



Federal Ministry of Health,  
National Malaria Control Programme,  
Abuja.

A 5-year Strategic Plan: 2006-2010

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# A Road Map for Impact on Malaria in Nigeria

Rapid Scale up of Malaria Control Interventions  
for Impact in Nigeria

## Table of Contents      Page

Foreword	iv
Acronyms	vi
Executive Summary	viii
Section 1:    Introduction	1
1.1    The Vision	2
1.2    The Goals	2
1.3    The Targets	2
1.4    The Commitment to Rapid National Scale Up	2
Section 2:    Background	4
2.1    Global Context of Malaria Control	4
2.2    Malaria Burden in Nigeria	5
2.3    Accomplishments and Lessons Learned 2000-2005	6
2.4    SWOT Analysis	9
2.5    Principles and Values	10
2.6    The 2006 – 2010 Strategic Plan Preparatory Process	12
Section 3:    Policy / Strategic Framework for Malaria Control in Nigeria	15
3.1    Rapid National Scale-Up for Impact	15
3.2    Integrated Package of Malaria Interventions	15
3.3    Focus on Prevention	16
3.4    Commitment to Performance Monitoring and Impact Evaluation	16
Section 4:    Integrated Package of Malaria Interventions	17
4.1    Reducing Disease Burden	17
4.1.1    Integrated Vector Management	17
4.1.2    Prevention in Pregnant Women	21

4.2	Care of the Sick	22
4.2.1	Diagnosis	22
4.2.2	Prompt and Effective Case Management	23
4.2.3	Management of Severe Malaria	24
4.2.4	Home Management of Malaria	24
Section 5:	Integrated Support Systems	25
5.1	Effective Programme Management	25
5.1.1	Organizational Alignment	25
5.1.2	Programme Planning and Design	26
5.1.3	Human Resource Management	27
5.1.4	Financial Management	27
5.1.5	Procurement and Supply Chain Management	29
5.1.6	Coordination of Partnerships for Impact	30
5.1.7	Financing and Resource Mobilisation	31
5.2	Empowering Individuals and Communities	32
5.2.1	Information, Education, and Communication for Behaviour Change	33
5.3	Commitment to Performance Monitoring and Impact Evaluation	35
5.3.1	Monitoring and Evaluation	35
5.3.2	Research	37

## Foreword

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Nigeria faces a promising future with regard to malaria control and the reduction of the ill-health and death caused by malaria. My Ministry has tirelessly worked on developing a Strategic Framework that is consistent with our vision to improve life expectancy and change the course of health care provision through a focus on outcome and impact related achievements. We are therefore clearly focused on meeting the challenges of translating strategies into service delivery; a challenge that finally, now is beginning to lead to an anticipation and expectation that we are clearly addressing inherent weaknesses in our health system.

Malaria can be classified as the first of the conditions causing most illness and death in the country. This is apart from the leading condition in the areas of child health and reproductive and maternal health. Furthermore, malaria effects have negatively impacted on different demographic and socio-economic groups. For instance, under five children and pregnant women are known to be relatively more adversely affected as demonstrated by the estimates that 11% of maternal related mortality is related to malaria in pregnant women. This contributes to the relatively high MMR in the country. Currently, there are, at least 30% more deaths of Under Five children than there ought to be due to malaria. These trends are of more than major concern and burden to the Government and the Nigerian population at large.

The health sector has faced some resource constraints, which have been acute in terms of successful programme implementation. This situation has previously limited effective resource allocation in terms of sustained priority resource allocation and sustained, continuous intervention and service provision for purposes of achieving desirable results and health status changes.

I am glad to note that in the last three years the resources' landscape has partially changed and changed for the better. In particular, during 2005, the resource situation has improved significantly. This has been both in terms of our partners' collaboration as well as additional financing. Although we are constrained and mindful of the need to address the human resource capacity constraint, I however, now have cause for optimism and belief that we are indeed on the threshold of a new health system improvements through the Health System reform. The increased levels of partnerships in the area of malaria control programme provide a solid foundation for ensuring that we hold the control programmes within our planning, management and operational controls. Although partners can provide some essentials, the challenge falls firmly upon us to ensure success through accountable performance which will be determined through the changes to the health conditions of the people.

Our focus on improving the health system has been supported through the years by our traditional partners, such as WHO, UNICEF, DFID, the Global Fund to Fight HIV and AIDS, TB and Malaria. Partners such as the World Bank have now come on board in the fight against malaria to ensure that within the course of the next three years we begin to reverse malaria impact and sustain this by the end of the five year strategic plan period.

In order for the gains to be sustained and impact achieved, the emphasis will be on the use of proven interventions coupled with necessary process initiatives within the local context that will ensure and assure success. The success of the programme is under-pinned on the following principles:

- Rapid scale up or expansion of all relevant and proven interventions. Key interventions involved included the distribution of Insecticide Treated Nets, Indoor Residual Spraying where applicable, IPT with SP for pregnant women and Effective Case Management.
- Universal access to the relevant interventions
- Ensuring equity through a community based approach and focus on hard to reach communities.
- A gender based approach that takes into account the demographic needs for safer health of women
- A rights based approach recognizing access to malaria interventions

The coverage of the programme as mentioned will be through-out the country and interventions will be based on relevance, cost-effectiveness and local context and environment.

It is my conviction that this Strategic Plan is committed to the improvement of health and towards rolling back and maintaining the gains in malaria control.

I wish to take this opportunity to thank all our Partners and other Stakeholders, and assure the General Public that Government is determined to bring general improvements in health care services and ultimately improve their health status.

**Professor Eyitayo Lambo**  
**Hon. Minister of Health**

## Acronyms

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ACT	Artemisinin based Combination Therapy
BCC	Behavioural Change Communication
CHW	Community Health Workers
c-IMIC	Community – Integrated Management of Childhood Illnesses
DDT	Dichlorodiphenyl - Trichlorethane
DOT	Directly Observed Treatment
EPI	Expanded Programme on Immunisation
FANC	Focused Ante-Natal Care
FBO	Faith Based Organisation
GDP	Gross Domestic <b>Product</b>
GFATM	Global Fund to Fight TB, Malaria and AIDS
HBC	Home Based Care
HIV/AIDS	Human Immuno-Deficiency Virus/Acquired Immunity Deficiency Syndrome
IEC	Information, Education and Communication
IPT	Intermittent Preventive Treatment
IRS	Indoor Residual Spraying
ITN	Insecticide Treated Net
IVM	Integrated Vector Management
LLIN	Long Lasting Insecticidal Net
M & E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MiP	Malaria in Pregnancy
MoH	Ministry of Health
NGO	Non-Governmental Organisation

NMCP	National Malaria Control Programme
NMSP	National Malaria Strategic Plan
PMTCT	Prevention of Mother to Child Transmission
RBM	Roll Back Malaria
RDT	Rapid Diagnostic Test
SP	<i>Sulfadoxine-Pyrimethamine</i>
TORs	Terms of Reference
WHO	World Health Organisation

# Executive Summary

## Introduction

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While Malaria remains a major public health and development challenge in Nigeria, we now have a unique opportunity to scale-up malaria related interventions, strengthen systems, and make a major effort to *Roll Back Malaria* in Nigeria. Malaria currently accounts for nearly 110 million clinically diagnosed cases per year, 60% of outpatient visits and 30% hospitalizations, an estimated 300,000 children die of malaria each year, and up to 11% of maternal mortality. In addition to the direct health impact of malaria, there is also a severe social and economic burden on our communities and country as a whole, with about ₦132 billion lost to malaria annually in form of treatment costs, prevention, loss of man hours etc.

Malaria control will need to be addressed, not as a separate, vertical, disease-specific intervention, but as part of a health systems strengthening effort to provide holistic services in all facets of care, as part of a larger community-development effort.

The Nigerian Government is determined to accelerate and intensify efforts on malaria control during the next 5-year planning cycle. The malaria control plan builds on the National Malaria Strategic Plan (NMSP) for Malaria Control that was developed by the National Malaria Control Programme in partnership with the RBM Partners, States' Ministries of Health and other Stakeholders to enable national scale-up of key preventive and curative interventions.

This malaria strategic plan addresses national health and development priorities, including the Roll Back Malaria (RBM) Goals and the Millennium Development Goals (MDGs). The malaria control strategy contained herein includes demonstrable performance results, including malaria-specific morbidity and overall "all-cause mortality".

The strategic plan provides a monitoring and evaluation framework, ensuring that Nigeria deploys an evidence-based and cost-effective package of interventions that are appropriately evaluated and documented. Finally the strategic plan includes a "business plan" component to enable efficient collaboration among all the partners in the public sector, the private and commercial sector and civil society.

### *The Vision*

#### **"A Malaria-Free Nigeria."**

The Government of Nigeria believes that every Nigerian has the right to access highly effective malaria preventative services and curative care delivered as close to the household as possible. Malaria causes untold suffering to a large proportion of the population each year and causing enormous economic drain to the health sector.

### **The Goals**



1. As a result of implementation of this Plan, there will be a reduction of malaria burden by half by the year 2010 which translates into a reduction in malaria prevalence from 50% population having at least one attack to 25% population having one attack yearly
2. A reduction in all-cause child mortality by 20% in children under five years.
3. Malaria control will not only improve the main health prognostic indicators, but also provide economic payoffs at household and national levels and alleviate poverty.

### **The Targets**

1. At least 80% coverage for effective case management for Children under five years
2. At least 80% coverage of population at risk sleeping under an Insecticide treated net(ITN)
3. 90% coverage for Intermittent Preventive treatment for pregnant women

### **The 2006 – 2010 Strategic Plan Preparatory Process**

The Preparatory process has adopted both a top down and bottom up approach, with the bottom up aspect taking on greater significance in the process. This has included consultative meetings with the RBM Partners, Stakeholders, States and LGAs. The district consultative meetings with States had happened simultaneously in all the six geo-political zones of the Country. At the national level, there have been various consultative meetings with implementing partners as well as well with donor agencies that are engaged in the public health system. The Strategic Plan has been subjected to a consensus meeting of all stakeholders for its final adoption.

### **Rapid National Scale Up for Impact**

Achieving immediate reduction of malaria mortality and morbidity will rapidly improve health status, lower health care costs as well have other socio – economic impact such as increasing productivity, educational attendance and minimize national and households expenditure on treatment to restore good health, while generally leading to the reduction of the burden of malaria on an under-resourced and over-stretched health care system.

### **Focus on Prevention during Rapid Scale Up**

Malaria interventions do not only lie in treatment approaches or clinical interventions or chemotherapy, they also lie extensively in prevention. Prevention interventions are recognised to be highly cost effective due to the lower technological and skills requirements in administering preventive interventions. Furthermore, the application of interventions requires support by monitoring, evaluation and the use of cost-effectiveness analysis in deriving an appropriate mix or package of interventions yielding optimal results in terms of cure or continued well being.

Malaria control is already incorporated into the existing health care delivery system which needs strengthening. The program packages for strengthening child and maternal health focus on providing malaria treatment and prevention services as close to the client as possible. All available routes will be used to deliver these interventions, including entry-level facilities (e.g., health centres and health posts),

community outreach services using front-line health workers and volunteers, NGOs, private sector providers, and commercial outlets, as well as LGA and State health facilities and hospitals.

The Strategic Plan is organized around a balanced package of preventive services to reduce disease burden and curative services to care for the sick, addressing the stated priority of rapid scale up of prevention interventions to decrease infection burden and to rapidly decrease costs of curative care in terms of drug costs, health facility operations and household expenditures. In addition, key cross-cutting strategies are proposed to assure that programme operations and management, and programme evaluation and documentation are fully operational.

There are a set of core interventions and cross-cutting interventions that form the framework of the Strategic Plan as outlined below.

## **The Core Interventions and Related Strategies**

### ***Reducing Disease Burden and Mortality: Prevention***

#### **Integrated Vector Management (IVM)**

The objectives under this section relate to achieving ITNS distribution and coverage of up to a minimum of 80% by 2010. For IRS, urban areas with poor access to health care services will be covered by IRS interventions with a coverage goal of achieving 85% coverage in all eligible households.

#### **Strategies: ITNS**

There will be rapid scale up of ITN coverage through a rolling mass distribution campaign complemented by distribution by IMPAC in health facilities. The campaign will focus on ensuring that a minimum target of two nets per household in all ITN eligible areas and all nets are distributed and accessed without cost to the households. Both LLINs and bundled ITNs will be used initially with gradual phasing out of bundled nets when LLINs are fully accessible.

- Mass cover up campaign shall be employed in the strategic choice of ensuring access and utilisation benefits of using ITNS in the country.
- Mass re-treatment shall be the adopted choice towards ensuring that there is continuation of efficacious utilisation of ITNs.
- Routine ITN distribution shall be undertaken through child clinics and Ante Natal Clinics.

#### **Strategies: IRS**

Annual campaigns will be implemented in eligible areas.

### ***Prevention During Pregnancy***

#### **Strategies :**

- Strengthen the malaria component of Focused Antenatal care.
- Support the national roll-out of Focused Antenatal care with IPT with SP during pregnancy
- Encourage pregnant women to attend ANC at least twice during their pregnancy.

## Reducing Disease Burden and Mortality: Caring for the Sick

The treatment of uncomplicated and severe malaria will be based on the use of the changes in treatment policy and the use of the Artemisinin based combination therapies (ACTs). Furthermore, extensive use and change in practitioners' practice is envisaged through improved clinical diagnosis of malaria using the IMCI approach, upgrading microscopy use and rapid diagnostic test kits for improved diagnosis and rationalisation of drug use. This will be part of the community programme designed to ensure early and prompt access to treatment to avoid preventable deaths and other complicated morbidity due to malaria.

The objective will be to ensure that at least 80% of malaria is appropriately diagnosed and effectively treated by 2010.

### Strategies

- Increase clinical diagnostic skills through the strengthening of c-IMCI strategy
- Expanding microscopy to all eligible areas in all facilities
- Introduce on a pilot study basis the use of RDTs for diagnosis of malaria in children over 5 years in selected urban and rural health facilities in 2007 before large scale deployment can be advocated.

### Strategies

- Extend Artemether-Lumefantrine (Coartem®) to the public sector which will be 80 – 100% subsidized
- Encourage the use of Artesunate-Amodiaquine (AA) to the private sector
- Strengthening of malaria component of c-IMCI
- Support roll-out c-IMCI.
- Support strengthening of referral systems

### *Effective Programme Management*

The commitment to rapidly scale up malaria programme coverage and operations as defined in the National Malaria Strategic Plan will require a growth and strengthening of the capacity of programme management systems at all levels of the health system. The role of the NMCP as the planning and policy setting focal point will require support, and in particular authority and adequate latitude to address key programme components such as human resources, procurement, and financial management. The Nigerian RBM partnership has great strength and the capacity of the NMCP to continue to play a strong and supportive role in partnership mobilization for programme scale up is vital.

The following areas will be part of a strengthened programme management approach for ensuring that the capacity for an expanded programme is systematically managed over time.

- Organizational Alignment

- Stewardship, Coordination and Partnership
- Programme Planning and design
- Human Resources Management
- Financial Management
- Supportive Supervision
- Capacity Building
- Financing and Resource Mobilization
- Procurement and Supply Chain Management

### *Empowering Individuals and Communities*

The rapid scale up of malaria control in Nigeria will only prove successful if community accept and use the prevention and treatment measures being implemented. Each require individuals, families and communities to decide whether or not they believe malaria is a preventable and curable disease and require that individuals, families and communities take action to protect themselves and their loved ones.

- Information, Education, and Communication for Behaviour Change
- Mobilizing Community Response
- Commitment to Performance Monitoring and Impact Evaluation





## Section One: Introduction

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Nigeria is the most populous country in the continent accounting for about a quarter of its population. Malaria is the country's most significant public health problem. It accounts for 25% of under-5 mortality, 30% childhood mortality and 11% maternal mortality. At least 50% of the population will have at least one episode of malaria annually while children aged below 5 years (about 24 million) will have 2 to 4 attacks of malaria annually.

The Nigerian Government is determined to both accelerate and intensify efforts on malaria control during the next 5-year planning cycle. The malaria control plan builds on the National Malaria Strategic Plan (NMSP) for Malaria Control that was developed by the National Malaria Control Programme in partnership with the RBM Partners, States' Ministries of Health and other Stakeholders.

The Strategic plan will meet national health and development priorities. The priorities are founded on the necessity to address diseases and public health concerns such as malaria within the context of resources necessary for undertaking such an effort. It is further noted that the issue of malaria is among the critical public health concerns that forms part of the performance targets within the Millennium Development Goals (MDGs). It is therefore incumbent and of major consideration to the Government that malaria is successfully controlled and managed with clearly demonstrable performance results. The plan will contribute directly to the achievement of the RBM and MDGs by the year 2010 and 2015 by significantly reducing malaria specific morbidity and mortality and overall all- cause mortality.

The strategic plan will further provide a framework for programme effectiveness ensuring that malaria control in Nigeria deploys an evidence based package of cost-effective interventions and implementation methods that have been proven to be effective. Finally the strategic plan will have a business plan component that will ensure that coordination of implementation is maximized.

## 1.1 The Vision

### **“A Malaria-Free Nigeria.”**

The Government of Nigeria believes that every Nigerian has the right to access highly effective malaria preventative services and curative care delivered as close to the household as possible. Malaria causes untold suffering to a large proportion of the population each year and causing enormous economic drain to the health sector.

Malaria is the most significant health problem in Nigeria accounting for about 60 % of outpatient consultations and 30% of hospital admissions. The government has identified the burden that malaria places on the health status of the population and has classified malaria as a public health problem. Malaria even though completely preventable and curable, pregnant women and children under five are the most vulnerable groups and therefore sustainable and evidence based efforts are required to control the malaria disease burden.

## 1.2 The Goals

1. As a result of implementation of this Plan, there will be a reduction of malaria burden by half by the year 2010 which translates into a reduction in malaria prevalence from 50% population having at least one attack to 25% population having one attack yearly
2. A reduction in all-cause child mortality by 20% in children under five years.
3. Malaria control will not only improve the main health prognostic indicators, but also provide economic payoffs at household and national levels and alleviate poverty.

## 1.3 The Targets

1. At least 80% coverage for effective case management for Children under five years
2. At least 80% coverage of population at risk sleeping under an insecticide treated net (ITN).
3. 90% coverage for Intermittent Preventive treatment for pregnant women

## 1.4 The Commitment to Rapid Scale for Impact

Nigeria is poised to make dramatic progress in reducing the health and economic burden attributable to malaria. There is a new and highly effective drug policy with the deployment of a more effective drug, the roll-out of a package of interventions to reduce the burden of malaria in pregnancy, and a scale up of transmission reduction, using insecticide treated mosquito nets, (ITNs) and targeted application of indoor residual spraying (IRS) where applicable.



Based epidemiologically on similar settings in Africa, the intensive scale up of coverage of personal protection interventions (ITNs and IRS) will have rapid and significant impact on malaria illness, deaths and health care cost, coverage in the range of 80% of vulnerable household will result in greater than 50% reduction in malaria illnesses and drug and healthcare costs.

The progress to date in malaria programming in Nigeria has built the confidence of many donors to commit to supporting malaria programme scale up. The Global Fund for AIDS, Tuberculosis, and Malaria, several multi-lateral and bilateral partners, and most recently the World Bank have agreed to partner with the National Malaria Control Programme and the Nigerian RBM Partnership to embark on the proposed rapid programme scale up.

## Section Two: Background

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### 2.1 Global Context:

Malaria is the leading killer of children in Africa, accounting for approximately 30 percent of all-cause mortality in children under the age of five. Africa's malaria burden is worsening, and many factors, including expanding drug resistance, faltering health services contribute to malaria's growing toll on the continent's health and economic potential.

Malaria strains health systems, particularly in Africa where it accounts for between 30 and 50 percent of hospital admissions and up to 50 percent of outpatient visits in high-transmission areas. Malaria costs Africa more than US\$12 billion annually. It has slowed economic growth in African countries by 1.3 percent per year, the compounded effects of which are a gross domestic product level up to 32 percent lower than it would have been if malaria had been eliminated in the 1960s.

The global health and malaria community has developed ambitious, and overlapping targets with respect to malaria control in Africa. On April 25, 2000, at the Abuja Summit in Nigeria, the Roll Back Malaria (RBM) Partnership and African health ministers set targets of exceeding 60 percent coverage for these interventions by 2005. Recent surveys indicate that current national coverage levels in Africa for each of the Abuja targets range from 5 to 40 percent.

#### Key Malaria Control Goals and Targets

##### **RBM Partnership**

- To halve malaria-associated mortality by 2010 and again by 2015

##### **Millennium Development Goals**

Goal 2: Achieving universal primary education

- Malaria is a leading source of illnesses and absenteeism in school age children and teachers. It adversely affects education by impeding school enrolment, attendance, cognition, and learning.

Goal 4: Reducing child mortality

- Malaria is a leading cause of child mortality in endemic areas.

Goal 5: Improving maternal health

- Malaria causes anaemia in pregnant women and low birth weight.

Goal 6: Combating HIV/AIDS, malaria, and other diseases. Target 8: to have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.

- Malaria morbidity and mortality are increasing in Africa.

Goal 8: Developing a global partnership for development, including as a target the provision of access to affordable essential drugs

- There is a lack of access to affordable essential drugs for malaria

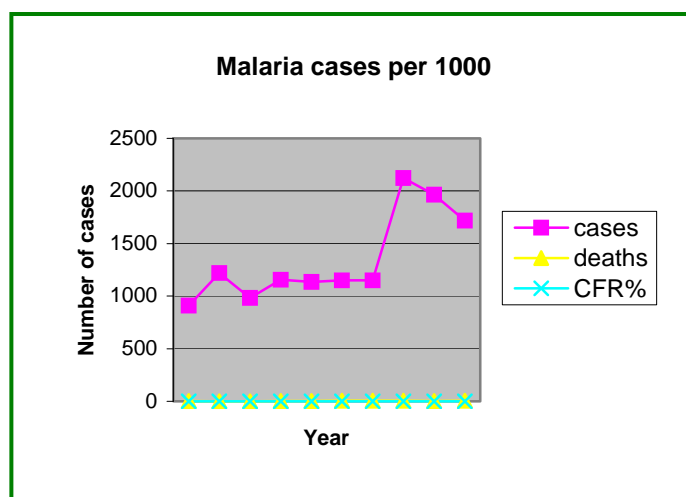
##### **Abuja Targets by 2005:**

- At least 60% of those suffering from malaria should be able to access and use correct, affordable and appropriate treatment within 24 hours of onset of symptoms.
- At least 60% of those at risk of malaria, particularly pregnant women and children under 5 years of age, should benefit from suitable personal and community protective measures such as ITNs.
- At least 60% of all pregnant women who are at risk of malaria, especially those in their first pregnancies should receive IPT

The 2006-2010 National RBM Strategic Plan is targeted to achieving the RBM Goals and the Health Millennium Development Goals (MDGs).” Malaria features prominently in the Millennium Development Goals and these internationally accepted goals build upon the Roll Back Malaria Partnership Goals and the Abuja Targets. The Millennium Development Goals (MDGs) were established to focus international efforts on addressing critical issues related to health, poverty and equity.

## 2.2 Burden of Malaria in Nigeria: Trends and Current Status

Malaria is a major public health problem in Nigeria, accounting for about 60% of all outpatient attendances and 30% of all hospital admissions. It is estimated that malaria is responsible for nearly 110 million clinical cases and an estimated 300,000 deaths per year, including up to 11% of maternal mortality. Malaria’s economic impact is enormous with about ₦132 billion lost to Malaria annually in form of treatment costs, prevention, loss of man hours etc.



Malaria programme coverage has increased substantially across the country from 1991 to date. However, current coverage levels remain considerably under the targeted 60% levels established in the previous plan and far below the levels (>60% coverage) at which major impact of the interventions on malaria burden would be expected.

There has been a progressive improvement in case reporting with increase in number of cases and deaths reported from 1991 to date. This improved reporting system will help us monitor changes in indicators especially impact indicators and this will inform of any success in our control activities.

Year	Reported Deaths
1991	1947
1992	1068
1993	719
1994	1686
1995	3268
1996	4773
1997	4603
1998	6197
1999	4123
2000	4722

## 2.3 Accomplishments under the 2000-2005 Strategic Plan

Since the launch of Roll Back Malaria initiative in Nigeria, several control activities under the major strategic interventions are being implemented. Preliminary findings from the 2005 evaluation survey carried out to assess progress in implementation showed minimal progress towards set targets with a great promise for significant improvements provided rapid scaling up of interventions is carried out at sub-national levels e.g. States, Local Government Areas and communities.

The main challenges faced were:

- Phenomenal increase in resistance of malaria parasites to drugs which necessitated a review of the national anti-malaria treatment policy during the period under review;
- Non-availability of the relative new and very effective anti-malarial commodities such as Artemisinin based Combination Therapies (ACTs) for treatment and Insecticide Treated nets (ITNs) for prevention. Efforts of the Federal Government to waive taxes and tariffs; and adapt technology for local production of active ingredients are commended.
- Limited resources to scale up these proven interventions to more than 133 million people residing in the 774 LGAs (about 10,000 wards) of Nigeria.

Notwithstanding the listed challenges, the National Malaria Control Programme, with the support of Development partners and other stakeholders have recorded some modest achievements recorded in the past five years. These are in the following listed areas:

- Advocacy
- Policy instruments and tools
- Capacity building (Planning and Training)
- Resource mobilization and partnership strengthening
- Evidence generation and research
- Monitoring and Evaluation

### Advocacy:

- Hosting of Africa Summit on Roll Back Malaria (2000)
- Chairmanship of the Global RBM Partnership Board (2005- date)
- Hosting Africa Summit on HIV/AIDS, Malaria, and other infectious diseases (2001)
- Annual commemoration of Africa Malaria Day
- Presidential launching of the ITN Massive Promotion and Awareness Campaign (IMPAC)
- Ministerial advocacy visits to States and Partners
- Presidential (as AU Chairman) advocacy for Malaria as part of heavy burden disease AIDS/Tuberculosis/Malaria (ATM) at the G8 Summit in Scotland (August, 2005) and eventual debt relief for the country.

### Policy instruments and tools:

- Revised National Malaria Control Policy
  - Revised and adopted the National Anti-malarial Treatment Policy and Guidelines
  - Strategic Framework and Guidelines on Malaria Prevention in Pregnancy (Use of Intermittent Preventive Therapy)
  - Revised Policy / Guidelines on Insecticide Treated Nets
  - National Strategic Plan to Control Malaria in Nigeria (2001-2005)

- Strategic Framework and Guidelines on Integrated Vector Management (IVM)
- Behaviour Change Communication Strategy
- Guidelines on Involvement of Non-Government Organizations in Roll Back Malaria initiative
- Guidelines on Monitoring and Evaluation of RBM Initiative

#### **Capacity building (Planning and Training):**

- 4000 health facility based care providers trained on case management
- 770 community based care providers trained on home management of malaria
- Annual Program review and planning workshops for all program managers
- Costing tool training for 70 program managers
- NGOs orientation
- Media practitioners orientation

#### **Resource mobilization and partnership strengthening:**

- RBM Partnership Forum established and functioning at national level– providing technical, financial and logistic support to malaria control programmes
- GFATM R2 Grant worth USD 44million
- GFATM R4 Grant worth USD 86 million
- DFID Malaria Grant ( yet to take –off)

#### **Evidence generation and research**

- National Drug Efficacy Trial – CQ and SP (2002)
- National Drug Efficacy Trial – AL and AA (2004)

#### **Monitoring and Evaluation**

- Baseline M&E Survey 2001
- Mid-Term Evaluation 2005

As listed above, the nation has made great strides in the past five years towards developing the policy environment and infrastructure capacity required to accelerate malaria control efforts nationally. The NMCP is working in full partnership with Development Partners and other stakeholders to identify and address barriers to rapid national scale up including logistics, supply chain management and through effective leadership and donor harmonization, new financial resources are now available specifically for the fight against malaria.

Since the Nigeria RBM partnership inception in 2000, Zambia has made significant progress in the strategic areas of partnerships and policy, funding and communications, and the inception of specific tactical interventions for drug treatment, malaria in pregnancy and access to Insecticide Treated Mosquito Nets (ITNs).

Intermittent Preventive Treatment (IPT) with SP for pregnant women was also introduced to mitigate the effects of malaria in pregnancy. Currently, IPT consists of 2 doses of Sulphadoxine-Pyrimethamine (SP) to be taken one month apart in the 2<sup>nd</sup> and 3<sup>rd</sup> trimesters of pregnancy. This is to be taken as a directly observed treatment (DOT) in antenatal clinics (ANC).

About 17% of Pregnant women take IPT with SP for malaria in pregnancy. The key challenge is that pregnant women do not attend ANC as per recommended practice. The recommendation in the malaria treatment policy is that each pregnant woman takes the two doses of SP for IPT. The current target is to have 100% of pregnant women taking the two doses of SP for IPT.

The years 2000 to 2005 saw an enormous rise in finances, malaria commodity and technical support for the NMCP, through many partners. Nigeria has been awarded a total of \$120million for 2<sup>nd</sup> and 4<sup>th</sup> round of the GFATM for malaria support

Over the past five years, strong partnership has been established at the national level, but the partnership at sub-national levels need to be strengthened.

## **2.4 Review of Malaria Programme Performance in Nigeria: Summarised Status of Strengthens, Weaknesses, Opportunities and Threats**

The malaria strategic plan for 2000 – 2005 has come to an end. Between 2000 and 2005 there have been a number of reviews that have taken place both to measure progress as well as to facilitate the direction as to where the programme is proceeding.

Some key issues have been raised in terms of the progress to date. These include the following issues:

### **Adoption of the Malaria Treatment Policy**

The change and adoption of a new treatment policy from Chloroquine to Artemisinin based Combination therapy (ACT) has been adopted.

### **Human Resource Recruitment and Capacity Development Training**

In spite of the inadequate human resources, a few recruitment was made in the NMCP and capacity building carried out to strengthen malaria programme management.

### **Increased Resource Mobilization efforts yielding increase in resources**

There has been a significant increase in the available resources for malaria. The increase in the resource base has been through successful resource mobilisation efforts that have been implemented over the last two years.

## Increased distribution of ITNS

Use of ITNs has increased from about 2.2% (2003) to about 6.8% (2005). This has provided a firm base for planned scaling up efforts.

## Strengthening of Malaria Public – Private Partnerships

The malaria control programme has benefited from the strengthening of partners both in the public and private sectors.

## Political advocacy awareness through the Ministerial sensitization visits to States.

There has been more awareness created and more political commitment towards malaria control in the Country due to the Ministerial advocacy visits to States. This is also evidenced through the tax and tariffs waivers on ACTs, ITNS and insecticide treatment kits.

It is against this background that the Table below is used to present a summarised SWOT analysis. The identified key elements of the SWOT and the situational analysis have been addressed in the Strategic Framework and Intervention Sections of the Plan.

## Summary Strengths, Weaknesses, Opportunities and Opportunities

Strengths	Weaknesses
Strong political will at the Presidential and Ministerial levels	Lack of knowledge on the interaction of the package of interventions and outcomes
Well established and effective RBM partnership especially at the National level	A weak and constrained health system that may not cope with added pressures of a national programme expansion
An increased resource base	Inadequate funding for effective programme management.
A core of well trained staff at national level coordinators	Procurement and Supply chain system that is in its infancy stages
Opportunities	Threats
A commitment by international partners and other financing initiatives that have committed funds for malaria programmes	Human resource gaps especially at sub-national level
Knowledge on proven interventions for successfully rolling out on a rapid basis	Gaps in total required resources for meeting scaling up targets
A decentralised health structure that is integrated into Federal, State, LGA and community level structures	Low priority for malaria control by some Policy makers at sub-national level
Communities that are willing to be key partners in operations and planning for successful outcomes	

## 2.5 Values and Principles

The National Health Policy restates the nation's commitment to a core set of principles and values, some of which are critical to the success of malaria control efforts in Nigeria. The National Health Policy has priorities and practices which continue to reflect a strong commitment to the following operational principles:

### **Decentralization:**

Decentralisation forms a cardinal approach towards ensuring the participation of people in the affairs of the planning and delivery of services to communities. The health care system is focussed on the strengthening of popular structures some of which are unique to the sector. For instance, the Village Health Committees (VHC) which are part of the community based structures for participation in health care services provision and planning at the health centre level are part of this process and organisational structure. Others include the community health workers, structures of the traditional leadership which are also cardinal in community mobilisation. The various health centre structures are part of the integrated LGA team that ultimately feeds into the state system. Hence in summary, decentralised and popular participation will be based on the following:

- Principle of expedient and relatively autonomous decision making through local priority setting based on a better informed set of information about the local environment and context
- Community health workers and community based organisations
- Ward Development Committee which is a representation of key community representation at ward level.

### **Strengthening of the Health System:**

The cost-effective delivery of the essential health care package is dependent on planning, procurement, logistics, information systems, financial management, monitoring, evaluation and other support services. In addition, reproductive health, child health, and laboratory services are significantly impacted by the performance of malaria control programmes. Therefore using avenues such as post natal and antenatal programmes provides an entry point into programmes such as prevention in pregnancy as well as prevention and prompt treatment of the child and pregnant women. Recognition that sustainability is only inherent given the successful integrated implementation process underlies the formulation and implementation strategy of the Strategic Plan. Close synergy and collaboration to protect the Country's vulnerable populations shall include strengthening of the follow:

- Reproductive and maternal health



- Child health
- Laboratory services. Among key disease control programmes for which strengthened diagnostic capacities will be available apart from child health and reproductive and maternal health are – TB and HIV/AIDS
- Procurement and Supply Chain Management

### **Equity and Increased Access:**

No person regardless of socio-economic background will or should be restricted for reasons of physical barriers, gender, age, infirmity, cultural, traditional or political or any other factor from accessing malaria preventative and curative services. Prioritization in programming will be based on protecting those communities that bear the highest burden and/or are at the greatest risk of malaria illness and death. Given the poverty levels in the country, providing services at no cost is crucial.

### **Partner Harmonization, Coordination, and Accountability:**

Multi-sectoral diversity of public health and strategic interaction necessary by related sectors will be recognised and embraced. Partnerships will be based on performance based accountability and national planning processes that are broadly inclusive. Through the strategic plan and programme management, the Ministry through the NMCP will provide key stewardship functions. Other mechanisms include strategic planning process coordination and ownership. Monitoring and evaluation and reporting functions shall be used in achieving accountability and transparency of resource use as well as providing necessary assessment of progress and variance levels.

## **2.6 The 2006 – 2010 Strategic Plan preparatory Process**

For the National Malaria Strategic Plan (NMSP) 2006 – 2010, distinction between **strategic issues** and **implementation issues** is fundamental to the planning process. Strategic issues are understood to be broader and longer term conditions, problems, or challenges that will impact the ability of the Nigerian RBM partners and programme implementers to achieve stated goals and objectives, and ultimately, to impact on disease control and prevention targets. Implementation issues are understood to be the programme strategies by which the strategic plan is achieved.

The Composite of three documents (Strategic, Business, and Annual Work Plans) forms the NMSP. The over-arching Strategic Plan is intended for planners and financing partners, and links with the National Health Policy both in format and objectives. In particular the Strategic Plan defines the programme policies and targets and how the programme will be organized, managed and financed.

The Implementation Planning components (Business and Annual Work Plans) are focused on how the work will be conducted and the role of partners both as implementers and financers of work. These plans will also support States in developing their malaria control plans.

The development and implementation of the national strategic plan is based on a consultative process to assure ownership and participatory autonomy by the States. To this extent, and in recognition of the decentralised process both in the health sector and Government decentralisation policy aimed at ensuring autonomy at the State level, the States' Ministries of Health, RBM Partners as well as other stakeholders were all part of the development of the strategic framework.



## Section Three: Policy/Strategic Framework for Malaria Control in Nigeria.

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The great progress that has occurred nationally in developing the technical, administrative and financing capacity for malaria control has strengthened the national commitment to address malaria with intensity and focus commensurate with the enormous burden that it continues to place on the health and economy of the Nation.

Several key strategies have been ratified by the RBM Partnership and the Government in developing the 2006-2010

National Malaria control Plan. These strategies are consistent with the Global RBM Strategy for Sustainable Program Scale up. Further, these perspectives and approaches clearly distinguish the current plan from the preparatory activities during the 2000-2005.

### **3.1 Rapid National Scale Up for Impact**

Epidemiological studies from a range of malaria transmission settings in Africa indicate that coverage of the core malaria control interventions stated earlier in the range of 70-80% of the at-risk communities and populations is required to achieve dramatic reductions in malaria mortality and morbidity, and reversal of the economic burden that malaria places on individuals, communities and health services. The RBM partnership has determined that scaling the package of malaria control interventions as defined in the strategic plan to 80% coverage in the first 3 years of the next 5-year plan is both feasible and required to bring malaria under control.

Achieving immediate reduction of malaria mortality and morbidity will rapidly improve health status, lower health care costs as well have other socio – economic impact such as increasing productivity, educational attendance and minimize national and households expenditure on treatment to restore good health, while generally leading to the reduction of the burden of malaria on an under-resourced and over-stretched health care system.

### **3.2 Integrated Package of Malaria Interventions**

Malaria control scale-up should be of an integrated package of prevention and curative interventions that is epidemiologically tailored for the local setting. The balance between investments in ITNs and IRS is particularly important in Nigeria, considering the highly urbanized population and the logistic challenges of programming to high coverage in sparsely populated but high risk rural areas. The areas of identified intervention strategies are the following:

- Reduction of disease burden
- Care of the sick
- Management programme and system support functions

### **3.3 Focus on Prevention during Rapid Scale Up**

Malaria interventions do not only lie in treatment approaches or clinical interventions or chemotherapy, they also lie extensively in prevention. Prevention interventions are recognised to be highly cost effective due to the lower technological and skills requirements in administering preventive interventions. Furthermore, the application of interventions requires to be supported by monitoring, evaluation and the use of cost-effectiveness analysis in deriving an appropriate mix or package of interventions yielding optimal results in terms of cure or continued well being.

While the rapid scale up of malaria control will be of an integrated package of both prevention and curative interventions, this emphasis on prevention of infection in the initial 3 years of the 5-year plan, will result in the dramatic decrease in the incidence of new infections required to bring down malaria deaths and to get control of the crippling financial and logistic burden that caring malaria illness places on health facilities and the household economy.

### **3.4 Commitment to Performance Monitoring and Impact Evaluation**

Malaria control must adopt highly accountable programming modes in order to build confidence that malaria control will produce the promised burden reduction and economic benefit. Further, with the infusion of financing for malaria control currently being experienced in the Country, it is important to develop highly accountable programme management and financing systems to assure national and global supporters of the solid business practices of malaria control. This implies the development of strong performance monitoring and impact evaluation systems by the Federal Ministry and the NMCP.

## Section 4: Integrated Package of Malaria Interventions

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Malaria control is part of the existing health service delivery programs. The program packages for strengthening child and maternal health focus on providing malaria treatment and prevention services as close to the client as possible. All available routes will be used to deliver these interventions, including entry-level facilities (e.g., health centres and health posts), community outreach services using front-line health workers and volunteers, NGOs, private sector providers, and commercial outlets, as well as LGA and State health facilities and hospitals.

The Strategic Plan is organized around a balanced package of preventive services to reduce disease burden and curative services to care for the sick, addressing the stated priority of rapid scale up of prevention interventions to decrease infection burden and to rapidly decrease costs of curative care in terms of drug costs, health facility operations and household expenditures. In additions key cross-cutting strategies are proposed to assure that programme operations and management, and programme evaluation and documentation are fully operational.

### 4.1 Reducing Disease Burden

#### 4.1.1 Integrated Vector Management (IVM)

IVM is to be implemented in the country in view of emerging issues on ecological diversity and some vector resistance to insecticides. The Plan of Action for IVM, Policy Framework and Guidelines have been developed and harmonized in collaboration with relevant ministries and agencies in the implementation of IVM activities.

##### 4.1.1.1: ITNs

##### Objective—ITNs

- To ensure that at least At least 80% of the population at risk sleep under insecticide-treated nets

##### Baseline:

The National Demographic Survey (NDHS, 2003) and Netmark, 2004 survey showed ITNs coverage to be 2.2% and 10% respectively. The recent survey, 2005 showed coverage to be 6.8%. This low coverage could be due to a number of reasons some of which are non-availability of ITNs, lack of information on its usage, poverty, low level of acceptance and relatively high cost of the ITNs. High tariffs and taxes on imported nets, insecticides and yarn for local production could contribute to the high cost of the ITNs.

## Target Groups and Operational Design:

The country will target various sub-populations such as the under five, pregnant women. Such mechanisms have included commercial sales, subsidized and free Insecticide Treated Nets (ITNs).

- Children under five years and Pregnant women
  - Free distribution through campaigns and public sector and faith based/NGO health facilities
  - Campaigns will be periodic and could be stand-alone or linked to other interventions(e.g measles)
  - Free distribution through facilities modelled on the IMPAC system. Pregnant women attending ANC receive an ITN at first attendance, children under five who complete DPT3 vaccination.
- General Population
  - Price support for Commercial sector.
  - Commercial sector
    - Institutional sales, net manufacturers and distributors
  - Transfer of technology for LLINs to local manufacturers
  - Reduction of taxes and tariffs.

## Strategies

There will be rapid scale up of ITN coverage through a rolling mass distribution campaign. The campaign will focus on ensuring that all children under five years and pregnant women receive nets free and at no cost to the households.

- Rapid scale up through a rolling mass distribution campaign.
- Mass re-treatment shall be the adopted choice towards ensuring that there is continuation of efficacious utilisation of ITNs.
- Routine ITN distribution shall be undertaken through child clinics and Ante Natal Clinics.
- Advocacy to Policy makers for reduction of taxes and tariffs on insecticides and yards to encourage local manufacturing of nets.
- Scaling up of targeted distributed of ITNs through the subsidy voucher/sticker system
- Continuous social marketing of ITNs/LLINs by a combination product development demand creation, advertisement and Behavioural Change Communication (BCC)
- Bundled nets and pre-treated nets will be used and progressively replaced with the pre-treated LLINs.
- Non-treated nets will not be used and all those already within communities will require re-treatment.

## Outputs

- Number of ITNs distributed to children under five years and pregnant women.
- Number of nets retreated
- Number of nets replaced

### 4.1.1.2: Indoor Residual Spraying (IRS)

Even though IRS had been carried out in the 1960s – 1970s, it was later abandoned as a strategy for malaria control. There is therefore no extant policy on IRS implementation in spite of its use in some states of the Federation.

#### Objective—IRS

- Limited IRS to be carried out in settings that are applicable in terms of epidemiology.
- To carry out baseline surveys
- To have a policy in place
- Ensure Political commitment to the IRS Policy
- Clearly define the roles of the different tiers of Government, communities and Households in the implementation of IRS
- Develop and implement an environmental impact assessment
- Develop and implement an effective BCC to ensure acceptability by beneficiaries.
- Effective tracking, monitoring and evaluation.

#### Strategies

Annual campaigns will be implemented in eligible areas.

#### Operational Design

- Coverage of IRS will, during the duration of the Plan be targeted at primarily achieving a minimum of 85% of eligible households in the pilot areas used for the limited IRS.
- Malaria prevalence, level of urbanisation ,population density, eligible housing structures as well as other factors such as Health facility distribution , capacity to handle IRS effective operations and human resources which are critical for achieving and sustaining coverage for effectiveness will be used.



- High standards of supervision, monitoring and evaluating with emphasis on personal and environmental safeguards through improved capacities for waste disposal management and storage will be maintained.
- Surveillance on insecticide resistance will form a critical component in IRS for further quality of the intervention.

### **Outputs**

- Number of households sprayed.
- Quality assurance scheme
- Environmental safeguards in place.

#### **4.1.1.3: Other IVM Interventions:**

Source reduction – limited application in urban settings – larviciding and environmental management

#### **Larviciding and Environmental Management:**

These two approaches will require further policy and strategy development

#### **Larviciding**

This intervention will be implemented as a complementary intervention. The application will be limited and in urban settings when the breeding sites will be discreet and accessible.

The types of larvicides to be utilised will range from chemical formulations to microbial formulations such as Abate, Larvex 100, Agnique, Monomolecular Surface Film (MMF), *i*, *Bacillus thuringiensis israelensis* (*Bti*), *Bacillus sphaericus* (*Bs*)

#### **Environmental Management:**

There is a draft policy on Environmental management, however activity is fragmented and uncoordinated. There is consequently no baseline information.

Simple environmental modification and manipulation approaches such as canalisation, draining and land filling will be implemented in urban areas in conjunction with the local authorities as complementary interventions.

#### **4.1.2: Prevention during Pregnancy**

##### **Intermittent preventive treatment (IPT)**

## Target for Intermittent Preventive Treatment

At least 90% of women have access to directly observed IPT with sulphadoxine-pyrimethamine (SP) twice during the second and third trimesters of pregnancy through the public and faith based/NGO antenatal facilities.

### Baseline:

Malaria in pregnancy is a public health problem in Nigeria. The recently concluded survey in 2005 showed that 17% of pregnant women took IPT with 2 doses of SP. Some of the problems affecting prevention of malaria in pregnancy include low level of education leading to poor compliance, poor antenatal care attendance and non-appreciation of the need to take drugs while they are physically fit.

A high percentage of pregnant women in Nigeria attend some form of antenatal care services (about 90%) from the recent 2005 survey. This offers an immense opportunity to encourage them to take appropriate actions to prevent malaria during pregnancy especially the use of IPT.

### Strategies

- All Pregnant women have 2 doses of IPT with SP free and at no cost.
- All pregnant women should **receive two doses of IPT after quickening**, during the second and third trimester of pregnancy during routinely scheduled ANC visits but no more frequently than monthly as Directly observed Treatment)
- Pregnant women who are HIV positive should receive three doses of IPT after quickening, during the second and third trimester of pregnancy during routinely scheduled ANC visits but no more frequently than monthly as Directly observed Treatment)
- Strengthen the malaria component of Focussed Antenatal care (FANC).
- Support the national roll-out of FANC by collaborating with Reproductive Health and other related programmes.

### Operational Design

The key emphasis will be to increase coverage of FANC, improve patient and provider compliance.

About 90% of pregnant women in Nigeria have at least one antenatal visit during their

pregnancy booking occurs on the average at about 4 - 5 months. Reports show that these pregnant women take at least the first dose, but a drop-off for subsequent doses, with fewer women receiving the recommended two doses.

Monitoring and Evaluation activities will be strengthened in order to capture information on compliance after the first dose. This strategic decision will further seek to improve the quality of care and completion of the IPT course. The implementation will be done according to the MIP guidelines. The strategic interventions to be used in the programme will compromise.

### **Outputs**

- Number of FANC points functional

## **4.2 Care of the Sick**

### **4.2.1 Objective—Diagnosis**

At least 80% of suspected malaria patients are correctly diagnosed.

### **Strategies**

- Increase clinical diagnostic skills through the strengthening of c-IMCI strategy
- Expanding microscopy to all eligible areas in all facilities
- Introduce RDTs as pilot studies in diagnosis of malaria in children above 5 years in both urban and rural health facilities.
- The use of RDTs will need further policy and strategy development

### **Outputs**

- All health facilities are providing diagnosis either through RDTs or microscopy

### **Operational Design**

Laboratory diagnosis is essential in providing sound scientific basis for accurate malaria diagnosis and case management. Laboratory support for diagnosis of malaria was poor. Currently, diagnosis of malaria is done based on clinical signs and symptoms.

In line with the change in the malaria drug policy, prompt and effective treatment of malaria with efficacious anti-malarial drugs requires that these drugs be used rationally. Irrational use of anti-malarial drugs also leads to parasite drug resistance.

Laboratory diagnosis using microscopy method will be extended progressively to all health facilities while rapid diagnostic test kits (RDTs), will be used on a pilot basis for malaria diagnosis before large deployment.

## 4.2.2 Objective—Prompt and Effective Case Management

**Target:** At least 80% of children under-five years receiving prompt and effective treatment for malaria according to the current drug policy within 24 hours of onset of symptoms.

### **Baseline:**

The recent survey in 2005 showed that only 34% of those who had fever had prompt access to treatment within 24 hours of onset of illness. This access was to Chloroquine and not to the recently recommended drug, ACT. About 80% of the health facilities surveyed in the rural areas reported stock-out of anti-malarial drugs in the last three months and none had any pre-packaged drugs.

### **Strategies**

- Children under-five will receive Artemether-Lumefantrine (ART-LUM) for free through public sector and faith-based/NGO health facilities.
- For the population over-fives, NAFDAC-registered artemisinin-based combination therapies (ACTs) like Artesunate-Amodiaquine (AA) will be accessed through the private sector including private medical practitioners, pharmacists and patent medicine vendors.
- Make ACTs an over the counter drug (OTC)
- Support the local commercial sector to manufacture AL and AA
- Reduce taxes and tariffs on raw materials and the finished drug, ACTs
- Encourage and support local production of ACTs.
- Encourage pre-packaging of drugs for easy compliance
- Training and re-orientation of health workers at all levels
- Establish a system of quality assurance and pharmacovigilance.
- Strengthening of malaria component of c-IMCI
- Support roll-out c-IMCI.
- Support strengthening of referral systems

## 4.2.3 Management of Severe Malaria

The management of severe malaria defines the functions and strategic role of the secondary and tertiary levels in the provision of a comprehensive malaria case management strategy that focuses on the reduction of case fatality and strengthens the technical capacity for addressing and managing sickness in malaria.

### **Strategic Issues**

- Technical support to Tertiary health facilities providing services for management of severe malaria.
- To ensure that there exists a workable and effective referral system
- Identify emergencies and refer immediately to next level of care

- Systems of referral in place with pre-referral artesunate suppositories.
- Feedback system in place

## Outputs

- Tertiary Health facilities providing ACTS according to Malaria Treatment Policy
- Tertiary Health facilities providing Quinine for treatment of severe malaria according to treatment policy.
- Health facilities with pre-referral with adequate stock of artesunate suppositories

## Operational Design

An average of 30% of hospital visits and bed occupancy is due to related infections. The percentage of self, household based treatment is equally significant for malaria. Other estimates for use of and consultations of traditional healers are also significant. The formal health system does not therefore represent the only contact and treatment for malaria in Nigeria.

### 4.2.4: Home Management of Malaria

A home-based management of malaria strategy will be developed to increase access to effective treatment for under-fives. This strategy will utilise Patent Medicine Vendors as well expanding the role model mother system.

## Strategies

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- Caregiver education about signs and symptoms, treatment and referral of malaria
- Public BCC campaigns, education at the community
- Engage the Patent medicine vendors(PMV) Association to identify their local members for training on ACTs
- Train the PMVs to improve practices for treatment of children with ACTs and referral of severe cases.

## Section 5: Integrated Support Systems( Cross cutting issues)

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The commitment to rapidly scale up malaria programme coverage and operations as defined in the National Malaria Strategic Plan will require a growth and strengthening of the capacity of programme management systems at all levels of the health system. The role of the NMCP as the planning and policy setting focal point will require support, and in particular authority and adequate latitude to address key programme components such as human resources development, procurement and

supply chain management, financial management, Stewardship and Coordination, Partnership, Support supervision, Resource Mobilization, Monitoring and Evaluation and Operational research.

## 5.1 Effective Programme Management

**Targets :**

- At least 80% of planned RBM activities are given supportive supervision at State and LGA levels.
- At least 80% of available financial resources are appropriated according to approved work-plan

**Strategies:**

- Stewardship and coordination and partnership
- Planning and programming
- Supportive supervision
- Financial Management
- Resource mobilization

**Operational Design :**

- To Strengthen national, state and LGA health system capacity to effectively and efficiently plan, implement and manage malaria control efforts.

### 5.1.1 :Organizational Alignment

**Strategies:**

- NMCP strengthened as a service support unit with prescribed responsibilities for overall coordination of the implementation of national malaria control efforts.

**Outputs**

- NMCP effectively manages consensus on policy and strategy through existing advisory and partner working groups and other fora.
- NMCP has the capacity to efficiently mobilise and manage financial and human resources in support of national programme efforts.
- NMCP ensures RBM Partners participation in control activities.

## Operational Design

Priority attention will be paid to assure that current capacity is sustained, expanded, and adapted to address rapid scale up of malaria prevention and control efforts and to achieve the RBM goals MDGs.

### 5.1.2: Programme Planning and Design

#### Strategies:

- Invest in evidence-based programme planning capacity at all levels of the health system.

#### Outputs

- Strategic, implementation, business and annual work plans are developed based on sound scientific and operations data.
- States address rapid scale up of malaria prevention and control.
- All levels of the health system have access to programme performance data and rationale for best practices from which to make sound programme implementation decisions.

## Operational Design

Annual malaria control programme planning cycle will include comprehensive consultation at the State and LGA levels to ensure alignment of resources with programme goals and feasibility of overall programme objectives.

### 5.1.3 :Human Resource Management

#### Strategies:

- Ensure that there is a well established planning and forecasting framework for projecting human capacity needs and related costs across all cadres and levels of the health system.
- Provide planning support to districts to manage temporary staffing pools for rapid scale up of malaria control efforts.
- Invest in health workforce training capacity for improved development of supply of health care providers as well as to professional progress members of the health workforce.

#### Outputs:

- An assessment will be completed of human resource requirements for rapid national scale up and maintenance of malaria control programming for all levels of the health system.

- A health workforce forecasting and costing framework will be in place that provides timely data for planning and budgeting purposes.
- All levels of the health system have staffing plans inclusive of malaria prevention and control related staffing requirements.

### **Operational Design:**

- Utilise increased resource mobilisation to contract non-civil service staff.
- Provide support for capacity development to institutions of higher learning for improved management and planning of human resource.

## **5.1.4 :Financial Management**

### **Strategies:**

- Provide financial planning support to states to develop implementation plans within context of available resource envelope and given disease burden.
- Ensure that there is a well established planning and forecasting framework for projecting financial resource and to track expenditures across all levels of the health system.
- Provide financial planning and management training capacity for improved management of financial resources and adherence with internationally accepted accounting principles and reporting procedures.

### **Outputs:**

- An assessment will be completed of current and required financial flows for rapid national scale up and maintenance of malaria control programming for all levels of the health system.
- A financial forecasting and costing framework will be in place that provides timely data for planning and budgeting purposes given programme priorities.
- All levels of the health system have financial planning and management plans inclusive of malaria prevention and control related requirements.

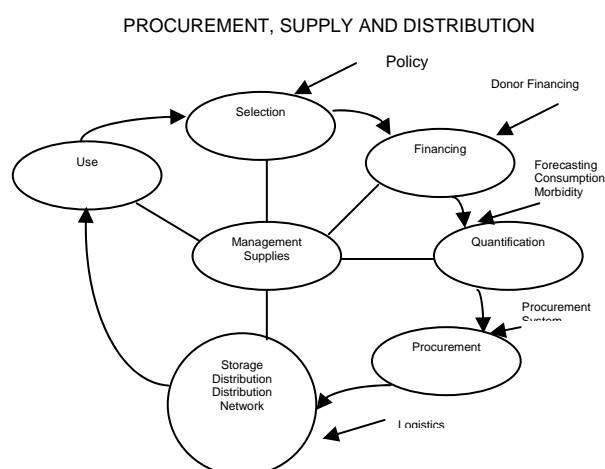
### **Operational Design**

The financial management system will be synchronised with the financial, administration, and management information sub-system that link the Federal, State and LGA levels.

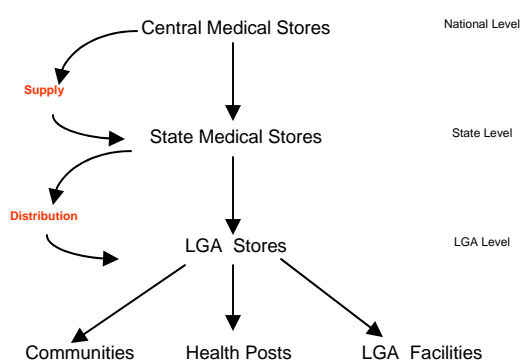


## 5.1.5 : Procurement and Supply Chain Management

Procurement, supply, storage and distribution of RBM commodities form the bedrock of an efficient malaria control programme.



### Supply and Chain Management



### Strategies:

- Develop systems for efficient quantification of malaria specific commodities and procurement cycle requirements to ensure appropriate availability.
- Contracting out of the Procurement management of specific commodities to ensure availability for rapid scale up phase
- Contracting out of the Supply chain management and distribution of malaria commodities such as ITNs, IRS equipment and supplies, and RDTs.
- Ensure quality control and Good Manufacturing Practices (GMP) of RBM commodities involving agencies like Standard Organization of Nigeria (SON), Consumer Protection Agency and NAFDAC

- Advocate for duty wavers and tariffs reduction on all RBM commodities
- Encourage strong partnership with the local manufacturers of RBM commodities.
- Encourage patronage of locally manufactured ITNs and ACTs
- Seek for Technology transfer for local manufacture of LLINs.
- Put in place procurement and distribution plans to avoid stock-outs and wastage of RBM commodities.

## Outputs

- Required commodities are on hand for implementation in advance.
- Contracting mechanisms are in place to support procurement through partners.
- Storage, transport and inventory management systems are in place at all levels of the health system for malaria commodities.

## Operational Design

Rapid national scale up of malaria prevention and control efforts will result in additional stress on the national procurement processes and capacity. The three year rapid scale up phase must be supported by procurement capacity that exceeds current government capacity. Advertisement for Procurement agents will be placed and successful agent hired. Commodities will be purchased in a cost-efficient manner, abiding by WHO guidelines and specifications.

The focus on prevention interventions will result in large shipments of non-drug commodities that will require transport, storage and inventory management at all levels of the health system. The ability to efficiently deliver commodities to community delivery points is crucial to effective programme implementation. NMCP will work to identify supply chain management constraints in concert with the hired consultants and develop solutions to constraints in the current system.

### 5.1.6 : Co-ordination and Partnerships

#### Strategies:

- Develop strategic private-public, multi-sectoral, and community partnership for the delivery of high impact malaria prevention and control efforts at all levels of the health system.
- Collaborate with other programmes like IMCI, NPI, RH and Neglected Tropical Diseases (NTDs)
- Strengthen/formalize TORs for advisory, technical and implementing fora with focus on efficiency of communication and consensus building and performance improvement.

## Outputs

- Partnership agreements are in place that detail partner contributions to the NMSP.
- Contractual agreements are in place in support of programme implementation.
- TORs for advisory and technical fora are in place.
- A communication plan for updating donors and partners on progress is in place.

## Operational Design

- NMCP will develop partnership agreements that map partner contributions to the NMSP. Contractual arrangements will be developed when government held resources are used to fund an implementing partner to do a scope of work essential to the implementation of the NMSP.
- NMCP shall operate as a sub-contractor or fund-holder for operational or implementing partners. It will also operate as a leader and joint owner giving stewardship to all partners including funding agencies.

### 5.1.7: Financing and Resource Mobilization

#### Strategies:

- A framework for analytical assessments of the economics and financing modalities of malaria will be developed and instituted with the programme, sector and national level to inform and provide a series of models in the analysis of resource effectiveness and efficiency during a process of changing programmatic implementation through scaling up.
- Dissemination at national and other international fora will be undertaken

## Outputs

- Inputs and resource deployment realigned
- Resource mobilisation and resource allocation improved and aligned to efficiency and effectiveness standards

## Operational Design

The scaling up of malaria programmes intended to reduce the burden of malaria in the country, brings with it, issues of developing and institutionalising the capacities not just for malaria programme, but the health system as a whole, on the methodological, analytical and practical issues relating to the economics and financing of malaria. The cost of malaria programme is a function of the targets, level

and extent of the interventions. The interventions are themselves a function of the technology and the cost of the technology, especially in relation to the case management area in which the medication and diagnosis issues may involve a considerable costs element. Furthermore the mere strategy of scaling up itself, denotes a shift towards changing the status quo in a significant manner, through applying programmes differently. The difference is due to an expanded resource base, which will enable the capacity of the programme to respond to the challenges.

In the process of scaling up, there are considerations relating to the efficient and effective use of resources on interventions that are required to be documented and analysed to determine the impact attributable to the various interventions as well as the cost to the programme and health system. As the programme implementation proceeds the assessment of efficiency and cost in relation to the outcome is again an area that has to be undertaken. These aspects of the programme management will lead to understanding how the technology and financial resources are leveraged and are able to yield optimal results. Similarly ascertaining how and what resources and resource mix approaches can be implemented and how they have been implemented will further provide insight into the programme management and process.

As scaling up raises issues of competing needs for resources, it is essential that the trade off issues due to the deployment of resources in one particular programme within the sector, is able to demonstrate the major benefits and yield arising from the programme in terms not just of financing resources, but health as a whole.

## 5.2 Empowering Individuals and Communities

The rapid scale up of malaria control in Nigeria will only prove successful if community accept and use the prevention and treatment measures being implemented. Each require individuals, families and communities to decide whether or not they believe malaria is a preventable and curable disease and require that individuals, families and communities take action to protect themselves and their loved ones.

Fostering effective community response through outreach services is necessary; achieving high coverage of effective interventions requires a well-functioning "close-to-client" health system that will ensure the delivery of high quality and technically sound services. Private sector channels, NGOs, and community-based organizations, including faith-based organizations, play an important role in delivering both prevention and treatment services. This requires local delivery structures (e.g., public and private health centres), well-trained and well-supervised health workers, reliable and efficacious drugs and supplies, and stronger health system management, including surveillance and monitoring.

In Nigeria, efforts at information dissemination and communication strategies for behaviour change show great promise, there are established communication channels and strategies including television and radio advertisement placement, posters and print materials for dissemination at the health facilities, the use of community drama performances to inform and educate in addition to high profile annual events such as Africa Malaria Day that bring national visibility to malaria control efforts.

Preliminary assessment has been done regarding the current knowledge, attitudes and perceptions of community members in regards to malaria prevention and control.

### **5.2.1. Information, Education, and Communication for Behaviour Change**

#### **Objective of Information, Education, and Communication for Behaviour Change:**

- At least 80% of families, communities, care providers and health workers will indicate that they have the knowledge, attitudes, and skills to effectively prevent malaria in their communities and in their homes, and to appropriately seek care during suspected malaria illness.

#### **Baseline:**

There is poor perception about the cause, prevention and management of malaria among our people. In some communities, it is believed that malaria can be caused by various reasons such as getting soaked in the rain, drinking dirty water, eating a lot of palm oil and witchcraft. In the recently concluded survey, data showed that the awareness on the use of ITNs increased from 2.2% in 2003 to 6.8% in 2005. It also showed that more people are taking treatment for fever within 24 hours of onset. 34% now as against 30% in 2004. Against this background, there is need for intensive dissemination of IEC messages on malaria in order to significantly promote appropriate practice of behaviour related to care seeking, care giving and prevention by caretakers, families, communities and health workers.

#### **Strategies:**

- Conduct annual evidence-based, national, multi-media/modality information, education, and outreach campaign on malaria prevention and control.
- Institutionalize process of engaging partners in IEC/BCC planning, design and dissemination.
- Publish timely progress reports for stakeholders that include human interest material in addition to progress reports on the national scale up campaign.
- Review and update the existing guidelines for different levels and target groups
- Selection and use of appropriate media ( Bill boards, posters, leaflets, radio and Television spots) including community media ( drama, music) to reach target groups like pregnant women, children under five years, health workers, CBOs, NGOs, PMVs and so on.

- Commemoration of African malaria Days at all tiers of government.

## Outputs

- A formal structure is developed to engage partners in planning, design, development, dissemination and evaluation of effective IEC/BCC plans.
- An annual national multi-media malaria information, education and outreach campaign is conducted—first in 2006 and maintained thereafter..
- A package of evidence-based intervention specific malaria information, education and communication materials is developed for use at the district level.
- A communications plan is implemented that provides quarterly updates and information on the achievements of the National Malaria Strategic Plan that targets stakeholders, political and health system leaders, donors and key partners.

## Operational Design

Communities will have timely access to reliable, credible information regarding malaria. This information will be delivered in a manner that is appropriate to the language, literacy and accepted cultural norms of the community.

Communication strategies will be based on sound evidence of success in similar settings and then, based on local assessment, tailored to be most effective.

## 5.3 Commitment to Performance Monitoring and Impact Evaluation

The National Malaria Strategic Plan commits the nation to a comprehensive assessment of the malaria programme performance and programmes health and economic impact. This will require the basic health information systems are strengthened and that new capacity is development for the collection, analysis and timely dissemination of coverage and impact data as well as to develop new knowledge through operations research.

### 5.3.1 Objectives—Monitoring and Evaluation

- 100% of M&E tools standardized by end of 2006-02-24
- 80% of all planned activities as contained in thr Country Plan of Action being implemented will be monitored and periodically evaluated.
- 70% of States will collect, process, analyse and manage malaria data by 2008, and 90% by 2010

- 70% compliance by 2007 with documentation whether activities have been implemented as planned to ensure accountability and address problems that have emerged in a timely manner
- 100% annual feedback to data providers and relevant authorities to improve future planning
- 90% annual compliance with documentation whether planned strategies have achieved expected outcomes and impacts

## Strategies

- Strengthening of disease surveillance and collaboration with relevant programmes
- Collaboration with the Health Management Information System (HMIS) to facilitate data flow
- Strengthening of Logistics management information system
- Establish linkages with Management Information System (MIS) for planning.
- Systems will be strengthened and/or developed to collect, process, analyse and manage malaria transmission and disease data
- Programme management capacity assures that all strategic programmes have been implemented as planned to ensure accountability and address problems that have emerged in a timely manner
- Monitoring and evaluation systems are capable to provide feedback to programme implementers, RBM partners and relevant authorities to improve programme planning, management, and accountability.
- The National Malaria Control Programme and partners document on a timely basis how the planned strategies and resource allocations have achieved expected outcomes and impacts

## Outputs

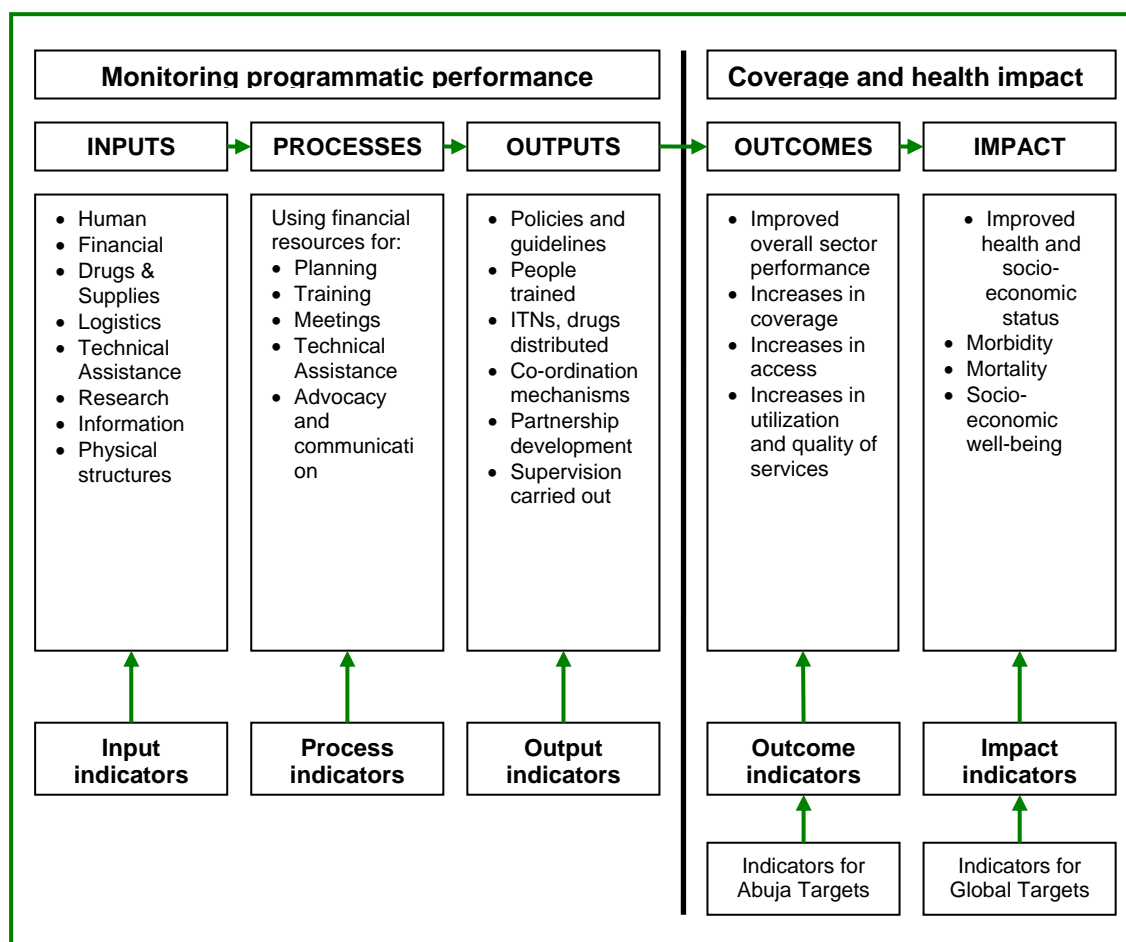
- A unified performance monitoring and system in place
- Impact evaluation system in place
- Timely information (reports) dissemination and feedback (national, provincial, district and community)

## Operational Design

By 2006 the key functions and actions of the NMCP's M&E system will be developed and strengthened within the context of general health and disease M&E systems in Nigeria, and systems will be in place to assure that challenges and opportunities that exist at Federal, State and LGA level

in M&E planning and capacity are addressed promptly to support the national commitment to rapid scale up of malaria programming for impact.

The basic malaria M&E framework with the proposed inputs, outputs, processes, outcomes and impact measures:



Adopted from the RBM M&E Framework

It is expected that improved monitoring and evaluation within the next 5 years (2006-2010) will facilitate documentation in future reports of progress made towards the achievement of the RBM goal by 2010 and the targets of the United Nations Millennium Development Goals (MDGs) by 2015.

### 5.3.2 Objective--Research

To develop and strengthen national capacity for developing evidence base for programming

#### Strategies

- Develop a malaria specific research agenda
- Develop a funding stream and contracting mechanism for programme responsive research



- Timely dissemination of research findings to stakeholders and integration of information in programming

## **Outputs**

- Research findings influencing policy formulation and decision making
- Research findings influencing programming

## **Operational Design**

Research for operational and policy purposes requires to be an integral part of programme implementation in order to inform and provide an input into the evaluation process of the programmes. As various technologies and interventions are utilised and applied, the outcomes being generated may not be known nor anticipated and it is essential that there are research areas for follow up. The research aspects have been addressed in various ways by the partner institutions such as Tropical Diseases Research Centre (TDRC) and other research institutions or organisations that carry out socio-economic related research.

The research framework will evolve to take into account contractual mechanisms for the research work that shall be a basis for informing programmatic and policy decision making processes.

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