

Information Note Malaria

Allocation Period 2023-2025

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Table of Contents

Introduction	2
Investment Approach	3
Prioritized Interventions to be Funded by the Global Fund	6
1. Evidence-based decision making	6
1.1. Sub-national Tailoring (SNT) of the malaria response	6
1.2. Malaria surveillance	7
2. Prevention	9
2.1. Vector control	9
2.2. Preventive therapies	15
3. Case management	18
3.1. Diagnosis	18
3.2. Treatment	19
3.3. Tailored service delivery across all sectors	21
4. Elimination	23
5. Cross-cutting Areas	24
5.1 Equity, human rights, and gender equality	24
5.2 Community leadership and engagement	25
5.3 Social and Behaviour Change (SBC)	26
5.4 Pandemic Preparedness and Response (PPR)	27
5.5 Environment and climate change	27
5.6. Urban malaria	28
5.7. Challenging Operating Environments (COE)	28
5.8 Malaria emergencies	29
5.9 Program management	29
5.10. Sustainability of malaria response	29
List of Abbreviations	31
Annex 1: Key Data	34

Introduction

The Global Fund has developed a new <u>Strategy</u> for the period 2023-2028. The malaria component of the Strategy aims to end the disease by funding the development, implementation, and monitoring of national malaria programs that are tailored to local contexts. It intends to ensure optimal and effective vector control coverage; make best use of chemoprevention; expand equitable access to quality early diagnosis and treatment of malaria; and drive towards malaria elimination and prevent the re-establishment of malaria.

This Information Note supplements the <u>applicant guidance</u>, provides information to prepare a malaria funding request, makes recommendations on priority interventions and encourages strategic investments to achieve impact. The document also adheres with and complements normative technical guidance¹ from the World Health Organization (WHO) and other partners.

To enable the Technical Review Panel (TRP) evaluation of the funding request within the country-specific context, this note provides an outline of both the process and information that are expected from applicants. Applicants are required to:

1. Hold a robust and inclusive country dialogue involving all relevant partners engaged in the national malaria response and health system strengthening, including communities, civil society, community-based organizations, and private sector.

2. Ensure the program split and prioritization decisions are informed by a comprehensive gap analysis to achieve <u>value for money</u>. Applicants may use the RBM Country Regional Support Partnership Committee (CRSPC) gap analysis tool² to inform the Global Fund gap analysis.

3. Use WHO's guidance on sub-national tailoring of malaria to inform the decisions on intervention mixes and delivery strategies.

4. Include a brief overview of the national malaria response and the program performance at national and sub-national level in the funding request. This includes the epidemiology of malaria, relevant contextual factors, health system components, health financing data and progress and challenges towards achievement of strategic plan goals. Key data points should be included in the funding request (either in the Essential Data Table or in the narrative) - for details, please see Annex 1.

¹ World Health Organization Guidelines for malaria <u>https://www.who.int/publications/i/item/guidelines-for-malaria</u>

² The RBM partnership <u>CRSPC guidance note on malaria gap analysis tools</u>

Investment Approach

The Global Fund incorporates Program Essentials within all aspects of its investment. They are derived from normative and technical guidance and are considered critical to meet the Global Fund's malaria strategy and the Global Technical Strategy (GTS) targets. Program Essentials, which include criteria for services (Table-1) and a framework of processes, standards and requirements that <u>apply to pharmaceuticals and diagnostic products</u>, should be applied consistently for all interventions funded by the Global Fund.

Applicants are expected to consider the Program Essentials during the country dialogue, funding request development, grant making, implementation and performance monitoring. While not all national programs will be able to achieve every Program Essential, the funding request should clearly demonstrate the program's plans to achieve these standards, progress, and challenges and how their achievement is prioritized with the available resources. As for malaria, the Program Essentials are well aligned with the evolution of malaria programs and may already be within the National Strategic Plans (NSPs) or other standard documents which should be annexed as relevant.

Objective	Program Essentials
(a) Implement malaria interventions, tailored to sub-national level using granular data and capacitating decision-making and action.	 Build in-country capacity for sub-national tailoring and evidence-based prioritization of tailored malaria interventions. Build capacity for quality data generation, analysis & use at national and sub-national levels. Ensure sub-nationally tailored planning considers factors beyond malaria epidemiology such as health systems, access to services, equity, human rights, gender equality (EHRGE), cultural, geographic, climatic, etc. Ensure quality of all commodities and monitor effectiveness. Deliver all interventions in a timely, peoplecentered manner³.
(b) Ensure optimal vector control coverage.	 Evidence-based prioritization for product selection, implementation modality and timing, and frequency of delivery with a focus on ensuring sustained high coverage among the highest risk populations. Expand entomological surveillance. Address barriers hampering the rapid scale-up of new products. Evolve indicators to improve the tracking of effective vector control coverage.

 Table 1. Malaria program essentials

³ For example, in a migrant community, a community health worker from the migrant population targeted may be more appropriate; adjusting service hours to address population/patient availability (SMC or ITN delivery early morning or in the evenings), etc.

(c) Expand equitable access to quality, early diagnosis, and treatment of malaria through health facilities, at the public sector and community level, and in the private sector.	 Understand and address key barriers to access. Engage private sector providers to drive parasitological testing before treatment. Expand community platforms where access is low. Improve and evolve surveillance and data collection tools and processes to enable continuous quality improvement (CQI) and accurate surveillance. Use of quality of care (QoC) stratification to tailor support to case management across sectors. Strengthening coordination and linkages between public, private and community systems for service provision.
(d) Optimize chemoprevention.	 Support data driven intervention selection and implementation modality. Support flexibility on implementation strategies including integration within primary healthcare (PHC) as relevant.
(e) Drive toward elimination and facilitate prevention of re-establishment.	 Enhance and optimize vector control and case management. Increase the sensitivity and specificity of surveillance. Accelerate transmission reduction.

One of the key program essentials is **Sub-national Tailoring** (SNT) of malaria interventions, which is defined as the use of local data and contextual information⁴ to determine the appropriate intervention mixes, and in some cases deliver strategies for optimum impact on transmission and burden of disease for a given area, such as a district, health facility catchment or village. Funding requests are expected to demonstrate the use of SNT strategies and plans where they have been conducted and/or future planning for such efforts,⁵ but also to be aligned with national priorities and normative guidance.

Applicants are strongly encouraged to prioritize interventions based on sub-national data to the extent possible. Malaria funding requests should be strategically focused on delivering optimal intervention mixes that are cost-effective and affordable in the context of a country's own epidemiological, programmatic, financial, and health system contexts.

Value for money (VfM) aims to guide applicants to make sure investments maximize and sustain equitable and quality health outputs, outcomes and impact for a given level of resources. VfM is defined through five dimensions: economy, efficiency, effectiveness, equity, and sustainability. For more information, please refer to the <u>Value for Money</u> <u>Technical Brief</u>.

Grant <u>implementation arrangements</u> shall be bespoken on the needed capacities to implement and coordinate the malaria interventions at sub-national level. Integrated risk management is essential to achieve impact.

⁴ Contextual information includes health systems, access to service, EHRGE and climatic information,

⁵ At time of publication, the WHO manual on sub-national tailoring of interventions was not yet published. Please check the WHO website for update. <u>https://www.who.int/teams/global-malaria-programme</u>

Applicants are also recommended to consider the <u>Protection from Sexual Exploitation</u>, <u>Abuse and Harassment (PSEAH)</u>, as well as child protection in the planning and design of program interventions. Program related risks of sexual exploitation, abuse and harassment to beneficiaries, community workers and others (as relevant) need to be identified in the proposed interventions, which should also include the necessary mitigation measures to ensure that services are provided to, and accessed by, beneficiaries in a safe way. It is also recommended to include PSEAH in community awareness activities like outreach strategies, communication campaigns, trainings or other activities which target grant beneficiaries.

Effective, integrated, quality, people-centered malaria services are dependent on functional health system and primary health care (PHC). The required <u>Resilient and Sustainable</u> <u>Systems for Health (RSSH)</u> interventions, including community systems strengthening, designed to ensure achievement of malaria outcomes should be discussed during country dialogue, and the identified priorities should be included for funding. It is critical that malaria program managers participate in the country dialogue on RSSH investments and vice versa to prioritize the key RSSH functions required for malaria service delivery. Key considerations for investments in RSSH for national malaria control programs include:

- 1. Investments to identify and address quality gaps in key services at primary health care level, such as quality improvement for acute febrile illness, community health packages and antenatal care (ANC). Opportunities to integrate activities such as training, referral networks and support supervision can be considered to improve quality and efficiency of PHC, of which malaria is a part.
- 2. **Investments to strengthen the health workforce**, including both facility-based health workers (public and private) and community health workers (CHWs). Applicants are encouraged to prioritize support to workforce planning and optimize available skills mix through improved deployment of the available personnel. This may include support to analyses related to human resources for health (HRH), such as workload analyses; governance and planning, such as data systems and strategic planning; and capacity for HRH planning and management at national and/or sub-national level.

Applicants are also encouraged to develop context-specific interventions to improve health worker performance. CHWs are an essential part of HRH and broader community systems strengthening (CSS) and recruitment, training, supervision, and reimbursement of CHWs could be included in any analyses, strategy, planning and performance improvement efforts. Integrated supportive supervision or quality improvement activities are evidence-based interventions that can be scaled up through RSSH investments including CSS.

- 3. Investments to strengthen generation and use of data, strengthen national <u>supply</u> <u>chain management</u> and improve routine primary care services.
- 4. Adaptations to foster people- and population-centered service delivery, including equity, cultural and gender-relevant issues to improve access and uptake of services; community-based service delivery; community-led monitoring; CHWs for service in migrant/refugee/indigenous populations, where such populations are at risk of malaria.

Prioritized Interventions to be Funded by the Global Fund

1. Evidence-based decision making

1.1. Sub-national Tailoring (SNT) of the malaria response

A sub-national tailored response is based on the use of malaria-specific, health system, geographic, equity, human rights, gender equality (EHRGE), climatic, political, and other relevant data as well as intervention quality and performance data at the lowest level possible. The aim is to provide quality, people-centered care that maximizes resources and impact. An SNT response requires the gathering, storing and analysis of sub-national data, the use of this data for decisions on mixes and delivery of interventions, as well as the continual use of this information for sub-national planning. The Program Essentials outlined in Table 1 are built around this framework: therefore, funding requests should be based on an SNT analysis and plan and, when feasible, funding should be included to strengthen data generation, quality, and use.

The Global Fund can support the different components needed to facilitate a sub nationally tailored malaria response, which include:

- Creation, maintenance, and use of malaria data repositories (MDRs) and required staffing and equipment, in alignment with WHO guidance.⁶ MDRs should draw from routine surveillance (health management information system, surveys, etc.), retrospective data on the malaria burden and response, as well as human resource information, health workforce accounts, climate, commodities, etc. They should be interoperable with existing information systems (laboratory and logistics management information systems).
- Introduction of additional relevant data sets into MDRs such as geospatial mapping, meteorologic data sets, EHRGE analyses, etc. This includes facilitation for the required adaptations of data to align with the operational framework of a malaria program's MDR.
- 3. Mapping of sub-national Continuous Quality Improvement (CQI) activities and results to address quality issues in a targeted and timely manner.
- 4. Addressing data gaps such as understanding barriers to access, in order to adapt intervention choice and implementation methodology.
- 5. Short- and long-term capacity building of national and district malaria programs to use available data to develop (and update) sub- nationally tailored strategies and plans (including the associated modelling) with the vision of programs being able to conduct these exercises independently.

⁶ WHO guidance for evidence-informed decision-making

1.2. Malaria surveillance

Malaria surveillance is a key intervention in all malaria-endemic countries. It is especially important in areas approaching elimination or those which have eliminated malaria. A malaria surveillance system comprises the people, procedures, tools, structures, and processes necessary to gather and interpret information on when, where and at what level malaria cases are occurring. An effective national surveillance system allows programs to monitor and evaluate interventions and to make sub-national tailored, prioritized decisions on investments.

Malaria programs need to work towards robust surveillance systems and build monitoring and evaluation (M&E) staff capabilities to: (a) Identify sub-national areas and population groups most affected by malaria; (b) Assess quality and effectiveness of necessary interventions through a holistic review of surveillance information with sufficient granularity to guide the response; (c) Review progress and decide whether adjustments to interventions or combinations of interventions are required; (d) Detect and respond to epidemics in a timely way; and (e) Perform case-based surveillance, provide relevant information for certification and monitor whether the re-establishment of transmission has occurred in elimination settings.

1.2.1. Health Management Information System (HMIS)

One important aspect of a malaria surveillance system is a strong routine Health Management Information System (HMIS). Investment in HMIS will also contribute to building the national SNT capacities. Applicants are strongly encouraged to consider interventions that better link HMIS to broader national efforts (e.g., District Health Information Software-2, (DHIS2) roll out) and surveillance, monitoring and evaluation plans. Applicants should also consider interventions that support the digitization of HMIS and data collection and the integration with National MIS (e.g., DHIS2) as they contribute to broader national plans and systems. In countries nearing, elimination surveillance systems should support active case detection and notification.

The Global Fund supports the people, procedures, tools, training and supervision for routine data collection and analysis (HMIS). This includes the various components of the routine data system (public, private, community) and different administrative levels. Robust, quality assured HMIS data are critical to a sub-national tailored malaria response and should be supported with quality assurance activities. Actions and decisions based on this data can only be as strong as the data itself.

Register revisions need to be considered to align with disease categorization across the case management cascade (for details, see WHO Surveillance Manual⁷), including reasons for care seeking, test performed, test result, diagnosis and treatment. Activities to support quality registration of cases can include training and supervision on recording, compilation

⁷ Malaria surveillance, monitoring & evaluation: a reference manual

and record submission as well as data entry, quality assurance reviews and follow up. Applicants are strongly encouraged to detail how interventions that support health information systems will use/analyze data and assess/improve data quality.

The WHO malaria surveillance assessment toolkit⁸ can be used to support countries in the assessment of surveillance systems and data quality. Technical assistance needs in strengthening the HMIS system and in using the surveillance assessment toolkit can be budgeted in the funding request.

1.2.2. Other surveillance data collection

The Global Fund also supports the collection and analysis of data through household and health facility surveys. Such surveys can provide robust estimates of intervention coverage and access to services at the population level. These results are critical to ensure that interventions are reaching the intended target population at desired levels. National household surveys can be supported with appropriate justification of the timing and utility of the modules. Other survey methodology, potentially useful for program management evaluation such as lot quality assurance sampling (LQAS) and ANC surveillance, can be considered when appropriate justification and methodology are presented.

Entomological surveillance, ITN durability studies (see Vector Control section below) and therapeutic efficacy studies (see Case Management section on page 21) should be included in the budget. In addition, targeted behavioural surveys, and specific, targeted operations research to inform access and delivery bottlenecks can be considered. Please see the respective sections of this Information Note for more information on funding for these data collection activities.

Malaria programs should also strengthen financial data intelligence and management system. Possible activities to be funded included to: (1) Assess the funding landscape including program expenditure by key program areas and source; (2) Understand the unit costs of key interventions, main cost drivers and variation across regions and delivery platforms; (3) Compare what types of intervention may be more cost-effective for a given area, taking into account service accessibility and program feasibility; and (4) Delineate potential resource needs to implement sub-nationally tailored response or intervention mixes given the disease burden and program reality.

⁸ Malaria Surveillance Assessment Toolkit

2. Prevention

2.1. Vector control

All requests for vector control need to be grounded in a national vector control strategy based on up-to-date entomologic and epidemiologic data and follow the WHO Guidelines for Malaria⁹. Insecticide resistance management principles, as outlined in the WHO Global Plan for Insecticide Resistance Management¹⁰, are expected to be followed. Intervention choices should be guided by the manual¹¹ for monitoring insecticide resistance in mosquito vectors and selecting appropriate interventions.

Applicants should describe:

1. Their target populations for vector control and planned Intervention mixes, as appropriate; and

2. The rationale for the choice of vector control tools, such as Insecticide Treated Nets (ITN) or Indoor Residual Spraying (IRS), epidemiological, entomological and user behaviour context, alongside any other criteria considered relevant by the program.

Please refer to the relevant Program Essentials in Table 1 to ensure the funding request includes the relevant information on progress, challenges and plans to address any gaps and to achieve optimal vector control coverage.

It is assumed populations at risk of malaria will be targeted with at least either ITNs or IRS (where the main vectors and context make these tools appropriate). If scale back of vector control is proposed, the chosen approach should be robustly justified: it should demonstrate how it is part of a sub-nationally tailored malaria control plan that responds to the epidemiological, entomological and user context, and include a detailed examination of the potential for resurgence given malaria burden prior to any recent vector control. Any such scale back should also be accompanied by sufficient surveillance and response capacity in order to detect and respond to any potential resurgence and be initially moderate in scale with a plan to assess impact.

2.1.1. Insecticide Treated Nets (ITN)

Expression of full need and rationale for request:

As with all interventions, it is important for the Global Fund and partners to understand the full need for a country program. While the NSP and tools such as the RBM CRSPC gap analysis tool¹² cover all interventions, the Global Fund is specifically asking for the full

⁹ WHO Guidelines on Vector Control

¹⁰ <u>Global plan for insecticide resistance management in malaria vectors</u>

¹¹ Manual for monitoring insecticide resistance

¹² RBM Country/Regional Support Partner Committee (CRSPC) Gap Analysis

expression of need for ITNs to ensure a clear understanding of a national program's plans based on the recent introduction of new ITN products, global reviews on attrition/durability and widespread piloting of new distribution strategies.

It is expected that the ITNs program will be sub-nationally tailored, as appropriate to variations in epidemiology, vector profile (including insecticide resistance), historical ITN durability and/or attrition, population behaviors etc. Sub-national variations may include type of ITN, ITN distribution approach, frequency of ITN distribution, social and behavior change activities (SBC), or other relevant program areas.

Applicants should therefore:

1. Describe the ITN strategy (including ITN types, volumes, delivery approaches) as an expression of the full need to maintain optimal effective ITN coverage of the target populations. The full volume need should be based on local data on durability, attrition, and coverage at different post-distribution time points; the rational for the ITN strategy and the data sources should be described.

2. After accounting for all partner contributions, if the funding request does not cover the full need, applicants should explain the prioritization process that was followed to balance the need across the three-years grant, cost, effectiveness, coverage, and potential for impact.

ITN types: Applicants are required to align selection of ITN types with WHO recommendations. ITN types effective against the local vector population are expected to be proposed and sub-nationally varied as appropriate. Note that WHO has an updated conditional recommendation for deployment of pyrethroid-PBO ITNs¹³ advising:

- Deployment in areas of pyrethroid resistance should be based on a resource prioritization exercise due to their higher cost; and
- Prioritization of areas for deployment could be based on data demonstrating metabolically based resistance.

If additional ITN types are recommended by WHO for use in areas of pyrethroid resistance by the time of the funding request submission, these will also be considered within a resource prioritization exercise. Countries who have previously deployed non-pyrethroidonly ITNs (i.e., pyrethroid-PBO ITNs or dual active ingredient ITNs under the Strategic Initiative projects) should not revert to pyrethroid-only ITNs for these geographic areas in their future funding requests.

¹³ WHO Guidelines for malaria <u>Pyrethroid-PBO nets</u>.

Operational considerations. Distribution may be through:

1. Intermittent campaigns, which need to be accompanied (including during campaign years) by continuous distribution through proven channels such as ANC, EPI, and/or school- or community-based distribution; or

2. Higher through-put continuous distribution channels instead of campaigns (e.g., annual school distribution).

Sub-national variation in distribution approaches may be appropriate to target the specific needs and vulnerabilities of the (sub)populations most affected. Applicants are encouraged to demonstrate how the proposed distribution approaches are based on considerations of cost per net delivered/used, equity of access, ability to maintain coverage or other considerations. Using NetCalc can help with the assessment of different options¹⁴. Evaluation plans will include assessment of these criteria to inform future planning.

The Alliance for Malaria Prevention (AMP) guidelines¹⁵ for campaign planning should be followed. It is essential that quantification for campaigns: (1) Assume no capping of ITNs by household size; (2) Consider whether any quantification factors would be appropriately tailored sub-nationally; and (3) Include a 10% contingency stock if the population data are older than five years. A plan for sound <u>waste management</u> should be included in the funding request, including efforts to limit waste. While retrieval of old nets from households is not recommended (nor historically funded by the Global Fund), there are recycling pilots underway for old ITNs. If successful, these could be considered for future fundings.

If a program requires technical assistance for ITN distribution planning, the Global Fund strongly encourages prioritization of this assistance within the funding request (e.g., AMP TA). Support for digitization of campaigns can also be included; the Global Fund encourages an integrated, multi-purpose digital platform that can be used for malaria campaigns as well as other campaigns and activities (e.g., vaccination campaigns).

ITN use and care: Applicants are required to include data on ITN use where there is access (at national and sub-national level, if available) and describe how a high use given access will be achieved/maintained. The scope and scale of social and behaviour change (SBC) activities should be appropriate to the local profile of use given access (i.e., if a population has high use given access, funding will focus on access rather than on additional SBC activities around hang up and use). SBC activities to promote proper net care may be warranted.

Exclusions: The Global Fund does not invest in ITN container storage, mop-up or hang-up campaigns, or non-essential data collection required by other partners.

¹⁴ Choosing a continuous distribution channel

¹⁵ Alliance for Malaria Prevention <u>resources</u>

ITN procurement: The Global Fund guidance on ITN specifications is available <u>here</u>. Only WHO prequalified and recommended products can be procured. ITNs need to be rectangular and one of the standard sizes listed <u>here</u>. Color (white, green, or blue) can be specified as part of the product specifications. Material preference can be indicated, but applicants cannot restrict their specifications to one single material.

If applicants request procurement of ITNs outside of the standard sizes, shapes or fabrics, these requests need to be supported by local evidence of significant impact on differential ITN use and/or durability. If necessary, funding for this evidence generation can be supported. ITNs can be procured with or without hooks and strings, considering local understanding of their importance, or otherwise, to encouraging hang-up. Applicants can consider the unit cost savings on the size of ITN or included accessories (i.e., hooks and strings) to support the procurement of more ITNs or more expensive, but more effective, ITNs. When budgeting, applicants are required to use the appropriate <u>Global Fund Standard</u> <u>Reference Price</u>. In line with WHO recommendations, the Global Fund does not allow applicants to specify the type of pyrethroid on an ITN.

All products will undergo pre-shipment testing in accordance with <u>Global Fund's policy on</u> <u>sourcing and procurement of health products.</u> ITN durability monitoring, using standard protocols, should be planned for, and are strongly encouraged to be included in the funding request. Applicants are expected to explain how this data will be used to increase program efficiency.

2.1.2. Indoor Residual Spraying (IRS)

Given its high cost, IRS in malaria endemic areas shall only be **initiated** if sustainable financing is assured. If IRS is requested within the funding request for the 2023-2025 allocation period, applicants are strongly encouraged to include a description of long-term IRS financing.

When a country maintains an existing IRS program, a sound insecticide-resistance management strategy must be in place, in line with the Global Plan for Insecticide Resistance Management¹⁶, and with the operational guidance in the IRS Operational Manual¹⁷, as well as routine monitoring of the quality and coverage of IRS.

Comprehensive health and environmental compliance safeguards need to be implemented for all IRS programs supported by the Global Fund. Applicants are strongly encouraged to include and budget the following items/activities for every IRS program: appropriate environmental contamination containment measures, waste management and disposal, and personal protective equipment (PPE). A description of how these safety aspects will be maintained must be included in the funding request if Global Fund resources are used to support IRS.

¹⁶ Global plan for insecticide resistance management in malaria vectors

¹⁷ Operational manual for IRS for malaria transmission, control and elimination

2.1.3. Combining ITNs and IRS

The Global Fund supports deployment of ITNs and IRS in the same geographic area if all the following points are true, which should be made explicit in the funding request:

1. The first method of vector control is funded at optimal coverage and delivered to a high standard in the area of proposed co-deployment.

2. The combination is proposed for the management of insecticide resistance and as part of a national insecticide resistance monitoring and management plan.

- 3. The proposal is part of a comprehensive malaria control plan which:
 - a. Is adapted at sub-national level.
 - b. Is supported by a prioritization process that includes cost-effectiveness considerations, and
 - c. Leaves no gaps in other high or moderate burden areas.

2.1.4. Supplementary interventions

Larval source management

Larviciding can be supported as a supplementary intervention if applicants include the following information in their funding request for the 2023-2025 allocation period:

- i. Justification by the vector profile based on robust entomological data.
- ii. Mapping of areas where optimal coverage with ITNs or IRS either has been achieved or is inappropriate due to context such as vector or community behavior (justification must be included); and
- iii. Evidence that aquatic habitats are few, fixed and findable, and where its application is both feasible and cost-effective¹⁸.

Habitat modification or manipulation is not recommended by WHO unless *An. stephensi* has been detected and if this intervention is considered feasible as part of an appropriate, multisectoral, *An. stephensi* response.

Larvivorous fish are not recommended by WHO and will not be funded.

House screening

House screening is conditionally recommended by WHO. Applicants proposing to include this intervention should assess the feasibility, acceptability, impact on equity and resources needed for screening houses within each context in order to determine whether such an intervention would be appropriate for their setting. They are strongly advised to review the

¹⁸ WHO guidance on Larval source management

detailed recommendation including rationale and practical guidance to determine if a strong justification for inclusion can be provided. If prioritizing Global Fund resources for house screening, applicants should detail how this intervention meets the following criteria:

1. Is part of an integrated vector management (IVM) approach.

2. Is proposed as a component of a wider strategy and follows the deployment of interventions recommended for large-scale deployment (ITN or IRS); and

3. Is accompanied by an evaluation plan.

The proposed deployment approach should be well described and consider the practical guidance included in the relevant section of the WHO Guidelines for Malaria¹⁹.

Interventions currently not eligible for funding

Other interventions recently assessed by WHO, and not recommended due to limited evidence for additional public health impact at the time of writing of this note, include topical repellents, space spraying, insecticide treated clothing and plastic sheeting, and spatial repellents. These will not be considered for funding unless a WHO recommendation is made in the future.

2.1.5 Anopheles Stephensi

An. stephensi is an emerging threat to the control of malaria in Sub-Saharan Africa. Applicants are strongly encouraged to review the WHO GMP documents²⁰ advising on surveillance and control approaches and include associated activities in their applications.

2.1.6. Entomologic surveillance

Applicants are strongly encouraged to put in place an insecticide resistance and management plan, based on the WHO framework²¹ and manual for monitoring insecticide resistance²². Entomological surveillance should be prioritized in their funding request for the 2023-2025 allocation period if other sources of funding are not available. The surveillance plan should cover data needs to inform planning and evaluation, including insecticide susceptibility testing, at least annually. This data is important for supporting procurement requests and shall therefore be prioritized.

2.1.7. Vector control capacity building

The Global Fund fully supports WHO's recommendation in the Global Vector Control Response that vector control needs assessments²³ be conducted via an inter-sectoral process, to cover both vector control operational capacity and entomological surveillance capacity. The funding request can include financial resources required to support the needs assessment, as well as capacity building activities.

¹⁹ WHO guidelines for <u>Supplementary interventions</u>

²⁰ WHO initiative to stop the spread of Anopheles stephensi in Africa

²¹ Framework for a national plan for monitoring and management of insecticide resistance in malaria vectors

²² Manual for monitoring insecticide resistance in mosquito vectors and selecting appropriate interventions

²³ Framework for a National Vector Control Needs Assessment

2.2.1. Drug-based therapies

Decision-making on type of chemoprevention. With growing evidence on the impact of different types of drug-based prevention tools, national programs can explore what needs to be prioritized based on the local epidemiology, transmission intensity, seasonality, access to services, and interaction of multiple chemoprevention strategies where applicable. Note that people living with HIV and receiving Cotrimoxazole preventive treatment are not eligible for malaria chemoprevention using Sulfadoxine-pyrimethamine (SP). In June 2022, WHO updated a guidance on chemoprevention strategies²⁴.

Refer to the relevant Program Essentials in Table 1 to ensure the funding request includes the relevant information on progress, challenges and plans to address any gaps and meet these standards.

Seasonal Malaria Chemoprevention (SMC)²⁵

WHO guidance has broadened the flexibility around targeting SMC to consider regions with highly seasonal transmission outside of the Sahel region, different age groups, transmission intensity and duration, and drug choice. Therefore, applicants should: (1) Provide the relevant information and analysis on these factors when requesting resources for SMC (e.g., local age pattern of severe malaria admissions, duration of high transmission season, etc.); (2) Provide an overview of the implementation plan containing a strong monitoring and evaluation component that includes pharmacovigilance and drug resistance monitoring; (3) Describe strategies to improve efficiency and quality of service delivery, including but not limited to (nor required) digitalization and/or integration with other interventions (such as malnutrition screening or Vitamin A supplementation); and (4) Consider the cost-effectiveness of SMC i.e. accounting for the burden of disease in the targeted geographic area as well as the age group(s).

Intermittent Preventive Treatment of Malaria in Pregnancy (IPTp)²⁶

Strategies to increase uptake of IPTp need to consider improving Antenatal Care (ANC) attendance as well as improving quality of ANC, as low quality of service can affect attendance. New methods of delivering IPTp such as community IPTp (cIPTp) require an integrated systems approach in which the continuum of care for pregnant women is reinforced. Intermittent screening and treatment of pregnant women is not supported by the Global Fund as it has been found to be less effective than IPTp.

Integration of IPTp with other activities targeting pregnant women within reproductive, maternal, newborn, child, and adolescent health (RMNCAH) services, sexual and reproductive health and rights (SRHR) and activities such as HIV services for pregnant

²⁴ WHO guidance on preventive chemotherapies

²⁵ WHO guidance on SMC

²⁶ WHO guidance on IPTp

women will be encouraged as ANC is the usual entry point into the health care system for women of reproductive age. Applicants are encouraged to think comprehensively about a pregnant woman's overall health and invest to strengthen antenatal and postnatal care (ANC-PNC), including through training of CHWs who can deliver RMNCAH and malaria interventions as part of a comprehensive package of care. Women, children and newborns still have limited access to quality of care, and there are opportunities to invest in the health system building blocks such as HRH, data systems, procurement and supply chain systems and laboratory systems to strengthen IPTp as part of ANC-PNC. All Global Fund malaria grants supporting Malaria in Pregnancy (MIP) services should include an indicator on IPTp3 and monitor ANC attendance.

Perennial Malaria Chemoprevention (PMC)²⁷

The Global Fund will continue to support Intermittent Preventive Treatment for infants (IPTi) and its updated nomenclature with a broadened spectrum, PMC, to reach a larger number of children with this preventive intervention. Countries introducing IPTi/PMC or modifying the delivery mechanisms or target age groups need to closely monitor coverage and, where possible, impact on malaria. PMC should be integrated with other strategies targeting the same age group populations, such as EPI or deworming. Note that new evidence from the several ongoing projects on IPTi will be generated in the coming years and may have implications for the guidance. Where IPTi/PMC are implemented, monitoring of SP resistance is advised.

Mass Drug Administration (MDA)²⁸

Mass drug administration (MDA) can be used with two different objectives: burden reduction or transmission reduction. WHO recommends that MDA for burden reduction can be considered in areas with moderate to high *P. falciparum* transmission for short-term burden reduction (evidence of 1-3 months post-MDA). The Global Fund will support MDA for emergency burden reduction (including malaria outbreaks and malaria control in emergency settings, section 5.8) and will require strong justification given the short duration of the effect.

MDA for transmission reduction will continue to be supported by The Global Fund in the context of intensified elimination efforts targeting all or specific vulnerable populations. *Plasmodium Vivax* elimination is currently not included in the MDA elimination guidance.

Funding for MDA implementation needs to be balanced against funding for other interventions with longer-term effects on malaria burden or transmission and on the overall health system. Countries are expected to monitor susceptibility to the drug deployed, as well as interaction with first line Artemisinin-based combination therapies (ACTs).

²⁷ WHO guidance on Perennial Malaria Chemoprevention

²⁸ WHO MDA guidelines

Other chemoprevention strategies

The funding request can include the two new chemoprevention strategies, Intermittent Preventive Treatment for school children²⁹ (IPTsc) and Post Discharge Malaria Chemoprevention³⁰ (PDMC). Introduction of **IPTsc** should not compromise chemoprevention interventions for those carrying the highest burden of severe disease (e.g., children under 5 years old). PDMC provides a full therapeutic course of an antimalarial at predetermined times following hospital discharge to reduce re-admission and death, and targets children admitted with severe anaemia not due to blood loss following trauma, surgery, malignancy, or a bleeding disorder. Applicants are requested to justify the selection of the strategy at national or sub-national level and include methods to ensure equitable access to preventive strategies.

2.2.2. Malaria vaccine

The Malaria Vaccine implementation program³¹ will be funded until 2023 by the Global Fund's Malaria Strategic Initiative, in collaboration with Gavi and Unitaid, in order to generate more evidence on the vaccine's impact, safety, and feasibility.

The Global Fund will continue to support implementing countries' efforts to develop evidence-based, costed national malaria plans and determine the best malaria intervention mixes based on national context. Malaria vaccine *RTS*,*S*/*AS*01 (RTSS) introduction requires a strong coordination between the national immunization program and the malaria control program and has to consider several factors such as: levels of malaria transmission at subnational level, pattern of severe malaria, structure and function of the health system, use and coverage of existing malaria control interventions, and the context where the vaccine could best complement other tools as part of a package of interventions.

The WHO recommendation and position on the RTSS vaccine is now published in an updated WHO position paper as well as in the WHO guidelines³² for the prevention of *P. falciparum* malaria for children living in regions with moderate to high transmission. Gavi has approved an investment³³ to support the introduction, procurement and delivery of RTSS in Gavi-eligible countries in sub-Saharan Africa in 2022-2025. To facilitate the distribution of the limited supply, WHO has led the development of an "allocation framework"³⁴ that provides guidance on the allocation of RTSS between countries, and priority criteria for vaccination of certain countries' areas until supply constraints are resolved.

A recent modelling analysis commissioned by the Global Fund in consultation with partners showed that the optimal intervention mixes for a given country or subnational area is highly dependent on its epidemiological and programmatic setting (e.g., parasite prevalence, malaria seasonality, programmatic coverage achieved, cost of intervention including

- ³¹ Malaria vaccine implementation program ³² WHO guidelines for the malaria vaccine
- ³³ Gavi <u>application window</u>

²⁹ WHO guidance IPTsc

³⁰ WHO guidance PDMC

³⁴ Malaria Vaccine <u>Allocation Framework</u>

products and service delivery, others). Countries are highly encouraged to carry out intervention prioritization analysis with latest data, both epidemiological and financial, to identify the optimal intervention mix given the resource envelope and considering programmatic feasibility and other key factors.

While the Global Fund will not support the vaccine procurement and introduction, the funding request can include technical support for SNT or for the National Strategic Plans (NSP) update and Malaria Program Reviews (MPR) including the vaccine.

3. Case management

Effective diagnosis and treatment

Interventions included for malaria case management are required to support the expansion and equitable access to quality, early diagnosis, and treatment of malaria, throughout the continuum of care regardless of the sector, (e.g., public sector, community level and private sector) and to address biologic threats such as drug resistance and parasite gene deletions through generation of country-specific data and targeted implementation of mitigating measures.

Refer to the relevant Program Essentials in Table1 to ensure the funding request includes the relevant information on progress, challenges and plans to address any gaps in order to meet these standards.

3.1. Diagnosis

The Global Fund supports early diagnosis of malaria through testing of suspected cases with microscopy or Rapid Diagnostic Tests (RDTs). Achieving universal coverage of testing and confirmation of parasitological diagnosis of malaria before treatment requires availability of testing capacity, reinforced by training, supervision, agile supply chain and quality assurance at all levels of the health system. In the case of microscopy, consider efficiencies across disease programs when funding external quality assurance (EQA), procurement and lab technicians' capacity.

Current evidence is still limited on the individual and public health cost-benefits of detecting and treating low density malaria infections contribution to malaria transmission reduction. As a result, for routine case management, the Global Fund does not support more sensitive diagnostic tools targeting low density parasite infections such as polymerase chain reaction, highly sensitive RDTs, and loop-mediated isothermal application (LAMP). If additional evidence and related WHO policy guidance are developed, the Global Fund will reassess support for these tools.

Key considerations for RDTs selection and procurement:

• Procurement of malaria RDTs needs to be in accordance with Global Fund's <u>Quality</u> <u>Assurance Policy</u> for Diagnostic Products and procurement policies.

- Technical considerations for selection need to be based on *plasmodium* species prevalence.
- RDTs within species categories are considered interchangeable, therefore brand preference is not a criterion for selection. Continued supervision and training are required to ensure quality of diagnosis, but brand-specific training is not necessary based on RDT use and experience across many countries.

3.1.1. Addressing biologic threats: Pfhrp2/3 Gene Deletions

A critical biologic threat is the emergence of *pfhrp2*/3 gene deletions that evade detection of the most used malaria RDTs. *P. falciparum* with deletions of *pfhrp2*/3 genes can cause false-negative RDT results with standard *Hrp2* based RDTs, resulting in patients going untreated and potentially progressing to severe disease, while also perpetuating transmission.

First identified in Latin America, parasite gene deletions have been confirmed in the Horn of Africa with signals of emergence in neighboring countries, posing a wider risk in all of Africa. Depending on the country specific context, the Global Fund can support baseline and periodic surveys³⁵ to determine whether local prevalence of mutations in the *pfhrp2/3* genes causing false negative RDTs has reached a threshold that might require a change in the local or national diagnostic policy. Alternative RDTs appropriate for *pfhrp2/3* gene deletion settings can be procured with The Global Fund support in consultation with the technical and sourcing operations teams and in accordance with product eligibility requirements.

3.2. Treatment

There are currently six WHO recommended and pre-qualified Artemisinin-based combination therapies (ACTs)³⁶ which, in the absence of resistance, have all been shown to be safe and result in parasitological cure rates above 95%. The selection³⁷ of first line ACTs should be in line with country treatment guidelines, and informed by in-country drug resistance surveillance, adherence, cost and usage in other settings, such as private sector and chemoprevention interventions.

Quantification and forecasting for antimalarials are expected to consider trends on burden, current access to care and any potential increases in access (e.g., scale-up of community services), and/or removal of barriers to access to care (e.g., removal of user fees or inclusion of people-centered care service delivery that improves access).³⁸

3.2.1. Management of severe malaria

At the health facility level, the Global Fund continues to support parenteral artesunate as the first-line treatment for severe malaria in children and adults, including pregnant women

³⁵ Protocol for <u>surveillance</u> surveys to monitor HRP2 gene deletion

³⁶ Artemisinin-based combination therapies (ACTs)

³⁷ For further details see WHO guidelines <u>Artemisinin-based combination therapy</u>

³⁸ For further details please see the RBM <u>CRSPC guidance note on malaria gap analysis tools</u>

in all trimesters. If artesunate is not available, then parenteral artemether is the second line choice.

For community case management, the Global Fund supports pre-referral treatment with rectal artesunate (RAS) for children under 6 years of age. However, recent implementation evaluation results from CARAMAL project (Community Access to Rectal Artesunate for Malaria), a three-year operational research project (2018–2020), highlighted significant challenges to the effective delivery and expected impact of pre-referral treatment in part due to weak or non-functional referrals systems and incomplete post-referral treatment. If the funding request includes procurement of RAS, it has to elaborate on the ongoing and planned activities in order to ensure effective training of CHWs and CHW supervisors, education of caregivers, operation of the referral systems, 3-day treatment with ACTs following initial parenteral treatment and other related aspects of the full continuum of care. The funding request can include support for these activities.

3.2.2. Management of Plasmodium vivax

When requesting funding for primaquine (PQ) for radical cure, we recommend that countries demonstrate having an adequate monitoring system for detecting and managing hemolysis (irrespective of whether a country employs glucose-6-phosphate dehydrogenase (G6PD) deficiency testing or not). This includes a pharmacovigilance system consisting of significant patient education, appropriate follow-up and referrals. The Global Fund can support testing for G6PD deficiency through diagnostics which are WHO pre-qualified or approved by Expert Review Panel for Diagnostics (ERPD). This includes the laboratory-based fluorescent spot tests and G6PD RDTs. Appropriate monitoring of relapses should also be included in these contexts to follow up the efficacy of radical cure.

Single-dose treatment with tafenoquine for radical cure has received approval from two stringent regulatory agencies with a follow-up label change: they state that tafenoquine should be co-administered with chloroquine only and no other antimalarials (e.g., ACTs).

Tafenoquine does not currently have WHO prequalification pending development of guidance around the use of tafenoquine in conjunction with approved G6PD point-of-care quantitative tests. As confirming G6PD status is a critical safety component of tafenoquine use, and has important operational challenges, procurement of tafenoquine through the Global Fund will require consultations with the technical teams on a case-by-case basis until such guidance is available.

3.2.4 Addressing biologic threats: Antimalarial Drug Resistance

In addition to efforts to address drug resistance in the Great Mekong Subregion, the emergence of artemisinin partial resistance and reduced efficacy of partner drugs in Africa require a coordinated and proactive response³⁹. The Global Fund supports routine surveillance for drug resistance through Therapeutic Efficacy Studies (TES) which need to be conducted at least once every two years. The U.S. President's Malaria Initiative (PMI) will provide funding and support implementation of TES to the countries they are supporting. Therefore, these interventions do not need to be included in the funding request. If funding is not available through other sources, TES will then need to be prioritized within the funding request. The funding request can include surveillance for molecular markers of drug resistance which can be integrated in ongoing TES, surveys or surveillance activities and support for the in-country capacity to do so.

Transitions of first line ACTs are expected to be based on results from TESs, documented signals of drug failure/delayed parasite clearance, evidence of low adherence to a current treatment and need to consider cost implications. As further guidance on strategies to address antimalarial drug resistance is developed in collaboration with WHO and other partners, the Global Fund may support proactive mitigation measures including the introduction of multiple first lines or rotation of ACTs. Programs that have already developed antimalarial resistance mitigation strategies should elaborate their plans within the funding request within a summary or as an annex. The Global Fund programmatic gap table includes a request for information on the different ACTs planned for use (for first and second line and/or alternative first line treatment). Applicants are encouraged to express any gaps, in particular antimalarial molecules due to the significant differences in price between molecules and prioritization of resources across all malaria interventions.

3.3. Tailored service delivery across all sectors

The Global Fund continues to support all channels of service delivery (public, private and community level) and encourages people-centered approaches, with a focus on the continuum of care, integration within PHC and other programs and levels of care. Service delivery needs to be tailored according to the context in order to ensure that all suspected malaria cases are tested, malaria infections are treated, timely referrals are done, and all cases are reported. Stratification and programming should follow sub-national tailoring guidance at the lowest sub-national level feasible and include a robust analysis of the following: care seeking behaviors; community perception and values; provider adherence to guidelines; EHRGE-related and other barriers to access and use of malaria case management services; challenges and funding gaps to inform targeted, sector specific, interventions. This will help justify any needs for prioritization and coordination of support across sectors.

³⁹ The Strategy to respond to antimalarial drug resistance in Africa

3.4.1. Additional considerations: public sector health facilities

Interventions to strengthen service delivery of malaria case management should focus on testing and confirmation of malaria prior to treatment, and accurate recording and reporting of the clinical encounter. Stratification of key indicators for case management need to be performed by districts on a routine basis to assess performance, to guide quality of care interventions in low performing facilities and systematically document the root causes of district challenges in meeting targets. In addition, as further elaborated in the <u>RSSH</u><u>Information Note</u>, the Global Fund strongly encourages applicants to invest in locally defined intervention packages to improve the quality of people-centered, integrated care. These packages, including supervision, training, and quality improvement approaches, can often be combined across programs in an integrated manner.

3.4.2. Additional considerations: private sector

The Global Fund strongly encourages a costed strategy for the delivery of quality malaria case management in countries where private sector care offers the potential to expand the reach of services. Priorities include efforts to expand parasitological diagnosis for confirmation of malaria prior to treatment, support regulatory framework to allow testing and availability of quality drugs, to reduce cost barriers to quality diagnosis and treatment and to ensure reporting of malaria cases to national systems.

Governments can use various pathways to engage systematically with the private sector, such as: 1) Policy and strategic level dialogue, 2) Two-way information sharing, 3) Inclusive balanced regulations (across service sectors), 4) Capacity building for the private sector; and 5) Financing the private sector (e.g., performance-based contracting, subsidies, etc.). The funding request can include supporting activities. The <u>private sector technical brief</u> and <u>RSSH Information Note</u> elaborate further on private sector engagement strategies.

As part of setting and implementing standards for service delivery requirements, the Global Fund will only support the ACT co-payment mechanism for the private sector in settings offering the full test and treat pathway, including confirmation of malaria with a diagnostic test before treatment, recording and reporting into national information systems.

3.4.3. Additional considerations: integrated community case management

As part of broader PHC, CHWs play a critical role in the fight against malaria. They make malaria interventions closer and more accessible to populations at greatest risk and increase access to malaria case management, typically as part of integrated community case management (iCCM) for children under-five and increasingly as malaria case management for older children and adults. They also play an essential role in the delivery and promotion of vector control interventions (e.g., ITNs) and drug-based malaria prevention services (e.g., SMC, IPTp, PMC). Building effective, strong, resilient, and sustainable CHWs programs with the capacity to surge and scale is necessary for expanding access to quality malaria case

management whether within the malaria epidemic and pandemic preparedness at community level, or the broader context of strengthening PHC services and community systems.

The Global Fund will invest in the systems components of CHWs programs,⁴⁰ including where CHWs provide malaria case management services (i.e., iCCM and case management for malaria among older children and adults). Detailed information on the CHW investments eligible for Global Fund support are provided in the table *Investments in health policy and systems support to optimize CHWs* in Section 4.5 Human Resources for Health and Quality of Care of the <u>RSSH Information Note</u>. Use the <u>CHW programmatic gap table</u> to facilitate planning for funding requests. They can also refer to <u>the Global Fund Budgeting Guidance</u> regarding remuneration (i.e., salaries, allowances, and benefits).

Strengthening community health systems also requires emphasis on improving bidirectional referrals between community and facility care. A detailed intervention approach on referrals is outlined in <u>Annex 2 of the RSSH Information Note</u>. Applicants should outline the needs and sources of funding for CHW commodities not provided by the Global Fund. Funding of non-malaria commodities for iCCM can be considered co-financing in most countries (please consult the Global Fund <u>Co-Financing Policy</u>). Note that the Global Fund will now support non-malaria medications for iCCM (e.g., for pneumonia and diarrhea) where CHWs provide malaria case management, where iCCM is part of the package of services CHWs are allowed to provide, and where the criteria in <u>Annex 3 of the RSSH Information Note</u> are met. If resources and/or supplies for non-malaria illness included in the iCCM package are not available simultaneously during implementation, the malaria component should continue as planned, though efforts should be made to identify additional sources of funding to deliver the complete package.

4. Elimination

Malaria elimination requires country ownership, with strong political commitment, reaching hard-to-reach populations, robust surveillance systems including case-based surveillance and case investigations-response, addressing cross-border issues and innovation in products and service delivery. The transition from malaria control to elimination requires a shift in strategy supported by evidence and the implementation of new activities tailored to each country's specific context. Please refer to the relevant Program Essentials in Table 1 to ensure the funding request includes the relevant information on progress, challenges and plans to address any gaps to meet these standards.

Intervention packages⁴¹ in countries approaching elimination are required to focus on: (1) Enhancing and optimizing vector control and case management (component A); (2) Increasing the sensitivity and specificity of surveillance to detect, characterize and monitor

⁴⁰ WHO guideline on health policy and system support to optimize community health worker programmes

⁴¹ WHO guidance on interventions in the final phase of elimination and prevention of reestablishment

all cases (component B); (3) Accelerating transmission reduction (component C); and (4) Investigating and clearing individual cases, managing foci, and following up (component D).

This could be achieved through the following interventions:

- i. Local stratification by malaria transmission intensity and other key characteristics. This is essential for effective targeting of interventions and needs be specific, ideally at the level of localities or health facility catchment areas. The funding request would benefit from describing how intervention strategies have been tailored to the different strata.
- ii. **Enhancing and optimizing vector control.** Vector control is expected to target remaining foci and areas of on-going transmission.
- iii. Enhancing and optimizing case detection and case management including support for quality assurance and reference laboratories. Case management needs to focus on 100 percent parasite-based, quality-assured diagnosis, and universal access to appropriate treatment including gametocytocidal primaquine where deemed effective. The Global Fund will also continue to support approaches to promptly investigate and respond to cases or foci detected such as case investigations and focus investigation and responses (CIFIR) or Diagnostic, Treatment, Investigation, Response (DTIR) and encourages applicants to decentralize these wherever possible to shorten the time from detection to response.
- iv. Strengthening surveillance systems to detect symptomatic and asymptomatic cases; notify, report, and investigate all malaria infections. Routine surveillance, active case detection and foci investigation are recommended, as well as response planning and epidemic preparedness. Outbreak preparedness should include clear alert mechanisms as well as systems to enable rapid access to malaria commodities.
- v. **Other activities** aimed at accelerating malaria elimination (e.g., community engagement and communication campaigns to promote awareness and avoid reintroduction).
- vi. Applicants are also asked to include a description of programs addressing prevention of re-establishment of the disease.

5. Cross-cutting Areas

5.1 Equity, human rights, and gender equality

Equity, human rights, and gender equality considerations are essential for inclusion in the sub-national tailoring analysis. Therefore, they should be incorporated into the implementation approach to ensure people- and population-centred service delivery.

While certain populations may have more health-related vulnerabilities than others, prioritization on malaria prevention and control activities need to be based on malaria-specific vulnerability. For example, children under five years of age and pregnant women in areas with on-going malaria transmission are more at risk of suffering serious consequences of and death from the disease. As such, malaria programs should focus interventions accordingly. Migrants, internally displaced people (IDPs) and refugees can also be more vulnerable, particularly if coming from an area with limited/no transmission into an area with high transmission. Disaggregation of data (e.g., gender, age, other equity-related variables) should be considered when needed to guide decision-making. For example, gender and socioeconomic variables collected through community-based surveys such as the Malaria Indicators Survey and Demographic and Health Surveys should be analyzed to better understand potential inequalities or barriers to access and uptake to guide appropriate tailoring of interventions.

If not already in the National Strategic Plan (NSP) or other document, the funding request should include an analysis of the data available to demonstrate any known barriers to access and uptake of malaria services. Funding for implementation of the <u>Malaria Matchbox</u> or other similar tools can be included where EHRGE analyses have not been undertaken and/or information gaps exist, or to improve understanding of how to address identified issues. Additional disaggregated information and analysis on workforce composition to deliver malaria services may provide additional insights on increasing equity and access. Interventions informed by such data, aimed at addressing EHRGE barriers, can be included under the respective modules. RBM has developed an e-learning training⁴² for national programs for the assessment of human rights and gender-related barriers to equitable access to malaria services. For further information please refer to the <u>technical brief</u> on Equity, Human Rights and Gender Equality and Malaria.

5.2 Community leadership and engagement

<u>Community Systems Strengthening</u> (CSS) are useful to improve and monitor access to malaria services for most affected, marginalized, and underserved populations in endemic areas. This includes empowering and supporting communities, especially the most vulnerable, to participate in national and local structures, platforms, and processes, including in country coordination mechanisms (CCMs) and ensuring that communities and civil society are key partners and play a meaningful role in the Global Fund grant application, decision-making and implementation. Community leadership and engagement have been and continue to be key to supporting strong responses to malaria: they should be at the heart of future efforts to address novel health threats.

There is no "one size fits all" strategy; it is crucial for community-based and community-led organizations to play a meaningful role in determining the elements of effective, equitable and sustainable malaria responses.

⁴² Community, Human Rights and Gender in malaria programming for Malaria Program Managers

Strengthening community participation may be especially important in elimination settings⁴³. Elimination strategies represent an opportunity for rights-based action to reach traditionally excluded and geographically marginalized populations with malaria services.

Applicants are encouraged to explore the potential of community-led monitoring (CLM) as part of efforts to improve availability, accessibility, responsiveness, and quality of services. CLM can focus on general health, disease-specific or intervention-specific services (e.g., monitoring of correct usage of ITN, stock/workforce availability at health facilities or geographic and other structural, and human rights and gender-related barriers).

The community also plays a role in improving services by identifying individuals or groups of individuals who do not have appropriate access, or who do not understand the barriers they face. Examples of CLM tools that applicants are expected to consider include scorecards (like the ALMA community scorecards⁴⁴), complaint mechanisms and monitoring of human rights and gender-related barriers to services.

Additional information on CSS and CLM are available in the <u>RSSH Information Note</u>.

5.3 Social and Behaviour Change (SBC)

Investments in SBC need to be evidence-based, results-oriented, theory-informed and part of the national malaria SBC strategy. The strategy and investments need to reflect the relevant prevention, control and elimination objectives of the national malaria strategy and include an M&E plan to guide and adapt approaches to improve access to and usage of malaria interventions. SBC plans and activities should build on existing best-practice and SBC efforts in other health sectors (e.g., maternal and child health, community systems). While integration is encouraged, advocacy efforts, such as "Zero Malaria Starts with Me" campaigns and activities, can also be considered.

SBC activities are required to:

- Account for differences amongst and within populations (e.g., cultural, socioeconomic, geographic, gender, occupational, literacy, race, ethnic and indigenous backgrounds, and other considerations) that may affect equitable access and utilization of interventions.
- Address identified barriers, including human rights and gender-related ones, to uptake and use of malaria interventions (and health services more generally).
- Address issues related to provider behaviours, such as adherence to case management guidelines, respect of fee policies and compassionate care.
- Address risk perception by communicating changes in the transmission dynamics and associated risks.

⁴³ <u>The Malaria Free Mekong</u> is an example of network platform of civil society organizations and communities.

⁴⁴ ALMA Scorecard

5.4 Pandemic Preparedness and Response (PPR)

In malaria endemic countries, components of the health system responding to malaria are key in early identification of other conditions leading to pandemics. Investments in PPR can build on already existing systems, including malaria control and surveillance systems for acute febrile illness. Lessons learned from the COVID-19 pandemic and response should also be considered, as well as investments to ensure appropriate capacity and expertise, recognizing that malaria program personnel at national and district level are often engaged in investigation and response for acute febrile illness outbreaks. In addition, investments in the PHC service delivery will strengthen the fight against malaria and preparedness for future pandemics.

Malaria early warning systems (MEWS) are among the potential areas for integration, as they can strengthen laboratory-based and community-based approaches. Exploring the overlap between the 7-1-7 approach⁴⁵ recommended for PPR and malaria surveillance in different transmission settings, notably the 1-3-7 approach in elimination contexts.⁴⁶ Synergies in HRH (training, remuneration, supportive supervision, and quality improvement) at national, facility and community levels may exist. CHWs play important roles in PPR, including risk communication and community engagement (RCCE), dispelling myths, promoting, and supporting vaccination, behavioural interventions and other relevant prevention tools, community-based testing and contact tracing, providing support to patients on treatment, and surveillance.⁴⁷

When considering PPR efforts or integration of other activities into CHW's terms of reference, analyse the scope and readiness of the existing CHWs and ensure sufficient resources (e.g., training, support supervision, etc.) for successful service delivery. The Global Fund encourages countries to consider laboratory system strengthening to further support malaria control, co-morbidities with other key endemic diseases and emerging pathogens. See <u>RSSH-Lab module</u> to learn more.

5.5 Environment and climate change

Environmental factors including climate events and climate change disproportionally affect malaria. Climate data is expected to be routinely incorporated in malaria data repositories and used as one of the factors to guide program planning, adaptations, and coverage. Integration of malaria into emergency response plans (epidemic, climate/natural disasters) should be considered, where relevant. Multisectoral partnerships⁴⁸ can help foster collaboration on improving prediction and response to potential climate events, addressing the impact of climate change on malaria, other vector-borne diseases, nutrition, etc., as well

⁴⁵ Frieden et.al, Lancet 2021

⁴⁶ Zhou et al, Infectious Diseases of Poverty, 2015

⁴⁷ Bhaumik et al 2020 ; Ballard et al 2022

⁴⁸ The Comprehensive Multisectoral Action framework - Malaria and Sustainable Development

as provide opportunities to mitigate the impact of malaria interventions on the environment (WHO Strategic Advisory Group on Malaria Eradication⁴⁹).

Lastly, <u>waste management</u> support needs to be included for the relevant malaria interventions (e.g., vector control), and applicants are encouraged to include environmental considerations in this activity (e.g., collaboration with recycling plants during an ITN mass campaign). Malaria funding requests can include these activities, while the broader waste management and green technology for facilities (e.g., solar panels) can be considered under RSSH see <u>RSSH Information Note</u>).

5.6. Urban malaria

The built urban environment, such as urban agriculture, settlement construction, roads and water drainage systems, and exposed water channels, can have a significant impact on urban malaria risk and burden. In malaria-endemic countries, large-scale rural-to-urban migration frequently leads to the expansion of unplanned settlements and an increased socioeconomic inequity. These changes may lead to vector changes (e.g., *Anopheles gambiae s.l.* adapting to polluted waters increased *Anopheles stephensi* expansion).

A strong example of a sub-nationally tailored approach is an adapted approach to malaria in urban settings⁵⁰. As malaria transmission in urban areas is usually focal and varies across short geographic spaces, a response targeting focal areas of transmission is likely more effective than an urban-wide approach, especially for malaria prevention. The funding request could include geospatial and epidemiological surveillance and analysis to identify clusters of malaria transmission, technical assistance for using data to tailor malaria interventions to urban settings, facilitation of community engagement, delivery of prevention and health care, and support private sector initiatives to improve quality and reporting (as a large portion of the population in urban areas seek care in the private sector).

Applicants are encouraged to document current practices and lessons learned on effective malaria control and elimination interventions in urban settings.

5.7. Challenging Operating Environments (COE)

The Global Fund will continue to support implementation of malaria activities in COEs and will help adapt the strategies, partnership, and <u>implementation modalities</u> to these difficult environments in order to ensure optimal access to the whole vulnerable population, including migrants, refugees, and IDPs.

Some examples of <u>adapted strategies</u> would consist in increasing the frequency of distributions to refugees, individual ITN distribution to displaced persons, selecting CHWs amongst mobile or migrant populations, or engaging with humanitarian actors to ensure delivery of malaria services in conflict-affected zones. Applicants should explore integration

 ⁴⁹ Malaria eradication: benefits, future scenarios & feasibility. <u>A report of the Strategic Advisory Group on Malaria Eradication</u>
 ⁵⁰ Global framework for the response to malaria in urban areas

of services as much as possible, especially given the often severely limited access such populations often have. They should also provide holistic, patient-centered services that all populations deserve. Special attention will be given to include forcibly displaced populations in grants: refugees are expected to be considered within host country grants, and applicants are asked to ensure these populations have access to malaria prevention and control. Flexibilities may be applicable to countries designated COEs by the Global Fund, and are detailed in the Global Fund <u>operational manual</u>.

5.8 Malaria emergencies

The Global Fund Emergency Fund special initiative is a mechanism to provide urgent funding for emergencies, including but not limited to, malaria outbreaks, natural disasters, and population displacement. If needed, the request can be focused on commodities, in order to respond to urgent needs - see the <u>guidelines on the Emergency Fund</u> for details. Note that malaria emergencies can also be funded through reprogramming of funds within the malaria grants.

5.9 Program management

The funding request can include activities related to leadership, coordination, and management of the malaria program at national, subnational, and cross-border level. The Malaria Modular framework outlines the specific activities to be included under this module. Special attention needs to be given to include capacity building for data generation, use and analysis at sub-national level,⁵¹ in line with the principle of SNT. The Global Fund will provide short-term support (e.g., specific technical assistance requested by the program), as well as longer-term support (e.g., program staffing), both of which can be included in the funding request.

5.10. Sustainability of malaria response

The Global Fund's approach to sustainability focuses on the ability of a health system to both maintain and scale up service coverage for continuing control of a public health problem and support efforts for elimination of the three diseases, even after funding from external donors comes to an end. As part of the Global Fund 2023-2028 Strategy and the implementation of the <u>Sustainability, Transition, and Co-Financing</u> (STC) Policy, the Global Fund strongly encourages all countries to incorporate sustainability considerations into national planning, funding request development, grant design, co-financing commitments, and grant implementation, regardless of where a country is on the development continuum or of their proximity to transition from Global Fund financing. While financial sustainability is a critical priority, sustainability considerations cut across many thematic areas, including epidemiological, programmatic, systems-related, governance, and human rights and vary according to the specific country context.

⁵¹Depending on the scope of the capacity building activity, it can be classified/budgeted/reported under program management or other intervention specific modules.

Strengthening sustainability is critical to maintaining the gains in the fight against malaria and moving towards malaria elimination. As external financing reduces or countries seek to strengthen malaria control, various factors may present sustainability challenges – for instance, the epidemiology of malaria transmission and/or strength of the national malaria program and broader health system. Strengthening the national health systems which serve as the foundation for national malaria responses is critical to sustaining the gains and supporting successful transitions from Global Fund financing. This is particularly relevant in the context of the COVID-19 pandemic and preparation for any future pandemics. While not exhaustive, examples of focus areas to support sustainability of national malaria responses include:

- **Financial**: Increasing the overall availability of resource for national malaria responses, while also addressing dependencies on donor financing for specific interventions critical to malaria control and elimination.
- Governance and political will: Maintaining political will to ensure that the national malaria program has adequate resources to achieve and maintain impact, especially as countries re-orient their programs towards elimination and prevention of reestablishment (POR), or seek to leverage integration, decentralization, and other health sector reforms.
- **Service Delivery**: Integrating aspects of malaria programs into the broader health system, while maintaining sufficient technical expertise and quality.

Given the diversity of potential sustainability challenges facing national malaria responses, the Sustainability, Transition and Co-financing Guidance Note includes a detailed <u>Annex on</u> <u>Malaria and Sustainability</u>.

List of Abbreviations

Abbreviation	Definition
ACTs	Artemisinin-based Combination Therapies
AMP	Alliance for Malaria Prevention
ANC	Antenatal Care
CHWs	Community Health Workers
CIFIR	Case Investigation, Focus Investigation and Response
CLM	Community-Led Monitoring
CRSPC	Country Regional Support Partnership Committee
CSS	Community Systems Strengthening
DHIS2	District Health Information Software 2
DTIR	Diagnostic Treatment Investigation and Response
EPI	Essential Program on Immunization
EQA	External Quality Assurance
G6PD	Glucose-6-Phosphate Dehydrogenase
GAVI	Gavi, the Vaccine Alliance
GTS	The Global Technical Strategy for Malaria 2016–2030
HMIS	Health Management and Information Systems

EHRGE	Equity, Human Rights, and Gender Equality
HRH	Human Resources for Health
iCCM	Integrated Community Case Management
ІРТр	Intermittent Preventive Treatment of Malaria in Pregnancy
IRS	Indoor Residual Spraying
ITN	Insecticide Treated Net
LQAS	Lot Quality Assurance Sampling
M&E	Monitoring and Evaluation
MDA	Mass Drug Administration
NSP	National Strategic Plan
PDMC	Post Discharge Malaria Chemoprevention
PE	Program Essentials
РМС	Perennial Malaria Chemoprevention
PNC	Postnatal Care
PPR	Pandemic Preparedness and Response
PQ	Primaquine
PSEAH	Protection from Sexual Exploitation, Abuse and Harassment
RAS	Rectal Artesunate

RBM	The RBM Partnership to End Malaria
RDTs	Rapid Diagnostic Tests
RMNCAH	Reproductive, maternal, newborn, child, and adolescent health
RSSH	Resilient and Sustainable Systems for Health
RTSS	Malaria Vaccine (RTS,S/AS01)
SBC	Social and Behavior Change
SMC	Seasonal Malaria Chemoprevention
SNT	Sub-national Tailoring of Malaria Interventions
SP	Sulfadoxine-pyrimethamine
STC	Sustainability, Transition, and Co-Financing
TES	Therapeutic Efficacy Studies
ΤQ	Tafenoquine
WHO	World Health Organization

Annex 1: Key Data

Key Data to include in funding requests

The information below is essential to include in the funding request – whether within the Essential Data Table, as an annex or within the narrative.

1) Summary of country context, highlight the epidemiology of malaria including:

- Parasite species present and their relative contribution towards burden.
- Malaria burden, including description of epidemiological trends (incidence, prevalence, historical burden) and stratification, geographic distribution of cases, as well as other relevant programmatic data.
- Disaggregated data (by age and gender, as appropriate) and relevant details on vulnerable and other populations, noting any barriers (including, but not limited to equity, gender, and human rights-related barriers) to access to prevention and case management service.
- Description and proportions of different channels where people seek care (e.g., public, private, community, including traditional healers); proportion of population with access to diagnosis and treatment.

2) Past and current implementation, as well as lessons-learned:

- Brief description of the health system including at the community level.
- Prevention and control implementation challenges encountered to date including, but not limited to changes in the financial landscape, issues with insecurity, etc.
- Current knowledge gaps.
- Equity assessments and relevant findings (e.g., Malaria Matchbox or other tools).
- Brief overview of current malaria interventions:
 - Diagnostic tool(s) in use and current testing coverage (e.g., testing rate).
 - First- and second-line antimalarial treatment; treatment for severe malaria.
 - Vector control interventions implemented and respective coverage and use. This should include types of nets deployed (ex. pyrethroid-only, pyrethroid-PBO net) and insecticides used for IRS.
 - Other core interventions e.g., IPTp, SMC, etc. and relevant coverage.
 - Monitoring and evaluation (M&E):
 - Coverage of key malaria interventions from population-based household surveys (DHS, MIS, MICS), including the date of last survey and planned date(s) for upcoming survey(s).
 - Date of last therapeutic efficacy study (TES); date of last *hrp2/3* gene deletion study; relevant findings and plans for future studies.
 - Dates and findings of recent insecticide resistance studies (including mechanisms and intensity of resistance) and plans for future studies; date and findings of ITN durability studies.
 - Routine monitoring/HMIS systems (disaggregation metrics, lowest administrative unit where data analysis is possible, etc.) and malaria-specific surveillance (particularly for countries approaching elimination).
 - Digital platforms.
 - Cross border or regional activities/initiatives, as applicable.