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Report No: PAD3025

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 470.1 MILLION
(US\$650.0 MILLION EQUIVALENT)

TO THE

FEDERAL REPUBLIC OF NIGERIA

FOR THE

IMMUNIZATION PLUS AND MALARIA PROGRESS BY ACCELERATING COVERAGE AND
TRANSFORMING SERVICES PROJECTAS PHASE 1 OF THE NIGERIA IMPROVED CHILD SURVIVAL PROGRAM FOR HUMAN CAPITAL
MULTIPHASE PROGRAMMATIC APPROACH

WITH AN OVERALL FINANCING ENVELOPE OF US\$1.5 BILLION EQUIVALENT

January 22, 2020

Health, Nutrition, and Population Global Practice
Africa Region

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CURRENCY EQUIVALENTS

Exchange Rate Effective December 31, 2019

Currency Unit = Nigerian Naira (NGN)

US\$1.00 = NGN 364.25

US\$1.00 = Special Drawing Rights (SDR) 0.72315469

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ACT	Artemisinin Combination Therapy
ANRiN	Accelerating Nutrition Results in Nigeria
BHCPF	Basic Healthcare Provision Fund
BMGF	Bill and Melinda Gates Foundation
CHIPS	Community Health Influencers, Promoters, and Services
CPF	Country Partnership Framework
CPS	Country Partnership Strategy
CERC	Contingent Emergency Recovery Component
CHVA	Climate and Health Vulnerability Assessment
DA	Designated Account
DFDS	Department of Food and Drug Services
DFF	Decentralized Financing Facility
DFID	U.K. Department for International Development
DHIS	District Health Information System
DHPRS	Department of Health Planning, Research and Statistics
DHS	Demographic and Health Survey
DLI	Disbursement-linked Indicator
DPH	Department of Public Health
DQA	Data Quality Assessment
DRM	Domestic Resource Mobilization
ERGP	Economic Recovery and Growth Plan
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FA	Financing Agreement
FGoN	Federal Government of Nigeria
FM	Financial Management
FMoH	Federal Ministry of Health
PPFMD	Federal Project Financial Management Department
FY	Fiscal Year
Gavi	Global Alliance for Vaccines and Immunization
GBV	Gender-based Violence
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis, and Malaria
GFF	Global Financing Facility
GHG	Greenhouse Gas
GIS	Geographic Information System
GRM	Grievance Redress Mechanism
HCWMP	Healthcare Waste Management Plan
HNP	Health, Nutrition, and Population
HRH	Human Resources for Health
HUWE	Basic Healthcare Provision Fund Project

IE	Impact Evaluation
IFR	Interim Financial Report
IMPACT	Immunization plus and Malaria Progress by Accelerating Coverage and Transforming services
IPF	Investment Project Financing
IPT	Intermittent Presumptive Therapy
IPTp	Intermittent Preventive Treatment in Pregnancy
ITN	Insecticide Treated Net
JRM	Joint Review Mission
LGA	Local Government Authority
LGHA	Local Government Health Authority
LLIN	Long-lasting Insecticide Treated Net
LMC	Lower-Middle-income Country
LQAS	Lot Quality Assurance Sampling
M&E	Monitoring and Evaluation
mCPR	Modern Contraceptive Prevalence Rate
MICS	Multiple Indicator Cluster Survey
MoU	Memorandum of Understanding
MPA	Multiphase Programmatic Approach
NBS	National Bureau of Statistics
NCDC	Nigeria Centre for Disease Control
NDHS	National Demographic and Health Survey
NGO	Nongovernmental Organization
NGN	Nigerian Naira
NHAct	National Health Act
NHFS	National Health Facility Survey
NHIS	National Health Insurance Scheme
NIMR	Nigeria Institute of Medical Research
NIPRD	Nigeria Institute of Pharmaceutical Research and Development
NMEP	National Malaria Elimination Program
NNHS	National Nutrition and Health Survey (SMART and NNHS are the same surveys)
NPHCDA	National Primary Health Care Development Agency
NPMT	National Project Management Team
NSC	National Steering Committee
NSHDP	National Strategic Health Development Plan
NSHIP	Nigeria State Health Investment Project
NSSNP	National Social Safety Nets Project
OAGF	Office of Auditor General of Federation
PBF	Performance-based Financing
PCV	Pneumococcal Conjugate Vaccine
PDO	Project Development Objective
Penta	Pentavalent Vaccine
PforR	Program-for-Results

PHC	Primary Health Care
PIU	Project Implementing Unit
PMI	President's Malaria Initiative
PPH	Postpartum Hemorrhage
PPSD	Project Procurement Strategy for Development
PrDO	Program Development Objective
RDT	Rapid Diagnostic Test
RMNCH	Reproductive, Maternal, Neonatal, and Child Health
RMNCAH+N	Reproductive, Maternal, Newborn, Child, and Adolescent Health and Nutrition
SBA	Skilled Birth Attendance
SBCC	Social Behavior Change Communication
SSC	State Steering Committee
SDG	Sustainable Development Goal
SDR	Special Drawing Rights
SMART	Standardized Monitoring and Assessment of Relief and Transition Methods (SMART and NNHS are the same surveys)
SMC	Seasonal Malaria Chemoprophylaxis
SMEP	State Malaria Elimination Program
SMoH	State Ministry of Health
SOML	Saving One Million Lives
SORT	Systematic Operations Risk Rating Tool
SP	Sulfadoxine-Pyrimethamine
SPHCDA	State Primary Healthcare Development Agency
SPMT	State Project Management Team
TA	Technical Assistance
U5MR	Under-Five Mortality Rate
UN	United Nations
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
VBD	Vector-borne Disease
WASH	Water, Sanitation, and Hygiene
WB	World Bank
WBD	Water-borne Disease
WHO	World Health Organization



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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Nigeria	Nigeria Improved Child Survival Program for Human Capital MPA	
Project ID	Financing Instrument	Environmental Assessment Category
P167156	Investment Project Financing	B-Partial Assessment

Financing & Implementation Modalities

<input checked="" type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Disbursement-linked Indicators (DLIs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	

Expected Project Approval Date	Expected Project Closing Date	Expected Program Closing Date
18-Feb-2020	31-Dec-2025	31-Dec-2030

Bank/IFC Collaboration

No

MPA Program Development Objective

The objective of the program is to reduce under-five mortality rate in program areas.

MPA Financing Data (US\$, Millions)



MPA Program Financing Envelope	1,500.00
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Proposed Development Objective(s)

The project development objective (PDO) of the first phase (IMPACT) is to improve the utilization and quality of immunization plus and malaria services in selected states.

Components

Component Name	Cost (US\$, millions)
Component 1: Malaria Control	188.00
Component 2: Immunization Plus	409.30
Component 3: Knowledge for Change	52.70
Component 4: Contingent Emergency Response Component (CERC)	0.00

Organizations

Borrower: Federal Republic of Nigeria

Implementing Agency: Federal Ministry of Health
National Primary Health Care Development Agency (NPHCDA)

MPA FINANCING DETAILS (US\$, Millions)

MPA Program Financing Envelope:	1,500.00
of which Bank Financing (IBRD):	0.00
of which Bank Financing (IDA):	1,500.00
of which other financing sources:	0.00

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	650.00
Total Financing	650.00



of which IBRD/IDA	650.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	650.00
IDA Credit	650.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Nigeria	650.00	0.00	0.00	650.00
National PBA	650.00	0.00	0.00	650.00
Total	650.00	0.00	0.00	650.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2020	2021	2022	2023	2024	2025	2026
Annual	7.10	73.76	130.96	156.04	127.89	100.77	53.48
Cumulative	7.10	80.86	211.82	367.86	495.76	596.52	650.00

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category

Rating



1. Political and Governance	● High
2. Macroeconomic	● High
3. Sector Strategies and Policies	● Low
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Substantial
7. Environment and Social	● Moderate
8. Stakeholders	● Low
9. Other	
10. Overall	● Substantial
Overall MPA Program Risk	● Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No

Does the project require any waivers of Bank policies?

Yes No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Performance Standards for Private Sector Activities OP/BP 4.03		✓
Natural Habitats OP/BP 4.04		✓
Forests OP/BP 4.36		✓
Pest Management OP 4.09		✓
Physical Cultural Resources OP/BP 4.11		✓
Indigenous Peoples OP/BP 4.10		✓



Involuntary Resettlement OP/BP 4.12	✓
Safety of Dams OP/BP 4.37	✓
Projects on International Waterways OP/BP 7.50	✓
Projects in Disputed Areas OP/BP 7.60	✓

Legal Covenants

Sections and Description

The Recipient shall recruit on a competitive basis, an independent external auditor, with qualifications, experience and terms of reference acceptable to the Association, to carry out audits for the Project as required in the General Conditions and the DFIL.

Sections and Description

The Recipient shall ensure, throughout the implementation of the Project, that the proportion of the Recipient’s funds appropriated for vaccines sourced from domestic resources is no less than the target percentages acceptable to the Association, as discussed during annual reviews to be conducted no later than December 31 of each calendar year.

Sections and Description

The Recipient shall establish, within one (1) month after the Effective Date, and thereafter maintain at all times during Project implementation, a National Steering Committee (NSC) chaired by the Honorable Minister of Health; and shall cause each Participating State to establish and maintain at all times during Project implementation in such State, a State Steering Committee (SSC) chaired by the State Commissioner of Health; both with a mandate, composition, staffing and resources acceptable to the Association, and as further elaborated in the Project Implementation Manual (PIM).

Sections and Description

The Recipient shall furnish to the Association, as soon as available, but in any case not later than November 30 of each year, the annual work plans and budgets and the evidence of the approvals referred to in paragraph 1 of Schedule 2, Section I.D of the Financing Agreement, for their review and approval; except for the annual work plan and budget for the Project for the first year of Project implementation, which shall be furnished no later than one (1) month after the Effective Date. Only the activities included in an annual work plan and budget expressly approved by the Association (each an “Annual Work Plan and Budget”) are eligible to a financing from the proceeds of the Financing.

Conditions



Type	Description
Disbursement	<p>No withdrawal shall be made:</p> <p>(a) for payments made prior to the Signature Date, except that withdrawals up to an aggregate amount not to exceed eighty-six million three hundred ninety thousand (86,390,000) SDR for payments made on or after November 1, 2019 for Eligible Expenditures under Categories (1), (2) and (3);</p> <p>(b) for payments to any Participating State under Categories 1 or 2, unless and until such Participating State has:</p> <ul style="list-style-type: none">i. established the State PIUs in accordance with Section I.A.4 of Schedule 2 of the Financing Agreement (FA);ii. signed a Subsidiary Agreement with the Recipient, in accordance with Section I.B of Schedule 2 of the FA, for the purposes of implementing the Project; andiii. deposited the Naira equivalent of \$100,000 in the Designated Account of the State PIU.
Type	Description
Effectiveness	The Project Implementation Manual has been duly adopted by the Recipient in accordance with Section I.C of Schedule 2 to the Financing Agreement.



I. STRATEGIC CONTEXT

Summary

- 1. Reducing under-five mortality in Nigeria is critical for human capital accumulation in the country and in Sub-Saharan Africa.** Nigeria ranks 152 out of 157 on the Human Capital Index (154 on child survival) and has the highest under-five child mortality rate (U5MR) of any lower-middle-income country (LMC). With 714,000 Nigerian children under five years dying every year, the country is responsible for 26 percent of all under-five deaths in Sub-Saharan Africa and 13 percent globally. If Nigeria does not make rapid progress in child survival, then even with the accelerated decrease for all the remaining countries in Sub-Saharan Africa, the region's U5MR in 2023 is going to be at least 17 percent higher than the goal set in the 2019 World Bank Africa Region strategy. To address this crisis, the Federal Government of Nigeria (FGoN) has committed itself to improve its human capital with the goal of reducing under-five mortality by half by 2030. The proposed Multiphase Programmatic Approach (MPA) is in support of this compelling commitment by the FGoN.
- 2. Most of the burden of childhood illness is easily prevented or treated.** Almost 87 percent of U5MR in Nigeria, excluding neonatal mortality, is due to malaria, pneumonia, diarrhea, and three other vaccine-preventable diseases—measles, pertussis, and meningitis. Much of neonatal mortality is due to infections and hypothermia. Additionally, these illnesses can cause disabilities. Malaria, for instance, can be the reason for hearing loss or deafness, meningitis can lead to intellectual disability, and measles can leave a child deaf or with intellectual disability. Fortunately, there are high-impact and cost-effective technologies available to control these diseases, including some new vaccines that prevent diarrhea and pneumonia. These interventions are relatively simple to implement and benefit from strong evidence coming from numerous randomized trials.
- 3. Recent government achievements by World Bank investments demonstrate that rapid progress is possible.** The FGoN has recently achieved impressive results with World Bank support, including the following: (a) Nigeria has not had a case of wild polio since August 2016 and is on the cusp of polio eradication; this success rests on highly granular monitoring and evaluation (M&E), the deployment of digital technology, and reaching the most isolated communities; (b) the malaria control booster project (P097921) improved use of long-lasting insecticide treated nets (LLINs) by 71 percentage points and decreased severe anemia by 10 percentage points; these achievements were the result of using a faith-based nongovernmental organization (NGO) to change behaviors through mosques and churches, community-based campaigns, and careful M&E; and (c) performance-based financing (PBF) and decentralized facility financing (DFF), with health facility autonomy, community engagement, and strengthened supervision were found to have substantial effects on health service utilization and quality of care as shown by a randomized impact evaluation (IE). Sole focus on financing inputs in some of the previous World Bank Investment Project Financing (IPF) projects did not achieve desired results. Likewise, limited success has been recorded with the health sector Program-for-Results (PforR) suggesting the need for a mixed approach that tethers provision of inputs with a strong result focus and appropriate accountability measures.
- 4. The proposed MPA is the first major investment as part of Nigeria's Human Capital Acceleration Program.** The MPA addresses a key pillar of the human capital index. An MPA is the right approach for



addressing under-five mortality for the following reasons: (a) accomplishing deep reductions in U5MR will require a continued focus and cannot be achieved during the life of a single operation; (b) the long-term Government and World Bank commitment inherent in the MPA approach has already attracted considerable parallel financing from diverse sources; (c) reducing U5MR will require strengthening high-impact priority programs and health systems simultaneously and an MPA will allow both sets of activities to be addressed concurrently; (d) an MPA allows for a programmatic engagement that can adapt readily to the context. For example, the expansion of the Basic Health Care Provision Fund (BHCPF), envisioned as part of Phase II, could be speeded up to facilitate national rollout or slowed down if public funds were not yet available; (e) an MPA will facilitate learning lessons that can be more readily incorporated into subsequent phases; and (f) an MPA provides the structure and rationale for tracking and analyzing data on impact indicators (particularly U5MR) and ensuring that it remains a regular aspect of the policy dialogue.

5. **There is a high likelihood of sustainability given the right incentives.** The FGoN has recently taken actions that increase the likelihood that financing of primary health care (PHC) is sustained: (a) it has allocated US\$180 million of new money in the 2018 federal budget for the BHCPF, 50 percent of which has already been released and deposited in state bank accounts; (b) as of 2020, funds allocated for the BHCPF will be statutory transfers which ring-fences the resources from uncertainties in budget implementation; and (c) the ministers of finance, budget, and health have signed an ‘Accountability Framework’ with the Global Alliance for Vaccines and Immunization (Gavi) (which will be monitored annually) that commits the FGoN to increasing the Government’s share of vaccine financing over the next decade. In addition to increased public financing, the Government will roll out approaches (such as DFF and contracting with NGOs) that represent large efficiency gains.

6. **Using approaches that will reduce fiduciary risks.** The proposed MPA uses approaches that have been shown in the past to reduce fiduciary risks, including (a) decentralized funding through electronic transfers directly to the bank accounts of individual health facilities; (b) Memorandums of Understanding (MoUs) with United Nations (UN) organizations that have worked well in Nigeria; (c) results-based contracts with NGOs that ensure accountability and proper financial management (FM); and (d) annual external audits.

A. Country Context

7. **Nigeria continues its recovery from the 2016 recession, sustaining an estimated 2 percent growth rate in 2019.** The collapse of global oil prices during 2014–2016, combined with lower domestic oil production, led to a sudden slowdown in economic activity. Nigeria’s annual real gross domestic product (GDP) growth rate, which averaged 7 percent from 2000 to 2014, fell to 2.7 percent in 2015 and to -1.6 percent in 2016. Growth slowly rebounded in 2017, levelling off at about 2 percent in 2018-2019, driven initially by the oil sector and more recently by the services sector, with positive contributions from agriculture. The oil sector however remains the key source of export earnings and government revenues. In the absence of significant structural reforms, economic growth is expected to hover just above 2 percent over the medium-term, vulnerable to oil sector shocks.

8. **With population growth (estimated at 2.6 percent) outpacing economic growth in a context of weak job creation, per capita incomes are falling.** Today, an estimated 100 million Nigerians live on less



than US\$1.90 per day.¹ Close to 80 percent of poor households are in northern Nigeria, while employment creation and income gains have been concentrated in central and southern Nigeria. Unemployment is high (23 percent), with a further 20 percent of the labor force under-employed. Nigeria's economic and demographic outlook makes job creation an urgent task.

9. **The Federal Government has been implementing an Economic Recovery and Growth Plan (ERGP) from 2017 and is expected to continue into 2020.** The ERGP set out to restore macroeconomic stability in the short-term and to undertake structural reforms, infrastructure investments and social sector programs to diversify the economy and set it on a path of sustained inclusive growth over the medium- to long-term. It had an ambitious target of achieving 7 percent real annual GDP growth by 2020.² So far, progress on implementation of the plan has been mixed with outcomes stronger in some areas than in others. Increasing growth above the baseline of 2 percent will require more effective implementation of the structural reforms laid out in the ERGP. Bolder and more accelerated reforms in areas like power, revenue mobilization, quality of spending, access to finance, and human capital would help accelerate growth, create jobs, and help build the necessary fiscal and external buffers to be prepared for difficult times.

10. **The poor performance of critical public services is a significant driver of low educational attainment, poor health, and inadequate living standards.** Rural areas lag urban areas and the poor lag the nonpoor in accessing basic services. This is true for all public services ranging from health and schooling to electricity and clean water. The gap between urban and rural areas is large.

11. **High population growth rates and demographic pressures pose challenges to the Government's efforts to reduce poverty through various channels.** The fertility rate of 5.3 children per woman is well above the rates in regional and structural peers (DHS 2018). Persistently high fertility rates result in high dependency ratio, and is related to several factors such as education, desire for more children, and access to family planning. Without a swift reduction in fertility, Nigeria will not benefit from the kind of demographic dividend that was so helpful to the 'tiger' economies of East Asia. Largest gains in fertility reduction can be made through improving women's access to education and family planning, especially in rural areas.

12. **Recently, the Government launched its Human Capital Vision 2030 in response to Nigeria's low ranking in the Human Capital Index.** The Government has committed to attaining the goal of healthy, educated, and productive Nigerians for a globally competitive nation by 2030 through three thematic areas in (a) Health and Nutrition; (b) Education; and (c) Labor Force. One of the key pillars of the Government's Human Capital 2030 vision is to reduce under-five mortality by half by 2030 to fulfill its vision of "providing equitable access to affordable and quality healthcare for every Nigerian."

B. Sectoral and Institutional Context

13. **Nigeria's U5MR is high and rates of decline are slowing.** Nigeria's U5MR is stagnating at high levels although progress was made from 2003 to 2013. There are a number of explanations posited for

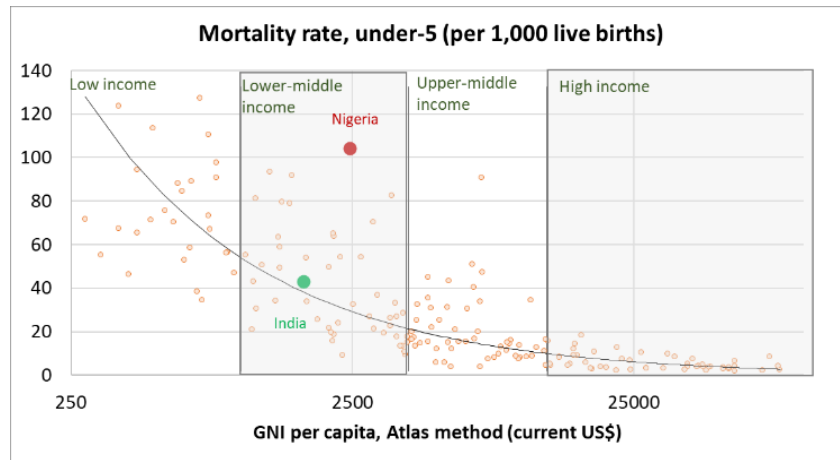
¹Source: World Poverty Clock (Projection for 2019).

²Following missed ERGP growth targets in 2017 and 2018, the growth target for 2020 in the Government's medium-term expenditure framework was moderated to 2.9 percent.



the decline observed in the 2000s, including (a) increased access to antibiotics and antimalarials in rural areas as the private sector expanded; (b) successes in malaria control (see paragraph 23e); and (c) some progress on controlling measles. Despite the progress, Nigeria’s U5MR is very high by any standard but is particularly high for an LMC (figure 1).

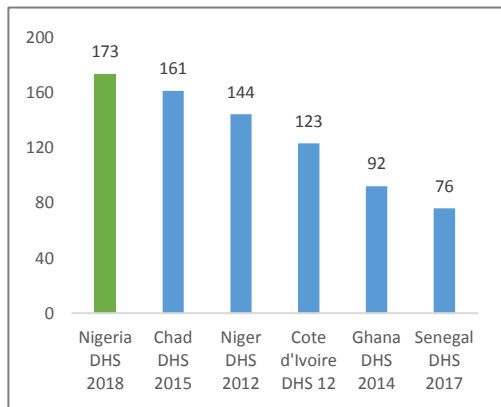
Figure 1. Under-Five Mortality Rates and National Income - 2016



Source: World Development Indicators 2017 (Data for 2016).

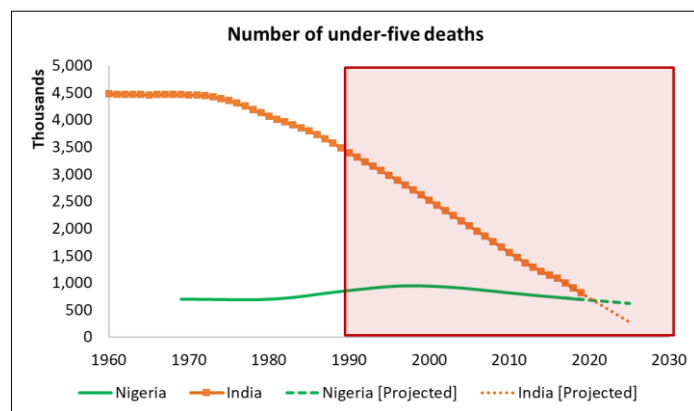
14. **Not only is Nigeria’s U5MR high, it is also very inequitable.** Among children in the poorest income quintile, Nigeria’s U5MR is the highest in West Africa (figure 2), twice the rate of Ghana or Senegal. Within Nigeria, children from the poorest quintile die at a rate that is 3.3 times higher than U5MR from the richest quintile. Both in relative and absolute terms, poor children in Nigeria are faring badly.

Figure 2. U5MR among the Poorest Income Quintile



Source: Latest Demographic and Health Surveys (DHSs).

Figure 3. Absolute Number of Under-five Deaths in India and Nigeria



Source: World Development Indicators 2017.

15. **Nigeria’s success or failure on reducing U5MR is of global significance.** Nigeria will soon overtake India as the country with the highest absolute number of under-five deaths in the world (figure 3) due to a higher U5MR and a higher fertility rate despite India’s population being seven times higher than



Nigeria’s. Nigeria currently accounts for about 13 percent of under-five deaths in the world and 26 percent of those in Africa.

16. **Most post-neonatal under-five mortality is due to malaria, diarrhea, and pneumonia.** About 87 percent of post-neonatal mortality can be tackled by addressing malaria, pneumonia, and diarrhea and improving immunization.³ Neonatal mortality accounts for about 30 percent of all under-five mortality in the country, most of which is caused by infections and hypothermia. Additionally, a high prevalence of stunting (37 percent) leaves children more susceptible to infections and disease due to weakened immune systems. Subsequently, stunting and infections perpetuate a vicious cycle, leading to an increased risk of death.

17. **These diseases respond well to very cost-effective and evidence-based technologies.** One reason for optimism is that the main killers of children in Nigeria can be prevented or treated using low-cost, highly efficacious, and easy-to-implement interventions (table 1). The evidence supporting these interventions is robust, coming from multiple randomized trials in diverse settings. Among the newer interventions (in Nigeria) are rotavirus and pneumococcal conjugate vaccines (PCV), which are powerful ways of reducing the impact of diarrhea and pneumonia, respectively. These vaccines could represent a real breakthrough if they are provided to poor children. Similarly, existing vaccines could effectively address meningitis, pertussis, and measles among poor children. In addition, skilled birth attendance and postnatal care can also address the roughly 30 percent of U5MR that happens in the neonatal period.

Table 1. Available Technologies for Controlling the Main Causes of Under-five Mortality in Nigeria

Disease	Prevention	Treatment
Malaria	<ul style="list-style-type: none"> • LLINs • Seasonal Malaria Chemoprophylaxis (SMC) • Social behavior change communications (SBCC) • Intermittent preventive treatment in pregnancy (IPTp) with Sulfadoxine-Pyrimethamine (SP) 	<ul style="list-style-type: none"> • Artemisinin-based combination therapy (ACT) • Rapid diagnostic tests (RDTs)
Pneumonia	<ul style="list-style-type: none"> • New vaccine against pneumococcal disease • Existing vaccines against measles, pertussis, and Hemophilus Influenza B 	<ul style="list-style-type: none"> • Antibiotics (Ampicillin)
Diarrhea	<ul style="list-style-type: none"> • New vaccine against rotavirus • Hand washing, sanitation, and clean water supplies 	<ul style="list-style-type: none"> • Oral rehydration solution with zinc
Neonatal conditions	<ul style="list-style-type: none"> • Skilled birth attendance 	<ul style="list-style-type: none"> • Postnatal care visit

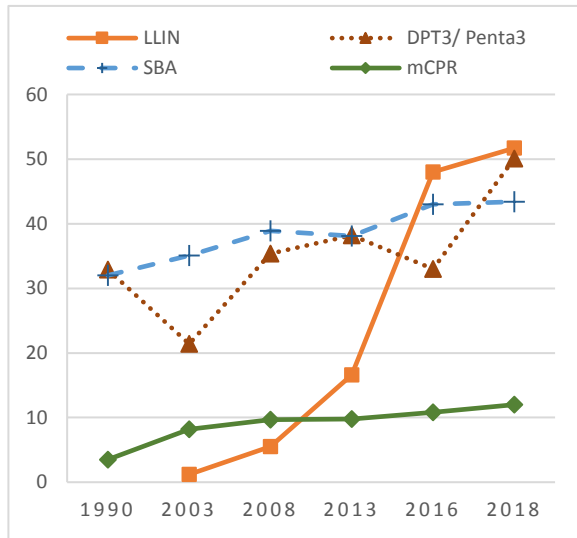
18. **The coverage and utilization of these life-saving interventions is variable.** Nigeria has made some progress in reducing the burden of malaria, partly by increasing the use of LLINs by under-five children (figure 4). In addition, the country has recently also made some progress in immunization rates with current coverage at 50.1 percent. However, coverage of most critical maternal and child health indicators remains mired at low levels because of both supply- and demand-side issues. For instance, on supply-side issues, care was sought from health providers for 70.2 percent of children with fever (DHS 2018) yet only

³Just three diseases account for 74 percent of U5MR in Nigeria (excluding neonatal mortality, that is, deaths within the first month of life). According to a verbal autopsy and social autopsy study³ involving more than 2,000 under-five deaths conducted in 2014, malaria accounts for 30 percent of under-five deaths while diarrhea and pneumonia account for another 26 percent and 18 percent, respectively. Another 13 percent of deaths are caused by the vaccine-preventable diseases—measles, pertussis, and meningitis.



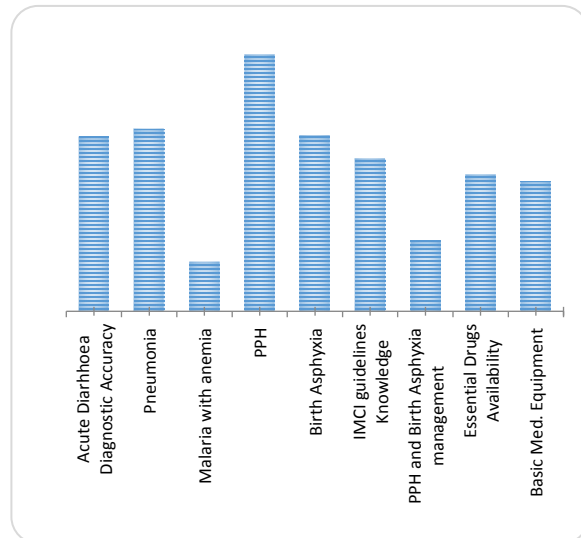
13.8 percent had a diagnostic test and only 28 percent received treatment. On demand-side issues, among children who were not fully vaccinated, 19 percent of their caregivers report that they thought the child was already fully immunized and 15 percent were unaware of the need for immunization as reasons for not fully immunizing their children.⁴

Figure 4. LLIN, DPT3, SBA, and mCPR Coverage



Source: DHSs and Multiple Indicator Cluster Surveys (MICS).
Note: mCPR = Modern Contraceptive Prevalence Rate; SBA = Skilled Birth Attendance.

Figure 5. Poor Quality of Care in Health Facilities



Source: National Health Facility Survey, 2016.
Note: IMCI = Integrated Management of Childhood Illness; PPH = Postpartum Hemorrhage.

19. **In addition to variable coverage and utilization of essential services, quality of care is low.** Nigeria also faces challenges in improving quality of care in health facilities. In 2016, a national health facility survey showed that health workers’ capacity to diagnose severe malaria is at 12.5 percent nationally and to manage PPH and birth asphyxia (leading causes of maternal, child, and neonatal death) at 17.9 percent (figure 5). Similarly, only 35 percent of facilities have stocks of essential drugs, and 33 percent had basic medical equipment.⁵ A key feature in improving quality of care is a well-trained and capable health work force. An increase in female health workforce is also crucial because it facilitates women’s access to health care services, especially in more conservative regions with limited female mobility.

20. **Primary health facilities lack operational funds which affects their readiness.** Only a third of public facilities in Nigeria receive any form of cash grant to meet their operational costs,⁶ and public primary care is currently characterized by frequent drug and vaccine stockouts, lack of equipment, and almost no maintenance of physical facilities, as discussed. Part of the problem is that state and local

⁴ MICS 2016/2017.

⁵ Availability of basic medical equipment is estimated as the proportion of health facilities that had a full complement of the following: thermometer, any weighing scale (adult, child, or infant), complete set of blood pressure apparatus, stethoscopes, and examination light/flashlight.

⁶ National Health Facility Survey, 2016/2017.



government authorities (LGAs) rarely prioritize the financing of PHC. In addition, almost no financial resources are directly managed at the facility level.

21. **Key barriers to improving child health in Nigeria are beyond lack of physical access to service delivery points.** Typical reasons for low coverage that are seen in other parts of Sub-Saharan Africa do not explain the challenges in Nigeria. About 90 percent of the population live within a one-hour travel of a health facility and 82 percent live within 30-minute travel.⁷ While the health system's physical infrastructure is wide spread, access to services depends on a number of factors including inadequate health system management, poorly incentivized and supervised health workers, limited accountability, and gender norms. Women as primary caregivers may have limited access to health services because of socioeconomic factors such as poverty, poor knowledge and information, and limited mobility. The 2018 DHS for Nigeria indicates that immunization coverage and ANC visits are lower in the North East and North West compared to other regions. This likely is related to unseen and hidden barriers such as cost and mobility that also have a gendered dimension, and scarcity of female health care providers. Similarly, poor management, supervision, governance, and low levels of financing affect coverage of services through their impact on quality of services. Additionally, lack of high-quality data on health service utilization and health expenditures at state and LGA levels prevent data-driven decision making and implementation in the health sector. The absence of systematic reporting that links health expenditure with health system performance across states and across different levels of government undermines the sector's ability to target limited government resources to the populations that would benefit most.

22. **Though progress has been recorded, there is still room for additional domestic resource mobilization (DRM) —the Government spends less on health than nearly every country in the world.** To accelerate progress to universal health coverage—a goal that most countries have agreed to work toward by 2030 as part of the Sustainable Development Goals (SDGs)—the Government will need to invest significantly more in health. In 2016, government health spending was 0.6 percent as a share of GDP or just US\$11 per capita, among the lowest in the world. The consequences of this low level of public spending include (a) limited resources available to pay for basic preventive and promotive health services that could have outsized impact; (b) high levels of out-of-pocket payments at the point of delivery which reduce the use of services and act as a barrier to care, especially for the poor; and (c) Nigeria's dependence on the largesse of development partners. External financing may decrease, as donors such as Gavi and Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) reduce their commitments in line with Nigeria's high per capita gross national income. The BHCPF will reduce the gap in provision of services and out-of-pocket spend, but some gaps in key services will persist unless there is greater DRM.

23. **Recognizing the crisis in PHC in Nigeria, over the course of the last decade, successive national assemblies and administrations have shown strong commitment to reducing child mortality in the country:**

(a) **Human Capital Project.** The Government has joined the Human Capital Project and taken ownership of the Human Capital Agenda at the highest level through launching a call for action for strengthening the country's human capital. The Government has further included improving child survival as one of the key pillars in addressing the human capital crisis in the country with its target to reduce under-

⁷ NBS (National Bureau of Statistics). *LSMS-Integrated Surveys on Agriculture General Household Survey Panel 2015/2016*. Abuja, Nigeria.



five mortality by half by 2030.

- (b) **National Health Act (NHAct) and the BHCPF.** The national assembly passed the NHAct in 2014 and provides for the establishment of the BHCPF. There has been strong and bipartisan support for both initiatives which have the potential to be transformative (see box 1).

Box 1. Potentially Transformative Response by the Nigerian Legislature and Executive: The NHAct and the BHCPF

In response to the crisis in the health sector, the Nigerian Assembly has enacted a potentially transformative NHAct in 2014, operationalized through the BHCPF funded from the Federal Government's share of the consolidated revenue fund. The BHCPF will mobilize significant new domestic resources for PHC and build on some of the successes achieved under Nigeria State Health Investment Project (NSHIP, P120798) through results-based and decentralized financing approaches. Thus, the BHCPF represents 'more money and smarter money'. The Federal Government allocated NGN 55 billion (almost US\$180 million equivalent) to support the BHCPF in the 2018 budget, of which 50 percent (US\$90 million equivalent) has already been released and placed in state-controlled accounts in the Central Bank of Nigeria. This gratifying commitment of additional funds for PHC may signal a long-awaited and much-needed surge in Nigeria's investment in its human capital.

Long-term importance of the BHCPF. The BHCPF engenders approaches that could alter the long-term trajectory of the Nigerian health system, because (a) the Government will use its own resources to purchase services not inputs; (b) the Government will buy services from both public and private providers using a level playing field; (c) it establishes a system of accreditation to improve quality of care; (d) it will finance a rigorous system of verification that helps ensure value for money; (e) it creates robust payment systems through electronic transfer to providers, which reduces the chance of corruption; (f) it gives providers substantial autonomy in use of operational funds with community representation; and (g) it demonstrates long-term Government commitment to using public funds to subsidize the cost of services for the poor.

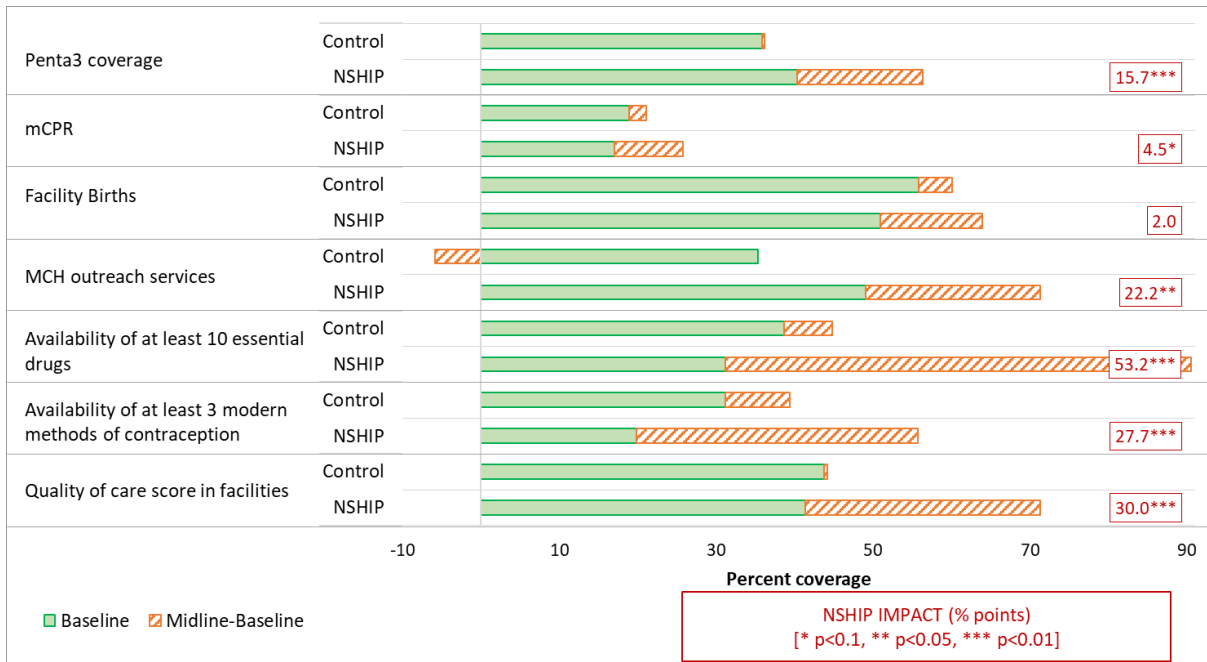
More than 80 percent of the services provided through the BHCPF have direct implications for reducing under-five mortality. The BHCPF will increase access to 11 high-impact and highly cost-effective interventions focused on reproductive, maternal, and child health which cover more than 60 percent of disease burden of the country. There are three interventions for under-fives (curative care, immunization, and treatment of moderate malnutrition); four maternal health interventions for pregnant women (antenatal care, labor and delivery, emergency obstetric and neonatal care, and caesarean section); one reproductive and adolescent health intervention (family planning); and treatment of malaria and screening of select noncommunicable diseases for all Nigerians.

- (c) **ERGP and National Strategic Health Development Plan II (NSHDP II).** Both the ERGP and the NSHDP II identified child mortality as one of its national development priorities. NSHDP II has the goal of cutting U5MR in half by the end of the plan.
- (d) **Investment case.** The Reproductive, Maternal, Child, and Adolescent Health and Nutrition (RMNCAH + N) investment case developed in 2018 provides a country framework for alignment of sector stakeholders around a set of prioritized and phased RMNCAH + N interventions to accelerate progress toward better maternal and child health outcomes.
- (e) **Progress in immunization, malaria, and polio.** In response to the low immunization rates, the Federal Ministry of Health (FMoH) through the National Primary Health Care Development Agency (NPHCDA) declared a state of emergency in immunization in June 2017 and launched emergency coordination centers at national and state levels. Over the past two years, a series of innovations



launched by the Government has led to Nigeria improving its immunization rates from 38 percent in 2013 to 50 percent in 2018, and coverage among the poorest quintile of children from 7 percent in 2013 to 24.7 percent in 2018. Similarly, the country made substantial progress in malaria control—malaria prevalence declined from 42 percent to 27 percent between 2010 and 2015 as led by National Malaria Elimination Program (NMEP) and supported by development partners including the World Bank (through Booster Project). Finally, through persistent efforts of the Government and development partners, Nigeria is close to being declared polio free.

Figure 6. NSHIP Improved Health Service Utilization, Coverage, and Structural Quality



Source: NSHIP baseline and midline surveys, 2014–2017.

- (f) **DFF and PBF have improved coverage and quality of care, and provide evidence for strengthening PHC in Nigeria.** As part of the World Bank-supported NSHIP, the Government introduced DFF and PBF in PHC facilities in three states in 2014. Both DFF and PBF provided funds directly to the bank accounts of individual publicly-owned health facilities and gave facilities substantial autonomy in how they used the money, engaged ward development committee in facility management, and strengthened supervision by increasing its frequency and introducing a supervisory checklist. Under DFF, lump-sum payments are transferred to facilities for operational expenses—to buy drugs and supplies, maintain and repair the facility, and conduct outreach. PBF provided payments to facilities based on the quantity and quality of specific services they provide. These funds can be used for operational expenses as in DFF, and up to half the PBF funds can be used to pay performance-based bonuses to the staff.
- (g) **A randomized IE over the course of more than 30 months of implementation demonstrated positive results of both DFF and PBF on the quantity of services as well as in the quality of care (figure 6).** Results show that the performance of NSHIP treatment arms varied. For instance, institutional deliveries increased by 7 percentage points under PBF in comparison to control whereas



DFF increased Penta 3 vaccination by 20.6 percentage points. Significant improvements were observed in structural, process, and clinical quality of care both under DFF and PBF. The nuanced nature of results suggests that DFF is well suited to tackling immediate gaps in immunization coverage while PBF could be employed at later stages where broader maternal and child health interventions become the primary focus.

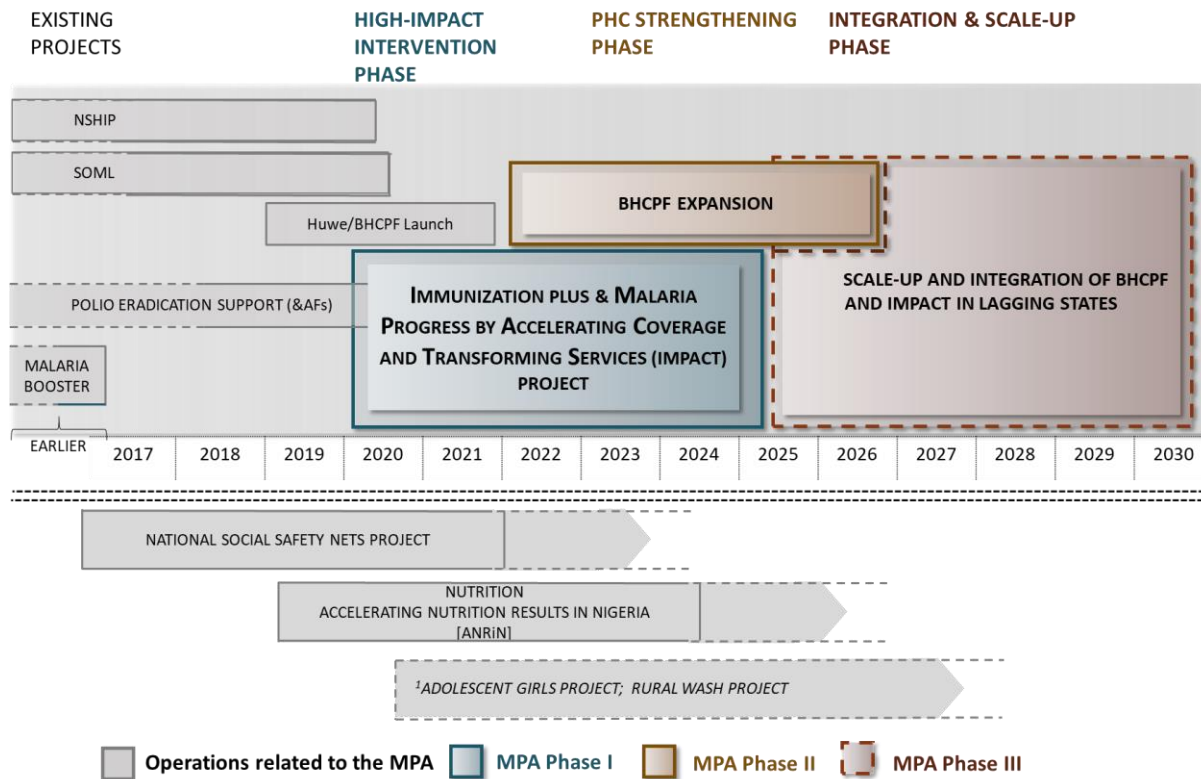
Improved Child Survival MPA: A Bold Program in Support of the Human Capital Vision of the Government of Nigeria

24. **The MPA will simultaneously address high-priority programs and health system strengthening.** All phases of the MPA will address high-priority programs (such as malaria control and immunization) while strengthening the health system so that it can deliver other related services sustainably. Phase I will focus on (a) high-impact malaria control interventions including distribution of LLINs, early and effective treatment of malaria, prevention of malaria in pregnancy, and SMC among children; (b) improving of vaccination coverage and supporting the introduction of new, high-impact vaccines; (c) improving of obstetric and postnatal care linked with neonatal mortality; and (d) national-level interventions aimed at changing behaviors, strengthening M&E, and operational research. Additionally, Phase I will also launch innovations in service delivery mechanisms; PHC, management, and governance strengthening; and data-driven decision making which will be tested and integrated into subsequent phases. Phase II will focus on PHC strengthening through expansion of the BHCPF, and Phase III will integrate and scale up the BHCPF and Immunization Plus and Malaria Progress by Accelerating Coverage and Transforming Services (IMPACT) in lagging states.

25. **The MPA builds on previous and ongoing World Bank-supported operations.** This MPA is not starting *de novo* but builds on an extensive series of previous and ongoing operations that have focused on various aspects of maternal and child health. For example, there is ongoing support for routine immunization (see figure 7) through the Polio Eradication Project (P130865) that is currently testing some new approaches to incentivizing managers. A Global Financing Facility (GFF) grant supports the rollout of BHCPF implementation in three states (Abia, Niger, and Osun) through the Basic Healthcare Provision Fund Project (HUWE, P163969) operation and will test the systems needed for effective implementation of the BHCPF. The BHCPF builds on lessons learned and successes of NSHIP implementation, including DFF. The recently effective nutrition operation, Accelerating Nutrition Results in Nigeria (ANRiN, P162069), will provide extensive long-term support for community-based nutrition activities. The Saving One Million Lives (SOML, P146583) PforR provides results-based financing for a program aimed at improving quantity and quality of primary health services. The use of NGOs has been piloted in the past under the Malaria Booster Project with significant success. The Polio Eradication Project, HUWE, NSHIP, and SOML are all scheduled to end in the next couple of years. The MPA is expected to subsume the key activities and successful approaches developed under these operations.



Figure 7. Timeline of MPA and Relationship to Ongoing and Planned Operations



Note: 1. Adolescent girls project and Rural Water, Sanitation, and Hygiene (WASH) project currently under preparation.

26. **The MPA is a critical part of multisectoral response to the Human Capital Agenda.** In addition to the ongoing nutrition project, the MPA, together with social protection and education sector responses, forms a truly cross-sectoral response to the human capital crisis in Nigeria. For example, Kogi, Kwara, and Plateau States, which are being supported by the MPA in Phase I, are also piloting conditional cash transfers for health including immunization services in the ongoing National Social Safety Nets Project (NSSNP, P151488). Implementation of immunization plus⁸ activities in the MPA will work to complement the demand-side activities carried out under the NSSNP, and Phase III in particular will be co-designed with future states adding immunization/health conditional cash transfers under the NSSNP. Similarly, the ongoing ANRiN project, the upcoming adolescent girls project, and WASH project also create other avenues for a multisectoral response, with a potential for child survival or human capital priority states across MPA phases for intensified World Bank support.

27. **The MPA also contributes toward Nigerian women’s empowerment.** The services provided through each phase of the MPA ensures provision of high-quality reproductive health services at health facilities and in communities through outreach, including postpartum family planning services. In addition, the integrated SBCC campaigns introduced in Phase I itself of the MPA also seeks to improve knowledge and benefits of reproductive and maternal health services. However, broader activities that encompass women’s empowerment such as interventions in social norms, education, and employment which are

⁸ Immunization plus services refer to provision of immunization, maternal, child, and neonatal services.



critical not only for reducing under-five mortality but also improving the nation's human capital are needed. Efforts from other World Bank-supported projects such as the Nigeria For Women Project (P161364), currently in implementation, and the Adolescent Girls project, currently under preparation, will be key in addressing these challenges.

28. **Addressing poverty.** The proposed MPA will focus on improving services available to poor people in the following ways: (a) it will focus on diseases (such as malaria, pneumonia, and diarrhea) and interventions (such as insecticide treated nets (ITNs), vaccination, and affordable curative care) which will disproportionately benefit poor children; (b) it will intensify interventions in rural areas where the poverty rates generally tend to be higher and access to services is lower; (c) it will promote activities that bring health services closer to the community through the use of the private sector and contracts with NGOs; (d) it will reduce or eliminate financial barriers to accessing selected curative services in rural areas (services provided for free) through the BHCPF; and (e) it will strengthen the monitoring of results through Standardized Monitoring and Assessment of Relief and Transition Methods (SMART) household surveys⁹ that will be modified to quickly assess income quintile using a simplified asset index thereby allowing progress on reaching the poor to be assessed annually.

29. **Demand-side constraints:** There is a need to address demand-side constraints and the MPA will do this through (a) extensive use of NGOs to change household-level knowledge and behaviors; (b) selected curative services being made free to the patients in rural areas, which will almost certainly increase the use of those services; (c) SBCC that promotes greater use of key services; and (d) the immunization plus component by exploring the use of conditional transfers to get children immunized and to increase institutional deliveries.

C. Relevance to Higher Level Objectives

30. **The proposed MPA is fully aligned with and in support of the Government's strategy.** Nigeria's vision to accelerate human capital (Human Capital Vision 2030) includes reducing under-five mortality by half in a decade. Additionally, ERGP 2017–2020, in its Human Capital Agenda, emphasizes the SDGs. It focuses on improving 'the availability, accessibility, affordability, and quality of health services' by (a) expanding the coverage and reach of PHC services; (b) financing health care using domestic resources; (c) expanding financial protection through the National Health Insurance Scheme (NHIS); and (d) ramping up polio and other vaccination efforts. Thus, the MPA is fully aligned with the FGoN's Human Capital Vision 2030 and the ERGP in addition to the health sector strategy (NSHDP II).

31. **The MPA is fully aligned with the Country Partnership Strategy (CPS).** The proposed operation is fully aligned with all three of the 'strategic clusters' of the FY14–FY19 CPS (report number 82501). It lies at the heart of the second cluster which aims to improve the 'effectiveness and efficiency of social service delivery at state level for greater social inclusion.' With its emphasis on encouraging innovation that achieves improved results, particularly for the poor, while making more efficient use of resources, this MPA wholly supports the CPS's objective of addressing 'inequities in income and opportunities' by 'developing more effective mechanisms of social service delivery.' The proposed operation's commitment to greater transparency, increased accountability, and improved availability of good-quality data fully supports the thrust of the third cluster which seeks to improve governance and public sector

⁹ Formally known as National Nutrition and Health Surveys (NNHS).



management. The project is also in line with the Country Partnership Framework (CPF) covering 2020-2024 that is currently under preparation and will be presented to the Board in May 2020.

D. Multiphase Programmatic Approach

(i) Rationale for Using An MPA

32. There are strong reasons for using an MPA instead of a series of projects or stand-alone operations to reduce under-five mortality:

- (a) **Need for continuity and persistence.** Accomplishing deep reductions in U5MR will require a continued focus over a long period on increasing the coverage of essential child health services and strengthening health systems. This cannot be achieved during the life of a single operation, which is why an MPA is a more appropriate instrument.
- (b) **Long-term government and World Bank commitment have encouraged joint financing.** The MPA has already provided a framework for development partners to align to maximize impact. The U.K. Department for International Development (DFID) is about to commit about US\$60 million of support for the MPA (particularly for the BHCPF) which will be channeled through a World Bank trust fund under the GFF umbrella. The Bill and Melinda Gates Foundation (BMGF) has also entered into an MoU with the FGoN for a grant of up to US\$75 million over 2019–2023. The Islamic Development Bank has already approved US\$100 million for the malaria component.
- (c) **Flexibility to tailor/adapt.** An MPA allows for a programmatic engagement that can adapt readily to the context. For example, depending on the availability of public financing, support for the expansion of the BHCPF, envisioned as part of Phase II of the proposed MPA, could be speeded up to facilitate national rollout or slowed down if public funds were not yet available.
- (d) **Learning.** An MPA would facilitate learning from multidimensional approaches and allow lessons to be more easily applied to subsequent activities. For example, the lessons from innovations in service delivery with NGOs could be more readily incorporated into other operations under the MPA. To ensure lessons are captured quickly, each of the operations will have robust M&E and an independent group to document learning from the stakeholders.
- (e) **Tracking impact indicators.** Because individual operations have, rightly, shied away from making U5MR a Project Development Objective (PDO) indicator, there has been little attention focused on collecting and analyzing data on it. An MPA provides the structure and rationale for tracking and analyzing data on impact indicators (particularly U5MR) and ensuring it remains a regular aspect of the policy dialogue.



(ii) Program Results Chain

33. **The assumption underpinning the project's theory of change is that improved service delivery, improved demand for health services, and improved management and accountability coupled with increased financing for health will substantively reduce under-five mortality in the country** (figure 8). More specifically, the following outputs are a prerequisite to the MPA meeting its Program Development Objective (PrDO):

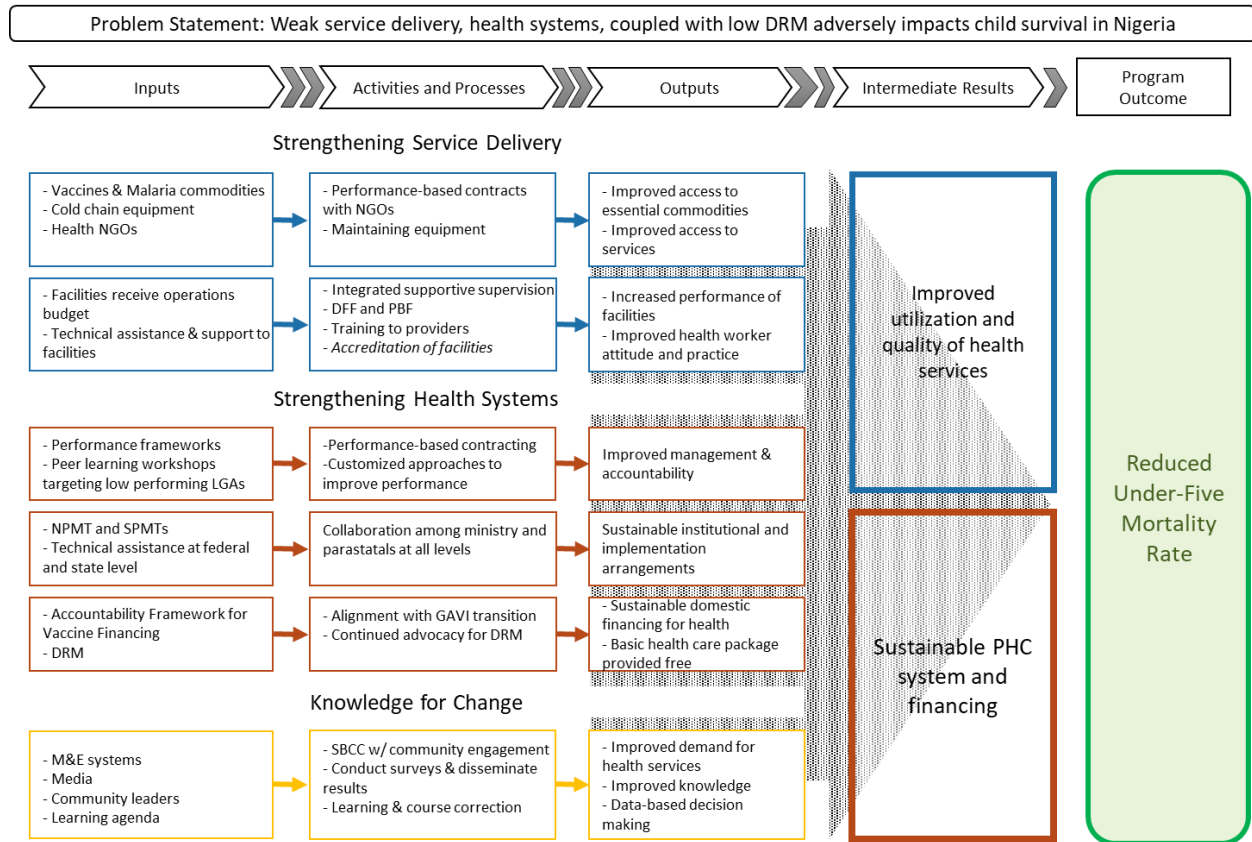
- (a) Much better coverage and utilization of preventive interventions such as immunization, LLIN use, and IPTp for malaria.
- (b) Increased access to and quality of clinical services to treat childhood illnesses and improve reproductive and maternal health.
- (c) Increased public expenditure on services for poor people.
- (d) Improvements in service delivery mechanisms such as engagement of NGOs for strengthening service delivery.
- (e) Improved financing, autonomy, and management skills at health facility level.
- (f) Strengthened management and governance at federal, state, and LGA levels including data-driven decision making.

34. Some critical assumptions in the causal chain above include the following: (a) the FGoN will commit and release funds for vaccine financing as indicated in the Gavi Immunization and Accountability Framework; (b) states contracting with NGOs for service delivery and PHC strengthening will improve access to health services in these states; and (c) weak management and accountability hinder progress in child survival in Nigeria.

35. Demand-side interventions will benefit by incorporating a gender lens in understanding barriers to access, especially in the northern parts of the country where health outcomes are the worst. MPA Phase I will also examine how to enhance female participation in the health workforce, especially in regions where there are gaps, and to build capacity of both women and men, to improve service delivery.



Figure 8. MPA Theory of Change



Note: NPMT = National Project Management Team; SPMT = State Project Management Team; DRM =Domestic Resource Mobilization.

(iii) Program Development Objective

36. The objective of the program is to reduce under-five mortality rate in program areas.

(iv) Key Program PDO indicators with Baselines and End Targets

37. In support of the Nigeria Human Capital Vision 2030, the program, with other complementary child health investments, is expected to reduce under-five mortality from 132 to 79 per 1,000 births by 2030. Cutting U5MR by 40 percent in 10 years is a stretch goal but it is achievable. Achieving a 40 percent decline in U5MR in 10 years would represent the achievement of the top 25 percent of LMCs over the last 25 years¹⁰ and would be much faster than the 16 percent decline observed in Nigeria during the last decade (2008–2018). Given global experience, it is not reasonable to expect Nigeria to achieve a faster rate of decline in U5MR.

¹⁰ Arur, A., R. Mohammed, and E. Bos. "Setting Targets in Health Nutrition and Population Projects." HNP Discussion Paper 2011.



38. The PrDO indicator is under-five mortality rate in program areas. Table 2 indicates the targets and the source of measurement.

Table 2. Targets and Source of Measurement

PrDO Indicator	Baseline	Phase I Target	Phase II Target	Phase III/ Program Target	Source of Measurement
Under-five mortality rate in program areas	132	112 (15%)	91 (30%)	79 (40%)	DHSs

39. **Measuring the PrDO.** The program will use DHSs and MICS to measure health outcomes for the MPA.

(v) Program Framework

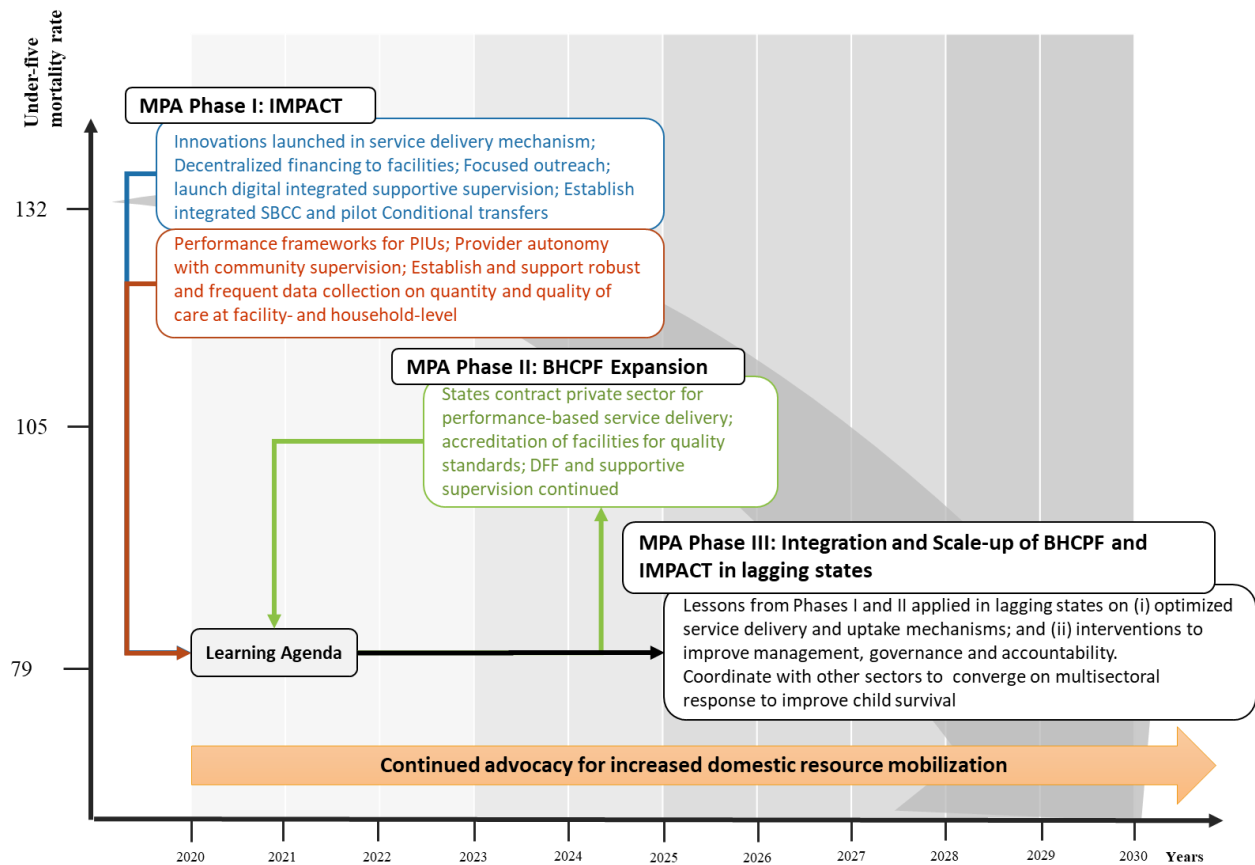
40. **Three-phased approach.** The use of an MPA enables a structured engagement to progressively target three outcomes.

- (a) **Intermediate Program Outcome I (Phase I).** Improve utilization and quality of immunization plus and malaria services in selected states
- (b) **Intermediate Program Outcome II (Phase II).** Scale-up provision of essential health services through the BHCPF
- (c) **Intermediate Program Outcome III (Phase III).** Enhance delivery and uptake of essential health services in lagging states

41. This phased approach would allow the following: (a) a rapid response to the Government’s pressing request for support to malaria control and immunization; (b) working out of operational challenges of the BHCPF as it is being phased in; (c) assurance that facilities, LGAs, and states are ready for the BHCPF as Phase II rolls in; (d) an opportunity to integrate high-impact interventions and PHC strengthening and scale both nationwide; and (e) performance-based advancements that can ensure increased domestic financing over the period of the operation. The timing of the phases will enable enough time for learning, testing new innovations, and incorporating findings into subsequent phases. All three phases are expected to use IPF since this instrument will help (a) pioneer results-based contracts to enhance service delivery and strengthen PHC systems and (b) test innovations and quickly incorporate the lessons learned (figure 9).



Figure 9. Phased Approach to Slashing U5MR in Nigeria



42. **Front-loading investment.** The MPA deliberately means to front-load investments to (a) help Nigeria get through its economic recovery without compromising crucial investments in its human capital development and (b) help finance higher cost interventions until their cost comes down. For example, new vaccines such as PCV and rotavirus are expensive when initially introduced but almost always come down in price subsequently.



Table 3. MPA Program Framework^a

Phase #	Sequential or Simultaneous	Phase's Proposed DO	IPF or PforR	Estimated IDA Amount (US\$, million)	Estimated other Amount (US\$, million)	Estimated Approval Date	Estimated Environmental and Social Risk Rating
I. IMPACT	—	Improve utilization and quality of immunization plus and malaria services in selected states	IPF	650.00	0.00	February 2020	Category B
II. BHCPF Expansion	Simultaneous	Scale up provision of essential health services through Basic Health Care Provision Fund in selected states	IPF	350.00	0.00	January 2022	Moderate
III. Integration and Scale-up in Lagging States Phase	Simultaneous	Enhance utilization and quality of essential health services in lagging states	IPF	500.00	0.00	July 2025	Moderate
Total				1,500.00	0.00		

Note: a. The management will seek the Board's approval of the future phases in case the Environmental and Social Framework risk classification changes to Substantial or High.



43. **Phase I: High-impact interventions and innovations in service delivery.** Phase I of the MPA will focus on improving immunization, intrapartum care, perinatal care, and malaria control activities and use these platforms to strengthen systems. These high-impact interventions will take precedence because (a) they reflect the request of the Government; (b) there are large financing gaps in malaria and immunization that are preventing these programs from covering large parts of the country thereby depriving children access to these life-saving services; and (c) they could potentially have a large and swift impact on U5MR. The World Bank has substantial experience in both malaria control and immunization but the MPA will also include important innovations in system strengthening which reflect success stories within World Bank-supported projects in Nigeria and globally, including decentralized financing for facilities, performance-based contracts with NGOs, performance frameworks for key national and state staff, and robust and timely data collection. This ‘diagonal’ approach to strengthening health systems while ensuring rapid delivery of priority interventions ensure rapid results in the short term while ensuring sustained systems strengthening in the medium and long term.¹¹ The approach is also aligned with the World Bank’s Health, Nutrition, and Population (HNP) Global Practice priorities identified under the World Bank Group’s Gender Strategy. A deeper analysis of factors that interact with social and gender norms, which contribute to barriers to women’s access to and use of health services will be employed in designing high-impact interventions that aim to close the gaps in accessing immunization, intrapartum, and perinatal care as well as malaria control.

44. **Phase II: Expanding PHC strengthening through the BHCPF.** The second phase of the MPA will support a large PHC—strengthening investment in the BHCPF in 15 states. Having a well-functioning PHC system is a necessary part of reducing U5MR because, despite effective preventive measures, children will get sick and require access to high-quality treatment (see table 1). High-quality PHC will also be needed to increase skilled birth attendance and postnatal care which will contribute to addressing neonatal mortality (that occurring within the first month of life), and improve reproductive health services which will contribute to improving under-five morbidity including malnutrition, and under-five mortality. More than 80 percent of the services provided through the BHCPF have direct implications for reducing under-five mortality. Phase II will be predicated on the successful implementation of the BHCPF in three states during Phase I (the pilot is being funded by a separate GFF grant).

45. **Phase III: Integration and scale-up in lagging states.** The third phase of the MPA will be used to support the scale-up of the high-impact malaria and immunization plus interventions and PHC strengthening and help ensure that these complementary approaches work together coherently, with a focus on 10 lagging states. Lessons learned from Phases I and II on using NGOs to support service delivery, performance frameworks for federal and state actors to improve accountability, engaging the private sector in the BHCPF, and behavior change communication strategies will be transferred and applied to these states. Cross-sectoral collaborations with WASH, education, and social protection interventions will also be considered to mitigate environmental, social and demand-side barriers in improving child health.

¹¹ Sources:

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Table 4. List of MPA States with Corresponding Under-five Burden^a

State	U5MR (2018)	Share of Annual Under-five Deaths (2018) in Nigeria (%)	Component 1 (Malaria Control)		Component 2 (immunization Plus)		Component 3 (Knowledge for Change)
			Parallel Financing with Partners	Fully Financed by World Bank Group	Complementary Financing with Partners	Fully Financed by World Bank Group	National in Scope, with Focus on Following States
Abia	86	1.2		✓			✓
Adamawa	104	1.9				✓	✓
Bauchi	147	5.1			✓		✓
Bayelsa	31	0.3	✓				✓
Benue	59	1.3				✓	✓
Borno	86	2.4		✓			✓
Ebonyi	91	1.0				✓	✓
Edo	71	0.9	✓				✓
Ekiti	95	1.0	✓	✓			✓
Enugu	61	0.8					✓
FCT ¹²	75	1.1	✓				✓
Imo	87	1.8		✓			✓
Kaduna	187	6.6			✓		✓
Kano	164	12.7			✓		✓
Kogi	148	1.9	✓			✓	✓
Kwara	74	0.8				✓	✓
Lagos	59	2.3		✓			✓
Nasarawa	120	1.3				✓	✓
Oyo	64	1.9				✓	✓
Plateau	106	1.9				✓	✓
Rivers	79	1.5		✓			✓
Sokoto	197	5.5			✓		✓

Note: a. U5MR source: 2018 NDHS.

46. **State selection for Phase I.** The states selected for the first phase of the MPA have high under-five mortality burden, representing 55 percent of all under-five deaths in the country, and also reflect the Government’s desire to coordinate development partner support across all states. Note that 18 states included have U5MR in 2018 higher than the 2015 Millennium Development Goal target for the country (table 4). The project includes some states with lower shares of annual under-five burden because of the Government’s interest to align donor support—these states are at the risk of increasing their under-five deaths due to persistently low investments in key priority programs such as malaria. States with the

¹² Federal Capital Territory.



heaviest burden of U5MR will be prioritized in Phases II and III under the leadership of the Governments of Nigeria with consultations with other development partners.

47. **The focus for each phase aligns with the HNP priorities identified in the World Bank's Gender Strategy 2016-2023** (report number 102114). The gender strategy recognizes addressing gaps in reproductive and maternal health as a first-generation priority for the HNP global practice. As already highlighted, factors such as poverty, poor knowledge, and information interact with social and gender norms and contribute to barriers to women's access to and use of health services, including maternal and child health. A deeper analysis to understand and address these issues from a gendered perspective will be employed in designing high-impact interventions that aim to close the gaps in immunization, intrapartum, and perinatal care as well as malaria control. The MPA will conduct a review of these issues that will be taken into the planning and design of Phase II interventions. At the same time, capacity-building interventions supported under Phase I/II will encourage female participation. Finally, the program will collect and report on gender-disaggregated data on key PDO-level indicators. This is important for ensuring that the team can track changes to gender-based differences in health outcomes and access to key child health services during the course of the project.

48. **Innovation and technology in the MPA.** There are several ways in which the program leverages innovation and technology to achieve the PrDO.

- (a) **Use of technology for population mapping and planning.** Phase I of the MPA also expands and further implements the use of geographic information systems (GIS) and satellite imagery to reliably estimate target populations for Reproductive, Maternal, Neonatal, and Child Health (RMNCH) activities planning and decision making on time. Some of these activities include mapping settlements using remote sensing satellite imagery, primary data collection, and geographic information systems. This 'microplanning' activity funded by the BMGF is critical in Nigeria which has not had a population-level census since 2006.
- (b) **Use of technology for improving supervision.** Phase I of the MPA also invests in a comprehensive and quantitative open data kit-based tool (administered through phones/tablets) which allows (i) supervisors to monitor trends in service quality and provision in health facilities; (ii) facility staff to monitor their progresses and challenges; and (iii) managers at the LGA, state, and federal levels to use the data for improving service provision.
- (c) **Innovations in service delivery mechanism.** The malaria control states in Phase I of the MPA will contract NGOs to strengthen service delivery and quality of care in health facilities. Lessons learned from this innovation in service delivery mechanism could be implemented in later phases of the MPA. Paragraph below highlights innovations in results-based approaches being leveraged by the program.
- (d) Finally, Phase II of the MPA which expands the BHCPF could also coordinate with the Identification for Development project currently under preparation to ensure that beneficiaries of the BHCPF could also benefit from national identification (ID) services to be rolled out under ID4D.



49. **Implementing results-based approaches in the MPA.** Up until the last few years, the FGoN and its development partners focused on input-based approaches that yielded modest achievements. The MPA in Phase I will support different results-based approaches:

- (a) Results-based contracts with NGOs will help reach the most remote children, where part of the payment will depend on the levels of coverage they achieve.
- (b) Health facilities in selected states will receive financing for operational expenses, part of which will be allocated based on their performance in improving quality of care in these facilities.
- (c) ‘Performance frameworks’ with federal and state-level officials, their technical advisers, and state and LGA (district) agencies will reward them for progress on key indicators.
- (d) In addition, the MPA will also support peer-learning events where quarterly LGA-level results on immunization and other key child health indicators will be discussed. These events are intended to recognize high performers and develop customized strategies to improve performance in lagging LGAs.

50. All these approaches have been tested in Nigeria and elsewhere and represent transformative innovations. In addition, Phase II of the MPA expands the BHCPF which uses a PBF and DFF mechanism to enhance accountability.

51. **Counterpart financing - ensuring continuing progress as a criterion to move to Phases II and III.** The 2018 federal budget includes NGN 55 billion (about US\$180 million equivalent) for the BHCPF, of which 50 percent has already been released. The Government began implementation of BHCPF in 2018 initially as a service-wide vote, but from 2020 will implement the program as a statutory transfer, which demonstrates persistent commitment of the Government to invest in its human capital aspirations. In addition, the states involved in ANRiN, and states being supported for malaria activities under the MPA have all put up NGN 36 million of their own funds to support implementation and signal commitment.

- (a) The MPA will proceed to Phase II based on (i) adherence to the Gavi Immunization Accountability Framework on increased budgetary financing of vaccines (see box 2) and (ii) satisfactory progress made in the ongoing BHCPF Launch Project (HUWE, P163969) with the payment, accreditation, and verification mechanisms established for operationalization of the BHCPF in Abia, Niger, and Osun. As a commitment instrument within Phase I of the MPA, the Financing Agreement includes a covenant on the proportion of the Government’s funds appropriated for vaccines sourced from budgetary resources as agreed in the Gavi Accountability Framework. The MPA will also demonstrate the FGoN’s and state government’s commitment to counterpart financing to access and retain funds from the GFATM, U.S. Agency for International Development (USAID)/President’s Malaria Initiative (PMI), and DFID malaria interventions gap filling grants.
- (b) The MPA will proceed to Phase III based on (i) continued adherence to the Gavi Immunization Accountability Framework on increasing budgetary financing of vaccines; (ii) increased domestic resource commitment for the BHCPF in keeping with the National Health Act; and (iii) satisfactory progress made in Phases I and II of the MPA (Satisfactory rating for PDO, Moderately Satisfactory rating for implementation progress (IP)).



Box 2. Accountability Framework Ensures Government Commitment to Increased Budgetary Allocations for Vaccine Financing, Improved Transparency, Planning, and Program Efficiency

Strong commitment from the FGoN to increase domestic financing of vaccines. The Minister of National Budget and Planning, Minister of Finance, and Minister of Health have signed and submitted to the Gavi Board an ‘Accountability Framework’ that forms the basis for the agreement with Gavi to extend the Gavi transition date to Nigeria and provide an additional US\$1 billion in support to the country. Progress in meeting the targets on this Accountability Framework will be reviewed annually by a high-level committee comprising Nigerian government officials, Gavi CEO, and the Gavi Board of which the World Bank is a member. The NPHCDA has also set up a joint planning committee to develop annual vaccine financing plans with clear and realistic estimates of resource needs, sources of available resources, and expected disbursement schedule.

Increased budgetary commitments. In the 2019 budget, the FGoN tripled its budget allocation for vaccines—from US\$35.7 million in the 2018 budget to US\$95 million. This was made possible through the use of a budget category known as ‘Service Wide Votes’, a non-debt recurrent expenditure that is more predictable and reliable than the capital budget. Estimates of vaccine financing requirements for the next three years have also been incorporated in the Medium-Term Expenditure Framework and have been made public by the Ministry of National Budget and Planning.

Overall vaccine financing requirements have declined while coverage has increased. Vaccine expenditures dropped from US\$639 million in 2016 to one-third that amount in 2019, at US\$208.6 million. These efficiency gains are due to more realistic coverage targets, better stock management and cold chain capacity, more precise forecasting practices, and improvements in service delivery and demand for immunization services. Coverage between 2016 and 2018 increased from 33 percent to 50 percent for DTP3 and from 42 percent to 54 percent for the first dose of measles.

(vi) Learning Agenda

52. A robust learning agenda is central to the MPA’s design and implementation. There are five areas of learning and adaptation in the proposed MPA to improve service delivery, management, knowledge, and M&E systems that will inform subsequent program phases and other operations.

(a) Improving Service Delivery

53. **Goal 1: Evaluate the effectiveness of the NGOs in improving service delivery especially for the poor.** The MPA will monitor and evaluate the role of NGOs in providing service delivery, as contracted by state governments and monitored and regulated by both the state and federal governments. An impact and process evaluation will be conducted comparing the NGO states with the non-NGO states¹³ to compare the relative effectiveness and efficacy of NGOs in strengthening PHC and improving service delivery for child health. Operational lessons learned from using NGOs for service delivery in IMPACT, together with lessons learned from the nutrition project (ANRiN), will be applied to Phase III of the MPA, and any future additional financing for ANRiN. In addition, there will be an additional IE in poorly performing LGAs of immunization plus states on whether contracting with NGOs can improve service delivery in these hard to reach areas specifically, adding to the evidence of the role of NGOs in potentially improving equitable access to health services.

¹³ All malaria control states in IMPACT are NGO states. Comparable non-NGO states for the IE will be selected from non-project states.



54. **Goal 2: Assess effectiveness and reach of various channels of SBCC.** The MPA will support formative research, evaluation, and adaptation of comprehensive SBCC interventions to address demand-side constraints in RMNCH services. Successful SBCC strategies will then be included in Phase III of the MPA.

55. **Goal 3: Effectiveness and reach of conditional transfers in improving service utilization.** Conditional transfers to improve health service utilization have been implemented globally with recent ventures in Nigeria as well. The M&E component will evaluate the effectiveness and reach of conditional transfers in improving immunization in poorly performing LGAs of immunization plus states in the first phase, which will also inform whether this intervention will be included in subsequent MPA phases or other ongoing social protection projects.

(b) Improving Health Systems

56. **Goal 4: Evaluate effectiveness of performance frameworks in incentivizing results-based work in state and federal PIUs.** The program will also support a process evaluation to understand the potential effectiveness of performance frameworks in improving institutional performance and accountability at the federal and state level.

57. **Goal 5: Data-driven decision making.** The MPA will scale up and launch various critical M&E systems for dynamic measurement and course correction including household surveys (including Lot Quality Assurance Sampling [LQAS] surveys to measure LGA-level performance), health facility surveys, use of GIS data and satellite imagery for population estimates, data quality assessment (DQA) to improve routine data collection, and digital supervisory checklists. The effectiveness of these technologies will be evaluated for potential continuation in Phase III.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

58. The PDO of the first phase (IMPACT) of the MPA is to improve the utilization and quality of immunization plus and malaria services in selected states. Immunization plus services refer to provision of immunization, maternal, child, and neonatal services in selected states.

59. The PDO builds on objectives in the National Strategy for Immunization and Primary Health Care System Strengthening, the National Malaria Strategic Plan, and the overarching RMNCAH-Malaria Integration Strategy currently being rolled out by the FMOH.

PDO Level Indicators

60. Ultimately, the project will contribute toward significantly decreasing U5MR, reducing the burden of malaria particularly among the poor and vulnerable populations, reaping the benefits of routine vaccination, and improving neonatal health.



- (a) Under-five mortality rate (number) (PrDO Indicator to which the first project will contribute)
- (b) Percentage of children under five sleeping under Long-Lasting Insecticide Nets (LLINs) the night prior to the survey (disaggregated by gender)
- (c) Percentage of febrile children under-five in the last two weeks who were treated with ACTs (disaggregated by gender)
- (d) Percentage of children ages (12–23) months vaccinated with third dose of Pneumococcal vaccine (disaggregated by gender)
- (e) Percentage of children ages (12–23) months vaccinated with third dose of Pentavalent vaccine (disaggregated by gender)
- (f) Percentage of women (15–49) who had live births in the 2 years preceding the survey and were assisted by a skilled birth attendant during delivery
- (g) Percentage of women (15–49) receiving a postnatal checkup within 2 days of delivery among respondents who had a birth in the 2 years preceding the survey
- (h) Average Health Facility Quality of Care Score (percentage)

61. PDO level indicator I, which will contribute to the PrDO, is national in scope. Indicator VIII will be measured in all project states. Indicators II, III, VI, and VII will be measured in immunization plus states, and indicators IV and V in malaria states—the intermediate results indicators (IRIs) follow the same principles.¹⁴

B. Project Components

62. IMPACT is designed to achieve a balance between the need to achieve rapid results through priority programs affecting under-five health and the requirement of strengthening PHC for long-term sustainability. As the first phase of a 10-year engagement, the project invests, among others, in launching and evaluating bold innovations in service delivery, improving demand for health services, improving facility performance and health systems management and accountability more broadly, and increasing data-driven decision making. IMPACT will comprise four components: (a) malaria control; (b) immunization plus; (c) knowledge for change; and (d) Contingent Emergency Response Component (CERC). The overview of components and financing across federal and states levels is tabulated in table 5.

¹⁴ It is likely that the Component 3 will have national-level impact and limiting most of these indicators to malaria or immunization plus states underestimates the impact of the first phase.

**Table 5. Overview of IMPACT Components and Support across Federal and State Levels (US\$)**

	Federal	State	Overall
Component 1: Malaria Control			188.0
Subcomponent 1.1: Strengthening Service Delivery	72.2	98.7	170.9
Subcomponent 1.2: Health Systems Strengthening and Technical Assistance	7.5	9.6	17.1
Component 2: Immunization Plus			409.3
Subcomponent 2.1: Strengthening Service Delivery	7.4	142.8	150.2
Subcomponent 2.2: Health Systems Strengthening and Technical Assistance	32.9	42.5	75.3
Subcomponent 2.3: Vaccines, Cold Chain and Logistics	183.8		183.8
Component 3: Knowledge for Change			52.7
Subcomponent 3.1: Strengthening Monitoring and Evaluation Systems ¹⁵	23.2		23.2
Subcomponent 3.2: Integrating Social Behavior Change Communications (SBCC) Activities	15.1		15.1
Subcomponent 3.3: Learning Agenda	14.4		14.4
Component 4: CERC			Nil
TOTAL	356.5	293.5	650.0

Note: The overall management costs for IMPACT are estimated to be approximately US\$23.8 million, which is 3.7 percent of overall financing.

Component 1: Malaria Control (US\$188.0 million equivalent IDA credit)

63. This component seeks to improve utilization and quality of malaria prevention and treatment activities in Abia, Borno, Ekiti, Imo, Lagos, and Rivers states in addition to support at the federal level. Islamic Development Bank will finance this component through parallel financing in the remaining 5 out of the 11 malaria states (table 4, see beneficiaries' section for rationale behind state selection). Component 3 will be financed by the World Bank at the federal level and will support all 11 states.

Subcomponent 1.1: Strengthening Service Delivery (US\$170.9 million)

64. This subcomponent will finance performance-based contracts with NGOs in participating states. Participating NGOs will be national, regional, and local NGOs that currently provide malaria service delivery in Nigeria. The contracts focus on cost-effective interventions, which were selected through a resource optimization exercise described in the technical, economic, and financial analysis section. The NGOs will also take active steps to ensure that interventions are climate resilient and adapt to the changing vector ranges. The interventions are to:

¹⁵ M&E activities for states are financed as part of health systems strengthening and TA for program management efforts.



- (a) Strengthen the capacity of public and private sectors in management of sick children, including those with malaria;
- (b) Provide LLINs to households and ensure nets are hung and used;
- (c) Distribute SP to pregnant women (known as intermittent presumptive therapy [IPT]) during antenatal care through both the public and private providers;
- (d) Provide SMC to under-five children in Borno (Sahelian State);
- (e) Conduct interpersonal behavior change communication to improve behavior and knowledge in malaria prevention, care seeking, and treatment in communities; and
- (f) Procure commodities starting in the third year of the projects and manage the supply chain in collaborations with the State Ministry of Health (SMoH).¹⁶

65. **An innovative service delivery mechanism.** NGOs will be recruited competitively and will have performance-based contracts where a proportion of their payment will be directly linked to the results of household level and facility-level data collected through independent surveys. LQAS will be used for performance payments biannually (leveraging the quarterly LQAS of the NPHCDA). Performance payments will be prorated based on percentage point improvements provided that progress made does not exceed the amount allocated per state, which is fixed per capita. State Malaria Elimination Programs (SMEPs), with support from the NMEP, will recruit the NGOs and manage the contracts. Subcomponent 1.2 will finance technical assistance (TA) to the states for contract management.

66. **There is interest and experience in performance-based contracts with NGOs.** The PMI, a U.S. Government effort, and the Global Fund both have contracted NGOs to provide malaria prevention and clinical services, demand creation, and M&E. Additionally, the 2011 Nigeria Malaria Control Booster Project (IDA-financed) contracted an NGO using a performance-based contract to promote preventive and health-seeking behavior for malaria, which saw significant improvements in LLIN use, early treatment of malaria in children, and use of IPT as verified by an independent survey.

67. **This subcomponent is intended to jump-start service delivery in malaria control while strengthening PHC systems at the same time.** Service delivery in malaria control in the last few decades has mostly been through NGOs (which are termed principle-/subrecipients or implementing partners across different partner-supported programs) and usually are not contracted and managed by federal or state agencies. However, for sustainability, these NGOs need to partner with public and private facilities to provide TA for strengthened malaria control services at the PHC level and be overseen by state and federal agencies with the mandate for malaria control. Hence, this design (a) allows for states to contract the NGOs, which are the current major service providers in malaria; (b) ensure that the NGOs provide services to areas that are not reachable by PHC facilities; and (c) provide TA in improving quality and access to care in PHC facilities. Additionally, the design allows for delivery of key preventive and diagnostic services for malaria such as LLINs and RDTs which are not currently covered by BHCPF NHIS package.

¹⁶ The NMEP will procure malaria commodities in the first two years for rapid procurement in the initial implementation stage.



68. **Procurement of malaria commodities.** The subcomponent will also finance procurement of preventative and curative medicines and commodities for malaria including LLINs, ACTs, RDTs, SP, SPAQ-SMC¹⁷ for Borno (Sahelian state), and so on. The NMEP will procure LLINs for the duration of the project and other malaria commodities for the first two years of the project. Procurement of medicines and commodities will be undertaken in line with emphasis on local content prioritization. The project will also consider alternative specification standards provided that they adhere to World Bank Guidelines. SMEPs, through the contracted NGOs, will procure the other malaria commodities from then onwards to enable economy of scale and address the current coverage gaps. All commodities will be distributed through the NGOs.

69. Finally, the subcomponent will develop a policy for the Low Carbon Public Procurement of vehicles, bed nets, malaria chemoprophylaxis, and vaccines. The significant purchasing power of the health sector to choose goods, services, and works with a reduced environmental impact can make an important contribution toward sustainability goals. High-impact targets within the health sector include buildings, food and catering, vehicles, and energy-using products. The policy will be developed across the project to ensure that lowest carbon options are always an important part of decision making. This policy may also provide financial savings particularly when consideration of the full life cycle costs of a contract are factored in and not just the purchase price.

Subcomponent 1.2: Health Systems Strengthening and Technical Assistance (US\$17.1 million)

70. The project will support the health system and provide TA at federal and state levels through

- (a) **Training and technical support to SMEPs** on (i) NGO contract management and supervision; (ii) data analysis and performance evaluation of the NGOs; (iii) organizing of annual or semiannual results conferences that bring together all states to learn from their implementation experience, and (iv) goods and operating costs to support day-to-day project management;
- (b) **Training and technical support to the NMEP** on (i) contract management and supervision for national-level contracts (see Component 3); (ii) large-scale procurement of LLINs and other antimalarial commodities; (iii) TA for private sector engagement to support local manufacturers toward attaining pre-qualification for malaria commodities; (iv) TA to support policy engagement and advocacy efforts to address identified policy constraints for local manufacturing, and (v) goods and operating costs to support day-to-day project management; and
- (c) **Performance frameworks** to foster accountability of SMEPs and the NMEP for results and critical project activities with a view to improve project management practices within state and federal entities. Performance frameworks will be administered biannually and will provide performance bonuses to key members of the NMEP and SMEPs for completion of critical management processes such as proper FM, conducting of supportive supervision, mobilizing of domestic resources, data analysis and utilization, and effective contract management.

Component 2: Immunization Plus (US\$409.3 million equivalent IDA credit)

¹⁷ SPAQ (sulfadoxine-pyrimethamine + amodiaquine) for Seasonal Malaria Chemoprevention (SMC).



71. This component will support strengthening service delivery and health systems for immunization, maternal, child and neonatal services and will also finance vaccines and cold chain strengthening.

Subcomponent 2.1: Strengthening Service Delivery (US\$150.2 million)

72. This subcomponent will finance interventions that will strengthen routine immunization, maternal, child, and neonatal service delivery in the context of strengthening PHC in 12 states (Adamawa, Benue, Ebonyi, Kogi, Kwara, Nasarawa, Oyo, Plateau, Bauchi, Kaduna, Kano, and Sokoto) (see the beneficiaries' section for the rationale behind state selection).

73. **Decentralized funding with performance-based allocation for quality improvement directly to PHC facilities.** Building on the successful experience of NSHIP, the project will provide operating budgets directly to PHC facilities, an innovative approach known as DFF. DFF will strengthen provision of immunization services; curative care for under-five children; outreach activities in reproductive, maternal, and child health services; skilled delivery; postnatal care; and maintenance and minor repair of existing PHC infrastructure. Facilities will be paid quarterly after the conditions in the DFF contract such as management arrangements, previous period fund utilization, and transparent use of funds have been met.

- (a) **The implementation of DFF will be fully aligned with guidelines of the BHCPF and will involve** (i) providing direct electronic payments to the accounts of health facilities selected by the states;¹⁸ (ii) enabling health facilities to enjoy considerable autonomy in the use of funds; (iii) strengthening FM incorporated into supervisory checklists; (iv) purchasing commodities only from preapproved pharmacies; (v) engaging a representative from the ward development committee in facility management who will be a co-signatory on the bank account; (vi) supervising all facilities receiving DFF using the enhanced supervision described; (vii) ensuring that the amount of DFF funds provided to each state would reflect its population size; and (viii) incorporating DFF financing under IMPACT into the support for the BHCPF under Phase II of the MPA.
- (b) **This subcomponent prepares facilities for BHCPF scale-up while ensuring immediate service delivery gains.** The project will also finance initial investments to improve the facility quality standards and provide TA to the states to ensure that facilities, LGAs, and states themselves are trained in DFF implementation—the initial investment funds and technical support provided to these facilities in Phase I set the stage for BHCPF scale-up in Phase II. Additionally, while preparing facilities for BHCPF implementation, this DFF design in Phase I also ensures that the immunization plus states achieve rapid gains in immunization services in Phase I itself because DFF under NSHIP was shown to have a rapid impact in improving immunization coverage over and above PBF (for more details, see box 3).
- (c) All DFF facilities will also be trained on standard operating procedures for referral services to improve the link between primary health facilities and secondary hospitals. About 40 percent of the financing

¹⁸The payments will not be made to facilities already receiving NSHIP payments but may be made to BHCPF-supported facilities depending on the amount allocated to facilities under the NPHCDA gateway (to ensure that the facilities have adequate operational financing).



received under DFF will be based on the performance of the health facilities in improving quality of care as measured by structural and clinical quality of care including competency tests.

74. **Low carbon energy efficiency guidelines for PHC facilities.** As part of improving the facility quality standards, a number of energy efficiency changes can be made to existing facilities to mitigate their greenhouse gas (GHG) emissions and enhance carbon sequestration. The project will help update building standards to ensure low emission-building practices and designs are employed although it will not finance any new construction in Phase I of the MPA. These will consider the embedded carbon in construction processes as well as the design of buildings to consider the climatic changes expected during the building's lifetime. Standards will be developed for a range of facilities including warehouses intended to house vaccines and other medical supplies, some of which require refrigeration. Guidelines for technical performance standards will be developed for cold storage and lighting equipment for PHC facilities, considering specifications for energy efficiency and refrigerants and associated technologies to mitigate GHG emissions. Further, activities will provide mitigation benefits through enhanced carbon sequestration. With respect to energy efficiency and mitigation of GHG emissions, the introduction and use of LED lighting in facilities and refrigeration of health products and maintenance of the cold chain will be the focus. In addition, tree planting for shade and cooling provides a multitude of benefits including reduced energy costs from cooling due to direct shade cast on health facilities, reduced direct air temperatures due to leaf transpiration, and lower costs. Guidelines will mandate a certain number of suitable tree species be planted near facilities and be cared for in return for resources for use in the facilities, a cheaper and lower carbon approach than the central distribution of saplings.

75. **Data-driven health facility supervision.** Building on NSHIP's success in strengthening supervision, the project will finance the development and implementation of an advanced health facility supervisory system that will reinforce immunization and other RMNCH service delivery. This third-generation supervision will employ (a) an open data kit-based system that allows data capture by phones or tablets; (b) a quantitative checklist that allows an objective measure of performance; (c) a central server that provides the supervisor with information about previous supervisory visits so they can quickly assess whether progress is being made; (d) a feedback mechanism so that facility staff can monitor their progress and challenges; and (e) a user-friendly dashboard available to managers at the LGA, state, and national levels to provide managers with the information they need to improve service delivery.

76. **Improving quality and access of care.** Decentralized financing provided through this subcomponent will be expected to improve structural quality of care in health facilities. However, more needs to be done in improving access and 'process' quality of care as well.¹⁹ The subcomponent will finance TA to design interventions to improve quality of care, such as mentoring, peer review, continuous quality improvement techniques, and so on. The TA will draw on successful pilots within the country and elsewhere and support the implementation of these interventions. The focus of the quality improvement will include, but not be limited to, Basic Emergency Obstetric and Newborn Care, essential newborn care, and postnatal care including postpartum family planning. Because much of the curative care is provided by the private sector, the quality-strengthening interventions will involve private sector engagement. The activities described will mostly be implemented through contracts with individuals and Nigerian universities. Additionally, a voucher program for improving transportation of women and under-five

¹⁹ Improving clinical quality of care is especially important in improving neonatal and under-five health as quality of care determines whether utilization of curative care, skilled delivery, and postnatal services actually has an impact on mortality or not.



children from their communities to the nearest PHCs will be launched to reduce any transportation barriers to seeking care.

Subcomponent 2.2: Health Systems Strengthening and Technical Assistance (US\$75.3 million)

77. This subcomponent will be implemented at the national and state levels and will support the following activities:

- (a) **Project operations and TA.** The subcomponent will also provide TA to national- and state-level PIUs and to LGA PHC Departments in the areas of management, supervision, and data analysis. The project will also help meet the operational costs of the PIUs and the Local Government Health Authorities (LGHAs). The operational expenses at the state and LGHA level will be financed through performance contracts. The operational expenses will be reviewed annually at all levels by external auditors. This subcomponent will also finance TA for introducing and implementing DFF in project states including training and monitoring support to state, LGHA, and PHC facilities and spot-checks of facilities to ensure independent verification of DFF funds utilization. DFF introduction and implementation will also include an HR listing exercise for human resources for health (HRH) gap analysis at the state level. Phase II may include provisions for HRH strengthening if gaps are identified during this HRH exercise in Phase I in any of the participating states.
- (b) **Performance frameworks.** The project will finance performance frameworks for key national, state, and LGA-level officials engaged in immunization plus activities. The performance frameworks will be reviewed and awarded every six months and will be based on output results as measured by LQAS and management indicators such as providing proper FM, conducting supportive supervision, mobilizing domestic resources, and conducting data analysis and utilization.

Subcomponent 2.3: Vaccines, Cold Chain and Logistics (US\$183.8 million)

78. Through this subcomponent, the project will support financing of the procurement of vaccines with an emphasis on new or recently introduced vaccines and strengthening of the cold chain and logistics.

79. **Vaccines.** The subcomponent will support the Government in financing vaccine procurement through United Nations Children’s Fund (UNICEF) with an emphasis on PCV, rotavirus vaccine, and meningococcal vaccine. This support will be based on the Government meetings its obligations on the agreed and signed ‘Gavi Immunization and Accountability Framework’ (see box 1).

80. **Cold chain and polio operations and logistics.** The subcomponent will also strengthen the cold chain by financing (a) the gap in the planned procurement of the Cold Chain Equipment Optimization Plan for service delivery points; (b) installation of cold rooms and accessories, generating set, and solar power system—all through an MoU with UNICEF; (c) distribution of vaccines from national to state level through contracts with six vendors; (d) preventive maintenance and as-needed repairs of walk-in cold rooms and national and zonal levels through long-term agreements with the private sector; (e) polio eradication support; and (f) vaccine logistics systems strengthening. Additionally, the subcomponent will employ innovative and high-impact activities for polio eradication support through provision of funds for surveillance operations and supplementary immunization activities managed by the World Health Organization (WHO), as well as for social mobilization and logistics support activities delivered through UNICEF.



Component 3: Knowledge for Change (US\$52.7 million equivalent IDA credit)

Subcomponent 3.1: Strengthening Monitoring and Evaluation Systems (US\$23.2 million)

81. Data-driven decision making is one of the key mechanisms through which Nigeria will be able to reduce its under-five mortality. As discussed, the country has already taken several critical steps toward this, and the MPA will further support strengthening of M&E systems as discussed in the following paragraphs.

82. **Quarterly performance evaluations through LQAS.** One of the most important innovations launched by the NPHCDA has been the use of LQAS to identify well and poorly performing LGAs every quarter in poorly performing states and biannually in the rest of the country, as well as obtain independent estimates of statewide immunization coverage. These surveys now also include other key indicators related to maternal and child health. These LGA-level performance estimates have been used by the NPHCDA to reward well-performing LGAs and conduct peer review sessions for poorly performing LGAs. The project will support the conduct of these LQAS surveys to help assess performance at LGA and state levels for four years and also fund an external assessment of the LQAS methodology to draw lessons for implementation in other countries, especially in low coverage settings. LQAS is conducted independently by the National Bureau of Statistics (NBS) under an MoU with the NPHCDA with TA from UNICEF and the WHO. The LQAS methodology will be also be used for performance frameworks for federal and state PIUs/relevant staff and contracted NGOs.

83. **Robust household and health facility surveys for utilization, quality, and mortality estimates.** The country has been conducting annual household survey for state-level estimates of utilization of key RMNCH services since 2014 (SMART) and annual national health facility survey (NHFS) to understand availability and quality of services provided; the project will support these surveys for the years that there is a funding gap. SMART and NHFS are already conducted independently by the NBS under an MoU with the FMOH, with TA provided by UNICEF and a private firm, respectively.

84. **Improvements in routine data quality.** The project will strengthen routine data used for planning and monitoring by supporting (a) DQA²⁰ on a sampling basis to improve routine District Health Information System-2 (DHIS-2) reporting accuracy and reliability of supervision scores, (b) resource mapping at the state level, and (c) microplanning activities to derive household-level population estimates of under-five children using GIS data and satellite imagery. The GIS-based LGA-level population estimation methodology has been successfully used by the NPHCDA to conduct microplanning activities for polio—the project will support its expansion for immunization plus activities to obtain reliable estimates of under-five children at the LGA level. DQA and resource mapping will be conducted by an independent firm and microplanning activities by the NPHCDA.

85. **Climate and Health Vulnerability Assessment (CHVA).** The project will finance a CHVA to identify the specific health threats faced by the Nigerian population and to ensure most efficient targeting of resources to deal with the risks faced now and into the future. The CHVA will consider the climate-related exposures such as rising temperature and changing precipitation as well as extreme weather events, current and future climate-related health outcomes such as malaria and other vector-borne diseases

²⁰ Note: IMPACT will support a robust DQA which would entail verification of a sample of the DHIS-2 entries through household visits, ideally conducted by an independent verifier.



(VBDs), nutrition and maternal and child health threats, and the capacity of the system to cope with these challenges. The CHVA will provide national and state-level findings and recommendations designed to be embedded into current government initiatives.

Subcomponent 3.2: Integrating Social Behavior Change Communications (SBCC) Activities (US\$15.1 million)

86. **Comprehensive SBCC campaigns are important to address demand-side barriers to child health in Nigeria.** The goal of this subcomponent is to improve social acceptability of preventive behaviors such as LLIN use and vaccination and of curative behaviors such as seeking care for sick children and seeking skilled providers for delivery and postnatal care. The project will finance the contracting of a firm to carry out formative research, development, and implementation of a comprehensive SBCC strategy for under-five health using mass media and social media. Another firm will be recruited to support SBCC provision through religious and traditional leaders. The household surveys will measure the performance of the SBCC firms and allow for the firms to adjust their SBCC strategies. Part of the learning agenda will focus on identifying best practices as implemented by these two SBCC firms to inform the next round of SBCC strategies. The project will also fund training of community mobilizers (community health influencers, promoters, and services [CHIPS]) and PHC health workers in interpersonal communication to encourage care-seeking behavior.

87. **Beneficiary feedback and grievance redress mechanism (GRM).** The project will also finance regular workshops and focus groups with beneficiaries to understand community perceptions about services. It will also strengthen the Government's GRM ('Servicom') to ensure prompt and transparent feedback of the project performance, including a comprehensive mechanism for tracking and responding to grievances related to service quality and utilization at the health facility and community level.

88. **Climate and health behavior change interventions.** The subcomponent will support the dissemination of health promotion messages focused on social acceptability of preventive behaviors for children to households. Alongside this, the subcomponent will also develop and disseminate climate and health-related health promotion information. This will enhance population adaptive capacity and resilience in the face of extreme events. The timing of campaigns will align with seasonal climate variations, thereby enhancing the climate-related efficacy of the intervention.

Subcomponent 3.3: Learning Agenda (US\$14.4 million)

89. **Operations research to support the learning agenda.** The first phase of the MPA assesses innovations in service delivery mechanisms, performance-based incentives to improve management and accountability, and comprehensive SBCC and conditional transfers to improve healthy behaviors. This subcomponent will finance operations research including process and IEs using both qualitative and quantitative methodologies to understand the impact of these innovations, and how they can be tailored to the country context and implemented in subsequent phases. The subcomponent will also finance warehouses and cold-store capacity assessment at the state level, and based on findings from this assessment, Phase II may include provisions for any rehabilitation and construction of these buildings. The warehouse audit will also include an energy audits of three national-level warehouses, requiring the ability to refrigerate health products, and audits of three zonal level warehouses. Walk-through energy audits will also be conducted in selected PHC facilities (PHC facilities of approximately 40–80 m² in size). The



number of PHC walk-through audits will be dependent on location and accessibility. Finally, the sub-component will also provide TA to support the design and learning for the Emergency Medical Services (EMS) as part of the implementation of the emergency gateway of the BHCPF.

90. **Randomized Controlled Trial to test innovative approaches in improving health services.** Given the need to quickly and dramatically improve immunization plus coverage among the poor and underserved, the project will finance testing of innovations in poorly performing LGAs as defined by both low Routine Immunization coverage and low levels of SBA. Fifty-four low-performing LGAs will be randomized into three groups. All of the groups will receive all other LGA-level interventions financed by the MPA. In addition, communities/households in the second group of LGAs will receive a noncash conditional transfer for fully vaccinating children. The decision on the type of noncash commodity will be context specific and designed with preferences of parents, caregivers, and communities in mind. LGAs in the third group will enter into a performance-based contract with NGOs to strengthen service delivery.²¹ The Randomized Controlled Trial would include a baseline survey and an end line survey 3 years after implementation. Percentage of children fully vaccinated will be the main outcome, but uptake of other health services such as changes in curative services for under-five children will also be measured.

Component 4: Contingent Emergency Response Component (CERC) (US\$0 million IDA)

91. The CERC should be able to respond quickly health emergency with the potential to cause major adverse economic and/or social impacts. The CERC will serve as a first-line financing option for emergency response. Unused IDA financing will be allocated to this component in an emergency. These measures will ensure a swift mobilization and deployment of resources thereby limiting the financial and operational burden on the Nigerian health system. Triggers for CERC activation will be clearly outlined in the Project Implementation Manual and its annexes. Disbursements will be made against an approved list of goods, works, and services required to support crisis mitigation, response, and recovery.

C. Project Beneficiaries

92. Key beneficiaries of this project and program are under-five children and women in participating states. The health systems improvements will have an impact on overall state populations in addition to the main beneficiaries. In addition to children and women in the project states, the project will also have national-level benefits from national-level activities such as SBCC, M&E strengthening, and the learning agenda.

93. In addition to the direct beneficiaries of the project, health workers, government health system staff, and the selected states will also benefit from the project. Health workers will benefit from better working conditions, health planners in the government health system will benefit from the TA and the states will benefit from strengthened health system and improved service delivery.

94. **State selection for the malaria control component.** The states under Component 1 were those not financed by the PMI or GFATM and that have not received support for their malaria control efforts for

²¹ The range of services including (a) support LGA immunization staff and facility in-charges with TA, mentoring, and data analysis; (b) distribute vaccines to the LGA or ward-level stores; (c) directly provide services in particularly remote and under-served areas; (d) mobilize the not-for-profit and for-profit private sector to support immunization; (e) establish CHIPS and other community health workers; and (f) carry out SBCC activities in the community.



years. These states are not necessarily those with highest U5MR burden, but further lack of malaria financing in these states would likely result in mortality increases and reversal of investments gains. To be part of the malaria control component, states would have to meet the following conditions: (a) commit dedicated financing (NGN 36 million initially) for project preparation and malaria program operations in general; (b) ensure adequate institutional capacity for program management; and (c) ensure availability of adequate and appropriate physical infrastructure for storage of LLIN and other commodities. Six out of eleven malaria control states will be fully financed through the World Bank Group (table 4).

95. **State selection for immunization plus activities.** The 12 states under Component 2 were selected based on their routine immunization performance, service delivery gaps, and funding gaps. More specifically, the selection criteria were (a) state ranking in number of unimmunized children and proportions of children immunized with Penta 3; (b) states that have existing funding gaps; and (c) states with inadequate capacity in service delivery and management of routine immunization activities. Eight out of the twelve states will be fully financed through the World Bank Group and four through the World Bank Group for immunization plus activities and through MoU partners (BMGF, Dangote Foundation, and USAID) for other supplementary activities.

96. **As domestic financing from states,** all participating states will deposit NGN 36 million equivalent (US\$100,000 equivalent) into their state-specific IMPACT project preparation accounts to express their interest in participating in the project. The malaria control states have already deposited this amount into their respective accounts; the Government and the World Bank agreed that the immunization plus states will do so before the project disburses into the state accounts (condition of state-level disbursement). These funds will be used for project preparation and implementation activities.

97. **National activities.** Component 3 on Knowledge for Change will be implemented by federal PIUs, with a particular focus on IMPACT states in the first phase. There are economies of scale to be gained from national-level M&E and SBCC activities with some natural spillover to non-IMPACT states, and as illustrated in the learning agenda, IE of the innovations in service delivery would have spillover benefits to other states as well.

D. Rationale for World Bank Involvement and Role of Partners

98. **Rationale for World Bank involvement.** There is strong rationale for World Bank involvement in MPA activities, including the following: (a) there are many positive externalities to the MPA-supported interventions and the program activities address market failures and equity concerns (all described in more detail in the technical, economic, and financial analysis section); (b) with Nigeria's economic recovery weak, external financing support to human capital development is crucial and counter-cyclical; and (c) through engagements in Nigeria and across the continent, the World Bank has extensive knowledge and experience in deploying bold and successful innovations and robust monitoring to accelerate service delivery. This evidence-based global knowledge is the World Bank's comparative advantage.

99. **Donor coordination.** On the malaria side, based on prior agreements within the Development Partners Group in Health and the country coordinating mechanism, development partners funding malaria control agreed to coordinate activities geographically. As such, the malaria component will focus its efforts on the states where other donor funders do not have a presence. The malaria component will



key into national-level activities such as quantification, development of technical guidelines and the learning agenda, alongside other partners. On the immunization plus component, the MPA will focus on eight states without any existing partner support and four additional states where collaboration with partners is needed to fill gaps in funding, management, and service delivery. Through this component, the MPA will leverage existing partnership arrangements for immunization activities in the country, particularly the Inter-agency Coordinating Committee. The development partner community agreed to meet on a quarterly basis, through the Inter-agency Coordinating Committee, to assess the progress toward meeting the MPA's PrDO.

E. Lessons Learned and Reflected in the Project Design

100. The proposed MPA draws on lessons from ongoing and previous World Bank operations in Nigeria and elsewhere that will increase the likelihood of success:

- (a) **Deploy innovations, particularly results-based approaches.** Continuing to use conventional input-based approaches is inappropriate and unattractive. Thus, the program will build on PBF, DFF, and contracting with NGOs. These results-based approaches have been shown to be effective under NSHIP and other operations in Nigeria and elsewhere.
- (b) **Address high-impact priority programs and systems challenges.** The experience in Nigeria and elsewhere is that there are real synergies between high-impact priority programs and broader health system-strengthening activities. To have a significant impact on U5MR, both challenges will have to be addressed simultaneously. Efforts to improve high-impact priority programs will be designed to strengthen the health system more broadly and the BHCPF will draw on lessons from the high-impact programs particularly the need to have specific measurable outputs. See box 3 for an example on how the MPA introduces DFF in Phase I to ensure rapid gains in immunization coverage based on lessons learned from NSHIP and simultaneously pave the way for the Government's PHC program BHCPF scale-up in Phase II.
- (c) **Work with the private sector.** The program will also take full advantage of the private sector because it already provides between 60 percent and 69 percent of the curative care in the country (National Demographic Health Survey [NDHS] 2013 and MICS 2016) and because it can more effectively adapt to challenging local conditions.
- (d) **Measure progress robustly and frequently.** Successful health activities in Nigeria and elsewhere have been obsessive in collecting, analyzing, and using data. The MPA will use multiple sources of data to track progress and make course corrections.
- (e) **Adaptive learning.** Building on the frequent data collection as well as qualitative assessments that will be incorporated in the individual IPFs, the program will have the opportunity to quickly assimilate lessons into the design of the individual operations. The learning will be strengthened by annual results conferences that allow all stakeholders to take stock of progress and challenges.
- (f) **Ensure increases in domestic investment.** The different levels of government need to substantially increase their level of investment in PHC. The program will make continuation of financing



dependent on the Government continuing to meet its responsibilities under its own laws and commitments.

Box 3: Decentralized Financing with Results-based Quality of Care Component Ensures Rapid Gains in Child Health Services while Improving PHC Service Delivery

Decentralized financing for PHC is a health systems approach that aims to improve service delivery by providing health facilities directly with funds and granting them autonomy in the use of those funds. As discussed before, DFF under NSHIP was introduced as part of a quasi-experimental design that would test, against business as usual, the effect of decentralizing funds alone, alongside decentralizing funds and providing incentives to health workers (PBF).

As results in figure 6 show, both PBF and DFF improved service provision. However, DFF had more impact on immunization coverage and net usage by under-five children. It had similar effects to PBF on improving curative care for under-five children and antenatal care utilization. These are all outcomes that affect child survival. Results achieved by DFF were achieved at lower annual per capita cost (US\$1.70) than PBF (US\$3.49).

This evidence has played a central role in the design of an arm of the BHCPF—the NPHCDA gateway. This gateway proposes to provide, on a capitation basis, funds to health facilities directly. While some states in the country have exhibited implementation readiness, the state of this readiness is varied across the board. Moreover, the amount of resources allocated to the BHCPF per capita will not allow states to experience the full benefit of decentralized financing as was experienced under NSHIP.

Phase I of the MPA intends to fast-track readiness for implementation of the BHCPF NPHCDA gateway while complementing the efforts of NSHIP and ongoing BHCPF/HUWE implementation in immunization plus states. The first phase will provide investment funds to health facilities for rapid upgrades, thereby ensuring that they are starting from a minimum acceptable standard. Additionally, as the investment funds to facilities are not included as a part of BHCPF design, these funds will support the facilities in the accreditation process for inclusion into the NPHCDA gateway of the BHCPF. While ensuring alignment and paving way for BHCPF scale-up in Phase II, DFF in MPA Phase I also ensures early gains in uptake of key under-five health services.

The NSHIP IE identified critical success factors driving results, which underpin the decentralized financing approach:

- **Decentralization of funds to service delivery points** to provide them with operating budgets for minor infrastructural rectification of facilities, procurement of basic supplies, provision of seed stock for a drug revolving fund, health promotion activities, and other logistics
- **Autonomy of managers at health facilities on use of funds** to ensure that health facility expenditures are responsive to specific facility needs based on business planning principles
- **Systematic supportive supervision** to facilitate improvements in structural and process of care aspects of quality as well as for business planning
- **Investments in health systems management** that foster accountability through enhanced routine financial and programmatic (DHIS-2) reporting

The NSHIP IE also identified further room for improvements in quality, particularly in process of care. Hence, 40 percent of the decentralized funds available to health facilities under the MPA will be based on performance in quality improvements to ensure that minimum quality standards are maintained by all health facilities.

- (g) **Use diverse approaches to improve service delivery and demand.** The program intentionally deploys different approaches to strengthening service delivery. These will range from demand-side activities (SBCC and conditional transfers) to creating increased demand to diverse results-based approaches (PBF/fee-for-service, performance-based contracting with NGOs, performance



frameworks, and so on). These diverse strategies will mitigate performance risk as well as address the many inadequate links in the causal chain needed to cut U5MR.

- (h) **Crowd-in other resources.** The program and its phases have already attracted significant attention and funding from development partners and thus provide a way of uniting efforts toward the PrDO.
- (i) **This MPA will not solve every problem.** This MPA cannot solve all the problems of the HNP sector in Nigeria. Specifically, malnutrition is being addressed in a separate operation, helping Nigeria capture a demographic dividend will require a multisectoral approach that has not yet been conceived, and there may be other compelling requests coming from future governments (for example, support for controlling HIV/AIDS).

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

101. **Government's capacity to implement the program.** The institutional and implementation arrangements required for the proposed MPA largely exist in the health sector in Nigeria.

- (a) **Existing arrangements.** For Phase I, the MPA will leverage existing institutional structures already implementing malaria and immunization plus programs at both the federal and the state level. For Phase II, the MPA will build on and, if necessary, improve the institutional and implementation arrangements currently being tested as part of implementing the GFF-financed BHCPF operation in three initial states.
- (b) **Key weaknesses.** In Phase I, lack of coordination among the FMoH and the NPHCDA at the federal level and their respective arms at the state level and lack of experience working with NGOs are key weaknesses. For Phase II, given that the BHCPF is new and yet to become operational, it will thus likely experience growing pains during the initial setup that is currently ongoing and possibly during the scale-up planned for Phase II of this MPA.
- (c) **Filling the missing gaps.** The MPA is expected to address the key weaknesses by (i) strengthening existing institutional structures through TA including for managing NGOs and performance-based contracts, (ii) establishing a coordinating mechanism at the federal level, (iii) getting states ready for BHCPF scale-up through DFF implementation and related TA and incorporating lessons learned from the initial BHCPF operation.

102. **Overall policy formulation and program coordination.** The FMoH will be responsible for the overall policy formulation and program coordination for the MPA as a whole. It will serve as the responsible line ministry for the program and provide policy direction for achievement of targets set by the MPA, monitor progress toward these results, and use these to inform policy and programmatic adaptations as the MPA evolves, including requesting for potential restructuring of the Project if needed due to changing situation on the ground (as included in the World Bank guidelines).

103. **Supervision by Project Steering Committee at both federal and state levels.** At the federal level, the MPA will be under the supervision of a National Steering Committee (NSC) chaired by the Honorable



Minister of Health and including representation from the NPHCDA, NMEP, Department of Health Planning, Research and Statistics (DHPRS), Department of Public Health (DPH), Department of Food and Drug Services (DFDS), Nigeria Institute of Medical Research (NIMR), Nigeria Institute of Pharmaceutical Research and Development (NIPRD), Nigeria Centre for Disease Control (NCDC), Ministry of Finance (the International Economic Relations Department), and Budget and Planning; State Ministries of Health and Finance; State Primary Health Care Development Agencies (SPHCDA); development partners; and community service organizations. DHPRS will serve as the secretariat of the national steering committee. At the state level, the State Steering Committees (SSCs) will be chaired by the Honorable Commissioners of Health and will include representation from state ministries of health and finance, SPHCDA, and relevant development partners and community service organizations. The composition of the steering committees, at both federal and state levels, may change in subsequent phases to ensure that all relevant ministries and agencies are represented. The NSC will ensure intergovernmental coordination and policy alignment for the program and will meet at least twice per year to oversee coordination, knowledge sharing, and achievement of the MPA's PrDO and related results.

104. **Progress reported to the Governors' Forum.** Progress on achieving the PrDO will be reported annually to the Governors' Forum (regularly scheduled meetings between 36 state governors for peer review and formation of development agenda for the states) to enhance ownership and accountability. The NPMT will be responsible for securing a slot for the Honorable Minister of Health to present progress on the MPA to the Governors' Forum once/twice per year (that is, following NSC meetings).

105. **Project management for Phase I (federal level).** In Phase I, the MPA will strengthen existing institutional structures by anchoring the malaria component in the NMEP within the FMoH while anchoring the immunization plus component within the NPHCDA, consistent with their existing respective mandates. The NMEP and its state counterparts (SMEPs) will be responsible for program implementation of malaria activities while the NPHCDA and its state counterparts (SPHCDA) will be responsible for implementing immunization plus activities under Component 2 and activities under Component 3. The NPMT co-led by staff from the NMEP and NPHCDA will ensure close collaboration and strengthen the implementation of Component 3, Knowledge for Change, and other areas of synergy. The NPMT will help mitigate implementation risk by strengthening information flow and collaboration between the NMEP and NPHCDA, particularly in contracting firms for M&E, TA, and SBCC.

(a) **Role of the NMEP.** The NMEP will provide specifications for antimalaria commodities to be procured by the program and be responsible for the procurement of LLINs. The NMEP will also provide support to states on the recruitment of NGOs. The NMEP, in collaboration with its partners, will conduct capacity assessments of states. The capacity assessment will inform the capacity development efforts of TA. Along with the World Bank team, the NMEP will leverage its National Malaria Operations Research Agenda to inform the learning agenda for the malaria component. The NMEP team will have a designated program manager supported by a case manager, behavior change specialist, M&E specialist, environmental and social safeguards specialists, FM specialist, internal auditor, and procurement specialist.

The NMEP was the implementing agency for the successful Malaria Booster Project (P097921) and so has considerable knowledge and experience with World Bank operations. The Project Implementing Unit (PIU) already has officers with the requisite capacities, including malariologists, procurement specialists, data and monitoring experts, a project accountant, and an internal auditor.



These skills are bolstered by TA being provided by Roll-Back Malaria. The NMEP has demonstrated its abilities to coordinate activities with other ministries, departments, and agencies including the SMOHs, SPHCDA, and SMEPs.

- (b) **Role of the NPHCDA.** The NPHCDA will be responsible for implementing immunization plus activities. Similar to the Polio Eradication Project, the Government, through the NPHCDA, will have agreements with UNICEF and the WHO on procurement of vaccines and routine immunization operations support under the immunization plus component. Similar to the NMEP PIU, the NPHCDA immunization plus PIU will include a designated program manager supported by a case manager, behavior change specialist, M&E specialist, logistics and supply chain specialist, environmental and social safeguards specialists, FM specialist, internal auditor, and procurement specialist.

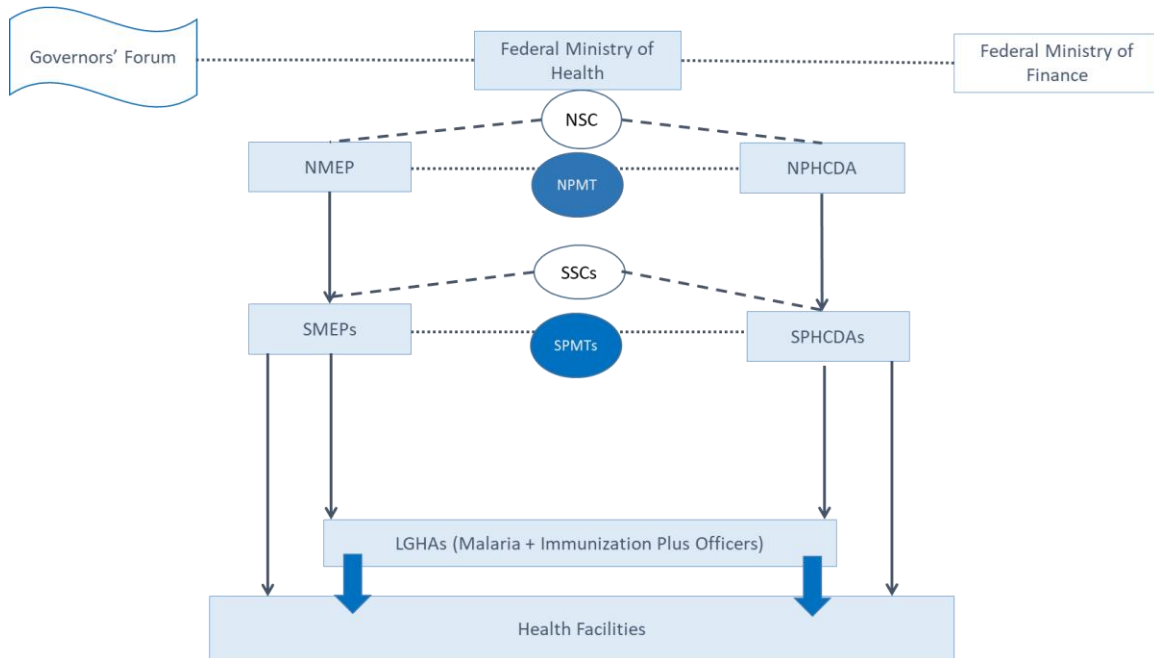
The NPHCDA's capacity is being strengthened through the third Additional Financing of the Polio Eradication Project currently under implementation to enable it to carry out supply and logistics management of vaccines and coordination and management of the immunization program in lagging states through its state-level arms, that is, SPHCDA.

106. **Project management for Phase I (state level).** At the state level, the SMEPs and the SPHCDA will be responsible for the day-to-day management of the malaria related activities under Component 1. At the state level, the SPMTs would co-lead a similar meeting platform like the NPMT regardless of whether they are participating in the malaria control or the immunization plus component during Phase I of the MPA given that both malaria control and immunization plus programs exist in every state, regardless of the source of financing.

- (a) **Role of the SMEPs.** The SMEPs domiciled in the SMOHs will collaborate with SPHCDA within their existing mandates in the provision of PHC treatment and diagnosis of malaria. This collaboration between the two state-level entities will help strengthen management of malaria and other related communicable diseases, including PHC-related preventive services. All other non- PHC-related activities for malaria will be the responsibility of SMEPs with guidance and supervision from the NMEP. SMEPs will also be responsible for contracting of NGOs related to the Malaria Control Component. The SMEPs will designate a PIU, led by the SMEP program manager, to oversee the malaria activities of the project. Team members will consist of a case manager, integrated vector management specialist, behavior change specialist, M&E specialist, environmental and social safeguards specialists, FM specialist, internal auditor, and procurement specialist.
- (b) **Role of the SPHCDA.** In addition to collaborating with the SMEPs on the implementation of malaria activities at the PHC level, the SPHCDA will be responsible for implementing day-to-day immunization plus activities under Component 2. Similarly, to determine how SMEPs will be organized, the SPHCDA will designate a PIU, led by the SPHCDA program manager, to oversee the immunization plus component of the project. Team members will consist of a case manager, behavior change specialist, M&E specialist, environmental and social safeguards specialists, FM specialist, and procurement specialist.



Figure 10. Institutional Arrangements for Phase I of MPA



107. **Project management for Phase II.** The FMOH will also host Phase II of the MPA and will rely on institutional and implementation arrangements currently in place for the GFF-financed BHCPF operation where the BHCPF Secretariat will serve as the Project Management Unit. The NPHCDA and the NHIS will be responsible for strengthening service delivery through state entities: the NHIS, through fee for service, and the NPHCDA, through decentralized financing. The NHIS and NPHCDA will provide supervisory oversight, TA, and validation of services by facilities through the State Social Health Insurance Agencies and SPHCDA, respectively.

108. **Role of the LGHAs.** LGHAs, through officers working on immunization plus activities will be in charge of supportive supervision at the PHC facilities. LGHAs will also be responsible for developing micro plans at the LGA level and using the results of LQAS to improve service delivery.

109. **Financing arrangements and oversight.** The FGoN will be the Borrower of the total amount of the MPA and the Federal Ministry of Finance will provide financial oversight in ensuring timely effectiveness of the various phases of the MPA and maintenance of funds flow. To facilitate implementation at the state level, the FGoN will make funds available to the participating states under a subsidiary agreement between the Borrower and each participating state, under the terms and conditions approved by the World Bank. The Federal Project Financial Management Department (FPFMD) and the Project Financial Management Units (PFMUs) that support FM at the federal and state level will be responsible for managing the financial affairs of the project. The federal and state-level PIUs will, among other things, be responsible for ensuring compliance with the FM requirements of the Government and the World Bank. The World Bank will disburse the funds into Designated Accounts (DAs) opened by PIUs.²² Procurement under the proposed project is to be implemented in accordance with the World Bank's 'Procurement

²² There will be one DA for each federal PIU and one DA for each state PIU.



Regulations for IPF Borrowers' dated July 2016 (revised August 1, 2018). In Phase I, the federal PIUs in the NMEP and NPHCDA will retain a portion of the credit for federal-level activities. Vaccine financing will be channeled through the WHO and UNICEF through UN contracts for polio operations support and procurement of vaccines. The sole sourcing of UNICEF and the WHO for procuring vaccines, running polio operations, and managing cold chain strengthening is based on their successful 16 years' experience doing this in Nigeria—these financing arrangements have proven to be successful under the Polio Eradication Project currently under implementation. Disbursements at the state-level PIUs within SMEPs and SPHCDA will be triggered based on approved work plans approved by the SSCs and performance frameworks.

110. The Borrower shall ensure that the project is audited annually by an independently qualified external auditor based on terms of reference acceptable to IDA and the audit report shall be submitted to IDA within six months after the end of the fiscal year. The auditor will express an opinion on the annual financial statements in compliance with International Standards on Auditing. In addition to the report, the external auditor will be expected to prepare a Management Letter giving observations and comments and providing recommendations for improvements in accounting records, systems, controls, and compliance with financial covenants in the Financing Agreement. The Borrower shall also ensure that the interim financial report (IFR) is submitted to IDA semiannually and within 45 days after the end of the calendar semester throughout the project life.

B. Results Monitoring and Evaluation Arrangements

111. **M&E.** The FGoN has planned to conduct several national surveys over the next few years, including the NDHS 2018, annual SMART surveys, and annual NHFSs. Funds are secured for SMART and NHFS until 2020; IMPACT will support these surveys for the duration of the project. These preidentified data sources can serve as robust means of collecting data to track progress of the program and IMPACT.

112. **Annual SMART surveys.** SMART household surveys have been carried out nationwide three times in the last four years and can be used to measure (a) use of curative services for malaria (diagnosis and treatment for children with fever); (b) the proportion of children sleeping under LLINs; (c) use of IPT by pregnant women; (d) Penta 3 coverage; (e) skilled delivery; and (f) postnatal care. The SMART surveys will also be used to measure progress on other phases of the MPA, including coverage for most of the interventions covered by BHCPF (skilled birth attendance, antenatal care, postnatal care, and use of family planning, and so on). There will also be a need to dedicate some resources to LQAS household surveys, which can measure indexes related to knowledge and behavior change. The LQAS surveys also provide some data about LGA-level results, which will be relevant for performance payments to NGOs and state-level officials. PCV coverage and Penta 3 coverage in the bottom two wealth quintiles will be tracked about once in two years, through other standard household surveys—MICS and DHS.

113. **Annual NHFS.** The NHFS will track changes in (a) quality of care, including malaria diagnostic and case management capacity of health workers; (b) quality of supervision; and (c) sharps disposal management in health facilities in project states.

114. **Qualitative research.** To ensure that lessons from implementation are quickly incorporated into the designs of subsequent operations, the MPA through IMPACT will support the conduct of qualitative research to supplement the household and health facilities surveys.



115. **Tracking outcomes.** DHS are conducted approximately once every five years, and MICs once every three years. Between these two surveys, progress in under-five mortality rates will be tracked approximately once every two years.

C. Sustainability

116. Sustainability of the MPA investments is based on (a) the Government's commitments in improving financing and service delivery of PHC; (b) the Government's adherence to the Gavi Accountability Framework to increase budgetary financing of vaccines; and (c) implementation of lessons learned from ongoing interventions in service delivery mechanisms and governance.

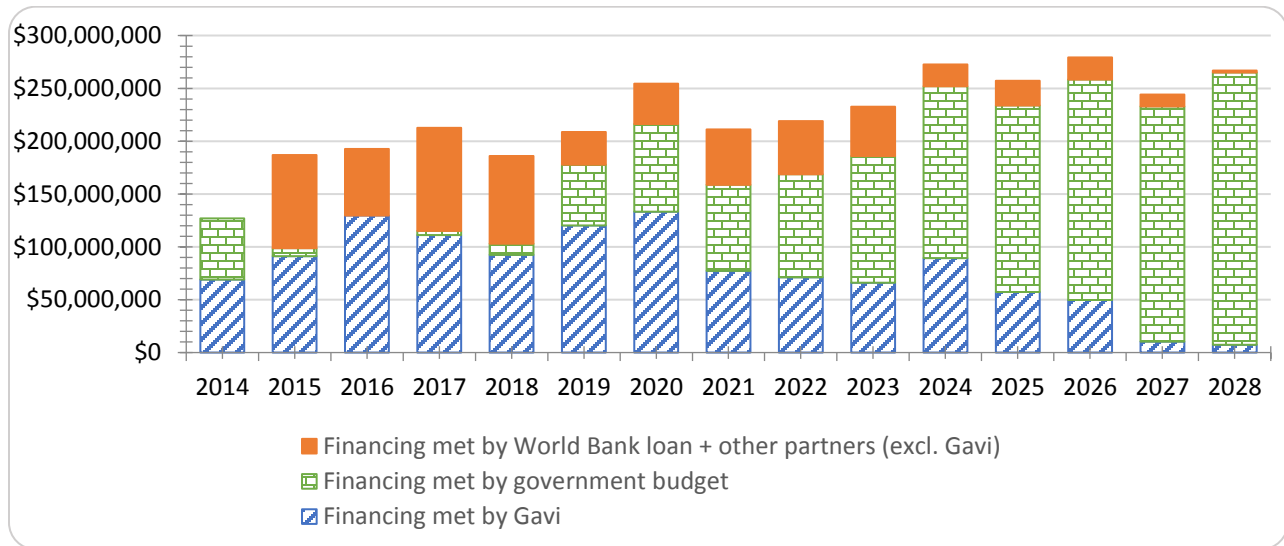
117. **The Government has shown high levels of political commitment to improve PHC financing by funding the BHCPF as a statutory transfer.** The Government has taken a laudable step in implementing the BHCPF as statutory funding this year, which ensures that there is guaranteed earmarked funding for the BHCPF each year with the ability to roll over unspent funds from year to year. This method of financing will help manage the unpredictability of health expenditures and allow any savings from improved efficiency to be retained in the health sector.

118. The MPA will address sustainability using a few approaches:

- (a) **Tackling inefficiencies to reduce costs and improve performance.** The MPA will support the country to identify more efficient modes of management and service delivery. Efficiency will be improved through (i) contracts with NGOs and greater use of the private sector in service delivery and (ii) strengthening of management and stewardship functions through various forms of capacity building.
- (b) **Using development assistance and MPA phasing to leverage domestic investments.** The MPA is being planned in close collaboration with partners to ensure that development financing leverages and does not substitute for government financing. For example, the BMGF grant, the Gavi Accountability Framework, and the GFF model of leveraging additional domestic resources will all encourage increased budgetary commitments to vaccine financing and PHC financing in Nigeria. Additionally, as a part of the MPA program design, the advancements to subsequent phases are based on increased domestic resources committed to BHCPF and toward vaccines (as discussed in program framework sub-section under section I.D).
- (c) **Transitioning away from World Bank credits for vaccine financing.** IMPACT will provide a ceiling up to US\$118 million which can be used to fill any temporary gaps in government financing as the Government gets on a more sustainable footing in the transition away from Gavi support. It is expected that more of the ceiling will be drawn on at the beginning of the Project to facilitate the introduction of new vaccines and to augment government resources. However, given the Gavi Accountability Framework signed by the Ministers of National Planning and Budget, Finance, and Health that proposes increases in domestic financing for vaccines and health, the share of vaccines financed by the World Bank will decline from a high of 45 percent in 2017 to 20 percent by 2023 to less than 1 percent by 2028 (figure 11).



Figure 11. Expenditures and Projected Resource Requirements for Vaccines, 2014–2028²³



Note that the total vaccine financing estimates for 2022 are lower than 2020 and 2021 because the Government is introducing new vaccines against Diarrhea (Rota) and HPV (first phase) in these years. Hence, there is a surge in estimated needs in these two years which is expected to normalize in 2022. Another phase of Rota and HPV roll out is scheduled for 2024.

- (d) **Provide early financing that will allow costs of key technologies to come down.** The MPA will frontload investments at a time when the Government is still grappling with a weak macro-fiscal context. This will allow the costs of key technologies such as vaccines and next generation LLINs to come down and reduce the long-term cost to the Government.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

119. **MPA design is technically sound.** Currently, 87 percent of all post-neonatal deaths are caused by malaria, diarrhea, pneumonia, and three vaccine-preventable diseases. The most impactful (and, it turns out, cost-effective) technical interventions for reducing U5MR include distribution of LLINs (and other malaria prevention technologies), vaccination, and early diagnosis and treatment of sick children (at PHC level). In addition, other services provided at PHC level such as family planning services, antenatal and postnatal care, and delivering babies by skilled providers could reduce neonatal mortality, which is approximately 30 percent of all under-five deaths. Malnutrition, which is also critically linked with childhood mortality and morbidity in Nigeria is being addressed through a nutrition project, in parallel with the MPA. Other important interventions in water, sanitation, and hygiene (WASH) and women’s

²³ The resource needs for vaccines are estimated by the Vaccine Financing Task Team, a team led by the NPHCDA, and includes other government Ministries such as the Ministry of finance, Budget and National Planning; as well as development partners including, Gavi, UNICEF, BMGF, CHAI, Solina and The World Bank. Final estimates for each year are endorsed by the Interagency Coordinating Committee (ICC), chaired by the Ministry of Health.



education and empowerment are also being addressed by the World Bank and other partners through parallel operations.

120. **MPA design addresses systemic barriers to improving child health.** The key systemic barriers to improving child survival in Nigeria are (a) lack of motivated and well-managed health workers; (b) lack of domestic financing; (c) lack of capacity and accountability in institutions; (d) financial and demand-side barriers to uptake of health services; and (e) lack of data-driven decision making. The MPA addresses these challenges through phasing, innovations in service delivery, data collection, integrated supportive supervision, child-centered comprehensive SBCC interventions, and performance frameworks for key national and state staff.

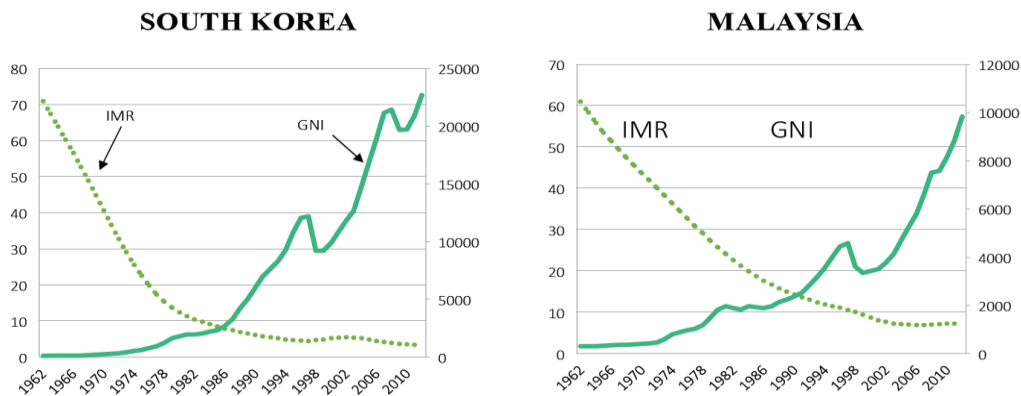
121. **Reducing U5MR will have important economic benefits including human capital formation.** Besides simple welfare impact, slashing U5MR will have important socioeconomic benefits for Nigeria, including on its human capital formation:

- (a) **Cognitive development.** Improved child health has an important influence on cognitive development. Children who are frequently sick experience significant delays in psycho-motor development. Preventing illnesses in young children and treating them effectively when they get sick is an important part of human capital development.
- (b) **Nutritional impact.** Children who are frequently sick are also at high nutritional risk. Frequent illness and malnutrition combine in a vicious cycle. Children who are sick have increased metabolic needs and are also less able to consume and absorb nutrients, while children who are malnourished have compromised immunity which renders them more prone to becoming sick. Breaking this vicious cycle is an important aspect of human capital formation.
- (c) **Fertility rate reduction.** There has never been a significant reduction in fertility rate that was not preceded by a steep reduction in U5MR. Families across the world will continue to have high fertility rates if they fear that many of their children will die in childhood. Because reducing U5MR is critical to fertility rate reduction, it also an essential aspect of obtaining a demographic dividend.
- (d) **Economic growth.** A paper by Jamison, Summers, and others²⁴ has argued that reductions in mortality account for about 11 percent of recent economic growth in low and middle-income countries based on national income accounts. Using a more encompassing measure of growth based on 'full income,' they argue that 24 percent of the growth observed between 2000 and 2011 in full income was due to mortality reduction.
- (e) **Reductions in child mortality have preceded economic take-off.** Whether they are causal or not, improvements in child mortality preceded the economic take-off observed in East Asian 'tiger' economies (figure 12). Waiting for economic growth to improve child health has not worked in Africa and goes against the experience in East Asia.

²⁴ Jamison, D. T., L. H. Summers, et al. 2013. "Global Health 2035: A World Converging within a Generation." *Lancet* 382:1898–955.



Figure 12. Trends in the Infant Mortality Rate and Gross National Income in South Korea and Malaysia 1962–2010



Source: World Development Indicators, 2017. World Bank: Washington D.C.

122. **Nigeria has the highest burden of malaria and largest number of unimmunized children in the world.** More children die of malaria in Nigeria²⁵ than in any other country in the world, and the country also has the largest number of unimmunized children—37 percent of all malaria deaths of under-five children in the world occur in Nigeria, and in 2017, approximately 4 million Nigerian children were not vaccinated for Diphtheria, Pertussis, and Tetanus dose 3 (DPT3)—about 20 percent of all unvaccinated children in the world live in Nigeria.²⁶ Malaria constitutes about 30 percent of the entire mortality burden of under-five children in the country, and 84 percent of all malaria deaths occur in under-five children.²⁷ In addition to the lives lost, the economic burden of malaria in the country, accounting for direct and indirect costs excluding mortality, is estimated to be 13.5 percent of GDP.²⁸ Therefore, expanding preventative and curative services for malaria should reduce malaria cases and malaria mortality and improve economic welfare.

123. **Strong evidence of impact and cost-effectiveness—malaria control.** The interventions included in the malaria control component have demonstrated impact in reducing malaria burden in many contexts. Nearly 68 percent of the reduction in malaria cases in Sub-Saharan Africa between 2000 and 2015 is attributed to ITNs.²⁹ Moreover, the global evidence shows that behavioral change communication at the community level is among the most cost-effective interventions to control malaria. Nationwide

²⁵ An estimated 193,263 Nigerian children under five years died from malaria in 2016.

²⁶ IHME (Institute for Health Metrics and Evaluation). 2018. *Global Life Expectancy, All-Cause Mortality, and Cause-Specific Mortality Forecasts 2016–2040*. Seattle, United States: Institute for Health Metrics and Evaluation (IHME).

Number of unvaccinated children and target based on estimated immunization coverage (2017 revision by the WHO/UNICEF) and United Nations Development Programme. *World Population Prospects (2017 revision)*. Source: http://www.who.int/immunization/monitoring_surveillance/routine/coverage/en/index4.html.

²⁷ Global Burden of Disease Study. 2016. *Global Burden of Disease Study 2016 (GBD 2016) Results*. Seattle, United States: Institute for Health Metrics and Evaluation (IHME).

²⁸ Jimoh, A. 2010. "The Economic Burden of Malaria in Nigeria and Willingness to Pay." In *Handbook of Disease Burdens and Quality of Life Measures*, 1443–1458. Springer, New York.

²⁹ Bhatt, S., D. J. Weiss, E. Cameron, D. Bisanzio, B. Mappin, U. Dalrymple, K. E. Battle, C. L. Moyes, A. Henry, P. A. Eckhoff, and E. A. Wenger. 2015. "The Effect of Malaria Control on Plasmodium Falciparum in Africa between 2000 and 2015." *Nature* 526 (7572): 207.



surveys have shown that there is widespread knowledge of malarial interventions; however, there are misconceptions about the causes and ways to manage malaria. A 2017 ranking of 93 health interventions for low- and middle-income countries found preventative and curative interventions for malaria to be highly cost-effective (table 6).³⁰

Table 6. Global Evidence of the Cost-effectiveness of Interventions for IMPACT

Intervention	Cost-effectiveness (2012 US\$/DALY)
ACTs	18–34
IPTp, Infants	4–422
IPTp during pregnancy	4–591
Comprehensive management of malaria (spray + nets + treat)	28–117
ITNs/ LLINs	61–94
Immunization	7
Skilled delivery and postnatal care	77–500

Note: DALY = Disability-adjusted life year.

124. Malaria prevention and treatment not only reduces malaria burden but also contributes to economic growth. A randomized IE in Nigeria showed that the offer of a workplace-based malaria testing and treatment program increases worker earnings by approximately 10 percent.³¹ A randomized distribution of subsidized bed nets in rural Zambia increased harvest value by 15 percent of the average output.³²

125. **Allocative optimization for malaria control.** The allocation of resources and the interventions chosen in this project are informed by a study which assessed the optimal allocation of resources given various preventative and curative interventions for malaria in Nigeria—this process can lead to significant gains in technical and allocative efficiency. The Optima study concluded that priority funding for LLINs, IPTp and behavior change communication programs, and SMC in Sahelian areas given existing resources could avert 78,036 deaths or 14.5 million cases of malaria in Nigeria over five years (figure 13). Additionally, increasing available funding for malaria by US\$300 million could avert 138,027 deaths or 35.9 million cases in the next five years.

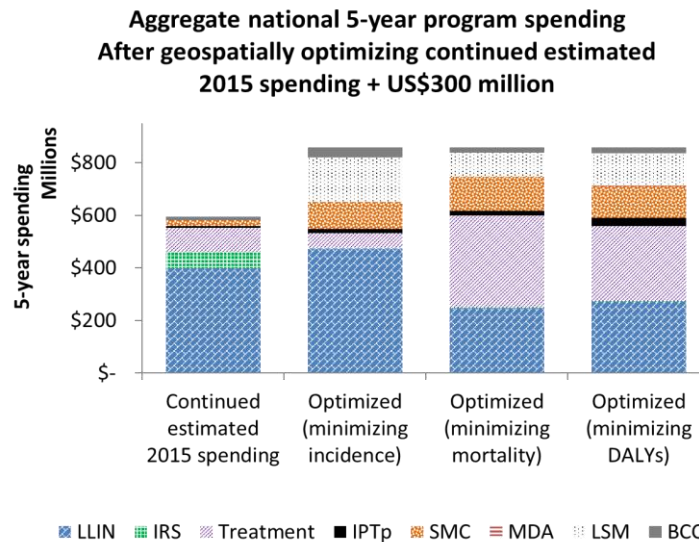
³⁰Horton, S., H. Gelband, D. Jamison, C. Levin, R. Nugent, and D. Watkins. 2017. “Ranking 93 Health Interventions for Low-and Middle-Income Countries by Cost-Effectiveness.” *PloS One* 12 (8): e0182951.

³¹Dillon, A., J. Friedman, and P. Serneels. 2014. “Health Information, Treatment, and Worker Productivity: Experimental Evidence from Malaria Testing and Treatment among Nigerian Sugarcane Cutters.” Institute for the Study of Labor Discussion Paper #8074.

³²Fink, Guenther, and Felix Masiye. 2015. “Health and Agricultural Productivity: Evidence from Zambia.” *Journal of Health Economics* 42:151–64.



Figure 13. Optimal Resource Allocation for Minimizing Malaria Burden in Nigeria - Results from the Optima Model³³



126. **Strong evidence of impact and cost-effectiveness—immunization plus.** Improving vaccination coverage reduces the risk of many life-threatening diseases for children and adults. Studies show that immunization is one of the best buys in public health, with recent studies citing a 16-fold return on investment over a 10-year period.³⁴ Cost-effectiveness of immunization interventions (including tuberculosis, DPT, polio, and measles) is estimated at US\$7 per DALY saved and for second opportunity measles vaccination at US\$4 per DALY saved. Additionally, a 2016 Lancet study found that the impressive reductions in child mortality between 2000 and 2015 were largely due to improvements in vaccination rates—roughly 49 percent of the total decrease was attributed to reductions in pneumonia, diarrhea, measles, meningitis, and tetanus.³⁵ If Nigeria continues to achieve the coverage targets defined in its newest strategy, routine immunization would result in 3.3 million lives saved over 2018–2025.³⁶ This is a particularly important time to avoid financing gaps that would nullify all the gains made in polio and would exacerbate the emergency in routine immunization. Finally, investments in skilled delivery and postnatal care are essential to avert neonatal deaths which are 30 percent of all under-five deaths in Nigeria. Investments in improving these interventions are also highly cost-effective, with the cost of US\$77–US\$500 per DALY averted.

³³ Scott, N., Hussain, S.A., Martin-Hughes, R., Fowkes, F.J., Kerr, C.C., Pearson, R., Kedziora, D.J., Killedar, M., Stuart, R.M. and Wilson, D.P., 2017. Maximizing the impact of malaria funding through allocative efficiency: using the right interventions in the right locations. *Malaria journal*, 16(1), p.368.

³⁴ The vaccines considered in the study were *Haemophilus influenzae* type b, Hepatitis B, Human Papillomavirus, Japanese encephalitis, Measles, *Neisseria meningitidis* serogroup A, rotavirus, rubella, *Streptococcus Pneumoniae*, and yellow fever.

³⁵ Liu, Li, Shefali Oza, Dan Hogan, Yue Chu, Jamie Perin, Jun Zhu, Joy E. Lawn, Simon Cousens, Colin Mathers, and Robert E. Black. 2016. "Global, Regional, and National Causes of Under-Five Mortality in 2000–15: An Updated Systematic Analysis with Implications for the Sustainable Development Goals." *The Lancet* 388 (10063): 3027–3035.

³⁶Nigeria cMYP 2017–2020.



Rationale for Public Sector Provisioning/Financing

127. There is strong rationale for public sector financing of malaria control efforts, immunization, skilled delivery, and postnatal care. First, all these initiatives are pro poor, and there is a strong equity argument for public financing of these activities. Malaria disproportionately affects poor children, immunization coverage along with postnatal care and birth with the assistance of a skilled provider is lower among poor children as well.

128. Second, public financing is also justified given both malaria and immunization have large and positive externalities to the community that are greater than benefits to individuals as immunizing children prevents many communicable diseases, and malaria is a communicable disease. For example, high ITN coverage and use will decrease the risk of infection even for people who do not themselves sleep under the nets, and high measles coverage will also decrease the risk of unimmunized children from contracting measles, the most contagious disease known.

129. Finally, the current uptake of vaccination, skilled delivery, and postnatal services and use of malaria prevention interventions is less than optimal and reflects a lack of information at family level of the benefits of vaccines, ITN use, IPTp, and SMC. Hence, the behavior changes interventions included in the first phase will reduce information barriers for a more informed take-up of these highly effective prevention and control measures.

B. Fiduciary

(i) Financial Management

130. The PPFMD, established in the Office of the Accountant-General of the Federation (OAGF), will be responsible for managing the financial affairs of the project. The PPFMD includes PFMUs that support FM of projects at the state level. The PFMUs were assessed by the World Bank and found to be acceptable for the implementation of World Bank-assisted projects. Because they are responsible for the FM arrangements of ongoing projects, they are reviewed regularly and strengthened as necessary (for example, training on an ongoing basis).

131. The PIUs will, among other things, be responsible for ensuring compliance with the FM requirements of the Government and the World Bank. Qualified project accountants and internal auditors will be assigned to PIUs from PPFMD (to the NPHCDA and NMEP) and PFMUs (to SPHCDA and SMEPs).

132. **Disbursement arrangements.** The World Bank will disburse the funds into DAs opened by PIUs. The NPHCDA and NMEP will each open one DA in U.S. dollars with the Central Bank of Nigeria and SPHCDA and SMEPs in participating states will each open one DA in U.S. dollars with reputable commercial banks acceptable to the World Bank and in consultation with the OAGF. The eligible incurred expenses will be paid by PIUs in naira from Drawdown accounts. The PIUs will each open a Drawdown account in naira with the Central Bank of Nigeria (by the NPHCDA and NMEP) and reputable commercial banks (by SPHCDA and SMEPs). Any government budget contributions will be directed through separate current accounts opened by PIUs (SPHCDA and SMEPs) with commercial banks acceptable to the World Bank. The project shall have available for project execution all methods of disbursement approved by the



World Bank as may be required. These disbursement methods are (a) advance and replenishment; (b) direct payment; (c) reimbursement; and (d) special commitment.

Table 7. Eligible Expenditures per Category

Category	Amount of the Credit Allocated (expressed in SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, consulting services, Training and Operating Costs under Part 1 of the Project in respect of:		
(a) National PIU (NMEP)	(a) 57,641,490	100%
(b) State PIUs (SMEPs)	(b) 78,325,890	100%
(2) Goods, works, non-consulting services, consulting services, Training and Operating Costs under Part 2 of the Project in respect of:		
(a) National PIU (NPHCDA)	(a) 162,076,015	100%
(b) State PIUs (SPHCDA)	(b) 133,942,340	100%
(3) Goods, non-consulting services, consulting services and Operating Costs under Part 3 of the Project in respect of:		
(a) National PIU (NMEP)	(a) 8,678,770	100%
(b) National PIU (NPHCDA)	(b) 29,435,495	100%
(4) Emergency Expenditures under Part 4 of the Project (i.e., CER Part)	0	
TOTAL AMOUNT	470,100,000	

133. **Accountability and risk mitigating measures.** As part of the mitigating measures to reduce the risk of misuse of funds and achieve value for money, the MPA will include performance-based contracts with NGOs. The performance will be verified by a third-party M&E firm through surveys and paid on a biannual basis. The project will also rely on established fiduciary arrangements for the Polio Eradication Project by using the UN agencies (UNICEF and the WHO) in procuring and distributing vaccines, running polio operations, and managing cold chain strengthening. Accounting records will be maintained in dual currencies, that is, naira and U.S. dollars. The project accountants will prepare monthly and semiannual IFRs and annual financial statements. The project will be audited annually by an independent external auditor appointed by the OAGF at the federal level and by private audit firms appointed by the SPHCDA/SMEPs at the state level based on terms of reference acceptable to the World Bank. The PIUs will be responsible for submission of audited annual financial statements to the World Bank within 6 months from the end of the Government fiscal year.

134. **The risk rating at this stage is Substantial.** Given the Substantial residual risk rating, the first FM on-site supervision will be carried out within 6 months of project effectiveness. This detailed review will cover all aspects of FM and internal control systems, evaluate the overall fiduciary control environment, and trace transactions from bidding process to disbursements as well as statement of expenditure review.



The supervision intensity will be based initially on the assessed FM risk rating and subsequently on the updated FM risk rating during implementation.

(ii) Procurement

135. The MPA will use the IPF instrument and leverage results- and performance-based approaches of project implementation. The two components under the first phase of the MPA, malaria and immunization plus, will be implemented through the NMEP and NPHCDA, respectively. Roughly a third of the financing for the first phase of the MPA will go toward malaria and immunization commodities. The other two-thirds will finance decentralized financing to health facilities; a window for contracting of NGOs by the states for service delivery (malaria); and contracting of a SBCC firm, M&E firm, and TA at the federal level. Procurement under the proposed project is to be implemented in accordance with the World Bank's 'Procurement Regulations for IPF Borrowers' (Procurement Regulations) dated July 2016 (revised August 1, 2018) under the 'New Procurement Framework', and the 'Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants', dated October 15, 2006, and revised in January 2011 and as of July 1, 2016, and other provisions that may be stipulated in the Financing Agreement. Also, the World Bank's Systematic Tracking and Exchanges in Procurement (STEP) system will be used to prepare, clear, and update Procurement Plans and conduct all procurement transactions for the proposed project for the first phase of the MPA. Finally, as part of the international competitive procurement for goods for the project, a margin of domestic preference up to 15 percent will be applied to the evaluation of bids and proposals. Procurement documents such as requests for bid/proposals will clearly indicate the preference to be applied and provide additional information required to establish eligibility for the preference according to World Bank Procurement Regulations.

136. The Borrower's procurement cycle management capacity has already been assessed at the federal level, that is, the FMOH entities comprising the NMEP and the NPHCDA. Also, as part of the preparation of the project, the Borrower (with TA from the World Bank), has prepared a Project Procurement Strategy for Development (PPSD), which describes how procurement activities will support project operations for the achievement of PDOs and deliver value for money. The PPSD has clarified the institutional arrangements for procurement; roles and responsibilities for procurement; thresholds, procurement methods, and prior review; and the requirements for carrying out procurement. The PPSD has also provided detailed assessment and description of the Borrower's capacity to carry out procurement and managing of contract implementation, identification of procurement risk, and proposed mitigations measures which will ensure conduct of procurement activities within acceptable governance structure and robust Accountability Framework. The PPSD has analyzed market behaviors, trends, and capabilities (that is, market analysis) for effective operationalization of the project Procurement Plan. All procuring entities as well as bidders, NGOs, and service providers, that is, suppliers, contractors, and consultants, shall be expected to observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with Section I and II of the World Bank Procurement Regulations. The project design has provided a window for the Borrower to carry out Advance Contracting and Retroactive Financing in accordance with Section V (5.1 and 5.2) of the Procurement Regulations. Retroactive financing will be allowed up to SDR 86.39 million (US\$119.4 million equivalent) covering the expenditures incurred by the project with effect from November 1, 2019, before the signing of the Credit Agreement under eligible activities agreed with the World Bank. The project procurement risk before mitigation measures is rated 'Substantial'. The risk may be reduced to a residual rating of 'Moderate' on successful implementation of the mitigation measures. The risks and mitigation measures have been



provided in the PPSD and procurement annex/Procurement Risk Assessment Management System platform.

C. Safeguards

(i) Environmental Safeguards

137. IMPACT has been classified as a Category B project, as the activities that will be financed under the project will not involve any major civil works, such as new constructions or significant rehabilitation of existing buildings. However, minor rehabilitation repairs such as painting, plastering, and replacing doors/windows and leaking roofs may occur in existing buildings and health facilities. The potential risks and impact of proposed civil works are expected to be minor, site specific, and relatively easy to mitigate. Activities under the project will include vaccination/immunization and distribution of drugs and LLINs that generate health care waste such as expired vaccines, sharps, and unsafe disposal of used LLINs which pose environmental and social risks. OP 4.01 on Environmental Assessment is triggered given the potential environmental concerns around the handling of health care waste. Given the potential health and environmental impacts of LLINs that may result from unsafe disposal of these nets, the NMEP/SMEP will adopt safe and environmentally friendly disposal methods as part of its broader waste management plan as documented in the Environmental and Social Management Framework (ESMF). This method will include adequate stakeholders' consultation and awareness on proper disposal of the nets. To ensure the sustainability of this process, the NMEP/SMEP will have overall responsibility based on their role in the distribution of the LLINs, using the same process and medium of distribution to collect the expired LLINs from beneficiaries for onward treatment and disposal.

138. The exact locations and numbers of PHC facilities are not yet known and therefore an ESMF prepared detailed processes and procedures to be followed to ensure that the potential adverse impacts are adequately mitigated. The ESMF is aligned to the approved National Healthcare Waste Management Plan and Guidelines for Nigeria. To address concerns of health care waste associated with the MPA, a Healthcare Waste Management Plan (HCWMP) has been prepared, aligned with the approved National Healthcare Waste Management Plan and Guidelines for Nigeria. During the preparation of these instruments, consultations were carried out with the states (Enugu, Borno, Rivers, Bayelsa, Anambra, Kogi, Abuja FCT, and Lagos) then participating in the malaria component. Before this, consultations were carried out with the states participating in the immunization plus component under Polio Additional Financing 3 (Parent: P130865). In addition, field visits were carried out to Kogi and Benue States.

139. The ESMF and the HCWMP have been prepared and disclosed in-country on October 7, 2019, and on the World Bank's InfoShop on November 8, 2019.

(ii) Social Safeguards

140. IMPACT aims to address health challenges related to under-five mortality in the country. This project will significantly reduce the U5MR particularly among the poor and vulnerable population through strengthening intrapartum and perinatal care, improving vaccination rates, strengthening management of malaria in children and pregnant women, supporting the distribution of SP to pregnant women during antenatal care through both the public and rural private providers, providing SMC to under-five children, and distributing LLIN in selected participating states.



141. The project does not trigger the OP 4.12 safeguards policy as activities under IMPACT will not lead to land acquisition or restriction of access to resources or livelihood. Thus, IMPACT will maintain a pro-poor approach focused on expanding and strengthening health care systems using NGOs in strengthening delivery of key health services to the poorest and most vulnerable in participating states.

142. Furthermore, in an effort to expand and strengthen preventive and curative health services especially at the rural level, the project will also support interpersonal behavioral change and knowledge of these services in rural communities through the development and implementation of a Social and Behavioral Change Communication Strategy. This will respond to the community's needs, promote participation, and influence the right behavior at the household and community level.

(iii) Other Safeguards

143. **Gender.** The project promotes and mainstreams gender concerns in service delivery and capacity building in the health service delivery system. It will ensure that women's peculiar needs, especially during the antenatal, intrapartum, and postnatal periods, are considered, including the activities of NGOs. It will also support intervention and reforms that will benefit children, both girls and boys, through affordable access to health care services at the public and private sector facilities.

144. All social behavior change interventions will be carefully developed and implemented to reflect cultural peculiarity as it relates to women while at the same time seek to address underlying gender concerns and inequality that lead to restrictions of women's and children's access to health services delivery due to cultural constraints and lack of awareness.

145. **Gender-based violence (GBV).** The project involves a significant level of service delivery by NGOs, including capacity building for public and private sector actors in the management of sick children, as well as direct service provision to women, children, and families. These direct beneficiary services include providing LLINs to households and ensuring proper use, distributing medication, and conducting interpersonal behavior change communications to improve behavior and knowledge in communities. Women and children who are beneficiaries can be at risk of sexual exploitation and abuse by workers from the agencies managing the program, as well as workers from contracted NGOs. Similarly, individuals who work within managing agencies or with contracted NGOs can be at risk of workplace sexual harassment (such as unwanted sexual advances or comments, requests for sexual favors, or unwanted sexual contact).

146. As required, during project preparation, GBV risk assessment was carried out based on the principles set out in the good practice note, and the GBV risk for this project was rated as low. To mitigate potential identified risks, project implementing agencies at the Federal and State levels will ensure that (a) relevant safeguard instruments (such as Environmental and Social Management Plans [ESMPs] and C-ESMPS) where required have adequate mitigation measures in place for mitigating the risk of GBV; (b) procurement documents used for contracting NGOs or private sector actors clearly define GBV requirements and expectations; (c) there are clear and enforced codes of conduct for health workers; (d) patient rights are posted on health facilities walls as part of awareness; (e) a referral protocol for referring survivor to non-health services is developed; and (f) contracting NGOs (i) have in place adequate Codes of Conduct that prohibit all forms of GBV including sexual exploitation and abuse and/or sexual harassment,



(ii) require all employees or agents to understand and sign such Codes of Conduct, and (iii) provide for appropriate training and enforcement mechanisms.

147. The project will also ensure that GRMs (discussed below) contain adequate channels to address GBV-related grievances, adapting standard procedures as necessary. In particular, the GRM will include multiple channels to initiate a complaint, provide for confidential reporting and safe and ethical documentation of GBV, and provide for referral for services.

148. **Disability.** The project promotes and mainstreams disability inclusion in service delivery and capacity building in the health service delivery systems. It will consider universal access to health care services and that health care personnel are aware of health-related challenges that persons with disabilities are facing, including pregnant women with disabilities. The project will focus on scaling up disability data collection and use, guided by global standards and best practices, such as using Washington Group's Short Set of Questions on Disability.

(iv) Climate Change Resilience Measures

149. **This project was screened for climate risk and assessed as being at moderate risk from flooding and drought.** Each of these hazards are recurring issues that affect livelihoods including agriculture, health, infrastructure, and trade. The southern part of the country is also vulnerable to flooding due to rising sea levels. A 1 meter rise in sea level could cause 75 percent of the land in the Niger Delta to be lost. In addition to flooding, recurring droughts and desertification have also been noted, with the southern region experiencing increasing desertification. Climate change is also known to be an important factor in changing vector ranges, including of the malaria transmitting anopholes mosquito.

150. The population served by this project is vulnerable to a number of climate-sensitive health outcomes. Studies show high levels of malaria endemicity, often with co-infection with dengue in the target population. Some autopsy studies indicating malaria account for 30 percent of under-five deaths while diarrhea and pneumonia account for another 26 percent and 18 percent, respectively. These VBDs and waterborne diseases (WBDs) are climate sensitive and projected to be affected by the climate crisis. The Intergovernmental Panel on Climate Change concludes that overall malaria conditions across tropical Africa are already optimal for malaria transmission and it is unlikely that an increase in malaria will be seen at the regional level. However, there will be local variations, with some areas seeing increases and others decreases. In Nigeria, in the South West and North Central areas, positive associations have been found between malaria incidence and rainfall with studies in Magaria, Niger, Jusot, and Alto reporting rainfall leading to a 7.2 percent increased risk of suspected malaria episodes. Studies focused on urban disease burdens in Lagos also suggest potential for increasing disease burden due to increasing temperatures and decreasing rainfall being strongly associated with malaria incidence.

151. **Specific project activities which will support climate change adaptation include the following:** Under Component 1, both subcomponents will make significant contributions to climate resilience by reducing the burden of malaria in the population served. Subcomponent 1.1 will provide mobile health services to internally displaced populations to enhance health care access at the local level. In addition to enhancing day-to-day health coverage, the use of NGOs is a resilient approach to the maintenance of health care access during extreme weather events such as flooding when more remote access can be impaired. Each of the activities (a–f) included in this subcomponent will enhance the adaptive capacity of the



population. For example, the project involves financing and distribution of LLINs and other malaria prevention and treatment commodities, thereby reducing population risk from this climate-sensitive health threat. The NGOs will ensure that provision of services responds to the changing vector range as a result of climate change and will also raise awareness of the population about the need to adapt to this risk. Under Subcomponent 1.2, there will be training and capacity-building activities for effective supervision and monitoring of the malaria interventions which will help develop continually adaptive climate-resilient measures to any changes in malaria prevalence seen from climate change.

152. Component 2 will enhance population climate resilience by improving the basic package of health services and ensuring new vaccines, especially rotavirus vaccine, and consider climate-related changes to disease ranges. Flooding and related climate change hazards could reduce beneficiaries' access to clean water and hygiene practices which could exacerbate diseases such as diarrhea. The program funding for procurement, distribution, and delivery of rotavirus vaccine would not only reduce the current burden of diarrheal diseases in under-five children but could also reduce the impact of any future increased incidence of diarrhea on child health and survival.

153. Component 3 will adapt the timing of campaigns to align with seasonal climate variations, thereby providing WBD- and VBD-focused health promotion advice during the rainy season. This will enhance the climate-related efficiency of the advice reducing population vulnerability to climate-sensitive diseases such as malaria (and dengue) as well as WBDs such as rotavirus and pneumococcus.

154. **Specific project activities which will support climate change mitigation include Subcomponent 1.1,** NGOs will move health provision closer to patients households and therefore reduce the requirement for journeys avoiding transport-related emissions. Under Subcomponent 2.1, on immunization plus activities, the project will provide decentralized operating budgets to health centers to facilitate outreach activities, vaccine delivery, and maintenance and repair of immunization equipment. These repairs will mean that equipment is more efficient and uses less electricity. The same also applied to Subcomponent 2.3, with respect to strengthening the operation of the cold chain so that GHG emissions are reduced (this is expected to be in the range of 30 percent reduction in GHGs and energy savings). Also, Subcomponent 2.2 will support information and communication technology deployment to strengthen and systematize routine data collection and supervision through the application of 'end-to-end' practical solutions. Digital health solutions also reduce unnecessary journeys and the associated GHG emissions.

155. **Component 4: Contingent Emergency Response Component.** The inclusion of CERC under Component 4 will provide access to contingent emergency financing in response to extreme weather events and climate-related threats, including epidemics.

(v) Grievance Redress Mechanisms

156. Increased awareness, behavior change communication, and increased access to information through the implementation of a Social and Behavioral Change Communication Strategy will increase demand for health care services at public health care facilities and potentially generate complaint and grievances related to either quality of services delivered or exclusion. For this reason, the program will develop a program-based feedback mechanism and GRM to receive, address, and resolve complaints resulting from program-related activities. NGOs will also be mandated to establish functional GRMs, the responsiveness of which will be annually and independently assessed.



157. As discussed above, all GRMs will contain adequate channels to address GBV-related grievances, making the necessary adaptations to standard procedures to ensure confidentiality, safe and ethical documentation, and adequate referral mechanisms.

158. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

V. KEY RISKS

159. **The overall risk rating for the project is categorized as Substantial.** The overall risk is Substantial mainly because of high political and governance and macroeconomic risks as well as substantial institutional capacity for implementation and sustainability and fiduciary risks.

- (a) **Political and governance risks.** The federal election that took place last year followed by the state elections has resulted in delays in decision making at the federal and state levels while the new federal and state governments are being placed and transitioned. In addition, continuing insecurity in the North East of the country and the Niger Delta pose political risks. Although the FGoN has degraded the capabilities of Boko Haram, there are still flare-ups of suicide bombing and the threats from Niger Delta Avengers, including blowing up of pipelines. With regard to security-compromised areas, as part of the emergency response for the North East, the Government and the World Bank agreed to using several innovative approaches to service delivery (for example, mobile clinics, and unannounced campaigns in markets and LGA border towns that use entertainment to attract households for health service delivery) which will be replicated in the MPA. These approaches show that despite the insurgency, the immunization coverage (Penta 3) increased by 22.9 percentage points in the North East.
- (b) **Macroeconomic risks.** After a year of economic recession, Nigeria's recovery is weak. The recovery is driven by higher oil prices and production, but the non-oil industry and services continue to shrink. Federal and state governments continue to face challenges with DRM which hampers their ability to invest in the social sectors or to finance development activities. The State Fiscal Transparency and Accountability PforR (P162009), currently under implementation, is supporting states in increasing their revenues. Furthermore, the Government has recently taken actions to increase the likelihood that financing of PHC is sustained—as of 2020, funds allocated for the Basic Health Care Provision Fund will be statutory transfers which ensures that there is guaranteed earmarked funding for PHC



each year with the ability to roll over unspent funds from year to year. In addition, the Government and the Bank have agreed to include a covenant in the financing agreement for the proposed operation to ensure domestic financing for vaccines gradually increases, in line with the Gavi Accountability Framework.

- (c) **Institutional capacity for implementation and suitability risks.** The NPHCDA and NMEP within the FMOH, as well as their respective state-level arms, have had limited experience working together on finding synergies and areas of collaboration, as well as minimal familiarity with contracting of NGOs. This program marks a unique opportunity to strengthen this collaboration. In particular, synergies are incorporated in the program design in the areas of procurement supply management for commodities, TA, M&E, SBCC, and the use of NGOs for service delivery to communities and in support of health facilities. To mitigate this risk, the project will set up the Project Steering Committee and the SSCs and provide TA at the federal and state levels as well as regular peer learning and team strengthening events.
- (d) **Fiduciary risks.** Fiduciary risk is rated as substantial given the country context, challenges faced in previous projects, the geographically dispersed nature of activities, and the innovations that will be introduced. To partly mitigate this risk, the first phase of the MPA will rely on already established fiduciary arrangements as part of the Polio Eradication project with UN partners, the WHO and UNICEF, under Component 2. In addition, the FM and procurement assessments of the NMEP and NPHCDA were carried out and found that both entities would provide adequate assurance that the World Bank's fiduciary requirements would be met. The assessments also provided a guide for areas that need capacity strengthening (for example, the development of financial and procurement manuals to ensure that World Bank's fiduciary guidelines are used).



VI. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Nigeria

Nigeria Improved Child Survival Program for Human Capital MPA

Project Development Objective(s)

The project development objective (PDO) of the first phase (IMPACT) is to improve the utilization and quality of immunization plus and malaria services in selected states.

Project Development Objective Indicators

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Reducing under-5 mortality rate							
Under-five mortality rate (Number)		132.00			123.00		112.00
1. To improve utilization of malaria (preventive and curative) services							
Percentage of children under five sleeping under Long-Lasting Insecticide Nets (LLINs) the night prior to the survey (Percentage)		28.50	29.70	31.00	34.10	37.20	41.00
Percentage girls under-five who slept under Long-Lasting Insecticide Nets (LLINs) the night prior to the survey (Percentage)		29.10	30.30	31.50	34.50	37.40	41.00
Percentage of febrile children under five in the last two		32.40	33.40	34.40	36.90	39.40	42.40



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
weeks who were treated with ACTs (Percentage)							
Percentage febrile girls under-five in the last two weeks who were treated with ACTs (Percentage)		30.70	31.90	33.00	36.00	38.90	42.40
2. To improve utilization of immunization plus (immunization, maternal and neonatal) services							
Percentage of children ages (12-23) months vaccinated with third dose of Pentavalent Vaccine (Percentage)		48.70	50.30	51.90	55.80	59.70	64.40
Percentage girls ages (12-23) months vaccinated with third dose of Pentavalent Vaccine (Percentage)		42.80	45.00	47.10	52.50	57.90	64.40
Percentage of children ages (12-23) months vaccinated with third dose of Pneumococcal Vaccine (will be disaggregated by gender) (Percentage)		46.60			54.10		63.30
Percentage of women (15-49) who had live births in the 2 years preceding the survey who were assisted by a skilled birth attendant during delivery (Percentage)		45.10	45.80	46.60	48.40	50.30	52.60
Percentage of women (15-49) receiving a postnatal checkup within 2 days of delivery		47.70	48.40	49.20	51.10	52.90	55.20



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
among respondents who had a birth in the 2 years preceding the survey (Percentage)							
To improve quality of malaria and immunization plus services							
Average Health Facility Quality of Care Score (Percentage)		34.30	36.80	39.30	45.60	51.80	59.30

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
1. Malaria Control							
Percentage of pregnant women who received three or more doses of IPT during antenatal care (Percentage)		8.10	9.20	10.40	13.40	16.40	20.00
Percentage of Primary Health Facility Health Workers who have Knowledge of IMCI Key danger signs and main symptoms in malaria states (Percentage)		45.40	46.40	47.40	49.90	52.40	55.40
Percentage of children under 5 with fever in the last two weeks who had had blood taken from a finger or heel for testing in malaria control states (Percentage)		18.50	19.80	21.00	24.10	27.30	31.00



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Percentage of public health facilities with safe disposal of sharps waste in malaria states (Percentage)	46.40		47.90	49.40	53.20	56.90	61.40
Percentage increase in performance framework score of federal and state PIUs in malaria states (Percentage)	0.00		5.00	10.00	22.50	35.00	50.00
2. Immunization Plus							
Percentage of facilities receiving DFF with engagement of ward development committee for facility management (Percentage)	0.00		8.00	16.00	36.00	56.00	80.00
Percentage of public health facilities with safe disposal of sharps waste in immunization plus states (Percentage)	26.50		28.00	29.50	33.30	37.00	41.50
Percentage of children ages (12-23) months vaccinated with the 3rd dose of Pentavalent Vaccine in bottom two quintiles (Percentage)	18.40				32.30		49.20
Proportion of annual vaccine procurement expenditure released from government budgetary resources (Percentage)	28.00		33.00	39.00	45.00	52.00	60.00
Percentage increase in performance framework score of federal and state PIUs in immunization plus states	0.00		5.00	10.00	22.50	35.00	50.00



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
(Percentage)							
Primary Health Facility Health Workers' Knowledge of IMCI Key danger signs and main symptoms in immunization plus states (Percentage)		48.00	49.00	50.00	52.50	55.00	58.00
People who have received essential health, nutrition, and population (HNP) services (CRI, Number)		0.00	800,000.00	1,600,000.00	3,600,000.00	5,600,000.00	8,000,000.00
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement) (CRI, Number)		0.00	500,000.00	1,000,000.00	2,250,000.00	3,500,000.00	5,000,000.00
Number of children immunized (CRI, Number)		0.00	600,000.00	1,200,000.00	2,700,000.00	4,200,000.00	6,000,000.00
Number of deliveries attended by skilled health personnel (CRI, Number)		0.00	200,000.00	400,000.00	900,000.00	1,400,000.00	2,000,000.00
3. Knowledge for Change							
Semi-annual nationwide LQAS surveys conducted and disclosed publicly (Number)		0.00	1.00	2.00	4.00	7.00	10.00
Percentage of facilities where a copy of the checklist was left at the facility for the most recent ISS visit (Percentage)		16.20	18.70	21.20	27.40	33.70	41.20



Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Under-five mortality rate	Probability of dying between birth and exactly five years of age expressed per 1,000 live birth	Once every two years	DHS; MICs	Surveys	NpopC; NBS; FMoH
Percentage of children under five sleeping under Long-Lasting Insecticide Nets (LLINs) the night prior to the survey	Percentage of children under five sleeping under Long-Lasting Insecticide Nets (LLINs) the night prior to the survey	Annual	SMART	Survey	NBS; FMoH
Percentage girls under-five who slept under Long-Lasting Insecticide Nets (LLINs) the night prior to the survey	Percentage girls under-five who slept under Long-Lasting Insecticide Nets (LLINs) the night prior to the survey	Annual	SMART	Survey	NBS; FMoH
Percentage of febrile children under five in the last two weeks who were treated with ACTs	Percentage of febrile children under five in the last two weeks who were treated with ACTs	Annual	SMART	Survey	NBS; FMoH
Percentage febrile girls under-five in the last two weeks who were treated with ACTs	Percentage febrile girls under-five in the last two weeks who were treated with ACTs	Annual	SMART	Survey	NBS; FMoH
Percentage of children ages (12-23) months vaccinated with third dose of Pentavalent Vaccine	Percentage of children ages (12-23) months vaccinated with third dose of Pentavalent Vaccine	Annual	SMART	Survey	NBS; FMoH



Percentage girls ages (12-23) months vaccinated with third dose of Pentavalent Vaccine	Percentage girls ages (12-23) months vaccinated with third dose of Pentavalent Vaccine	Annual	SMART	Household survey	NBS; FMoH
Percentage of children ages (12-23) months vaccinated with third dose of Pneumococcal Vaccine (will be disaggregated by gender)	Percentage of children ages (12-23) months vaccinated with third dose of Pneumococcal Vaccine. This indicator will be disaggregated by gender once the dataset becomes available.	Once every two years	DHS; MICs	Survey	NPopC; NBS; FMoH
Percentage of women (15-49) who had live births in the 2 years preceding the survey who were assisted by a skilled birth attendant during delivery	Percent of women (15-49) who had live births in the 2 years preceding the survey who were assisted by a skilled birth attendant during delivery	Annual	SMART	Survey	NBS; FMoH
Percentage of women (15-49) receiving a postnatal checkup within 2 days of delivery among respondents who had a birth in the 2 years preceding the survey	Percentage of women (15-49) receiving a postnatal checkup within 2 days of delivery among respondents who had a birth in the 2 years preceding the survey	Annual	DHS/SMART	Survey	NPopC; NBS; FMoH
Average Health Facility Quality of Care Score	Average score of participating health facilities based on composite quality index	Annual	NHFS	Survey	NBS; FMoH

**Monitoring & Evaluation Plan: Intermediate Results Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Percentage of pregnant women who received three or more doses of IPT during antenatal care	Percentage of pregnant women who received three or more doses of IPT during antenatal care in malaria states	Annual	SMART	Survey	NBS; FMoH
Percentage of Primary Health Facility Health Workers who have Knowledge of IMCI Key danger signs and main symptoms in malaria states	Percentage Primary Health Facility Health Workers who have Knowledge of IMCI Key danger signs and main symptoms in malaria states	Annual	NHFS	Survey	NBS; FMoH
Percentage of children under 5 with fever in the last two weeks who had had blood taken from a finger or heel for testing in malaria control states	Percentage of children under 5 with fever in the last two weeks who had had blood taken from a finger or heel for testing in malaria control states	Annual	NHFS	Survey	NBS; FMoH
Percentage of public health facilities with safe disposal of sharps waste in malaria states	Percentage of public health facilities with safe disposal of medical waste in malaria states	Annual	NHFS	Survey	NBS; FMoH
Percentage increase in performance framework score of federal and state PIUs in malaria states	Percentage increase in performance framework score of NMEP and SMEPs in malaria states	Twice a year	Performance management reports	Survey	NBS; FMoH; Performance management firm
Percentage of facilities receiving DFF with engagement of ward development committee for facility management	Percentage of facilities receiving DFF with engagement of ward	Twice a year	Report to World Bank	Routine	SPHCDA; NPHCDA



	development committee for facility management Citizen Engagement Indicator: This CE indicator ensures that the community through the ward development committee had a voice in the management and oversight of the facilities being financed by the project.				
Percentage of public health facilities with safe disposal of sharps waste in immunization plus states	Percentage of public health facilities with safe disposal of sharps waste in immunization plus states	Annual	NHFS	Survey	NBS; FMoH
Percentage of children ages (12-23) months vaccinated with the 3rd dose of Pentavalent Vaccine in bottom two quintiles	Percentage of children ages (12-23) months vaccinated with the 3rd dose of Pentavalent Vaccine in bottom two quintiles	Once every two years	MICS; DHS	Survey	NBS; NPopC; FMoH
Proportion of annual vaccine procurement expenditure released from government budgetary resources	Proportion of annual vaccine procurement expenditure released from government budgetary resources	Annual	GIFMIS report / UNICEF records	Review	NPHCDA
Percentage increase in performance framework score of federal and state PIUs in immunization plus states	Percentage increase in performance framework score of NPHCDA and SPHCDA in Immunization Plus States	Twice a year	Performance management reports	Surveys	NBS; FMoH; Performance management firm



Primary Health Facility Health Workers' Knowledge of IMCI Key danger signs and main symptoms in immunization plus states	Percentage Primary Health Facility Health Workers who have Knowledge of IMCI Key danger signs and main symptoms in immunization plus states	Annual	NHFS	Annual	NBS; FMoH
People who have received essential health, nutrition, and population (HNP) services		Annual	DHIS-2	Routine	FMoH
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement)		Annual	DHIS-2	Routine	FMoH
Number of children immunized		Annual	DHIS-2	Routine	FMoH
Number of deliveries attended by skilled health personnel		Annual	DHIS-2	Routine	FMoH
Semi-annual nationwide LQAS surveys conducted and disclosed publicly	Semi-annual nationwide LQAS surveys conducted and disclosed publicly	Semi-annual	NPHCDA	Review	NPHCDA
Percentage of facilities where a copy of the checklist was left at the facility for the most recent ISS visit	Percentage of facilities where a copy of the checklist was left at the facility for the most recent ISS visit in malaria and immunization plus states	Annual	NHFS	Survey	NBS; FMoH



ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Nigeria

Nigeria Improved Child Survival Program for Human Capital MPA

1. The detailed implementation and institutional arrangements are outlined in the main body of this Project Appraisal Document. The implementation support plan considers the assessed risks of the project as assessed in the SORT, including the capacity of the implementing agencies responsible for implementing their respective activities and delivering results under the operation. The plan embeds elements of enhanced implementation support with a flexible approach that would enable the team to respond to challenges as they arise. In addition, continuous collaboration and dialogue with the Government, development partners, and beneficiaries will ensure real-time information exchange and allow for course correction as needed.
2. Implementation support will include (a) biannual Joint Review Missions (JRMs); (b) quarterly technical meetings and field visits between the formal JRMs; (c) on-demand external technical expertise; (d) virtual communications platform; and (e) audit and FM reporting.
3. The World Bank will provide timely support to the project as well as guidance to the implementing agencies regarding technical, fiduciary, social and environmental, and communication and coordination issues. Implementation support and field visits will be carried out as required and will focus on the following:
 - (a) **Technical inputs.** The World Bank will make available several health and operational staff/consultants for all formal JRMs as well as on-demand technical requests throughout the life of the project. The first couple of years will include intensive support for large procurement of LLINs, DFF, and TA for the BHCPF. In addition, the World Bank will organize regular video conferences to discuss issues in real time and provide technical advice to address implementation issues related to all components.
 - (b) **Fiduciary requirements and inputs.** The NMEP and NPHCDA, with their state-level arms, will be responsible for the implementation of the Operation. Appraisal assessments have highlighted the need for training and TA for these implementing agencies in project management, FM, and procurement. Supervision of FM and procurement arrangements will be carried out as required as part of the project supervision plan and support will be provided on a timely basis to respond to project needs.
 - (c) **Environmental and Social Safeguards.** The World Bank will organize training, technical guidance, and continuous stakeholder consultations and will monitor compliance with the ESMF and HCWMP during JRMs.
4. The main focus of implementation support is summarized in tables 1.1 and 1.2.



Table 1.1. Task Team Skills Requirements

Time	Focus	Skills Needed	Resource Estimate
First 12 months	Technical support for DFF launch and implementation; technical support for completing NGO contracts for malaria states; technical support for governance, management, and accountability mechanisms; technical support for monitoring system (surveys); procurement training and supervision; FM training and supervision; environmental and social monitoring and reporting; and institutional arrangement and program supervision coordination	Technical (DFF, quality of care, and NGO contracting); audit; M&E; procurement; FM; institutional; and environmental and social	<ul style="list-style-type: none"> • Health specialists/economists: 20 weeks • Operations specialist: 10 weeks • M&E specialist: 6 weeks • Procurement specialist: 6 weeks • FM specialist: 6 weeks • Environmental specialist: 2 weeks • Social specialist: 2 weeks • Co-task team leaders: 24 weeks
12–48 months	Technical support for results areas; procurement management; FM and disbursement; environmental and social monitoring and reporting; Program supervision, and monitoring, and reporting	Technical; M&E; procurement; FM; institutional; and environmental and social	<ul style="list-style-type: none"> • Health specialists/economists: 10 weeks • Operations specialist: 8 weeks • M&E specialist: 4 weeks • Procurement specialist: 6 weeks • FM specialist: 6 weeks • Environmental specialist: 1 week • Social specialist: 1 week • Co-task team leaders: 20 weeks

Table 1.2. Task Team Time Commitment

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Health specialist	15 weeks	Field trips as required	Country based
Health specialist	15 weeks	Field trips as required	Country based
Operations specialist	10 weeks first year, then 8 weeks annually in the following years	Field trips as required	HQ and country office based
M&E specialist	6 weeks	Field trips as required	HQ and country office based
Procurement specialist	6 weeks	Field trips as required	Country office based
Social specialist	2 weeks	Field trips as required	HQ based
Environment specialist	2 weeks annually	Field trips as required	Country office based
FM specialist	6 weeks annually	Field trips as required	Country office based
Co-task team leaders	24 weeks first year, then 20 weeks annually in the following years	Field trips as required	HQ and country office based