
Malaria Information Note

25 JULY, 2019

Abbreviations

ACT	-	Artemisinin-Based Combination Therapy
AMP	-	Alliance for Malaria Prevention
ANC	-	Antenatal Care
BCC	-	Behavior Change Communication
CBO	-	Community-Based Organization
CCM	-	Country Coordinating Mechanism
CRSPC	-	Country Regional Support Partners Committee (formerly RBM Harmonization Working Group)
CSO	-	Civil Society Organization
CSS	-	Community Systems Strengthening
FBO	-	Faith-Based Organization
G6PD	-	Glucose-6-phosphatase-dehydrogenase
GPARC	-	Global Plan for Artemisinin Resistance Containment
GPIRM	-	Global Plan for Insecticide Resistance Management
GTS	-	Global Technical Strategy (for Malaria)
HBHI	-	High Burden to High Impact
HSS	-	Health Systems Strengthening
HWG	-	Harmonization Working Group (of RBM)
iCCM	-	Integrated Community Case Management
IDP	-	Internally Displaced Person
IPTi	-	Intermittent Preventive Treatment in Infants
IPTp	-	Intermittent Preventive Treatment in Pregnancy
IRS	-	Indoor Residual Spraying
ITN	-	Insecticide-Treated Net (used to encompass pyrethroid only long-lasting insecticidal nets (LLINs) and pyrethroid-PBO insecticide treated nets)
M&E	-	Monitoring and Evaluation
MNCH	-	Maternal, Newborn and Child Health
MPR	-	Malaria Program Review
NGO	-	Non-Governmental Organization
OCHA	-	Office for the Coordination of Humanitarian Affairs
PQ	-	Primaquine
PR	-	Principal Recipient
PPM	-	Pooled Procurement Mechanism (of the Global Fund)
PSM	-	Procurement and Supply Management
RBM	-	RBM Partnership to End Malaria
RDT	-	Rapid Diagnostic Test
SBCC	-	Social and Behavior Change Communication
SMC	-	Seasonal Malaria Chemoprevention
TRP	-	Technical Review Panel (of the Global Fund)
WHO	-	World Health Organization

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1. Introduction

This information note provides guidance on how to complete a funding request for Global Fund (GF) malaria financing and complements the general guidance for Global Fund applicants.

The document adheres with and complements normative technical guidance from the World Health Organization (WHO) and other partners. It focuses on Global Fund requirements to apply for Global Fund funding for malaria. Links to additional guidance are provided below each section, including focus on Community, Rights & Gender (CRG) and Resilient and Sustainable Systems for Health (RSSH).

Applicants must articulate their requests using the modules and interventions laid out in the updated RSSH [Modular Framework Handbook](#). General guidance on how to develop a funding request is provided in the updated [Global Fund Applicant's Handbook](#) and the [Instructions Guide to the Funding Request](#).

1.1 Key Points

Essential Points for the Funding Request

To allow evaluation of the funding request within the country-specific context, below is an outline of both the process and information that is expected from applications.

Applicants should:

- 1) Hold a robust country dialogue that involves all relevant partners, including civil society and community-based organizations;
- 2) Ensure that the program split and prioritization decisions are informed by a comprehensive gap analysis. Applicants can use the RBM Country Regional Support Partnership Committee (CRSPC) template to inform the Global Fund gap analysis template. Both documents should be consistent and can be submitted with the funding request.
- 3) Use the Global Fund Reference Price when preparing a budget, if commodities are requested, even if the country procures outside the Global Fund's Pooled Procurement Mechanism (PPM).

The information below is essential to include in the funding request. There are now indicator tables included as annexes for the funding request that can be used to summarize key data, otherwise, include the information 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 (e.g. test positivity rate)
 - If relevant, details on vulnerable and other populations with barriers (including, but not limited to gender and human rights-related barriers) to access to prevention and case management services

- 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 the community level
- Prevention and control implementation challenges encountered to date
- Current knowledge gaps
- Equity assessments and relevant findings (ex. 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- & 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 indoor residual spraying (IRS)
 - Other core interventions e.g. IPTp, SMC, etc.
 - Monitoring & evaluation (M&E):
 - Date of last population-based survey (DHS, MIS, MICS) and planned date(s) for upcoming survey(s)
 - Date of last therapeutic efficacy study (TES), its 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
 - Routine monitoring/HMIS systems (disaggregation metrics, lowest administrative unit where data analysis is possible, etc.) and malaria specific surveillance (particularly for countries approaching elimination)
 - Cross border or regional activities/initiatives, as applicable

The Global Fund supports the **WHO/RBM partnership ‘High Burden to High Impact’ approach** (HBHI), which outlines four response elements: political will, strategic information, better guidance, and a coordinated response. The aim of this approach is to foster implementation of prioritized operational plans (based on evidence-informed national malaria strategic plans). While the current focus of HBHI is on a subset of countries, the approach can be considered by all national malaria programs. The Global Fund encourages programs to use the HBHI elements when considering their funding request – particularly the use of local data to inform decisions on the mix of interventions chosen, approaches for their delivery and efforts to improve quality and equity.

In addition, with the increase of insecticide resistance and the introduction of new vector control tools, national programs must use up-to-date evidence to outline their priorities in vector control.

The Global Fund also expects programs to consider:

- Access, coverage and use of malaria interventions at the lowest administrative level possible, including an understanding of barriers to access and use of services and products (e.g. are there areas and/or populations with lower coverage and/or use of nets; health facilities with low testing rates, etc. – which could indicate a need for modification of delivery of interventions to improve services).

- People/patient-centered approaches¹ – tailored and informed by local data, with relevant disaggregation – to improve access and use. This includes considerations of vulnerable populations such as IDPs, refugees and migrants who may require tailored approaches as well as cultural and socioeconomic factors that may impact service delivery and acceptance
- Targeted approaches to improve coverage, usage and quality of service delivery.
- Up-to-date entomologic data to feed into a sound vector control strategy.
- Targeting and prioritization of available vector control tools considering coverage of populations at risk and insecticide resistance.

In addition to the HBHI analytical framework, another tool that can help structure discussions around improvements in coverage, usage and quality of service delivery is the **Malaria Matchbox**. The Malaria Matchbox is an assessment tool designed to improve malaria responses, by bringing into perspective how social, economic, cultural and gender-related barriers shape malaria and malaria services in a country or region. Such qualitative assessments can help shape how malaria interventions are delivered to improve access and use.

In **challenging operating environments**, including humanitarian crises, countries should consider the potential increased vulnerability amongst populations like internally displaced persons (IDPs) and refugees, and the impact on local/host communities. In addition, standard operating procedures may need to be modified (e.g. changes in ITN mass distribution methodology for quick and high coverage of refugee populations).

Applicants are encouraged to explore the potential of **community-based monitoring (CBM)** as part of efforts to improve accessibility, responsiveness, and quality of services. CBM is a process by which community engagement can be increased through collaborative approaches to identifying and addressing bottlenecks and gaps in service provision. CBM can focus on general health, disease specific or intervention specific services (e.g. monitoring of correct usage of ITNs or quality of care offered through CHWs or health facilities, geographic and other structural barriers). Examples of CBM tools that applicants should consider include scorecards, complaints mechanisms and monitoring of human rights and gender barriers to services. For more information, refer to the Global Fund's webpage on Community Response Systems.

In addition, the Global Fund expects applicants to consider the aspects of **value for money** to ensure the best use of Global Fund resources to maximize impact. Thus, the funding request should demonstrate aspects of economy, efficiency, effectiveness (including cost-effectiveness), equity and sustainability in program design and request for funding. For more information, refer to the Value for Money Technical Brief.

Key considerations for investments in **RSSH** for national malaria control programs include:

1. Investments to improve routine primary care services will improve provision of malaria services and vice versa.

¹ WHO defines people-centered care as care that is focused and organized around the health needs and expectations of people and communities rather than on diseases. People-centred care extends the concept of patient-centred care to individuals, families, communities and society. Whereas patient-centred care is commonly understood as focusing on the individual seeking care—the patient—people-centred care encompasses these clinical encounters and also includes attention to the health of people in their communities and their crucial role in shaping health policy and health services.
https://www.who.int/healthsystems/hss_glossary/en/index8.html

2. Contributions to improve malaria services – whether at public, private or community level - can be considered investments to support RSSH, such as improving quality of malaria diagnostic services.
3. Participation of the malaria community in country dialogue on RSSH investments is critical to address key bottlenecks affecting primary care/malaria service delivery.
4. Malaria is more naturally integrated with service delivery for childhood diseases and primary care – as demonstrated by iCCM and ANC. Building on lessons learned from past and current integration efforts, plans for integration should include consideration of the target populations, methodologies of service delivery, and others.
5. Consideration of cultural and gender-relevant staffing to improve access and uptake of services (e.g. female community health workers or spray personnel, migrant/refugee community health workers for service in migrant/refugee populations).

[Global Fund Application Materials](#)
[Global Fund Applicant Guidance](#)
[Global Fund concept note development – WHO policy brief 2014](#)
[WHO | Global Technical Strategy for Malaria 2016–2030](#)
[Global Fund Challenging Operating Environments Policy](#)
[Malaria control in humanitarian emergencies - An inter-agency field handbook](#)
[Community, Rights and Gender Technical Brief](#)
[Resilient and Sustainable Systems for Health Information Note](#)
[Value for Money Technical Brief](#)
[High Burden to High Impact: a targeted malaria response](#)
[Malaria Matchbox](#)
[The Global Fund's Community Response systems](#)
[PPM Reference Prices for LLINs -May 2018](#)
[RBM |CRSPC Malaria Toolbox](#)

2. Case Management

Interventions for case management can include public and private facilities and community level services.

2.1 Quantifying rapid diagnostic tests and artemisinin-based combination therapy

Testing rates, proportion of testing by RDT versus microscopy, test positivity rate, and treatment rate, should all factor into quantification of case management commodities. Other factors that could impact malaria burden should be included. For example, changes due to improvements in the supply chain, and/or potential changes in coverage and usage of malaria interventions.

Include adjustments based on current access to care and any potential increases in access (e.g. scale-up of community services), removal of barriers to access to care (e.g. removal of user fees or inclusion of patient-centered care service delivery that improves access) that could affect quantification. As not all suspected malaria patients may seek care, quantify for those that are expected to seek and receive care (rather than quantifying for the entire potential population).

2.2 Service delivery

The Global Fund continues to support all channels of service delivery (public, private and community level) and encourages patient-centered approaches to ensure all cases are tested, treated and tracked.

There should be a strong focus on **quality of care** and consideration of a stratified approach to improving care. For example, if a district or health facility is consistently performing well, it may not require the same level of supervisory attention, and additional resources and efforts can focus on poorer performing facilities or districts.

2.3 Specifics for the private sector

The Global Fund strongly encourages an engagement strategy for the private sector. A technical brief is available for this purpose.

In addition, the ACT co-payment mechanism (formerly known as the Affordable Medicines Facility - malaria) is still employed by some of the initial pilot countries and remains an option for continued Global Fund support.

2.4 Specifics for community level care

The Global Fund will fund most components of an iCCM platform (Table 1). Applicants should outline the needs and sources of funding for commodities not provided by the Global Fund. If resources and/or supplies for non-malarial acute febrile illness are not available simultaneously during implementation, the malaria component should continue as planned.

Table 1. Essential components of iCCM and eligibility for Global Fund support

Essential iCCM Components	Global Fund Supported
Training and salary costs for CHWs	Yes, provided that the CHWs are directly involved in malaria management
RDTs for malaria diagnosis	Yes
ACTs for malaria treatment	Yes
Respiratory timers for pneumonia diagnosis	No*
Antibiotics for pneumonia treatment and ORS and zinc for diarrhea treatment	No*
Supportive supervision	Yes
Supply chain system strengthening	Yes**
Health information system strengthening	Yes**

*Commodities not funded by the Global Fund provide a co-funding opportunity for governments or other development partners to invest in the iCCM platform.

**These two components should be included in the appropriate RSSH modules within the funding request, while the remaining components should be included in the malaria case management iCCM module.

2.5 Therapeutic Efficacy Surveillance

Therapeutic efficacy studies (TES) should be conducted at least once every two years. If funding is not available through other sources, funding for a TES should be prioritized using Global Fund resources.

2.6 Particular issues related to *Plasmodium vivax*

If requesting funding for primaquine (PQ) for radical cure, countries must demonstrate that they have an adequate monitoring system for detecting and managing hemolysis (irrespective of whether a country employs 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 WHO pre-qualified or WHO-hosted Expert Review Panel for Diagnostics (ERPD) assessed laboratory based fluorescent spot tests (FST). Rapid diagnostic tests granted with an ERPD approval and pending WHO pre-qualification can be procured. Procurement will require approval by the Global Fund Secretariat and justification of how these tests will be used, including assurances that will be employed to address potential heterozygous females.

Recently, single dose treatment with tafenoquine received approval from two stringent regulatory agencies: The United States Food and Drug Administration (USFDA) and the Australian Therapeutic Goods Administration (ATGA), for adults 16 years of age and older. However, use of tafenoquine should be accompanied by a WHO prequalified point-of-care quantitative G6PD test. WHO guidance around the use of tafenoquine for the treatment of *P. vivax* malaria will be developed in parallel with a review of G6PD point-of-care quantitative tests in 2019/2020. Procurement of tafenoquine through Global Fund **will not** be supported until such guidance is available.

2.7 RDT related issues

Key considerations for RDT selection:

- Procurement of malaria RDTs should be in accordance with Global Fund's Quality Assurance Policy for Diagnostic Products.
- Technical considerations for the selection are based primarily on the epidemiologic context of malaria in the country in alignment with national treatment guidelines and WHO policy.
- In accordance with Global Fund's procurement guidance for malaria diagnostics, RDTs within species categories are considered interchangeable, therefore brand preference is not a criterion for selection. Continued supervision and training are required as part of ensuring quality of diagnosis, but brand specific training is not necessary based on RDT use and experience across many countries.
- Multi-species RDTs (e.g. *Pf/Pv*) should only be procured in countries with co-endemic *P. vivax* according to WHO recommendations.
- For highly sensitive RDTs, see Elimination section.

Special note: HRP2/3 gene deletions

A new potential challenge to case management is the emergence of mutated *P. falciparum* parasites that have deletions in the genes that encode for the production of HRP2, the main target used by *P. falciparum*-detecting RDTs.

P. falciparum with deletions of *pfhrp2/3* genes can cause false-negative RDT results resulting in patients going untreated and potentially progressing to severe disease, while also perpetuating transmission.

In general, the causes for false-negative RDT results are more likely to be related to: product defects due to manufacturing process, adverse transportation, storage conditions, operator error, or parasite density below the limit of detection.

Deletions of *pfhrp2/3* genes must also be considered as a potential cause for false-negative RDT results, particularly in or near regions where these deleted parasites have been reported. WHO is now tracking report of *pfhrp2/3* deletions <https://apps.who.int/malaria/maps/threats/> and has outlined recommendations for the investigations of suspected *pfhrp2/3* deletions causing false negative RDTs and surveillance.

The Global Fund can support surveys to determine whether local prevalence of mutations in the *P. falciparum hrp2/3* genes causing false negative RDTs has reached a threshold that might require a local or national change in diagnostic strategy.

<p>Framework on Private Sector Engagement</p> <p>WHO Safety of 8-aminoquinoline antimalarial medicines</p> <p>WHO Malaria Threats Map</p> <p>WHO HRP2 deletion prevalence protocol</p> <p>Methods for surveillance of antimalarial drug efficacy</p> <p>Global Fund Quality Assurance Policy of Diagnostics</p> <p>WHO Good practices for selecting and procuring rapid diagnostic tests for malaria</p> <p>RBM CRSPC Malaria Toolbox</p> <p>The Global Fund Technical Brief: Malaria Case Management in the Private Sector</p> <p>WHO UNICEF Joint Statement: Integrated Community Case Management (iCCM)</p> <p>WHO Guidelines for the treatment of malaria. Third edition</p> <p>WHO Management of severe malaria - A practical handbook. Third edition</p> <p>The Global Fund's Sourcing and Management of Health Products Guide</p>
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3. Vector Control

Noting the increasing complexity of vector control planning given the spread of insecticide resistance and the growing number of vector control tool options, applicants should consider the following:

- All requests for vector control should be grounded in a national vector control strategy based on up-to-date entomologic and epidemiologic data.
- Applicants should clearly identify their populations at risk and prioritize achieving and maintaining coverage with effective vector control for these populations.

In line with WHO's guidance on deployment of pyrethroid-PBO ITNs, choice of tools – including those with potentially improved performance – should be based on the latest evidence and the vector control strategy and balanced with the need to ensure maintenance of coverage of all populations at risk.

In accordance with WHO guidance on universal coverage of vector control in areas with ongoing malaria transmission, the Global Fund:

- Does not recommend the scale-back of vector control in areas with ongoing malaria transmission (irrespective of the pre-intervention and current levels of transmission);
- In areas where transmission has been interrupted, to minimize the risk of resurgence, scale-back of vector control should only be considered based on a detailed analysis that includes: i) assessment of the receptivity and vulnerability to malaria, ii) active disease surveillance system, and iii) capacity for case management and vector control response.

3.1 Insecticide Treated Nets (ITNs)

Countries aiming for universal coverage with ITNs should demonstrate how their proposed implementation approach will achieve and maintain universal coverage.

Implementation approaches based on intermittent mass campaigns, should also include continuous distribution through locally proven channels, such as routine ITNs through ANC or EPI and school-based distribution.

A net life-span of 3 years should be assumed, unless local evidence justifies a longer or shorter interval.

As per Global Fund policy, to maximize coverage, ITNs should be of a standard size with a maximum height of 180cm and be rectangular. Material preference can be indicated, but applicants cannot restrict their specifications to one particular material. In addition, in line with current WHO recommendations, the Global Fund does not allow for specification of the type of pyrethroid on a pyrethroid-only or a pyrethroid-PBO nets.

The Global Fund will only support procurement of products which are WHO prequalified and backed by WHO policy. Currently this includes pyrethroid-only nets, and pyrethroid-PBO nets. As per WHO recommendations, ensuring coverage of all at risk populations should be prioritized over the selection of more costly vector control tools. As pyrethroid-PBO nets are currently more expensive than pyrethroid only nets (at time of publication, pyrethroid-PBO nets were approximately USD 0.80 more than pyrethroid only nets), pyrethroid-PBO nets can only be requested for Global Fund funding if all at risk populations are covered. All products should undergo pre-shipment testing in accordance with Global Fund's policy on sourcing and procurement of health products. Net durability monitoring should also be conducted according to standard methodology.

The Global Fund will only procure nets that do not yet have a WHO policy, such as new types of ITNs containing pyrethroid insecticide and other active ingredients, for countries receiving co-payment funds through the pilots under the New Nets Project. Countries involved in the New Nets Project pilots can specify this in their strategy and funding request, however, nets should be budgeted using the pyrethroid-only net Global Fund reference prices (even if not using the Pooled Procurement Mechanism), given the availability of a co-pay. Should such nets receive a WHO policy decision during the next cycle, Global Fund will review its own policy.

To ensure maintenance of effective vector control, countries deploying nets with improved, or potentially improved, performance against pyrethroid-resistant mosquitoes – (pyrethroid-

PBO nets or new types of ITNs containing pyrethroid insecticide and other active ingredients as part of New Nets Project pilots) should plan to maintain this strategy for the same geographical areas in the following grant cycle.

Operational considerations

The Global Fund continues to follow the standard quantification (1 net per 1.8 persons, resulting in distribution of 1 net for every 2 household members) unless available local data indicates that a different ratio is more appropriate to reach the set target. Consider alternative data sources (such as data from the last mass campaign or data from other campaigns) as well as possibilities to share data across programs that implement campaigns (i.e. household registration data for mass campaigns, SMC, immunization campaigns).

If a country's population census is older than 5 years old since implementation, a 10% contingency stock can be added to the number of nets required.

It is important to plan for the ITN campaign quantification as though no "caps" (maximum number of nets per household) will be needed. If, following microplanning or household registration, it is necessary to limit the number of nets per household, this should be based on the use of local data for decision-making. Distribution methodology may be tailored to regional particularities within a country. For example, national programs often apply a 'cap' of nets per household at a national level, but there may be significant regional differences in household size and regional capping at different levels may be more appropriate. The Global Fund encourages the use of local data for decision-making on distribution. Considerations for sharing operational data (such as household registration data) across campaigns (e.g. IRS, SMC) to improve efficiency, as well as coverage, is encouraged.

A plan for sound waste management should also be included. However, retrieval of old nets from households is not recommended.

The ***Alliance for Malaria Prevention (AMP)*** provides operational guidance for mass campaigns and continuous distribution of ITNs and can provide technical assistance. Should a program require technical assistance from AMP, the Global Fund strongly encourages prioritization of this assistance within their allocated budget.

The Global Fund generally does not support:

- Container storage of ITNs
- Mop up campaigns
- Hang up campaigns
- Non-essential data collection required by other partners

The Global Fund encourages innovative ideas on data collection, but these should be aligned with broader NMCP/NMEP priorities and not focused on ITN campaign-specific implementation.

[WHO | Conditions for use of long-lasting insecticidal nets treated with a pyrethroid and piperonyl butoxide](#)
[WHO Guidelines for Vector Control](#)

[AMP: A toolkit for mass distribution campaigns to increase coverage and use of long-lasting insecticide-treated nets](#)
[Malaria Behavior Change Communication \(BCC\) Indicator Reference Guide](#)
[AMP Statement on M&E Best Practices for Partners Supporting National Long-Lasting ITN Mass Distribution Campaigns](#)
[PMI VectorWorks Continuous Distribution Toolkit](#)
[WHO | Recommendations on the sound management of packaging for long-lasting insecticidal nets](#)
[WHO | Recommendations on the sound management of old long-lasting insecticidal nets](#)
[The Global Fund's Sourcing and Management of Health Products Guide](#)
[WHO guidelines for durability monitoring of LLINs](#)
[RBM/AMP Consensus statement on repurposing of nets](#)
[AMP Operational guidance for ITN distribution in complex operating environments \(COE\)](#)
[WHO Prequalified list of Vector Control Products](#)
[WHO | Recommendations for achieving universal coverage with long-lasting insecticidal nets for malaria control](#)
[WHO recommendations on the sound management of old long-lasting insecticidal nets](#)

3.2 Indoor Residual Spraying (IRS)

Given the high cost, IRS in malaria endemic areas should only be initiated if long-term financing is assured. When IRS is proposed for Global Fund financing, a description of long term IRS financing should be included in the funding request. While a single spray application is an appropriate response to malaria epidemics if it is conducted early enough during the outbreak, this type of intervention is too short-lived to be considered of value in areas with ongoing high transmission.

When a country maintains an existing IRS program, a sound insecticide-resistance management strategy should be in place as well as routine monitoring of the quality and coverage of IRS.

For all spray programs supported by the Global Fund, comprehensive health and environmental compliance safeguards need to be in place: appropriate environmental contamination containment measures, waste management and disposal, and personal protective equipment must be included in every IRS program. A description of how these safety aspects will be monitored should also be included.

[WHO recommended insecticides for indoor residual spraying](#)
[WHO Guidelines for Vector Control](#)
[WHO IRS operational manual](#)

3.3 Combining ITNs and IRS

The Global Fund will not consider funding ITNs and IRS in the same geographic area unless all the following are true:

- 1) Universal coverage with one method of vector control of all at-risk populations is ensured with available funding (and other high priorities are met such as comprehensive case-management);
- 2) High coverage and utilization/acceptance of the first method of vector control and;

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

[WHO | Guidance for countries on combining indoor residual spraying and long-lasting insecticidal nets](#)
[WHO Guidelines for Vector Control](#)

3.4 Larval Source Management (LSM)

If an applicant proposes LSM, they should provide a strong justification on the feasibility of proper implementation as well as strong local entomologic data and assurance that the full need for high impact interventions has been met (through Global Fund, partner and/or government resources), including that the targeted breeding sites are few, fixed and findable.

[WHO Guidelines for Vector Control](#)
[WHO | Larval source management – a supplementary measure for malaria vector control. An operational manual.](#)

3.5 Entomologic surveillance and insecticide resistance management

The Global Fund requires all recipients of malaria grants, to put in place an insecticide resistance monitoring and management plan based on the WHO framework. Countries should use the development of such plans as an opportunity to identify resource requirements for effective entomological surveillance including regular insecticide susceptibility monitoring.

3.6 Insecticide Susceptibility Monitoring

All countries are requested to conduct insecticide susceptibility testing at least once per year, using the latest WHO guidelines. The guideline has recently been updated to include testing for intensity and mechanisms of resistance. These data are important for supporting procurement requests and should therefore be prioritized. All insecticide classes approved for public health use should be included in these tests. If annual insecticide resistance monitoring is not funded by partners and/or the government, it should be prioritized within the Global Fund budget.

3.7 Entomological capacity building

The Global Fund fully supports WHO's recommendations for entomological capacity building and therefore requests Ministries of Health to ensure that their NMCP has the basic human and infrastructure capacity to support vector control and entomological surveillance, including monitoring implementation quality, insecticide resistance and use of entomologic data for decision making. Furthermore, it is suggested that an intersectoral coordination mechanism, including representation from agriculture and other relevant bodies and led by the Ministry of Health, is established or strengthened. The purpose of this mechanism is to develop a long-range strategic plan for building human resources and systems for public

health entomology and vector control. Financial resources required to support these activities can be requested as part of the funding application.

[WHO | Test procedures for insecticide resistance monitoring in malaria vector mosquitoes](#)
[WHO | Global plan for insecticide resistance management in malaria vectors](#)
[Guide to Global Fund policies on procurement and supply management](#)
[WHO | Guidelines for monitoring the durability of long-lasting insecticidal mosquito nets under operational conditions](#)
[PMI | Durability Monitoring Toolkit](#)
[WHO Guidance Note on Capacity Building in Malaria Entomology and Vector Control](#)
[WHO Prequalification of Vector Control](#)

4. Preventive Therapies for Malaria

4.1 Intermittent Preventive Treatment (IPT)

Intermittent preventive treatment in pregnancy (IPTp)

Tailored strategies to improve ANC attendance and IPTp uptake focused on local and national challenges should be considered. Attention should be paid to potential gender, socioeconomic, cultural, human rights and other equity barriers in ANC access and uptake. All Global Fund malaria grants supporting malaria in pregnancy (MIP) services should include an indicator on ANC attendance under the RSSH module. 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.

Intermittent preventive treatment in infants (IPTi)

The Global Fund will support implementation of IPTi under WHO parameters. Programs should monitor the impact on immunization services and performance as well as pharmacovigilance and efficacy of SP.

[WHO | Intermittent preventive treatment in pregnancy \(IPTp\)](#)
[WHO | Recommendations on intermittent screening and treatment in pregnancy and the safety of ACTs in the first trimester](#)
[WHO | Intermittent preventive treatment in infants \(IPTi\)](#)
[Malaria in Pregnancy Toolkit](#)

4.2 Seasonal Malaria Chemoprevention (SMC)

Applicants should include the following information: the eligibility of the geographic areas chosen for implementation and an overview of the implementation plan containing a strong monitoring and evaluation component that includes pharmacovigilance. Applicants should describe strategies to improve efficiency and quality of service delivery (including uptake of 3rd and 4th dose).

In line with WHO's recommendation, the Global Fund does not support inclusion of children 5-10 years old for SMC nor implementation outside of the Sahel.

4.3 Malaria Vaccine (RTS,S)

The Malaria Vaccine Implementation Program (MVIP) was developed in response to the 2016 WHO recommendation to pilot implementation of this vaccine, referred to as RTS,S.

MVIP is supporting the introduction of the malaria vaccine in selected areas of Ghana, Kenya and Malawi to inform a learning agenda, which includes an evaluation of the programmatic feasibility of delivering a four-dose schedule, the vaccine's impact on mortality, and its safety in the context of routine use.

The primary aim of the program is to address outstanding questions related to public health use of the vaccine to enable a robust WHO policy decision on its broader use in sub-Saharan Africa, and to inform future funding decisions, including Global Fund support.

The malaria vaccine is being used in the context of a pilot study and therefore is not eligible for Global Fund support.

4.4 Mass Drug Administration

Following WHO recommendation, the Global Fund will support mass drug administration (MDA) if full funding for coverage of all at-risk populations is available through Global Fund, government and/or other partner support with high impact interventions like case management, vector control, and others. i.e. MDA cannot be implemented at the expense of other high impact interventions

In addition, applicants should include: a clear description of the epidemiology and rationale for employing MDA; details of the proposed drug to be used; and plans for monitoring efficacy and safety. Programs should monitor susceptibility to the drug used and that of the first- and second-line treatment regimen(s).

5. Quality Assurance for Product Procurement

Programs using grant money to purchase health commodities and services must comply with the Global Fund's procurement policy. Recipients shall also ensure that the procurement of health products complies with the principles set forth in the WHO Model Quality Assurance System for Procurement Agencies (MQAS). As for all health products, recipients should ensure that all products comply with the relevant national legal requirements established in the country. Recipients should develop and maintain a system acceptable to the appropriate national regulatory authority for reporting any product defects and/or any adverse event/reactions. Post-marketing surveillance activities such as quality control testing for drugs, diagnostics, vector control tools should also be considered, as appropriate.

When procuring commodities with Global Fund support, PRs/NMCPs are encouraged to use the streamlined PPM mechanism for procurement of their commodities with GF resources, in order to take advantage of GF negotiated prices.

Policies & Principles - The Global Fund to Fight AIDS, Tuberculosis and Malaria
WHO | Malaria microscopy quality assurance manual – Ver. 2

6. Surveillance

Malaria programs must have robust surveillance and monitoring and evaluation systems. To improve coverage and quality of program and service delivery, ensuring timely and accurate data at all levels of the health system to use for decision-making is critically important.

The Global Fund supports routine information systems, household and health facility surveys, entomological data collection, malaria mapping, and longitudinal studies. Their role and relative importance change as programs transit from high transmission to malaria elimination. Sources of information should also include the different parts of the health system (public, private, community) and different administrative levels.

Investments into routine health information systems should link with broader national efforts (e.g. DHIS2 roll out). A malaria data repository can be supported when it clearly demonstrates its links with the national system.

Large national household surveys can be supported with appropriate justification of the timing and utility of the modules (ex. Consider excluding biomarkers in low transmissions as they are usually of limited usefulness). Sample size and power calculations should consider the administrative units at which decisions are made.

WHO standard indicators should be used to monitor programs.

WHO | Disease surveillance for malaria elimination: operational manual

7. Social and Behavior Change Communication

Investments in Social and Behavior Change Communication (SBCC) should be based on an evidence-based, results-oriented and theory-informed national malaria SBCC strategy. The strategy and investments should 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. SBCC plans and activities should build on existing SBCC efforts in other health sectors (e.g. maternal and child health, community systems) and integration is encouraged. The Global Fund will support *Zero Malaria Starts With Me* campaigns and activities.

SBCC activities should:

- Address identified barriers to uptake and use of malaria interventions (and health services generally);
- Account for differences amongst and within populations (i.e. cultural, socio-economic, geographic, gender, occupational, literacy and other considerations) that may affect access and utilization of interventions;

- Adapt based on changes in transmission dynamics which could influence perceptions of risk, etc.

RBM BCC Strategic Framework

RBM SBCC Indicator Reference Guide SBC Toolkit for ITNs

Zero Malaria Starts With Me Toolkit

Social and behavior change considerations for areas transitioning from high and moderate to low, very low and zero malaria transmission

8. Malaria Elimination

As outlined in the 2017 WHO's Framework for Elimination, every country can accelerate progress towards elimination through high coverage of evidence-based strategies, regardless of the current intensity of transmission and malaria burden. Accurate stratification of malaria transmission intensity is essential for effective targeting of interventions and should be specific, ideally at the level of localities or health facility catchment areas. The funding request should describe how intervention strategies have been tailored to the different strata.

In addition, a critical analysis of the strengths and weaknesses of the health system, particularly the surveillance system, the care-seeking behavior, cultural and gender norms, and the roles of the community and private sector should be undertaken and considered as part of the elimination strategies. Applicants should also include a description of programs addressing eventual planning for prevention of re-establishment of the disease.

Case management should focus on: 100 percent parasite-based, quality-assured diagnosis, and universal access to appropriate treatment including gametocytocidal primaquine. G6PD testing does not need to be conducted with single dose primaquine (0.25 mg of base/kg) as the risk of dangerous hemolysis (even in severely deficient individuals) is unlikely.

RDTs should not be used to document clearance as they can remain positive due to persistent antigenemia. Malaria RDTs or microscopy are the accepted diagnostic tools for clinical case management and routine surveillance in all epidemiological situations.

The Global Fund is currently not supporting more sensitive diagnostic tools that have been developed in recent years, such as polymerase chain reaction (PCR), highly sensitive RDTs, and loop-mediated isothermal application (LAMP), that target the submicroscopic reservoir of parasites. While data supports that these infections are present in all settings and may contribute to transmission, additional research to evaluate the public health importance of submicroscopic infections and the impact of detecting them using highly sensitive diagnostic tests are needed to update policy. Global Fund support for these tools might be revised once results of additional studies are reported and further guidance developed.

Vector control should target remaining foci and areas of on-going transmission. Premature withdrawal of vector control can lead to rebound of transmission and should be considered only after a comprehensive analysis of factors mentioned in this section (and with a robust epidemic response plan). Vector surveillance (including susceptibility) should be maintained.

Mass drug administration is discussed in section 4.4.

Routine surveillance, active case detection and foci investigation are recommended as well as response planning and epidemic preparedness. Epidemic preparedness should include clear alert mechanisms as well as systems to enable rapid access to malaria commodities (diagnostic tests, anti-malarial medicines, nets and/or insecticides and equipment for IRS).

Often, remaining transmission is focused in certain high-risk populations that do not easily access treatment and prevention, therefore, programs may need to adopt different strategies to improve access to these target populations. Cross-border and regional initiatives/interventions should be considered. However, mass screening (testing regardless of symptoms) and treatment and focal screening and treatment for malaria are not recommended as interventions to interrupt malaria transmission.

[WHO | Information note on the risks associated with the scale back of vector control in areas where transmission has been reduced](#)

[WHO | Updated WHO policy recommendation: Single dose primaquine as a gametocytocide in Plasmodium falciparum malaria](#)

[WHO | WHO policy recommendation on malaria diagnostics in low transmission settings](#)

[WHO | Recommendations on the role of mass drug administration, mass screening and treatment, and focal screening and treatment for malaria](#)