THE FEDERAL REPUBLIC OF NIGERIA



National Malaria Policy

National Malaria Elimination Programme Federal Ministry of Health Abuja Nigeria

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FOREWORD

Malaria remains an important cause of morbidity and mortality in Nigeria. Nigeria accounted for 32% of the global estimate of 655,000 malaria deaths annually in 2010 [WMR, 2012]. With an estimated population of 160 million, Nigeria has a large population at risk of malaria. However, children under five years of age and pregnant women are the most vulnerable to illness and death from malaria infection in Nigeria. The yearly economic loss due to malaria in Nigeria has been put at 480 Billion Naira due to costs of treatment, transportation to sources of treatment, loss of man-hours, absenteeism from schools and other indirect costs. Thus malaria imposes a heavy cost, not only on the country's income, but also on its rate of economic growth and invariably on its level of economic development.

It is also worth noting that current burden of malaria is due to a combination of factors which include conducive climatic conditions, ecological factors, agricultural practices, water resource development, mining and excavation activities. In addition the spread and increasing level of resistance to antimalarial medicines and insecticides is one of the greatest challenges facing effective malaria Elimination in the world today.

This Policy document expresses the desires and commitment of the Government of Nigeria at all levels in ensuring the elimination of malaria and the strategies by which this is to be achieved. This is within the context of the vision for a malaria free Nigeria. It addresses the core issues related to malaria prevention, diagnosis and treatment, communication and social mobilization and the regulations regarding antimalarial commodities. It also expresses the intentions of Government regarding engagement of partners and private sector participation at all levels.

I therefore call on all stakeholders in the fight against malaria to cooperate in the implementation of this policy and use it in scaling up all malaria elimination interventions at all levels: - the home, the community, and at private and public health facilities throughout the country. Let me also seize this opportunity to appreciate the concerted efforts of our Partners and Stakeholders in supporting the National Malaria Elimination Programme under various arrangements and capacities in Nigeria.

Thank you.

Professor Christian Onyebuchi Chukwu

Honourable Minister of Health

PREFACE

ACKNOWLEDGEMENT

The development of the National Malaria Elimination Policy is a major leap towards the scaling up of all effective and evidence-based malaria Elimination interventions in the country. The recent call for integration especially in the health sector has necessitated the collation of the existing policy documents to develop a single policy document for the National Malaria Elimination Programme.

We thank the Honourable Minister of Health, the Honourable Minister of State for Health, the Permanent Secretary and the Director of Public Health, Federal Ministry of Health for their leadership roles and support to the National Malaria Elimination Programme (NMEP).

The Federal Ministry of Health, Federal Republic of Nigeria, hereby wishes to acknowledge the contributions of various organizations and members of staff towards the successful development and production of this articulate document.

We also thank the team of experts from the Roll Back Malaria Partnership in Nigeria and the Global Malaria Partnership who provided technical support towards the development of this policy document. Many individuals have also worked tirelessly to ensure the timely production of this document and these represent research groups, professional associations, development partners, government departments and the Private sector.

We appreciate your efforts and furthermore hope that in the spirit of true partnership, we shall all contribute to the implementation of effective integrated vector and case management of malaria in Nigeria.

Dr, Nnenna Marcelina Ezeigwe National Coordinator National Malaria Elimination Programme Abuja

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ABBREVIATIONS

ACSM	Advocacy, Communication and Social Mobilization
АСТ	Artemisinin Combination Therapy
BCC	Behavioural Change Communication
СВО	Community Based Organization
DDT	Dichloro-Diphenyl Trichloroethane
DFID	Department for International Development
DHMT	District Health Management Team
EIR	Entomological Inoculation Rate
FAO	Food and Agricultural Organization
FMOH	Federal Ministry of Health
GDP	Gross Domestic Product
HMIS	Health Management Information System
IRS	Indoor Residual Spraying
ICC	Inter-country Coordinating Committee
М	Intramuscular
IMCI	Integrated Management of Childhood Illness
ISC	Inter-sectoral Collaboration Mechanism
ITN	Insecticide Treated Nets
IV	Intravascular
IVM	Integrated Vector Management
JCHEW	Junior Community Health Extension Worker
KAP	Knowledge, Attitude and Practice
LGA	Local Government Area
LLIN	Long Lasting Insecticidal Net
M&E	Monitoring and Evaluation
МоН	Ministry of Health
NAFDAC	National Agency for Food and Drug Administration and Control
NGO	Non-Governmental Organization
NMCP	National Malaria Control Programme
OR	Operational Research
отс	Over-the-Counter
РОМ	Prescription-only Medicine
PPMV	Patent Proprietary Medicine Vendor
PSM	Procurement Supply Management
RDT	Rapid Diagnostic Test
RBM	Roll Back Malaria
SON	Standards Organization of Nigeria

SUFI	Scaling Up for Impact
USAID	United States Agency for International Development
VCNA	Vector Control Needs Assessment
WHO	World Health Organization
WHOPES	World Health Organization Pesticide Evaluation Scheme

EXECUTIVE SUMMARY

Over the last decade the Government of Nigeria at all levels, together with all partners have put in place severe measures to scale up malaria control interventions and modest achievements has been recorded. This has resulted in the change of malaria programme focus from control to elimination of malaria in Nigeria. While this is a major proposition, it is important that the National Malaria Policy is reviewed to reflect Government's commitments toward malaria elimination in Nigeria.

Hitherto, each intervention area had its own Policy. This made it cumbersome for stakeholders to access information on policies regarding the different interventions on malaria Elimination in Nigeria. This has necessitated the need to pull together all the policy issues in the various intervention areas. Consequently, the different policies were consolidated into a single National Malaria Elimination Policy.

This document articulates the principles and commitments of the Government of Nigeria in bringing about the elimination of malaria in Nigeria. This document serves as a reference document for matters of policy, as it pertains to malaria programme activities at the Federal, State, Local Government, Ward and Community levels.

It is the expectation of Government that all stakeholders will key into the framework of this Policy to bring about a concerted effort towards achieving the critical milestones that will lead to malaria elimination in the country.

1 INTRODUCTION

1.1 Background Information

1.1.1 Geography

Nigeria lies on the west coast of Africa with a surface area of 923,708 sq. kilometres. It borders Cameroon in the east, Benin on the west, Chad to the north- east, Niger to the north and on the south by the Atlantic Ocean. The climate varies from arid in the North, with annual rains of 600 - 1,000 mm and 3 - 4 months duration, to the humid weather of the south with an annual average of 1,300 - 1,800 mm (and in some coastal areas up to 2,500 mm) and 9 - 12 months duration. The country's vegetation changes from Sahel savannah in the far north followed by Sudan savannah merging into Guinea savannah in the middle belt, then rain forest in the south and mangrove forest in the coastal areas.

1.1.2 The Population

Nigeria has a population of 169,304,554 based on projections from the 2006 National Population Census, with 41% of the population below 15 years of age, 55% between the ages 15-64 and only 4% in the age group 65 years and above. The country has experienced a decline in fertility, falling from 5.4 births per woman in 1988 to 3.8 in 2005-6. English is the official language. There are over 250 different languages but the commonest are Hausa, Ibo and Yoruba languages. Nigeria is made up of six geo-political zones comprising 36 States and the Federal Capital Territory. There are 774 Local Government Areas and 9,555 wards.



1.1.3 Vision 20:2020

Nigeria's economic blueprint is articulated in the vision 20:2020; "By 2020 Nigeria will be one of the 20 largest economies in the world, able to consolidate its leadership role in Africa and establish itself as a significant player in the global economic and political arena." To achieve this vision the Government has embarked on a transformation agenda that is to provide the necessary stimulus for the development of various sectors.

1.1.4 Socio-economic indices

Agriculture is the major source of livelihood for most of the population who are subsistence farmers. The nation's major source of income is crude oil exports. Other sources of income include mining and export of cash crops. Nigeria is currently classified as a lower middle income country by the World Bank. In 2012, the Gross Domestic Product (GDP) was 262.6 billion USD; while GDP per capita was 1,555 USD, with a GDP growth rate of 6.6% (World Bank, 2012). About 46% of the population live below the poverty line of less than \$1.25 per day (2010). There is a National health insurance scheme though coverage is still low, hence significant health expenses are borne by families and individuals as "out of pocket" expenses while limited health insurance services are available, especially to civil servants and some rural communities.

1.2 Malaria Epidemiology

1.2.1 Malaria Transmission and Parasites

Malaria transmission was initially holoendemic in Nigeria. However, recent information has provided evidence of a progress divergence of in-country variation in malaria endemicity [Snow et al, 2013]1. Hence as at 2010, it was estimated that 85% of Nigerians lived in areas supporting mesoendemic transmission, 15% lived under conditions of hyper-holoendemicity and areas within FCT Abuja, Adamawa and Borno States support hypoendemicity (Figure x). The dominant species of malaria parasites in Nigeria is Plasmodium falciparum (≈95%); the most pathogenic of the five human malaria parasites, which also occur as mixed species with other Plasmodium species. The other non-falciparum species species are: P. malariae (9.8%) and P. ovale (5.8%) and mixed infections (10.4%).

1.2.2 Malaria Vector

The major vectors are Anopheles gambiae ss, Anopheles funestus, and Anopheles arabiensis. Anopheles melas occurs in the mangrove/coastal areas. The entomological inoculation rate in Nigeria varies across the zones, ranging from about 30-100 bites/person/year (Garki Project, 1975), making it an efficient rate for malaria transmission in Nigeria.

1.2.3 Malaria Burden

Malaria has been reported to account for 60% of outpatient visits and 30% of hospitalizations among children under five years of age in Nigeria [MIS, 2010]. The National Malaria Indicator Survey of 2010 showed that Slide Positivity Rate was 42% in children under-five with zonal variations ranging from 27.6% in the South-east to 50.3% in the South-west zone [NPC et al, 2012]². In the same vein, Drug Efficacy Study conducted in seven sentinel sites spread across all the epidemiological zones showed a Slide Positivity Rate of 35% in febrile children aged less than five years. Malaria accounts for 1 in 4 deaths among children under 5 years. Nigeria is reported to account for 32% of the estimated 655,000 global malaria deaths. (WMR, 2012).

¹ Snow RW, Mundia CW, Kinyoki D, Linard C, Baba ES, Adegbe E, Ozor L, Mohamed AB, Amratia P, Kabaria CW, Noor AM (2013). *A description of the epidemiology of malaria to guide the planning of control in Nigeria*. Report prepared by SunMAP, WHO-Country Office Nigeria and the KEMRI-Wellcome Trust-University of Oxford Programme, Kenya for the Federal National Malaria Control Programme, Abuja, Nigeria. February 2013.

² National Population Commission (NPC) [Nigeria], National Malaria Control Programme (NMCP) [Nigeria], and ICF International. 2012. Nigeria Malaria Indicator Survey 2010. Abuja, Nigeria: NPC, NMCP, and ICF International



1.2.4 Antimalarial Medicines Resistance

Nigeria changed her antimalarial medicine of choice from Chloroquine and sulfadoxine-pyrimethamine to ACT in January 2005 with artemether-lumefantrine (AL) and artesunate-amodiaquine (ASAQ), in that order of preference, following the report of the therapeutic efficacies carried out in the six epidemiological regions of the country in 2002 and 2004. Both combination therapies were found to be highly efficacious and well tolerated and thus suitable for use in the treatment of uncomplicated malaria.

Table: Therapeutic Efficacy of Antimalarial Medicines in Nigeria (Adequate Clinical and Parasitological Response ACPR)

S/No	Zones	Chloroquine*	Sulphadoxine Pyrimethamine*	Artemether Lumefantrine**	Artesunate Amodiaquine**
		14-Day response		28-Day response	
1	SE	3.7%	14.9%	100%	100%
2	SS	9.1%	8.5%	87%	82.5%
3	NC	53.2%	82.7%	100%	96%
4	NW	77.3%	94.2%	100%	100%
5	SW	40.9%	75.6%	100%	100%
6	NE	50.8%	64.8%	100%	100%

* 2002 Drug Efficacy Study ** 2004 Drug Efficacy Study

1.3 Current Status of Malaria Control in Nigeria

Substantial malaria control investments have been made in Nigeria in the last decade. Some of the key milestones are outlined:

1.3.1 Integrated Vector Management

Long Lasting Insecticidal Nets: Current data showed that net ownership has increased from 2% in 2003 to 42% in 2010. Over 58 million LLINs were distributed through mass distribution campaigns during the 2009-2011 period. These are now being targeted for replacement



Figure 1-1: Percentage of households with at least one ITN/LLIN (source NMIS, 2010)



Figure 1-2: LLIN ownership in the 6 geopolitical zones in Nigeria.

Indoor Residual Spraying: In 2006 and 2007 the National Malaria Control Programme of Nigeria and its partners conducted small scale pilot IRS projects in six Local Government Areas that are located in the three distinct ecological zones: the rain forest, Sudan savannah, and sahel savannah. The results of the projects showed the effectiveness of IRS in controlling local malaria vectors. States where there has been pilot IRS implementation include Bauchi, Jigawa, Gombe, and Kano. Others are Anambra, Akwa-Ibom, Rivers, Nassarawa and Lagos. Although few LGAs were covered thus precluding impact assessment at this stage valuable lessons have been learnt with regard to planning for the short rainy season, as well as the feasibility of inter-sectorial collaboration and capacity building on IRS deployment.

Larval source management (LSM): In redefining its long term vector control strategies in Nigeria, the NMEP incorporated LSM as a component of IVM within the last two years. Pilot larviciding has been carried out in five locations in Nigeria (Rivers, Nassarawa, Ogun Lagos and Jigawa) and is sparingly implemented in Lagos and Rivers States with low coverage and lacking strategic projection.

Monitoring Insecticide Resistance: There is no systematic coordination of insecticide resistance monitoring at the national level. This is compounded by the absence of vector surveillance sentinel sites in Nigeria. Although, there are some data available on vector resistance to a number of public health insecticides in south west, north central and north Eastern zones, there is no records or published data for the South-South and South East zones of the country.

1.3.2 Malaria Case Management

Nigeria has updated guidelines and other operational documents and access to recommended malaria medicines has improved in increasing number of public and private facilities.

Parasite-based diagnosis of malaria: The MPR showed that some progress was made towards access to diagnosis before treatment. By 2010 data obtained from health facilities showed that less than 15% of fever cases were tested before treatment with antimalarial drugs. However since the conduct of the MPR an RDT implementation research at PHCs was carried out across the six geopolitical zones of Nigeria in January 2013. Compliance was the proportion of ACTs correctly prescribed in relation to RDT result. The testing rate was (39.8%) using RDT kits. Compliance to RDT results was 81.7% among the health workers. There has been a number of capacity development opportunities to strengthen microscopy through partnerships between the NMEP and research institutions on laboratory personnel training.

Access to affordable quality-assured antimalarial drugs: Availability of ACTs increased with a total of 268.9 million doses of ACTs provided between 2007 and 2013. However the percentage of children under-five presenting with fever who received prompt treatment with ACTs lags behind operational availability data (i.e. 47.5% of the estimated 565.9 million doses required). The Affordable Medicines Facility-malaria (AMFm) contributed to the scale up of access to ACTs but percentage of those treated with "undesirable antimalarial drugs" like Chloroquine and Sulphadoxine-Pyrimethamine are still unacceptably high at 28.5% and 10.9% respectively (NMIS, 2010).

Management of severe malaria: Data on severe malaria which are treated largely in secondary and tertiary health facilities have been under-reported although there is now renewed emphasis. In 2012, the NMEP adopted a change in treatment policy from quinine to artesunate treatment of severe malaria. Nigeria became the first country to align with the updated WHO recommendation. Following the change, and in collaboration with partners (the Clinton Health Access Initiative, MMV and Academia), several activities to conduct an appraisal of the state of severe malaria in Nigeria, build capacity on management of severe malaria to different health professionals and procurement and distribution of injection artesunate were undertaken. There are however weaknesses in the health system regarding referrals and availability of intensive care services for severe malaria that calls for further strengthening.

Integrated Community Case Management: Level of implementation is reported low by the 2012 MPR. An estimate based on the assumption that one CHW will be required to provide iCCM to 500 persons among 65% who reside in rural areas (using a projected total population of 173 million in 2013), shows that a total 225,561 community-based frontline health workers may be required to adequately reach the rural population. High rate of attrition of trained health workers has been identified as a barrier to success in iCCM implementation which could be mitigated by a concurrent initiative to motivate volunteers and retain health workers by building a locally-acceptable and sustainable incentive programs into the iCCM strategy.

Malaria in Pregnancy: Implementation of malaria control in pregnancy has been fairly well integrated at all levels of health facilities across the country. There is a marginal increase in the percentage of pregnant women that received at least two doses of IPT from 6.5% in 2008 (NHDS 2008) to 13.2% in 2010 (NMIS 2010). Facility data pooled from the States (by the NMEP) showed slightly higher operation coverage of 18.7% with a wide variation IPTp use across the States. Information obtained from MPR 2012 suggests that majority of pregnant women with suspected malaria seen at public and private health facilities were treated with ACTs or quinine but diagnostic tests were not used in most cases. There were no guidelines, standard operating procedures or charts on prevention and treatment of malaria in pregnancy in most public and private facilities visited across the country.

1.3.3 Private sector involvement

Through the AMFm facility from the Round 8 Global Fund Grant, there was a lot of support and improvement in the performance of the private sector (both formal and informal) in diagnosis and treatment of malaria. There has been some integration and engagement of proprietary patent medicine vendors (PPMVs) in community case management of malaria. There are about 40,000 registered PPMVs in Nigeria with probably a large number unregistered and operating without license. The private sector remains a critical strategic target for scaling up access to diagnosis and treatment and they must be engaged innovatively.

1.3.4 Procurement and Supply Management

There has been steady progress of PSM activities, from 2007, when the PSM unit was created within the NMEP. The achievements include the development of PSM Tools, and subsequent training on MCLS, across national, state and LGA levels. Quantification exercises, now undertaken with an impressive complement of RBM Partners along with NMEP, have become more robust, scientific and participatory. Significant capacity to conduct major procurement and distribution of bed nets has been demonstrated with multiple procurements of ACTs, RDTs and LLINs conducted over the years. There are however some challenges leading to low forecasting of products, storage, distribution bottlenecks and fragmentation of procurement of commodities that needs to be addressed.

1.3.5 Malaria in Complex Emergencies and Epidemic Preparedness

Nigeria has a National emergency response programme managed by NEMA. Malaria emergency preparedness will be mainstreamed in the planning processes and response in order to address current inadequacies in this regards.

1.3.6 Seasonal Malaria Chemoprevention

Nigeria has acknowledged the WHO Policy on SMC and the significant benefit of SMC which has been shown to reduce malaria morbidity by 50-75% among children under five years of age in areas of low transmission. The current policy provides further appropriate environment for its implementation.

1.3.7 Advocacy, Communication and Social Mobilization (ACSM)

A four year National ACSM Strategic Framework and Implementation Plan (ACSM-SF & IP) was developed in June 2010. Sixteen States of the Federation have since adapted the ACSM-SF & IP to their specific needs. Through community mobilization and use of IEC materials, ACSM contributed significantly to the successful distribution of about 60million LLINs during the LLIN campaigns of 2009 to 2013. Counterpart funding for net distribution was successfully leveraged from a couple of States during the LLIN campaigns, as a result of advocacy events by NMEP.

1.3.8 Key Challenges

The following is the summary of the key challenges in relation to malaria control in Nigeria

Malaria Prevention

- The need to attain and sustain universal coverage of insecticides
- Low utilization of LLINs
- Provision of proper baseline entomological indices.
- Capacity and infrastructural challenges regarding IRS implementation
- Sub-optimal uptake of IPTp
- Developing a framework for implementation of SMC

Diagnosis and Treatment

- Expanding access to diagnosis at all levels
- Enhancing access to appropriate treatments with patients in rural areas disadvantaged.
- Establishing enough pool of community oriented persons for iCCM implementation
- Lack of access to malaria treatment guidelines.
- Weak referral systems militating on quality of care for severe malaria.
- Poor pharmacovigilance and irregular monitoring of efficacy of malaria medicines and non-functional malaria sentinel sites.
- Failure to sustain supply of affordable quality-assured ACTs after AMFm
- Continued use of non-recommended malaria medicines in malaria treatment.

Advocacy Communication and Social Mobilization

- Inadequate number of skilled staff in ACSM
- Operationalizing ACSM at the state and LGA levels
- Limited availability and utilization of IEC/BCC materials
- Inadequate operational research: weak, un-strategic and inconsistent advocacy engagement with the health promotion division of the Federal Ministry of Health
- Inadequate media engagement strategy for tracking and reporting ACSM activities nationwide
- Persistent non-strategic planning, implementation and monitoring of ACSM activities

Procurement and Supply Management System

- Delays in stages of the PSM process (procurement, distribution, financial disbursement);
- Quantification for distributions from State to HF's are not based on client population to be served
- Persistent stock-outs of malaria commodities;
- Lack of good storage infrastructure and practices (e.g. for LLINs), inventory control management and reporting, in some health facilities;
- Quality assurance of antimalarials not yet institutionalized at all levels of care;
- Lack of a comprehensive PSM Management Information System.

Monitoring and Evaluation

- The relatively low completeness and timeliness of routine reporting continued to challenge the programme.
- The dearth of trained human resources for M&E at all levels of reporting; the continued use of paper based systems for reporting; and
- Continued existence of vertical reporting systems also contributed to quality of routine reporting.
- Fund limitations informed the paced roll out of the DHIS 2.0 technology and related capacity building for its use.

2 VISION, MISSION AND OBJECTIVES

2.1 Vision

To have a MALARIA FREE NIGERIA

2.2 Mission

To provide equitable, comprehensive, cost effective, efficient and quality malaria control services ensuring transparency, accountability, client satisfaction, community ownership and partnership.

2.3 Policy Principles and Basis

The current policy is informed by the following key issues;-

- 1. Promotion of rapid scale up of malaria interventions towards achieving universal access and ultimately malaria elimination
- 2. Prompt access of patients with malaria to appropriate and adequate treatment within 24 hours of the onset of symptoms
- 3. Compliance to technical specifications for all malaria Elimination commodities
- 4. Promotion and strengthening of partnership for effective malaria control and elimination
- 5. Evidence based multi-pronged approach to malaria Elimination
- 6. Inter-sectoral collaboration with line Ministries, Departments and Agencies, leveraging on functional health system.
- 7. Promotion of integration with other health interventions
- 8. Promotion of community participation and ownership

2.4 Goal

The goal of this policy is to give direction towards the elimination of malaria in Nigeria in line with the Nigeria Vision 20:2020.

2.5 Objectives

- 1. To provide guidance to the current national focus on malaria elimination- a package of interventions, which include appropriate measures to promote positive behaviour change and to prevent and treat malaria
- 2. To attain universal coverage of high impact malaria interventions in the 36 States and the FCT by 2018 and sustaining these coverage levels for future malaria elimination in Nigeria;
- 3. To entrench a culture of adequate budgetary provisions for malaria interventions at all tiers of government (Federal, the 36 States and FCT as well as the 774 LGAs) in Nigeria.
- 4. Encourage innovations in malaria interventions, especially among the private sector and academia;
- 5. Enhanced private sector participation

3 POLICY FRAMEWORK AND STRATEGIES

Malaria Elimination interventions in Nigeria are categorized into two broad implementation areas, namely; prevention and case management. These intervention areas are supported by cross cutting activities in the areas of Programme Management (PM), Procurement, Product Supply Chain Management (PSM), Advocacy Communication and Social Mobilization (ACSM), Monitoring and evaluation (M&E) and Operational Research (OR).

3.1 Malaria Prevention

Preamble

Malaria prevention consists of a combination of mosquito avoidance measures and chemoprevention. Mosquito avoidance include the use of Integrated Vector Management (IVM). There is the need for a rational decision making process for the optimal use of resources for vector control.

Policy Statement

The Government of Nigeria, in collaboration with relevant partners, will support Vector Control through the Integrated Vector Management and ensure that IVM remains the principal pillar for malaria vector control in Nigeria. The IVM Strategy shall include:

- 1. The use of Long Lasting Insecticidal Nets (LLINs)
- 2. Indoor Residual Spraying (IRS)
- 3. Larval Source Management (Larviciding and Environmental Management)
- 4. Personal protective measures such as the use of repellents, house- screening and durable linings.

However, programmatic deployment of all new IVM tools for interventions shall be preceded by pilot trials/studies to generate evidence.

In addition to IVM, the following additional malaria chemoprevention methods will also be deployed as complementary strategies to the target groups. These measures include;

- 5. Malaria Prevention in Pregnancy
- 6. Seasonal Malaria Chemoprevention
- 7. Chemoprophylaxis for non-immune immigrants
- 8. Malaria Vaccine

3.2 Vector Control (Integrated Vector Management)

3.2.1 Long Lasting Insecticidal Nets (LLINs)

Policy Statement

In order to contribute to the reduction of malaria morbidity and mortality, The Federal Government will ensure that:

i. There is an increase access to LLINs to attain universal coverage defined as one LLIN per every two person at risk of malaria infection

- ii. Every household has two or more LLINs
- iii. All Children less than 5 years of age, and all pregnant women sleep under LLIN
- iv. The specifications for LLINs use in Nigeria are in accordance with WHOPES recommendation, registered by NAFDAC and approved by the National Malaria Elimination Programme (NMEP).
- v. LLINs used for malaria prevention are products recommended by World Health Organization (WHO) on the basis of independent assessment of their performance and safety by the WHO Pesticide Evaluation Scheme (WHOPES). They should comply with WHO specifications for netting materials and seam strength
- vi. The private sector is responsible for production, promotion and sales of LLINs through their normal market channels/systems. Firms or companies that wish to be involved with large scale handling of LLINs must comply with LLINs specifications.
- vii. There is local production of LLINs in the country in order to enhance access. Government shall encourage companies with local capacity for production of LLINs in the country through appropriate linkage with WHOPES to facilitate their registration. Furthermore, to promote local content and capacity for production of LLIN in Nigeria, Government shall patronize local manufacturers by allocating at least 15% of all procurement of LLINs to indigenous LLINs manufacturers at fairly competitive prize.
- viii. Mandatory use of LLINs by all public and private institutions for demand creation mechanism, which encourages the need for, and use of insecticide treated mosquito nets in public and private institutions.
- ix. The Government of Nigeria, through the NMEP, and in collaboration with partners/ other stake holders shall develop guidelines and implementation of the LLIN programme to ensure demand creation and universal access.

3.2.2 Indoor Residual Spraying

Preamble

Indoor Residual Spraying (IRS) is the application of long acting insecticides on the inner walls, eaves, ceilings and roof of houses and domestic animal shelters in order to kill the adult vector mosquitoes that transmit malaria and other indoor insects.

Policy Statement

The Government of Nigeria shall ensure that:

- i. IRS is used as a core evidence-based strategy for transmission interruption in selected areas in Nigeria.
- ii. The country is clearly delineated to identify areas where IRS will be feasible, effective and program expanded progressively to protect targeted areas as defined by the national IVM guidelines.
- iii. An effective residual spraying programme is based on a plan of operations which defines the geographical area, the methods and procedures of spraying, duration of the programme, personnel requirements, supplies, equipment and estimated cost.

iv. Insecticides for IRS in Nigeria shall be chosen from the WHOPES recommended insecticides (annex 2). Mandatory trials (insecticide susceptibility, bio-efficacy and residual efficacy tests) shall be carried out on all WHOPES recommended and NAFDAC registered insecticides in Nigeria before they are deployed programmatically for IRS.

3.2.3 Larval Source Management

Preamble

Larval Source Management (LSM) is the management of aquatic habitats (water bodies that are potential larval habitats for mosquitoes in order to prevent the completion of immature developments. This can be achieved through (i) environmental management practices such as habitat modification and manipulation) and (ii) larviciding: application of chemical or biological larvicides.

Policy Statement

Government will ensures that:

- i. Nigeria continues to explore the use of LSM strategy as a complementary vector control method in line with global malaria practices.
- ii. LSM is integrated into other vector borne diseases such as lymphatic filariasis (in the context of malaria lymphatic filariasis collaboration)
- iii. Competent entomologists with detailed knowledge of local malaria vectors are engaged in the implementation of LSM and establish linkage and collaboration between relevant ministries and agencies, establish a sustainable management structure and put in place a strong surveillance system.
- iv. There is mandatory field trials of all WHOPES approved larvicides before large scale deployment for malaria vector control in the country.
- v. The Federal Ministry of Health collaborates with relevant ministries, agencies and other regulatory bodies to ensure environmental standards and best practices are maintained during the deployment of LSM interventions.
- vi. As part of the strategy to ensure cost effective deployment of this intervention, Nigeria will collaborate with ECOWAS member States to support and leverage the local production of biolarvicides under the ECOWAS commission's tripartite partnership with countries that have expertise in this area.
- vii. Communities are sensitized to participate and own this process. An effective PPP arrangement is in place to deploy this intervention at a subsidized rate to beneficiaries to ensure sustainability.

3.2.4 Use of personal protective measures

Preamble

Personal protection is a complementary strategy for malaria vector control. This strategy protects individuals and households against both outdoor and indoor biting mosquitoes.

Policy Statement

Government shall ensure that:

- i. Repellants such as aerosols and other innovative interventions which have repellant and or knock down effects on mosquitoes are being used in many households in the country.
- ii. House screening and innovative technologies such as durable linings are also be used as complementary malaria vector control strategy in the country.

3.2.5 Insecticides Resistance Monitoring and Management

Preamble

Malaria Vector control in in Nigeria relies majorly on the use of insecticides through Long Lasting Insecticidal Nets, Indoor Residual Spraying and Larviciding.

Policy Statement

To ensure that these interventions are not marred by mosquito resistance to insecticides, Government shall ensure that:

- i. The NMEP adapt the Global Plan for Insecticide Resistance Management in malaria. The Government, Universities, research institutes and partners shall support the implementation of a comprehensive insecticide resistance management plan through provision of funds, research, and technical support.
- ii. There is an effective surveillance system put in place through the establishment of vector surveillance sentinel sites in the country.
- iii. The Federal Ministry of Health through the NMEP collaborate with relevant ministries such as Agriculture and Environment to ensure a holistic approach to insecticide resistance management in the country.

3.3 Malaria Chemoprevention

3.3.1 Chemoprophylaxis for non-immune visitors and special at risk groups

Preamble

Malaria chemoprophylaxis is generally not necessary in persons living in a malaria endemic area because it may slow down the ability of the individual to develop partial immunity which protects from developing the severe form of the disease. However the need for protection of non-immune persons or other risk groups as may be supported by evidence is acknowledged. In addition the changing epidemiology in the country may soon provide areas with very low or no malaria burden, with attendant implication for chemoprophylaxis in the country.

Policy Statement

The Government of Nigeria shall ensure that;

i. Appropriate chemoprophylaxis medicines are recommended for non-immune visitors and any special risk groups, as evidence dictates, in line with the National Antimalarial Treatment Guidelines.

- ii. There is periodic update of treatment guidelines to reflect on appropriate chemoprophylaxis for non-immune visitors, Nigerians returning after prolonged stay in malaria free countries (in excess of two years) and special risk groups like sickle cell disease patients.
- iii. Non-immune visitors are allowed to bring to the country antimalarial medicines prescribed in their home countries for personal chemoprophylaxis.

3.3.2 Intermittent Preventive Treatment (IPT)

Preamble

Intermittent Preventive Therapy is a programmatic intervention in which a population at risk is presumptively treated with an antimalarial so as to prevent malaria episodes or reduce the complications that may arise with the presence of malaria parasites. This may be directed at pregnant women; Intermittent Preventive Treatment in Pregnancy (IPTp), directed at infants, Intermittent Preventive Treatment in Infants (IPTi) or at Children, Intermittent Preventive Treatment in Children IPTc. Nigeria has adopted IPTp as the core chemoprevention strategy for pregnant women. The programmatic adoption of IPTi and IPTc or any other form of IPT will be carried out as compelling evidence is generated and reflected in National Antimalarial Treatment Guideline updates.

Policy Statement

The Government of Nigerian shall ensure that;

- i. All pregnant women receive IPTp in line with national treatment guidelines at the Health Facility, Community and private facilities' levels.
- ii. IPTp medicines are provided as part of a comprehensive antenatal package with other components such as haematinics and antihelminthics to control maternal anaemia that is highly prevalent during pregnancy in the country
- iii. Mass Screening and Treatment of Malaria (MSTm)
- iv. This refers to the screening of all people in areas of high endemicity, using appropriate diagnostic tools and treating the positive cases with appropriate antimalarial medicines. This strategy has been modified to include only febrile cases hence the entry criterion for MSTm is fever.
- v. This shall be carried out with the aim of achieving a coverage of not less than 80% of the infected population within three months.
- vi. The primary aim of this strategy is to drastically reduce morbidity, cure illness, reduce the parasite density in the population and avert deaths. Focal Screening and Treatment shall also be promoted in communities and villages with evidence of high transmission to achieve similar purpose.

3.3.3 Seasonal Malaria Chemoprevention (SMC)

Preamble

Available evidences across the Sahel sub-region showed that most childhood morbidity and mortality, due to malaria occur during the rainy season, which is generally short i.e. lasting for three to four months. Giving effective antimalarial medicines at full treatment doses at appropriate intervals during this period has been shown to prevent illness and death from malaria in children. The states that are included in this intervention are; Sokoto, Kebbi, Zamfara, Katsina, Kano, Jigawa, Yobe, Borno and northern part of Bauchi.

Policy Statement

The Government of Nigeria shall ensue the;

- i. Development and guidelines for the wide scale implementation of SMC in the identified states of the country.
- ii. Availability of high quality, colour coded and blister packed chemoprevention drugs (according to national treatment guidelines) for use among children under 5 in the Sahellian regions of the country

3.3.4 Malaria Vaccine

Preamble

Government of Nigeria notes with delight the current progress being made regarding global effort at malaria vaccine development.

Policy Statement

The Government of Nigeria shall ensure that;

- i. Research and other activities that will facilitate development of effective malaria vaccines are supported
- ii. Appropriate vaccine is adopted and made available to relevant target groups once there is compelling evidence to justify programmatic deployment.

3.4 Prompt Diagnosis and Treatment of Malaria

3.5 Diagnosis of Malaria

Preamble

Prompt access to accurate diagnosis of malaria following onset of symptoms is central to effective and rational treatment. In line with current WHO recommendations, prompt parasitological confirmation with mRDT or microscopy is essential in **all suspected cases** of malaria before treatment. Treatment solely on the basis of clinical suspicion should only be considered when a parasitological diagnosis is not accessible.

The Use of Microscopy: Microscopy shall remain the operational gold standard for the diagnosis of malaria. It is cost-effective, can distinguish specie, quantify parasite load and is useful in the management of other diseases. Functional laboratory and availability of skilled personnel are essential for maintenance of quality microscopic diagnosis.

Rapid Diagnostic Tests (RDTs): The RDTs are based on the detection of circulating parasites antigens or parasite by-products. Quality assured Histidine Rich Protein 11 (HRP2)-based RDTs is recommended for the diagnosis of malaria in all age groups because of their sensitivity and stability over a wide range of variation in environmental temperature.

Policy statements

The government shall ensure that:

- i. Malaria diagnosis will be parasite-based at all times using high quality malaria rapid diagnostic test and/or microscopy.
- ii. A quality assurance programme for malaria diagnosis is provided throughout the country
- iii. Sustained capacity development of relevant laboratory personnel on malaria microscopy to enhance their proficiency;

iv. All healthcare workers who will need to diagnose malaria are trained to use the RDT and this includes community volunteers, PHC workers and staff of secondary and tertiary health care facilities.

Malaria diagnosis in private and public secondary / tertiary health facilities

- v. Availability of microscopes at all private and public secondary and tertiary health facilities
- vi. Malaria RDT be deployed in the General outpatient clinics within private and public secondary and tertiary health care facilities to complement the use of microscopy.

Malaria diagnosis at PHC and Community levels

vii. Make good quality mRDT available at primary health care facilities (PHC) to be used by PHC workers and trained community health care providers for parasite based diagnosis among patients with fever or other symptoms of malaria

Malaria diagnosis by the informal private sector

- viii. Training and engagement of the informal private sector health workers in the use of mRDT.
- ix. The involvement of trained Community Based Organizations in the monitoring and supervision of the informal private health workers in the use of mRDT

3.6 Treatment of Malaria

Preamble

The primary goal of treating malaria is to eliminate the parasite in the victim. Other benefits of the current goal is the reduction of transmission rate, prevention of emergence and spread of resistance in the parasite.

3.6.1 Treatment of Uncomplicated Malaria

Selection of antimalarial drugs:

Nigeria has undertaken, since 2005, a fundamental shift in the treatment of uncomplicated malaria. This was in line with the global observation that there was invariably significant resistance to single drugs (monotherapies) when used for the treatment of malaria. Hence Nigeria adopted the use of artemisininbased comination therapy (ACTs) for the treatment of uncomplicated malaria. The recommended ACT will always be determined from the result of DTET studies. For any ACT to be deployed for programatic use, the ACT should provide a day 28 cure rate >95% during clinical trial. If the cure rate of any ACT of choice falls below 90%, such ACT will be replaced and the new ACT of choice will be based on DTET result.

The preferred formulations and dosage forms are for the ACTs that are co-formulated, with reasonable shelf-life and are able to withstand variable environmental conditions in Nigeria's distribution chain. (For example, tablets and capsules are more stable in the prevailing Nigeria's ambient temperatures and humidity than mixtures, syrups and elixirs. Preferably, therefore, paediatric doses should be achieved from the use of either paediatric tablet strengths or scored tablets of standard tablet strengths or dispersible formulations and in their age/weight based packaging. Precise dosages are as in the National treatment Guidelines.

The Use of Monotherapy: The use of antimalarial monotherapies are no longer allowed in Nigeria for the Treatment of Uncomplicated Malaria

Treatment Failure: This occurs when fever and parasitaemia fail to resolve, or recur within 14 days of treatment. It must be confirmed parasitologically preferably by microscopy. The alternate treatment should be given after confirmation has been made. Recurrence of fever and parasitaemia more than 2 weeks

after treatment could result either from recrudescence or new infection. In such a case, parasitological confirmation is desirable. However, treatment could be effected with the same medicine administered earlier or the use of alternate medicine, if confirmed to be a new infection.

Policy statement

The Government of Nigeria shall ensure that:

- i. Persons with malaria have access to quality assured treatment with effective Artemisinin-based Combination Therapies (ACT) as obtains in the National Treatment Guidelines at all public and private levels of health care services in the country.
- ii. There are avenues and facilities for both pre-service and in-service training on malaria case management
- iii. A quality assurance programme for antimalarial medicines is provided.
- iv. Health care workers refer persons with malaria who cannot be managed at one level to the next/appropriate level of health care where such persons will be managed in line with the National Treatment Guideline.
- v. Procured antimalarial medicines are properly stored to maintain their potency for the entire duration of their shelf lives

Community-based Treatment of Uncomplicated Malaria: To further promote prompt treatment of malaria, diagnostic and treatment services will be brought as close as possible to the persons needing treatment. This is to be achieved through the community delivery mechanisms; either as stand-alone community based diagnosis and treatment or within the context of the integrated community case management (iCCM).

Policy statement:

The Government of Nigeria shall:

- i. Provide access to good quality first line choice of ACT in line with National Treatment Guideline at community levels.
- ii. Build capacity of the first level health workers and community oriented persons, including the patent medicine vendors on skills for effective treatment, counseling and referral (where necessary) of malaria patients.
- iii. Ensure system is in place for effective supervision of malaria case management at community levels.

Treatment of Uncomplicated Malaria in Special Groups

Treatment of Malaria in Pregnancy: Recognizing that the pregnant woman is more susceptible to malaria infection and the need to maintain the appropriate balance between preventing the deleterious effects of malaria in pregnancy versus the risk of drug related fetal injuries,

The Government of Nigeria shall ensure;

- i. The diligent review of the available evidence or consensus statements for use of a given antimalarial in pregnancy
- ii. That all pregnant women have access to recommended antimalarial medicines in line with national treatment guidelines

Neonates and Children Less than 5Kg

The Government of Nigerian shall ensure that;

- i. All neonates and young infants (less than 6months) have access to recommended antimalarial medicines in line with the National Treatment Guidelines
- ii. The formulation of antimalarial medicines in dosages that will be easy to administer among neonates and young infants

3.6.2 Treatment of Severe Malaria

Preamble

Severe malaria is a medical emergency and requires parenteral treatment. Management of severe malaria should be carried out in secondary facilities with adequate facilities to manage complications or at a tertiary/specialist facilities. At the PHC and community levels the goal is to ensure early recognition of severe malaria, instituting pre-referral treatment and prompt referrals.

Policy Statement

The Government of Nigeria shall ensure:

- i. The availability and access to the most effective injectable antimalarial recommended for treatment of severe malaria at all public and private secondary/tertiary health facilities
- ii. That secondary and tertiary health facilities are well equipped for the management of the complications in severe malaria
- iii. Provision of intensive care facilities for the management of extreme complications at the tertiary health facilities
- iv. Access to options of antimalarial drugs needed for pre-referral treatment of severe malaria at PHC and community levels
- v. Strengthening of the referral system for more efficient transfer of patients from one of health care to the next, whenever necessary.

3.7 Advocacy, Communication and Social Mobilization (ACSM)

Preamble

In order to enhance the uptake and sustainable utilization of malaria intervention measures, all key interventions and programme activities will be are accompanied with strategic deployment of components of information and behaviour change communication.

Policy Statement

The Government of Nigeria shall promote use of antimalarial interventions by ensuring that:

- i. Advocacy to key policy makers at all levels obtain appropriate support for malaria elimination;
- ii. All tiers of government, non-governmental development agencies, civil societies, the private sector and individual communities will have to be actively involved in combating the malaria burden;
- iii. Appropriate messages on the transmission of malaria, the use of insecticide treated nets, the diagnosis of malaria, community management of malaria, the recognition of danger signs and referral will be developed and continually reviewed.

- iv. The dissemination of messages through the most effective means of communication in relation to the target audience. Options include posters, pamphlets, the mass media (print and broadcast), social mobilization activities, special announcements in places of worship, etc;
- v. The continuous monitoring of malaria related messages for effectiveness and impact of IEC initiatives.

3.8 Regulations of Antimalarial Commodities

3.8.1 Commodities for Prevention of Malaria

Policy Statement

The Government of Nigeria shall ensure that:

- i. Norms for net production are to be consistent with national standards as prescribed by the Standards Organization of Nigeria (SON) in line with international standards.
- ii. Bidders do state their compliance with the technical specification of LLINs they are offering, by completing the statement of compliance provided in annex.
- iii. Annual review of the issues on taxes and tariffs in order to obtain waiver on LLIN.
- iv. Taxes and tariffs on mosquito nets are adjusted continually to encourage local production in accordance with the Abuja Declaration
- v. NAFDAC and SON carry out testing of samples of all imported LLINs at the entry points. In addition, the National Malaria Control Programme in collaboration with NAFDAC and SON shall carry out routine testing of samples of all locally manufactured and imported LLINs from the warehouses to the distribution points and end users (communities and households) for quality assurance.

3.8.2 Regulations on Diagnostics

Preamble

The recommendation of the WHO that the diagnosis of malaria be parasite-based in all cases underscores the need for a rapid yet accurate diagnostic technique. The use of antigen detecting rapid diagnostic tests (RDTs) is a vital part of this strategy and is the backbone of expansion of access to malaria diagnosis in areas where good quality microscopy cannot be maintained. In the last few years, there has been a rapid increase in the number of RDTs available. There has also been a scale up in their use. However, these RDTs have varying sensitivity and specificity. In 2006, the WHO, Special Programme for Research and Training in Tropical Diseases (TDR) and the Foundation for Innovative New Diagnostics (FIND) launched an evaluation programme to assess the comparative performance of commercially available malaria RDTs. These data are available in the public domain and are guiding procurement decisions which are in turn shifting markets towards better-performing tests and helping to drive overall improvement in the quality of manufacturing. The results of WHO Malaria RDT Product Testing have been published annually since 2009.

Policy Statement

The Government of Nigeria shall ensure that:

i. Malaria diagnostics (RDT and requirements for microscopy e.g. Giemsa stain, microscope slides, lancets and microscopes) shall be registered, certified good and recommended by the

appropriate national regulatory agencies such as the National Agency for Food and Drug Administration and Control (NAFDAC) or the Standard Organizations of Nigeria (SON)

- ii. Batch testing of malaria diagnostics shall be undertaken by the designated quality assurance laboratory at regular intervals.
- iii. Non-recommended malarial diagnostics shall not be marketed in Nigeria

3.8.3 Antimalarial Medicines

Preamble

Illegal production, sale and distribution of counterfeit, sub- standard and poor quality antimalarial drugs especially artemisinin derivatives can result in worsening morbidity, loss of life from untreated malaria & toxic chemicals and encourages emergence of drug resistance. Every malaria patient treated with fake ACT is in danger of progressing to severe illness and in some cases of dying. The availability and accessibility of good quality antimalarial medicines in the country is thus absolutely essential in the execution of a successful malaria control and elimination program.

Policy Statement

The government of Nigeria shall ensure that:

- i. The therapeutic efficacy of antimalarial medicines in Nigeria is constantly monitored and suitable alternatives identified when necessary.
- ii. Medicines provided for use are safe, efficacious, and of good quality. A quality assurance system will be put in place in line with WHO guidelines. Good manufacturing Practices (GMP) that is routinely monitored should be an important component of the system. NMCP will work with relevant regulatory agencies like National Agency for Food and Drug Administration and Control (NAFDAC) or the Standard Organizations of Nigeria NAFDAC and SON to effect this.
- iii. Malaria medicines shall be registered, certified good and recommended by the appropriate national regulatory agencies such as the National Agency for Food and Drug Administration and Control (NAFDAC) or the Standard Organizations of Nigeria (SON)
- iv. Malaria medicines purchased are safe, of good quality and efficacious and are as indicated in the National Treatment Guideline
- v. Systems are place for the procurement, storage, distribution of antimalarial commodities to all levels of health care delivery in the country
- vi. Antimalarial medicines that are not recommended are not marketed in the country

3.8.4 Pharmacovigilance

Preamble

With the continued scale-up in the use of anti-malarial medicines and this involve use of antimalarial among special populations, there will be need to strengthen pharmacovigilance.

Policy Statement

The Government of Nigeria shall

- i. Put in place measures for active and passive pharmacovigilance regarding antimalarial use in Nigeria
- ii. Engage the appropriate partnership to ensure complete analysis of pharmacovigilance data/reports
- iii. Undertake to review guidelines and recommendations on use of antimalarials as may be informed by evidence from pharmacovigilance studies.

3.9 Monitoring and evaluation

Effective monitoring and evaluation of the national malaria programme activities is essential in assessing the progress made towards set targets. Monitoring and evaluation will be undertaken at national, State and Local Government levels. Information will be derived from routine data at the Ministries of health, national surveys, and information systems by collaborating partners and research institutions.

Policy Statement

The government of Nigeria shall ensure that:

- i. Monitoring and evaluation activities are guided by a comprehensive national monitoring and evaluation (M & E) plan.
- ii. Monitoring and evaluation becomes an integral and relevant part of malaria control activities leading to malaria elimination.
- iii. M & E activities receive adequate funding
- iv. There is efficient monitoring and evaluation of the strategic approaches to malaria control, prevention and elimination.

3.9.1 Surveillance monitoring

Critical investments in the areas of information management; routine monitoring, measuring for outcome and impact constitute critical aspects of successful malaria control and elimination programme. It is only with close and accurate recording of surveillance activities that the country will be able to identify time points of crossing critical epidemiologic hurdles of endemicity, pre- elimination and elimination stages.

Policy statement:

The Government of Nigeria shall:

- Strengthen routine data generation and flow from public/private facilities and community-based health providers for the National Health management information system
- Operationalize electronic and SMS database for malaria control.
- Strengthen human resources for monitoring and evaluation
- Strengthen routine monitoring & supervision especially within the context of the anticipated changes in the epidemiology as the country transits from high burden to extremely low burden state
- Strengthen Data Quality Assurance (DQA) at all levels of reporting
- Strengthen malaria surveillance coordination and linkages with National HMIS Strengthen data generation and sharing from evaluations and reviews

3.9.2 Operational Research (OR)

Operational research helps to identify solutions to bottlenecks that limit program quality, efficiency and effectiveness, or to determine which alternative service delivery strategy would yield the best outcomes.

Policy Statement:

The Government of Nigeria shall ensure:

- i. The setting and funding of operational research priorities
- ii. The conduct of operational research to generate knowledge on malaria interventions and to provide timely, accurate and relevant information that could enhance programme effectiveness.
- iii. That operational research outputs are translated to guide malaria programme activities by all collaborating partners
- iv. The engagement of implementing partners, research institutions and CSOs to complement the NMEP in the conduct of identified research priorities cutting across health system strengthening, service delivery mechanisms, behavioural change communication and surveillance issues.

3.10 Emergency preparedness and epidemic response

Preamble

The deployment of antimalarial interventions as envisaged in this Policy is expected to result in significant changes in the disease burden in Nigeria. It is therefore anticipated that as the country's epidemiological profile shifts from current levels to widespread hypoendemicity there could be an initial risk of incidences of malaria epidemics. Hence the need to mainstream malaria emergency preparedness and response in the national planning processes or relevant agencies like NEMA and the NMEP.

Policy Statement

The Government of Nigeria shall correct this anomaly by putting in place:

- Improved documentation of malaria in complex emergencies
- Effective collaboration with meteorological, education and tourism departments/agencies.
- Strengthen the policy environment for effective handling of epidemics and malaria-related emergencies as the herd immunity continues to decline with sustained drop in malaria transmission as a result of the evidence-based interventions.

3.11 Programme Management

Preamble

Programme management is the overall umbrella of coordinating the component parts of this national Malaria policy. This will involve active participation and cooperation of all sectors working together with development partners with a view to ensure that services are scaled up, impact is monitored and policy strategy revised based on evidence when necessary. This will entail a continuous cycle of planning, implementation, evaluation and re-planning.

Policy Statement

The Government of Nigeria will ensure that:

- An effective and inclusive partnership for malaria elimination is built
- All partners are accountable for for the delivery, and reporting of the progress of implementation
- Capacity for managing the malaria control to elimination program is strengthened.at the national, state and local government levels and also at the primary, secondary and tertiary levels of health care.
- The procurement, supply management systems are strengthened to eliminate disruption in commodity supply.
- Develop a Malaria Health Financing Strategic Framework with an intensive advocacy effort to increase malaria budget allocations within overall health budgets

4 IMPLEMENTATION FRAMEWORK

4.1 National Malaria Elimination Programme

The National Malaria Elimination Programme shall have the primarily responsibility of coordinating and driving the implementation of the intentions expressed in this policy document. The NMEP shall coordinate the partnership and stakeholders arrangement to ensure the implementation of the identified interventions towards disease prevention, diagnosis and treatment and the application of supportive cross cutting activities of ACSM, PSM, Monitoring and Evaluation.

4.2 Stakeholders and Partnerships

Malaria control in Nigeria shall be driven by a vibrant and broad-based Roll Back Malaria (RBM) partnership which is linked to the overall global partnership. The partnership should include the community, government at various levels, development partners, bilateral and multi-lateral agencies, academia, civil society organizations and the Private sector. This partnership shall be coordinated by the Federal Ministry of Health through the National Malaria Elimination Programme and supported by development and bilateral agencies as well as the private sector.

4.3 Resource mobilization

In order to attain the objectives of the National Policy on Diagnosis and Treatment of Malaria, there should be appropriate and adequate deployment of funds to malaria control. Funds would be needed to facilitate the implementation of preventive measures, ensure medicine availability and effective distribution at all levels, capacity building, and improved referral from one health care level to another. There would also be the need to provide funds for the monitoring and evaluation of all aspects of malaria control, for social mobilization, and for Operations Research, as specified above in this policy document.

4.4 Sources of funding

Funding for malaria control would be provided by the Federal, State and Local governments. Appropriate proportion of the health budget of each tier of government, based on the precise gravity of the malaria burden and malaria related needs, shall be allocated and released by all tiers of government for malaria control, as and when the fund shall be required.

Others envisaged sources of funds include international and local non-governmental development agencies and organizations, communities and philanthropic individuals.

4.5 Resource Mobilization

Resource mobilization should be carried out and sustained through:

- i. Substantial increase in health budgetary allocation by Governments at all three levels to the 15% level set by the Abuja Declaration;
- ii. Effective Public/Private collaboration: A special appeal should be made to Nigerian corporate organizations to make specific contributions to their respective communities;
- iii. Active community involvement, right from the planning stage through to programme execution and evaluation, as well as in monitoring the use of funds; and

iv. The proactive deployment of organizations operating within specific communities in the fight against malaria.

4.6 Roles and responsibilities of different tiers of government

4.6.1 FMOH, SMOH & LG Health Department

- i. Procurement of anti-malaria commodities;
- ii. PSM
- iii. ACSM
- iv. Coordination
- v. Operational Research (To liaise with other organs e.g. National Population Commission, as necessary)
- vi. Monitoring and Evaluation
- vii. Budgetary provisions

4.6.2 FMEnv

- i. Environmental Management
- ii. Regulation of Chemical standard and disposal

4.6.3 FMWA

i. ACSM

4.6.4 SON/NAFDAC

- i. Standard regulation
- ii. Quality Assurance of anti-malaria commodities

4.6.5 FMTI

i. Encourage investment in malaria intervention ventures

4.6.6 Legislature

- i. ACSM
- ii. Legislation

4.7 Partners' responsibilities

The Federal Government upholds the concept of RBM partnership as involving all stakeholders and partners. The partnership development will be a continuous process to ensure the effective involvement of all stakeholders. Furthermore, the FGN will continue to encourage networking and information sharing between stakeholders to improve coordination and access to antimalarial commodities.

In addition to its advisory role, the National Malaria Elimination Committee (NMEC) has the responsibility to create and support broad partnership; play a pivotal role in advocacy, social mobilization and monitoring of malaria control activities in Nigeria. The NMEC has four sub-committees which are Publicity and Community Mobilization; Case Management and Anti-Malaria Drug Policy; Monitoring and Evaluation

and Integrated Vector Management (IVM)/Environmental Management. This arrangement shall be replicated at the State and LGA levels. Areas of responsibilities of partners include

- i. Funding
- ii. Capacity development at all levels
- iii. Mapping activities in relation to malaria interventions
- iv. Procurement and Supply Chain Management systems
- v. Operational research
- vi. ACSM
- vii. Monitoring and Evaluation

4.8 Private sector engagement

Government here underscores the critical role of the private sector in the attainment of the vision of the Malaria Policy. The Private sector ranges from multinational companies through the informal sector and the Civil Society Organizations. Government will therefore provide the enabling environment for the participation and engagement of the private sector at all levels of programme implementation. Specifically the private sector will play significant roles in;

- i. Manufacturing of antiamalarial commodities
- ii. Storage, distribution and sales of antimalarial commodities
- iii. The promotion and utilization of preventive, diagnostic and treatment services
- iv. Ensuring compliance with prescribed standards within this policy framework
- v. Surveillance
- vi. Whistle blowing
- vii. Funding

4.9 Academia and Research Institutes

The academic and research institutes shall be actively engaged in the

- i. Evidence generation to promote understanding of the malaria disease and preventive measures
- ii. Capacity development
- iii. Advocacy
- iv. ACSM
- v. Improve Disease reporting mechanisms
- vi. Operational research

5 REVIEW AND UPDATE OF THE POLICY

This Policy shall be reviewed periodically only when there is compelling reason to undertake such. This will include availability of ne evidence that calls for major changes in the strategic approach. Changes in options of intervention within the same strategic framework such as choice of insecticides, type of rapid diagnostic test to be deployed or selection of antimalarial medicines shall be managed largely through the update of relevant guidelines.

5.1 Legal Clause

6 ANNEXES

6.1 Conceptual Definitions

In an effort towards global malaria eradication, there has been a number of documents developed to guide the different levels of activities. Many of these documents have been adapted, where feasible, by countries to guide their malaria control/elimination programmes. In Nigeria, with multi-partner support for malaria, there has been a variety of documents, with overlapping focus, target groups and contents to the extent of precluding their effective utilization.

Thus in developing the Malaria Policy document, it became necessary to present some conceptual definitions of the various documents that are being used for malaria programme activities. These definitions are largely operational guides, and may be subject to modifications within the broader sector of malaria partners. However the concepts established here are intended to guide the focus and classification of the documents being used by the National Malaria Programme in order to promote consistency of their contents and application.

6.1.1 National Malaria Strategic Plan (NMSP)

The NMSP articulates the periodic milestones to be achieved in relation to national vision for malaria control/elimination. It sets out medium range objectives and strategies by which these are to be achieved. The NMSP is therefore useful as a basis for the annual implementation plans, budgeting and advocacy for resource mobilization. It also sets standards for performance evaluation.

6.1.2 National Guidelines on Malaria Treatment and Control

Guidelines are systematically developed evidence-based statements which assist providers, recipients and other stakeholders to make informed decisions about appropriate health interventions. Guidelines are formal advisory statements which should be robust enough to meet the unique circumstances and constraints of the specific situation to which they are being applied. They are periodically updated. Consistent with this definition the National Guidelines on Malaria Treatment and Control are evidencebased statements for making informed decisions on malaria treatment and control/elimination in Nigeria. This may be presented for specific components of malaria management or as an integrated document, though preference will be for integrated documents where feasible.

6.1.3 National Malaria Policy (NMP)

The National Malaria Policy contains statements of intent or desires by the Policy steward and strategies for attaining them within the foreseeable future. It is often open and not limited by time but guided by available evidence. It may however be updated and refined by new developments in relation to the subject of interest. For instance the NMP may be updated to provide wider range of importance to use of vaccine as this becomes available. The NMP also expresses Government's commitment with regards to the various interventions on malaria elimination. It however does not elaborate on the guidelines.

6.2 Attendance

6.2.1 Consultants Entry Meeting

ENTRY MEETING WITH CONSULTANTS FOR NATIONAL MALARIA POLICY & PARTNERS' PROFILE SuNMaP, Office, Abia House.30th January, 2014

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6.2.2 Meeting of Consultants and Working Group on National Malaria Policy

NATIONAL MALARIA ELIMINATION PROGRAMME NMEP CONSULTANTS AND WORKING GROUP MEETING ON NATIONAL MALARIA POLICY, 20 February, 2014.

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