and information?	☐ No access to global information/data ☐ Inconsistent access to global information/data ☐ Adequate access to global information/data ☐ Consistent and comprehensive access to global information/data
2	What type of access does the NITAG have to relevant regional data and information?	☐ No access to regional information/data ☐ Inconsistent access to regional information/data ☐ Adequate access to regional information/data ☐ Consistent and comprehensive access to regional information/data
3	What type of access does the NITAG have to relevant local data and information?	☐ No access to local information/data ☐ Inconsistent access to local information/data ☐ Adequate access to local information/data ☐ Consistent and comprehensive access to local information/data

4	Does the NITAG have access to raw global, regional, or local information/data? Check all that apply.	☐ No access to raw information/data ☐ Access to raw global information/data ☐ Access to raw regional information/data ☐ Access to raw local information/data

List any strengths, challenges, or other relevant comments:

Access to external technical expertise

1	Does the NITAG solicit input from external experts?	☐ NITAG does not solicit or accept input from external experts. (go to next section: Secretariat support) ☐ NITAG rarely solicits or accepts input from external experts. (go to Q2) ☐ NITAG routinely obtains input from external experts. (go to Q2)
2	Does the NITAG formalize relationships with external experts through non-core membership, as appropriate?	☐ Yes ☐ No

List any strengths, challenges, or other relevant comments:

Secretariat support

1	Is there an officially appointed Secretariat to support the NITAG?	☐ Yes ☐ No
2	What type of support does the Secretariat provide? Check all that apply.	☐ There is no officially-appointed Secretariat to support the NITAG. ☐ Secretariat provides active administrative support. ☐ Secretariat provides basic technical support. ☐ Secretariat is able to conduct and/or outsource advanced analyses. ☐ Secretariat has multiple full-time staff members with a mix of skill sets that support the NITAG.

List any strengths, challenges, or other relevant comments:

INDICATOR 4: OPERATIONS

Meeting logistics

1	How often does the NITAG meet?	☐ Less than annually ☐ At least annually ☐ More than annually, and as needed beyond regular schedule
2	Are agendas produced for NITAG meetings?	☐ Yes (go to Q3) ☐ No (go to Q4)
3	When are the agendas for the meeting circulated?	☐ At the meeting ☐ At least one week before meetings ☐ Other (specify)

4	Are background documents produced for NITAG meetings?	☐ Yes (go to Q5) ☐ No (go to Q7)
5	What statement below best describes the background documents produced for the meetings?	☐ Background documents include very limited information ☐ Background documents are missing some key pieces of information. ☐ Background documents are comprehensive.
6	When are the background documents for the meeting circulated?	☐ At the meeting ☐ At least one week before meetings ☐ Other (specify)
7	Are NITAG members invited to suggest agenda items for Secretariat review?	☐ Yes ☐ No

List any strengths, challenges, or other relevant comments:

Standard operating procedures (SOP)

1	Are there written formal standard operating procedures (SOPs) for NITAG operations?	☐ Yes ☐ No
2	What do the written SOPs include or refer to? Check all that apply.	☐ COI policy and annual budget. ☐ Recommendations and tools for orienting and evaluating members
3	How often are the written SOPs reviewed?	☐ They are not routinely reviewed ☐ Regularly and updated as needed
4	Are members made aware of the written SOPs?	☐ Yes ☐ No (go to next section – Evaluation)
5	How are members made aware of SOPs? Check all that apply.	☐ NITAG does not ensure members are aware of the SOPs ☐ Updates are promptly circulated to all members. ☐ New member orientation includes review of the SOPs

List any strengths, challenges, or other relevant comments:

Evaluation

1	How often is the NITAG evaluated?	☐ There is no system for evaluating the NITAG ☐ NITAG is evaluated, but without a regular schedule ☐ NITAG is regularly evaluated
2	Is there a standardized tool that is used to evaluate the NITAG?	☐ Yes ☐ No

List any strengths, challenges, or other relevant comments:

INDICATOR 5: MAKING RECOMMENDATIONS

Decision-making process

1	Does the NITAG define or follow a standard set of elements as the basis for decision-making or use a formal structure for quality assessment of evidence?	☐ Yes ☐ No (go to next section: Output and documentation)

2 What processes does the NITAG use to make decisions?

☐ The NITAG defines and follows a limited set of elements as the basis for decision-making.
☐ The NITAG uses a formal structure for reviewing evidence and making recommendations (e.g., SAGE Evidence-to-Recommendation [EtR] framework).
☐ The NITAG uses tools to assess evidence such as GRADE or others.

List any strengths, challenges, or other relevant comments:

Documentation and communication

1 How are recommendations documented? Check all that apply.

☐ Recommendations are registered in meeting minutes
☐ Recommendations are documented separately from minutes and systematically archived
☐ Recommendations are documented separately from meeting minutes in a policy brief.
☐ Other (specify)

2 How are recommendations shared with policy makers? Check all that apply.

☐ The NITAG Chair or designee discusses recommendations with policy decision makers.
☐ Recommendations are submitted to designated policy makers in the form of a policy brief.
☐ Other (specify)

3 Do recommendations follow a consistent format?

☐ Yes
☐ No

4 Do recommendations refer to peer-reviewed published material?

☐ Yes
☐ No

5 Do recommendations refer to local evidence or contextual information?

☐ Yes
☐ No

List any strengths, challenges, or other relevant comments:

INDICATOR 6: INTEGRATION INTO POLICYMAKING PROCESS

Government consideration and solicitation

1 Is there a defined process for the MOH to officially request recommendations from the NITAG?

☐ Yes
☐ No (go to Q3)

2 Does the process include a mutually agreed-upon timetable for NITAG response?

☐ Yes
☐ No

3 Does the NITAG monitor the percentage of recommendations accepted by the MOH?

☐ Yes
☐ No

4 Is the NITAG officially informed of the MOH's decisions regarding their recommendations?

☐ Yes
☐ No

5 How does the MOH communicate their decisions regarding NITAG recommendation?

☐ In writing.
☐ Other (specify)

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6   When a recommendation is not accepted, is a clear explanation for its refusal provided in writing?   ☐ Yes
☐ No

7   If recommendations are not accepted, does the NITAG improve the process for making recommendations, if warranted by MOH's explanation for not accepting NITAG recommendations?   ☐ Yes
☐ No

8   Does NITAG consider topics suggested by the NITAG but not specifically requested by MOH, through mutually agreed upon process?   ☐ Yes
☐ No

List any strengths, challenges, or other relevant comments:

Implementation

1   Does the NITAG focus any of its efforts on vaccine implementation?   ☐ Yes
☐ No (go to indicator 7: Stakeholder Recognition)

2   In what ways does the NITAG focus on implementation? Check all that apply.   ☐ NITAG requests reports or presentations regarding implementation efforts and vaccine coverage so members can understand if their recommendation is successful or if further considerations are necessary
☐ As needed in response to identified issues or gaps regarding implementation, NITAG makes evidence-based programmatic recommendations (e.g., regarding logistics, delivery, access, etc.)
☐ NITAG is involved in setting the policy research agenda; that is, recommendations for R&D, recommendation for filling gaps in programmatic or implementation data
☐ Other (specify)

List any strengths, challenges, or other relevant comments:

INDICATOR 7: STAKEHOLDER RECOGNITION

Relationship with stakeholders

1   Are members of the scientific and professional community aware of the NITAG's role?   ☐ Yes
☐ No

2   Can members of the scientific and professional community easily access the NITAG's recommendations?   ☐ Yes
☐ No

3   Are NTAG recommendations recognized as the standard of care; that is, grossly conflicting recommendations are not issued by other authorities?   ☐ Yes
☐ No

4   Does the NITAG accept input from the public, including organizations that are not represented among non-core members?   ☐ Yes
☐ No

5   Do NITAG members exchange information and collaborate with relevant partners based on partner expertise and focus?   ☐ Yes
☐ No

List any strengths, challenges, or other relevant comments:

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