

# Data Collection Survey on the Health System in Nigeria

## Final Report

May 2021

Japan International Cooperation Agency

TA Networking Corporation

Samauma Consulting LLC.

Exchange Rates  
USD1= JPY 105.743  
NGN1= JPY 0.27937  
(JICA Rate in March, 2021)

This report was prepared based on the information collected in Nigeria and Japan from November 2020 to April 2021. The recommendations are suggested by the Survey Team and do not represent JICA's official cooperation strategy for the particular sector or country.

## Contents

1	Introducion .....	1
1.1	Background and Objectives of the Survey .....	1
1.2	Survey Methodology.....	1
2	Current Status and Issues of Health Care in Nigeria .....	2
2.1	National Health Status.....	2
2.1.1	Key Health Indicators .....	2
2.1.2	Disease Structure .....	4
2.1.3	Progress of UHC.....	5
2.1.4	Maternal and Child Health.....	6
2.1.5	Infectious Diseases .....	13
2.1.6	Nutrition.....	17
2.1.7	Non-communicable Diseases.....	19
2.2	National Development Plans and Related Policies and Plans in the Health Sector.....	19
2.2.1	National Development Plan .....	19
2.2.2	Position of the Health Sector in National Development Plans .....	19
2.3	Status of Other Donors' Support in Nigeria.....	23
2.3.1	Assistance Achievements.....	23
2.3.2	Development Cooperation Strategy .....	32
2.3.3	Support to Health System by Major Development Partners .....	33
2.3.4	Achievements and Current Status of Japan's Cooperation to Date .....	48
3	Current Status and Challenges of Health Systems in the Target Countries .....	49
3.1	Human Resources for Health .....	49
3.1.1	Standardization of Health Human Resource Development .....	51
3.1.2	Standardization of Numbers of Health Workforce Required for Primary Health Care .....	53
3.1.3	Employment and Management of Human Resources of Health for PHC in Lagos and Ogun State .....	54
3.2	Health Financing .....	55
3.2.1	National Health Account .....	55
3.2.2	Health Budget.....	58
3.2.3	Health Coverage System.....	61
3.3	Health Information System .....	67
3.3.1	Health Information System Overview.....	67
3.3.2	Revision of the Health Information Policy .....	67
3.3.3	Operation Status of the District Health Information System (DHIS) and Integrated Disease Surveillance and Response (IDSR). .....	68
3.3.4	Demographic Statistics.....	68
3.3.5	Examples of eHealth Contributions to Health Administration Efficiency.....	69
3.3.6	Key Challenges in Implementing eHealth Solutions .....	71
3.3.7	Success Factors for Implementing e-Health Solutions .....	72
3.4	Procurement and Supply for Facilities, Equipment, and Medical Supplies.....	72
3.4.1	Health Facility .....	72
3.4.2	Medical equipment.....	76

3.4.3	Medicine.....	78
3.5	Management and Supervisory Functions .....	81
3.5.1	Federal Ministry of Health.....	81
3.5.2	State Ministry of Health .....	82
4	Identification of Cooperation Needs and Recommendations.....	84
4.1	Health sector challenges and cooperation needs .....	84
4.2	Recommendations for future cooperation policy.....	88
4.3	Items to be confirmed in the future .....	92

## Appendix

Appendix 1: SDGs Global Indicators

Appendix 2: Trends in major causes of death at all ages in Nigeria and sub-Saharan average

Appendix 3: Reference List

## Tables and Figures

Table 1: Key Social and Economic Indicators.....	2
Table 2: Key Health Indicators .....	3
Table 3: UHC Monitoring Indicators (2017).....	5
Table 4: Utilization of Basic Health Services in the Perinatal Period.....	8
Table 5: Problems in Accessing Health Care (%: 2018).....	10
Table 6: Utilization of Key Basic Health Services (%: 2018) .....	12
Table 7: Status of Insecticide-applied Net Use, IPTp Use during Pregnancy, and Malaria Infection Rates among Children Under-five by State .....	15
Table 8: Key Indicators of Nutrition (%) .....	18
Table 9: Summary of the Second National Strategic Health Development Plan (NSHDP II) 2018–2022 Framework.....	22
Table 10: Top Aid Donors in the Health Sector (Total Amount, 2009–2018) .....	24
Table 11: Areas of Cooperation of Development Partners in Nigeria, 2009–2018 (Up to about \$5 million is shown, units in million dollars).....	25
Table 12: Major Development Partners and Donors Supporting Health Sector in Nigeria .....	35
Table 13: Japan’s Major Assistance in the Health Sector over the Past Decade.....	48
Table 14: Number of Healthcare Workers per Thousand Population .....	50
Table 15: Accreditation and Licensing Bodies for Different Cadres of Health Workforce .....	52
Table 16: The number of Training Institutions for Health Personnel.....	53
Table 17: Minimum recommended staff number and cadre for each type of health facility .....	53
Table 18: Key Health Financing Indicators .....	56
Table 19: Percentage of Health Facilities with Out-of-Pocket Expenditure at the Health Facility (%) .....	62
Table 20: Female (15–49 years) Health Insurance Coverage (%: 2018).....	62
Table 21: Male (15–49 years) Health Insurance Coverage (%: 2018) .....	62
Table 22: Progress on Implementation of the Social Health Insurance Scheme in Each Region.....	64
Table 23: Outline of the Health Insurance Scheme of FCT .....	64
Table 24: Outline of the Health Insurance Scheme of Lagos State.....	65
Table 25: Outline of the Health Insurance Scheme of Ogun State.....	65
Table 26: Information Required during Birth Registration.....	69
Table 27: Information Required at the time of Death Registration.....	69
Table 28: Example of eHealth Solution .....	70
Table 29: Types and Overview of Health Facilities .....	73
Table 30: Number of Health Facilities over the Past Five Years.....	73
Table 31: Equipment, etc. Required for each Health Facility Type that Provides PHC	77

Table 32: Procurement and Logistics Management System for Medicines and Other Supplies in Each Region.....	79
Table 33: Challenges and Needs of the Health Sector in Nigeria .....	84
Table 34: Procurement and Logistics Management Systems for Pharmaceuticals and Commodities in each region (reprinted) .....	88
Figure 1: Health and Social Issues, UHC, and the Challenges of Health Systems Strengthening .....	1
Figure 2: Major causes of Death at All Ages in Sub-Saharan Africa Average and Nigeria (% of all deaths) .....	5
Figure 3: Trends in Maternal Mortality Rates.....	6
Figure 4: Nigeria's Maternal Mortality Ratio by Region .....	7
Figure 5: Major Causes of Maternal Mortality.....	7
Figure 6: Health Facility Births by State.....	9
Figure 7: Trends in Neonatal Mortality Rate (per 1,000 live births) and Under-Five Mortality Rate.....	10
Figure 8: Under-Five Mortality Rate by Geopolitical Zone (per 1,000 live births) .....	11
Figure 9: Causes of Death among Newborns and Children aged 1 month to Under 5 years, 2015 .....	11
Figure 10: Trends in HIV Infection Rate (15–49 years old) (%).....	13
Figure 11: Trends in Number of Malaria Cases per Thousand Population .....	16
Figure 12: Trends in Incidence of TB cases (per 100,000 people), TB Detection Rate, and TB Treatment Success Rate.....	17
Figure 13: Prevalence of Stunting among Children Under-five by State.....	17
Figure 14: Major Causes of Death for All Ages in Nigeria, 2019 (% of all deaths; reprinted) .....	19
Figure 15: Overview of the NSHDP II Framework.....	21
Figure 16: Required Budget by State for the Field of Reproductive, Maternal, Newborn, Child and Adolescent Health: RMNCAH.....	23
Figure 17: UK Assistance to Nigerian Health (USD million) .....	26
Figure 18: U.S. Assistance to Nigerian Health Sector (USD million).....	27
Figure 19: Germany's Assistance to Nigerian Health Sector (USD million) .....	28
Figure 20: Japan's Assistance to Nigerian Health Sector (USD million) .....	29
Figure 21: Global Fund's Support to Nigerian Health Sector (USD million) .....	30
Figure 22: World Bank Assistance to Nigerian Health Sector (USD million).....	31
Figure 23: GAVI's Assistance to Nigerian Health Sector (USD million).....	31
Figure 24: BMGF's Support to Nigerian Health Sector (USD million) .....	32
Figure 25: Target Areas for Japan's Health Sector Assistance over the Past Decade	49
Figure 26: Number of Healthcare Workers per Thousand Population .....	50
Figure 27: Distribution of Human Resources for Health by Region.....	51

Figure 28: Per Capita Health Expenditure in Nigeria (U.S. dollar rate: \$).....	57
Figure 29: Breakdown of Sources of Current Health Expenditure in Nigeria.....	57
Figure 30: Flow of Health Budget .....	59
Figure 31: Breakdown of the Federal Ministry of Health Budget.....	60
Figure 32: 2020 Budgets for Major Departments of the Federal Ministry of Health (in NGN million).....	60
Figure 33: 2021 Budget of State Ministry of Health (Unit: Billion NGN).....	61
Figure 34: Percentage of Public and Private Health Facilities at each Level of Care..	74
Figure 35: Distribution of Public and Private Health Facilities by Geopolitical zone (Distribution per 100,000 Population).....	74
Figure 36: The number of Health Facility by Health Care Level (2018).....	75
Figure 37: Population per Health Facility (2019) .....	76
Figure 38: Percentage of health facilities with basic medical equipment (%: 2016) ....	78
Figure 39: Percentage of Health Facilities that Have All Essential Medicines Available (%: 2016).....	81
Figure 40: Organizational Chart of the Federal Ministry of Health, Nigeria.....	82
Figure 41: Lagos State Ministry of Health Organizational Chart .....	83
Figure 42: Ogun State Ministry of Health Organizational Chart .....	84
Figure 43: Systems for Hiring and Deploying Health Personnel and Managing the Procurement and Distribution of Medicines and Other Products .....	91
Figure 44: Target States for Cooperation by Development Partners in the Procurement and Management of Pharmaceuticals and Other Products .....	92

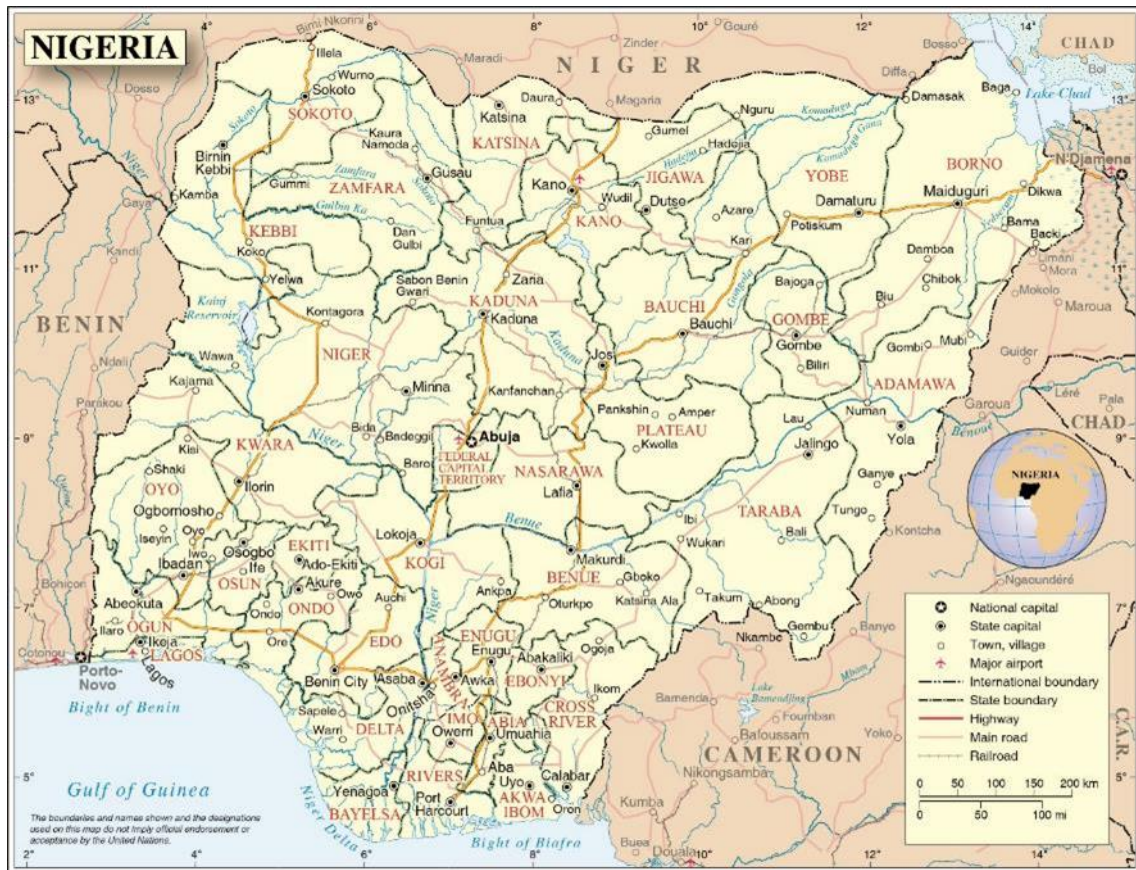
## Abbreviations

ACMS	Abja Central Medical Store
ADF	African Development Fund
BHCPF	Basic Health Care Provision Fund
BMGF	Bill & Melinda Gates Foundation
BMPHS	Basic Minimum Package of Health Service
CHEWs	Community Health Extension Workers
CHIPS	Community Health Influencer Promoter Service Agent
CHO	Community Health Officer
CORPs	Community Resource Persons
CMS	Central Medical Store
DHIS2	District Health Information Software
DHS	Demographic and Health Survey
DOTS	Directly Observed Treatment, Short-course
DMMA	Drug and Medical Consumables management agency
DRF	Drug Revolving Fund
EDL	Essential Drug List
EPHS	Essential Package of Health Services
EU	European Union
FCDO	Foreign, Commonwealth & Development Office
FCT	Federal Capital Territory
FP	Family Planning
GAVI	GAVI the Vaccine Alliance
GBD	Global Burden of Diseases
GDP	Gross Domestic Product
GNI	Gross National Income
HEFAMAA	Health Facility Monitoring and Accreditation Agency
NDHS	Nigeria Demographic and Health Survey
HFR	Health Facility Registry
HRH	Human Resources for Health
HIUOR	Health Insurance Under One Roof
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technology
IDSR	Integrated Disease Surveillance and Response
IHVN	Institute of Human Virology Nigeria
IPTp	Intermittent Preventive Treatment in Pregnancy
JCHEWs	Junior Community Health Extension Worker
LASAMBUS	Lagos State Ambulance Service



LASHEF	Lagos State Health Fund
LASHMA	Lagos State Health Management Agency
LGA	Local Government Area
LLIN	Long-lasting Insecticidal Nets
LMCU	Logistics Management Coordination Unit
LMIS	Logistics Management Information System
LSHS	Lagos State Health System
LSPHCB	Lagos State Primary Health Care Board
MICS	Multiple Indicator Cluster Survey
MSP	Minimum Service Package
NAFDAC	National Agency for Food and Drug Administration and Control
NASCP	The National AIDS and STDs Control Programme
NCDs	Non-communicable Diseases
NCDC	Nigeria Center for Disease Control
NCH	National Council on Health
NDF	National Drug Formulary
NEMTC	National Emergency Medical Treatment Committee
NGN	NIGERIA NAIRA
NHIS	National Health Insurance Scheme
NHRHP	National Human Resources for Health Policy
NIPRD	Nigeria Institute for Pharmaceutical Research and Development
NMEP	National Malaria Elimination Programme
NNRA	Nigerian Nuclear Regulatory Authority
NPHCDA	National Primary Health Care Development Agency
NPSCMP	National Product Supply Chain Management Program
NSCIP	The National Products Supply Chain Management Program
NSHDP	National Strategic Health Development Plan
NTBLCP	National Tuberculosis and Leprosy Control Program
NTDs	Neglected Tropical Diseases
OECD	Organisation for Economic Co-operation and Development
OGSPHCDB	Ogun State Primary Health Care Development Board
PHC	Primary Health Care
PHCUOR	Primary Health Care Under One Roof
PPP	Public-Private Partnership
RDT	Rapid Diagnostic Test of Malaria
RMNCAH	Reproductive, Maternal, Newborn, Child and Adolescent Health
SASCP	State AIDS and STD Control Programme
SDGs	Sustainable Development Goals

SDRF	State Drug Revolving Fund
SMEP	State Malaria Elimination Program
SON	The Standards Organization of Nigeria
SSHIS	State Social Health Insurance Scheme
STBLCP	State TB and Leprosy Control Programme
UHC	Universal Health Coverage
WMHCP	Ward Minimum Health Care Package
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WB	World Bank
WDC	Ward Development Committee
WHO	World Health Organization



Source : United Nations HP. Available from <https://www.un.org/geospatial/content/nigeria> (Accessed 2020.12.04)

## Summary

1. Between 2000 and 2014, Nigeria's gross domestic product (GDP) grew at an average annual rate of 7%, and in 2014, Nigeria surpassed South Africa to become the largest economy in Africa. However, economic disparities within the country are significant, with more than half of the population living at the absolute poverty level (below \$1.90 per day).
2. Health indicators such as maternal mortality rate of 917 (per 100,000 live births: 2017) and neonatal mortality rate of 36 (per 1,000 live births: 2018) are outstandingly severe compared to the average of sub-Saharan Africa and lower-middle-income countries. Deaths from infectious diseases remain high at 51% of all deaths (2019). In particular, enteric infections, most notably diarrhea, and neglected tropical diseases (NTDs), including malaria, account for a large proportion.
3. Nigeria's UHC service coverage indicator is 42 (2017), with low ratings for service utilization especially for maternal and child health, and service capacity and access. The incidence of catastrophic health expenditure is also very high, with 15.1% (2012) of the population having a health-related expenditure of 10% or more of household expenditure/income. The largest number of women (45.7%) cited "having the money to pay for medical treatment" as a barrier for using maternal and child health services.
4. The limited access to maternal and child health services, with 56.8% of women receiving four or more prenatal checkups, 39.4% of women giving birth in health facilities, and 21.0% of children aged 1–2 years receiving all basic vaccinations. Many indicators are poor, especially in the north, indicating large regional disparities. Nigeria's HIV infection rate among 15–49 years old is 3.7% (2019), which is low compared to the average for sub-Saharan Africa, but has not declined significantly over the past two decades. In addition, the number of malaria infections (per thousand population) is 291 (2018), which is very high compared to the sub-Saharan African average of 219.
5. The Second National Strategic Health Development Plan (NSHDP II) was formulated in 2018, which sets out the following strategic objectives: improving governance; increasing the utilization of basic health service packages; strengthening the health system; preparing for emergencies; and predictable financing and risk protection.
6. Under the federal system, the Federal Ministry of Health is responsible for policy, planning, and regulation, management, and operation of tertiary care facilities (such as federal/national hospitals). The State Ministries of Health is responsible for the management and operation of secondary (state hospitals) and tertiary health facilities. The Local Government Area (LGA) is responsible for the management and operation of primary health facilities. Most of the health-related budget is spent by the federal government, i.e., tertiary care.
7. Nigeria's health sector has a large number of development partners and aid achievements (in terms of amount) to support health policy and administrative management, basic health services, communicable disease control, and malaria control. Japan has mainly provided support for strengthening community health services, improving nutrition, and strengthening capacity to respond to communicable diseases, including strengthening laboratories such as

the Center for Disease Control.

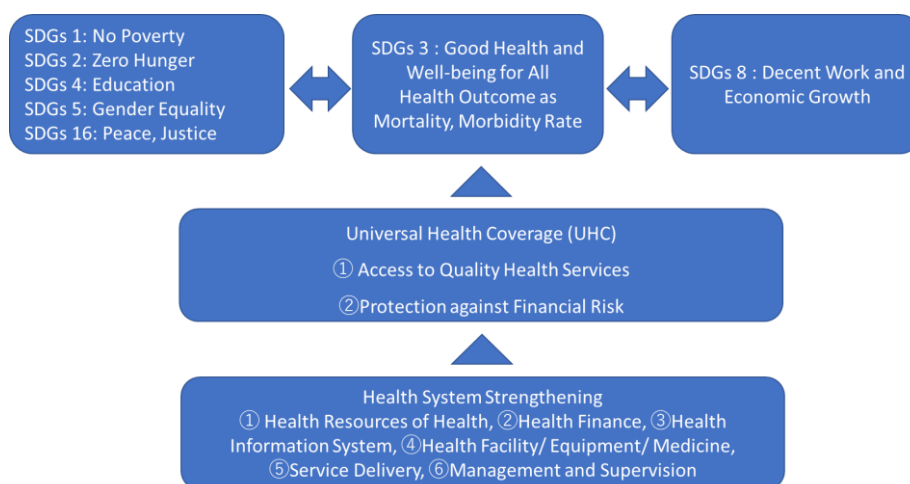
8. Challenges in the health sector include poor physical access, lack of medicines, and high incidence of out-of-pocket expenditure at a health facility, which inhibit the use of health services. To address these issues, there is a great need to strengthen the procurement and logistics management of medicines and other supplies in the State Ministry of Health, and to improve management of budget disbursement through the National Primary Health Care Development Agency (NPHCDA).

# 1 Introduction

## 1.1 Background and Objectives of the Survey

In recent years, the African region has seen an increase in the number of non-communicable diseases, in addition to infectious diseases, maternal and child health, and nutrition problems, and these health sector challenges have a significant impact on society and the economy. To alleviate the impacts, most countries and the global community have been promoting the Universal Health Coverage (UHC), in which the goal is for “all people should have access to appropriate health promotion, prevention, treatment and functional recovery at a cost they can afford”. UHC can be realized by working on the following two points: “access to quality essential health services” and “protection from financial risk”. In other words, the strengthening of the health system is required to achieve UHC.

To contribute to the promotion of UHC in Mozambique, Angola, and Nigeria, in the African region, this study aimed to confirm the current status of health systems, cooperation needs, and trends in cooperation among development partners in these three countries, and to examine future cooperation policies. This report summarizes the results of the survey on Nigeria.



**Figure 1: Health and Social Issues, UHC, and the Challenges of Health Systems Strengthening**

Source: Prepared by the survey team based on UHC2030. (2017). Healthy systems for universal health coverage - a joint vision for healthy lives. Geneva: World Health Organization and the World Bank.

## 1.2 Survey Methodology

This study was conducted by a joint venture consisting of TA Networking Corporation and Samauma Consulting, LLC, and the study was initiated in November 2020 upon review of existing documents, as well as collection and analysis of basic information on Nigeria. In December of the same year, this basic information was compiled into an interim report and discussed with JICA’s Human Development Department to identify specific issues and target areas in Nigeria. To identify particular needs for cooperation and to make recommendations for policies, a discussion with the Human Development Department of JICA was held in March 2021, after which, a final report was written as a compilation of all these findings.

## 2 Current Status and Issues of Health Care in Nigeria

### 2.1 National Health Status

#### 2.1.1 Key Health Indicators

Nigeria, located in the western part of the African continent, has a land area of 923,768 km<sup>2</sup> and has the largest population (209.96 million) in Africa. Nigeria is a federal country, consisting of 36 states and the Federal Capital Territory (FCT) of Abuja. There are 774 LGAs and 9,565 districts (wards) under the states, which are given greater autonomy.

Nigeria is said to have about 400 ethnic groups and 450 languages and is divided into six geopolitical zones (North Central, North East, North West, South East, South South, and South West) according to the regions where they share culture and history.

Between 2000 and 2014, Nigeria's GDP grew at an average annual rate of 7%, and in 2014, Nigeria surpassed South Africa to become the largest economy in Africa. Since 2015, however, GDP growth has fallen to 2.7% (2015) due to the impact of the oil price crash, and economic growth has remained slow since then, with the same growth rate hovering at 2.0%. Gross national income (GNI) per capita was at \$2,030 (2019), and in 2016, the World Bank changed the country's income classification from a "low-income country" to a "lower-middle-income country".

While it is the largest economy in Africa, the economic disparity within the country is significant, and it is estimated that over 100 million people, or more than half of the population, are living at the absolute poverty level (less than \$1.90 per day) as of 2009. Also, life expectancy at birth is 54.3 years (2018), which is lower than the averages for sub-Saharan Africa (61.3 years) and lower-middle-income countries (68.4 years) (Table 1). The challenges in the areas of maternal and child health and infectious diseases are very large in the impact and outcome level indicators of the health sector indicators, described in Table 2.

**Table 1: Key Social and Economic Indicators**

Major Social and Economic Indicators	Nigeria	Sub-Saharan Africa average	Lower-middle-income countries average	Japan
Area (1,000 km <sup>2</sup> )	910.7 (2018)	NA	NA	364.6 (2018)
Total population (millions)	200.9 (2019)	NA	NA	126.2 (2019)
Gross domestic income (GNI: US dollar 1billion)	433.4 (2019)	NA	NA	5,364 (2019)
GNI per capita (US dollar)	2,030 (2019)	1,550 (2019)	2,189 (2019)	41,690 (2019)
Poverty headcount ratio (% of population under \$1.90/day)	53.5 (2009)	42.3 (2015)	14.2 (2015)	0.7 (2013)
Primary education completion rate (%)	73.8 (2010)	68.8 (2018)	90.8 (2018)	NA
Life expectancy at birth (years)	54.3 (2018)	61.3 (2018)	68.4 (2018)	84.2 (2018)
UHC Service Coverage	42 (2017)	44 (2017)	55 (2017)	83 (2017)

Source: World Bank Open Data

The WHO organizes key health indicators into inputs, outputs, outcomes, and impacts levels according to a concept of “results chain,”<sup>1</sup> and Table 2 shows key health indicators for Nigeria, sub-Saharan Africa, and lower-middle-income countries based on this methodology. Nigeria’s maternal mortality rate (per 100,000 live births) and neonatal mortality rate (per 1,000 live births) are estimated to be 917 (2017) and 36 (2018), respectively, and compared to the average for sub-Saharan Africa and lower-middle-income countries, Nigeria’s health indicators at the impact, outcome, and output levels need improvement. In addition to maternal and neonatal mortality rates, maternal and child health indicators such as the percentage of women whose demand for family planning of modern methods, the percentage of births attended by skilled health staff, immunization of DPT, and the prevalence of stunting, are significantly worse than the average for sub-Saharan Africa and lower-middle-income countries.

The output and input level indicators are considered to improve the quality of health services is In Nigeria, the input level indicators, especially the number of doctors (per thousand population) and nurses and midwives (per thousand population are 0.38 (2018) and 1.18 (2018), respectively, which are slightly better than the average for sub-Saharan Africa but worse than the average for lower-middle-income countries.

**Table 2: Key Health Indicators**

Key Health Indicators	Nigeria	Sub-Saharan Africa Average	Lower- and middle-income countries Average
<b>Impact</b>			
Maternal mortality ratio (per 100,000 live births) <sup>*1</sup>	917 (2017)	534 (2017)	265 (2017)
Neonatal mortality rate (per 1,000 live births)	36 (2018)	27.7 (2018)	23.7 (2018)
Incidence of catastrophic expenditure at 25% of household total consumption or income (%)	4.1 (2012)	1.9 (2015)	3.3 (2015)
<b>Outcome</b>			
Demand for family planning satisfied by modern methods (% of married women with demand for family planning) <sup>*2</sup>	33.9 (2018)	52.8 (2017)	67.1 (2017)
Births attended by skilled health staff (%)	43.4 (2018)	59.9 (2016)	73.1 (2016)
Immunization, DPT (% of children ages 12-23 months)	57.0 (2019)	73.5 (2016)	83.9 (2019)
Prevalence of stunting, height for age (% of children under 5)	36.8 (2018)	33.0 (2019)	30.1 (2019)
<b>Output</b>			
Antiretroviral therapy coverage (% of people living with HIV)	65 (2019)	70 (2019) <sup>*3</sup>	-
Tuberculosis treatment success rate (% of new cases)	86.0 (2017)	82.0 (2017) <sup>*3</sup>	64.0 (2017)
<b>Input</b>			
Number of physicians (per 1,000 population)	0.38 (2018)	0.23 (2017)	0.80 (2017)
Number of nurses and midwives (per 1,000 population)	1.18 (2018)	0.98 (2018)	1.79 (2018)
Number of hospital beds (per 1,000 population)	0.5 (2004)	-	1.0 (2011)

\*1: Due to differences in estimation methods, the values in this table differ from those in “Figure 3: Nigeria’s maternal mortality ratio by region”.

<sup>1</sup> WHO (2018) Global Reference List of 100 Core Health Indicators



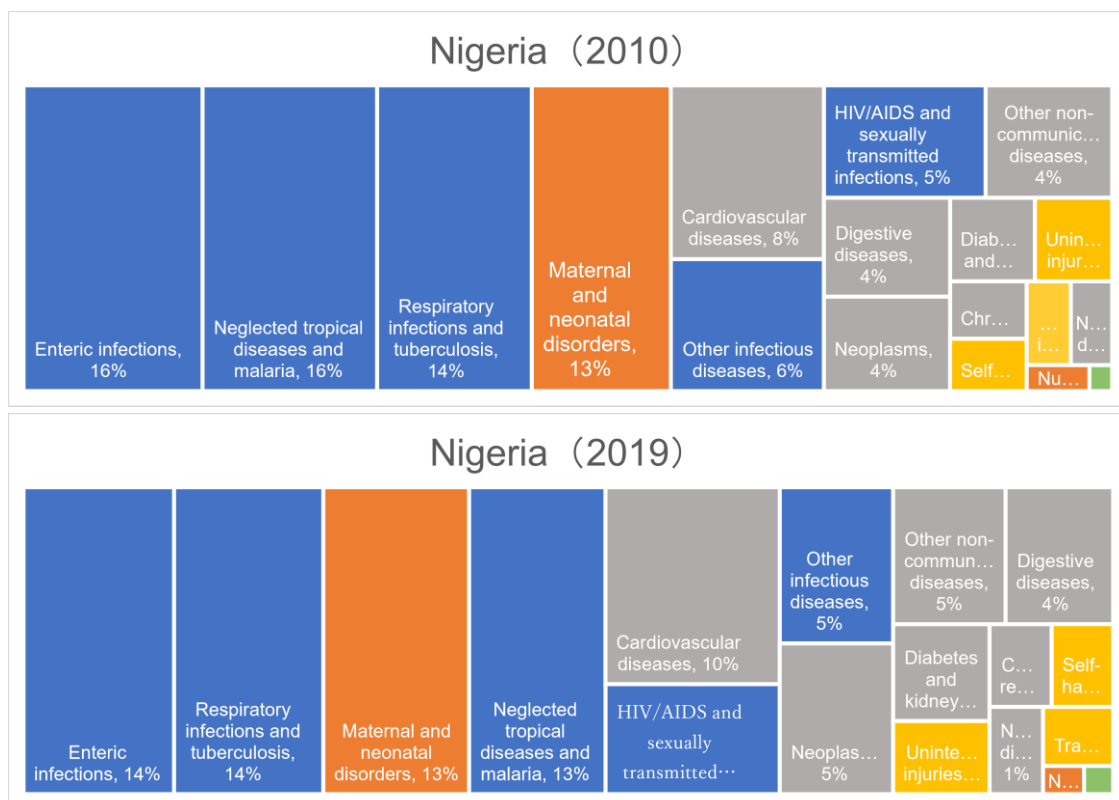
\*2: Percentage of women whose needs for access to modern family planning methods are met

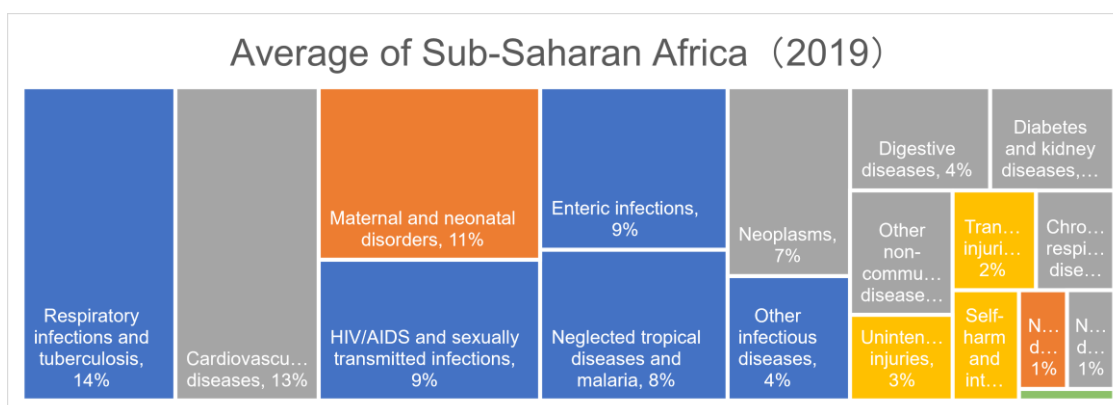
\*3: Average for the African region

Source: World Bank Open Data and WHO Global Health Observatory Data.

### 2.1.2 Disease Structure

The Global Burden of Diseases (GBD) survey results are used to examine the transition of the burden of disease in Nigeria. With sustained development in the African region, the disease structure has gradually shifted from one in which infectious diseases account for the largest share to one in which non-infectious diseases account for a larger share. In Nigeria, a comparison of the causes of death between 2010 and 2019 shows that deaths from infectious diseases decreased from 58% to 51%, while deaths from non-infectious diseases increased from 25% to 30%. On the other hand, a comparison with the sub-Saharan African average shows that deaths from infectious diseases are higher in Nigeria, with a sub-Saharan African average of 45% and 51% in Nigeria. Among infectious diseases, enteric infections and NTDs account for 14% (2019) and 13% (2019) respectively, which is higher than the sub-Saharan Africa average of 9% and 8% respectively. In particular, among children under 5 years of age, 21% of deaths are due to enteric infections, higher than the same sub-Saharan African average of 15%.





**Figure 2: Major causes of Death at All Ages in Sub-Saharan Africa Average and Nigeria (% of all deaths)**

Source: Prepared by the survey team based on Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Seattle, WA: IHME, University of Washington. Available from <http://vizhub.healthdata.org/gbd-compare>. (Accessed 2020.11.20)

### 2.1.3 Progress of UHC

To monitor the progress in achieving UHC, the UHC Monitoring Indicators have been developed. The UHC monitoring indicators consist of two major items: 1) Essential Health Service Coverage Index, and 2) Incidence of Catastrophic Health Expenditure. The UHC Service Coverage Index consists of 14 sub-indicators in four areas: (1) reproductive, maternal, newborn and child health (hereafter referred to as “maternal and child health”), (2) communicable/infectious diseases, (3) non-communicable diseases, and (4) service capacity and access. Nigeria’s UHC service coverage indicator is 42 as of 2017, which is lower than the African regional average of 46, and has remained at 42 from 2015 to 2017, showing no progress. In particular, service utilization for 1)-(1) Maternal and child health and 1)-(4) Service capacity and access<sup>2</sup> are rated low. As for 2) Incidence of Catastrophic Health Expenditure, the percentage of the population with a health-related expenditure of 10% or more of household expenditure/income is 15.1% (2012), which is double the average of 7.3% (2015) in the African region.

**Table 3: UHC Monitoring Indicators (2017)**

	Nigeria	Average for the African region <sup>1</sup>	Lower-middle-income countries
UHC Service Coverage Index	42	46	57
Maternal and child health* <sup>2</sup>	40	54	69
Infectious diseases	37	42	51
Non-communicable diseases	78	71	62
Service Capacity and Access	27	30	54
Percentage of population with high health-related expenditure as a percentage of household			

<sup>2</sup> “Service capacity and access” consists of access to hospitals (number of hospital beds per capita), human resources for health (number of health professionals per population), and health crisis response (core capacity index based on international health regulations).

expenditure or income.			
Incidence of catastrophic expenditure at 10% of household total consumption or income (%)	15.1 (2012)	7.3 (2015)	14.2 (2015)
Incidence of catastrophic expenditure at 25% of household total consumption or income (%)	4.1 (2012)	1.8 (2015)	3.3 (2015)

\*1: The average for “Sub-Saharan Africa” is used elsewhere, but since information on the same value could not be collected, the average for the “WHO African Region” is used in this table.

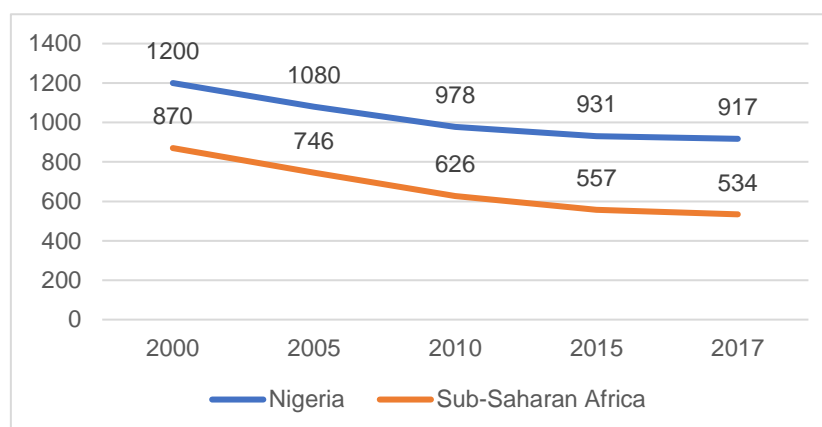
\*2: “Reproductive, maternal, newborn and child health” to be precise.

Source: Tracking Universal Health Coverage: 2019 Global Monitoring report, WHO, The World Bank

## 2.1.4 Maternal and Child Health

### (1) Changes in maternal mortality over time

Nigeria’s maternal mortality rate was 917 (per 100,000 live births) in 2017, which is very high compared to the sub-Saharan Africa regional average of 534. It has also remained high for the past 10 years since 2000.

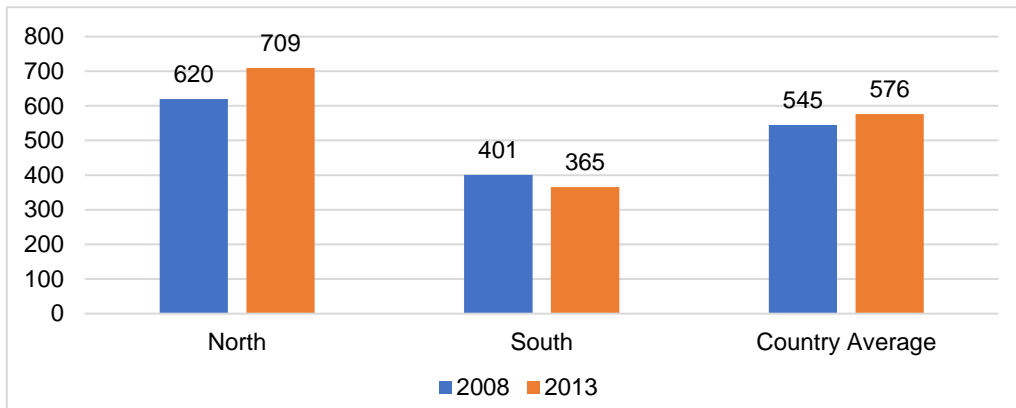


Due to the difference in estimation methods, the values in this figure and those in “Figure 3: Maternal Mortality Ratio by Region in Nigeria” are different.

**Figure 3: Trends in Maternal Mortality Rates**

Source: World Bank Open Data

There is also a marked difference in the maternal mortality ratio between the northern and southern regions. As shown in Figure 4, the maternal mortality rate in the South is estimated to be 365 (per 100,000 live births) as of 2013, which is an improvement from 401 (per 100,000 live births) as of 2008. However, the mortality rate in the North is estimated to be 709 (per 100,000 live births) as of 2013, which is almost double that of the South, and worse than the 620 in 2008.



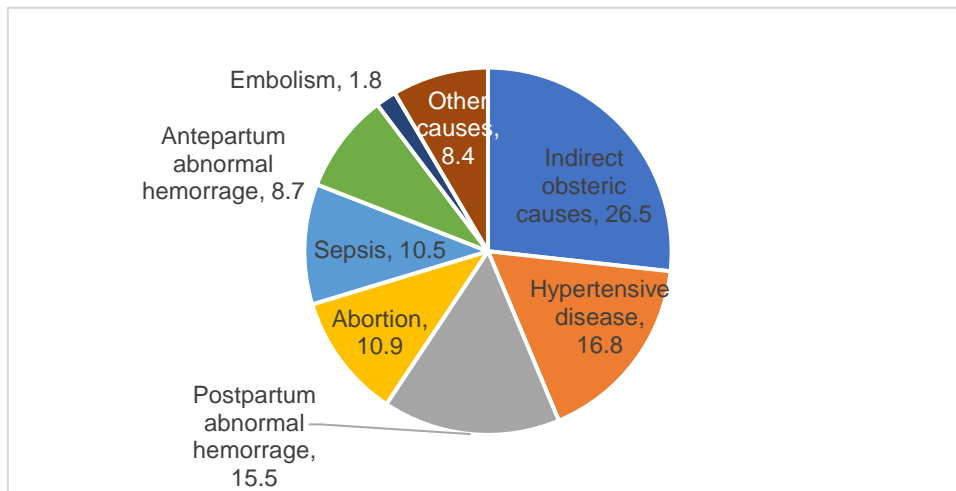
Due to differences in estimation methods, the values in this figure differ from those in “Table 2: Major Health Indicators” and “Figure 2: Trends in Maternal Mortality Ratio”.

**Figure 4: Nigeria’s Maternal Mortality Ratio by Region**

Source: Meh, C., et al. Levels and determinants of maternal mortality in northern and southern Nigeria. BMC Pregnancy Childbirth 19, 417 (2019). <https://doi.org/10.1186/s12884-019-2471-8>

(2) Causes of maternal mortality

Figure 5 shows the causes of maternal deaths, and table 4 shows the utilization of basic health services in the perinatal period among pregnant women in Nigeria. Most of the deaths can be avoided by emergency obstetric care and antenatal care, delivery by a skilled provider, and postnatal check. In Nigeria, direct obstetric deaths such as gestational hypertension, hemorrhage before and after delivery, and sepsis account for a large proportion of deaths, while indirect obstetric deaths, in which a pre-existing condition worsened with pregnancy, account for 26.5%.



**Figure 5: Major Causes of Maternal Mortality**

Source: Global Causes of Maternal Death: A WHO Systematic Analysis, 2014

The rates of antenatal care from a skilled provider and four or more antenatal care have increased since 2008. However, there is a large regional disparity, with only 14.7% of women in Kebbi receiving antenatal care services from a skilled professional, compared to 97.4% in Imo. There is also a clear socio-economic disparity, with 97% of women with up to secondary

education receiving antenatal care, compared to only 45% of women with no formal education.<sup>3</sup> Income disparity is similar, with 93.1% in the highest income quintile compared to 40.5% in the lowest income quintile.

**Table 4: Utilization of Basic Health Services in the Perinatal Period**

Region	State	Percentage of receiving antenatal care from a skilled provider	Percentage of women who received four or more antenatal care	Percentage of women with access to modern family planning <sup>1</sup>	Percentage delivered in a health facility	Percentage delivered by a skilled provider
North Central	FCT-Abuja	87.7	-	20.0	63.2	71.6
	Benue	74.1	-	15.5	67.1	67.6
	Kogi	79.5	-	11.8	72.4	73.4
	Kwara	72.8	-	17.1	55.1	62.1
	Nasarawa	77.1	-	14.3	49.8	57.3
	Niger	41.5	-	6.4	25.8	24.7
	Plateau	72.4	-	21.4	43.9	42.9
North East	Adamawa	82.1	-	18.2	38.9	40.5
	Bauti	51.6	-	5.2	21.8	21.6
	Bomo	50.7	-	5.4	26.2	25.9
	Gombe	46.4	-	16.2	27.7	18.8
	Taraba	57.4	-	8.6	30.0	30.4
	Yobe	66.3	-	1.7	16.2	17.8
North West	Jigawa	78.6	-	3.9	20.1	20.9
	Kaduna	69.0	-	13.7	17.6	26.5
	Kano	65.3	-	5.6	19.2	21.5
	Katsina	53.1	-	3.3	16.5	18.9
	Kebbi	14.7	-	3.2	7.4	3.4
	Sokoto	24.3	-	2.1	7.8	9.2
	Zamfara	35.2	-	6.7	10.8	12.5
South East	Abia	95.2	-	10.8	92.0	95.8
	Anambra	93.3	-	17.2	90.4	94.7
	Ebonyi	70.3	-	5.9	56.5	52.1
	Enugu	94.7	-	17.6	79.5	93.0
	Imo	97.4	-	10.9	94.5	98.2
South South	Akwa Ibom	74.5	-	15.7	34.7	41.4
	Bayelsa	51.4	-	3.3	22.9	27.0
	Cross River	79.5	-	18.9	52.6	55.7
	Delta	73.2	-	12.9	54.9	67.1
	Edo	89.2	-	15.0	80.1	88.2
	Rivers	81.0	-	19.6	48.2	78.3
South West	Ekiti	90.6	-	25.4	71.8	87.1
	Lagos	86.4	-	29.0	75.7	83.6
	Ogun	85.0	-	16.6	73.4	79.9
	Ondo	92.0	-	17.7	80.7	86.1
	Osun	96.9	-	27.0	91.6	96.0
	Oyo	85.4	-	22.2	70.1	84.6
Zone	North Central	66.2	-	13.8	49.2	51.0
	North East	58.5	-	7.8	25.4	24.8
	North West	53.9	-	6.2	15.6	18.2
	South East	89.2	-	12.9	81.8	85.2
	South South	77.1	-	15.8	50.2	64.8
	South West	88.2	-	24.3	76.3	85.4

<sup>3</sup> National Population Commission (2019). Nigeria Demographic & Health Survey 2018.

National average	67.0	56.8	12.0	39.4	43.3
Rural	56.1	45.7	7.8	25.8	28.0
Urban	83.6	73.7	18.2	61.1	67.6
Wealth Quintile Lowest <sup>*2</sup>	40.5	-	3.7	11.6	11.7
Wealth Quintile Wealthiest <sup>*3</sup>	93.1	-	22.2	79.5	86.9

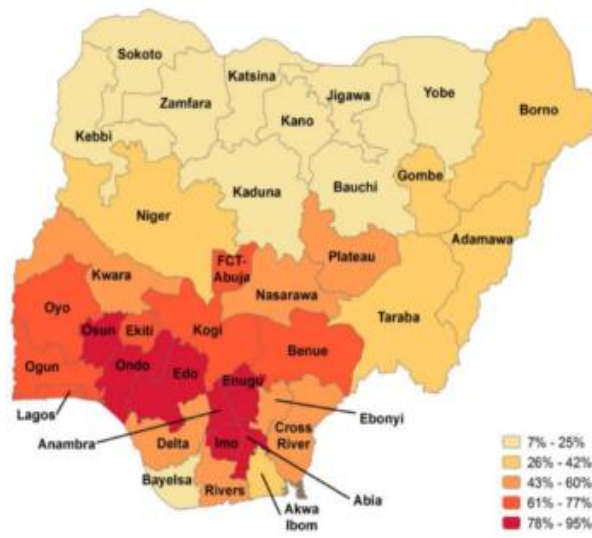
\*1: Percentage of women aged 15-49 years who use some form of modern family planning method

\*2: Lowermost quintile obtained (0–20%)

\*3: Uppermost quintile of the resulting quintile (80–100%)

Source: National Population Commission (2019). Nigeria Demographic & Health Survey 2018.

The institutional delivery rate tends to be lower in the north than in the south, especially in the northwest (16%) and the southeast (87%). Compared to the highest rate of 95% in Imo State, the rate in Kebbi State in the northwest is remarkably low at 7%, indicating a very large regional disparity.



**Figure 6: Health Facility Birth Rate by State**

Source: National Population Commission (2019). Nigeria Demographic & Health Survey 2018.

### (3) Barriers to the use of maternal and child health services

When women were asked about barriers to using maternal and child health services in a multiple-choice format (Table 5), the most frequently cited factor was “having the money for medical treatment”. On average, 45.7% of women in the country reported this barrier, but the percentage was higher in rural areas and among the poorest, at 53.1% and 61.5%, respectively. The next most frequently cited factor was “distance to health facilities”, with a national average of 25.8.<sup>2</sup> It is likely that service users perceive economic barriers to the use of maternal and child health services to be more significant than physical proximity.

**Table 5: Problems in Accessing Health Care (%: 2018)**

Inhibiting factor	National average	Urban	Local	Wealthiest* <sup>1</sup>	Poorest* <sup>2</sup>
Get permission from your family	11.8	8.3	14.0	7.6	16.8
Prepare for medical expenses	45.7	37.2	53.1	28.1	61.5
Distance to health facilities	25.8	16.8	33.2	12.7	45.8
I don't want to go alone	17.0	10.9	20.5	9.8	26.5
One or more of the above	51.8	42.1	59.5	33.1	69.8

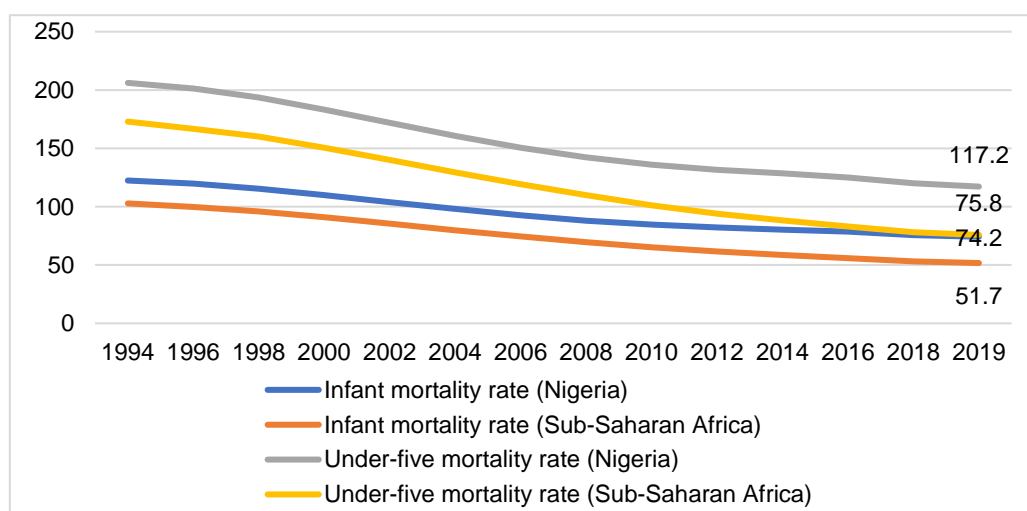
\*1: Uppermost quintile obtained (80-100%)

\*2: Lowermost quintile obtained (0-20%)

Source: National Population Commission (2019). Nigeria Demographic & Health Survey 2018.

(4) Neonatal, infant, and under-five mortality over time, regional and state comparisons

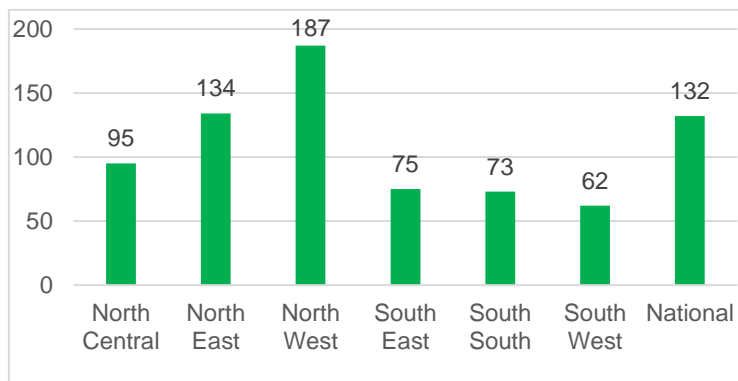
The infant and under-five mortality rates (per 1,000 live births) are 74 and 117 (2019), respectively, and have remained high with no significant progress in the last five years. According to UNICEF in September 2020, Nigeria is now the country with the highest number of under-five deaths in the world, surpassing India, which previously had the highest number.<sup>4</sup> In each of the six geopolitical zones, the number of deaths is higher in the north than in the south. The north-central region is lower, but this is thought to be due to the fact that this is the region where the capital, Abuja, is located.



**Figure 7: Trends in Neonatal Mortality Rate (per 1,000 live births) and Under-Five Mortality Rate**

Source: World Bank Open Data

<sup>4</sup> Premium Times, September 11, 2020. <https://www.premiumtimesng.com/news/top-news/413883-nigeria-becomes-worlds-highest-contributor-to-under-5-deaths-unicef.html> (Viewed 2020.11.26)

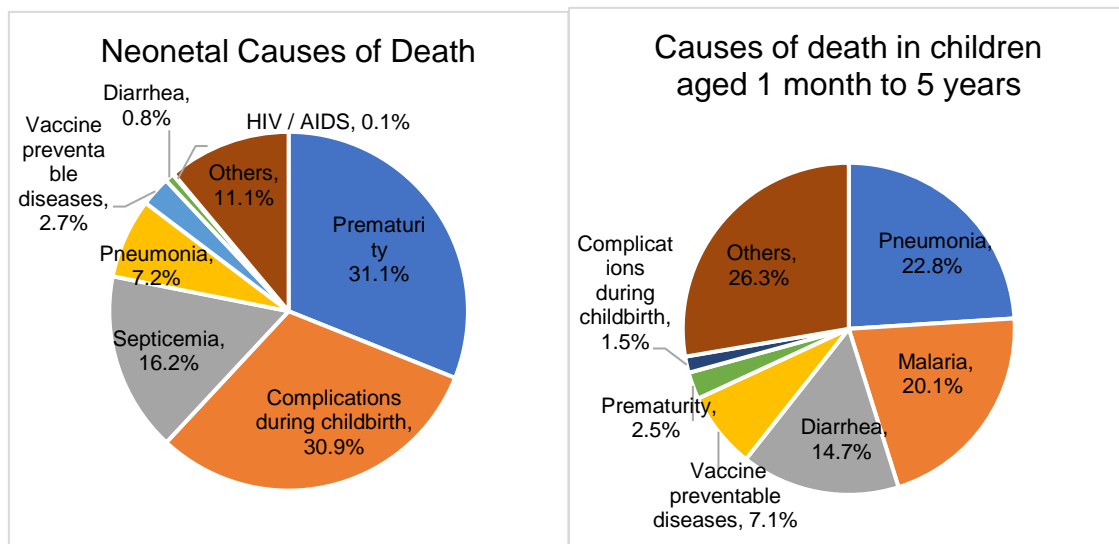


**Figure 8: Under-Five Mortality Rate by Geopolitical Zone (per 1,000 live births)**

Source: National Population Commission (2019). Nigeria Demographic & Health Survey 2018.

(5) Causes of deaths of newborns and children aged 1 month to under 5 years

The causes of death among newborns and children aged 1 month to under 5 years are shown in Figure 9. Preventable diseases such as pneumonia, malaria, diarrhea, and vaccine-preventable diseases account for more than 60% of deaths of children aged 1 month to under 5 years. The utilization of basic health services is not progressing. In particular, the rate of children aged 1 to 2 years who received all the basic vaccinations was 11.3% in the North West region; the rate of utilization of health services for suspected acute respiratory infection among children under 5 years was 57.0% in the South East region; the rate of utilization of health services for fever among children under 5 years was 58.7% and the rate of utilization of health services for diarrhea among children under 5 years was 53.1% in the North Central region.



**Figure 9: Causes of Death among Newborns and Children aged 1 month to Under 5 years, 2015**

Source: WHO-MCEE Estimates for Child Causes of Death, 2015



**Table 6: Utilization of Key Basic Health Services (%: 2018)**

Region	State	Percentage of children who received a checkup within 2 days of delivery	Percentage of children aged 1–2 years who have received all basic vaccinations	Health service utilization rates for suspected ARI* <sup>1</sup> among children under 5 years of age	Health service utilization rate for fever among children under 5 years	Health service utilization rate for diarrhea among children under 5 years
North Central	FCT-Abuja	60.8	40.1	59.7	79.2	84.9
	Benue	50.4	18.6		92.3	82.9
	Kogi	69.0	8.1		51.9	38.9
	Kwara	54.6	26.0		53.5	61.7
	Nasarawa	38.3	29.5		48.4	86.3
	Niger	23.1	12.3		50.6	31.7
	Plateau	38.9	28.8		49.8	49.6
North East	Adamawa	49.1	16.3	73.0	49.3	51.3
	Bauti	38.1	11.7		71.2	67.2
	Bomo	32.1	13.5		77.5	77.7
	Gombe	25.4	6.1		84.4	71.8
	Taraba	25.6	12.8		52.5	32.8
	Yobe	14.9	12.9		84.3	73.5
North West	Jigawa	21.4	16.2	84.6	83.2	80.8
	Kaduna	21.1	13.8		64.4	47.9
	Kano	20.4	19.4		84.0	79.3
	Katsina	12.6	10.8		79.1	64.8
	Kebbi	5.9	1.1		73.1	62.0
	Sokoto	27.5	1.2		73.5	74.6
	Zamfara	8.0	4.0		42.3	47.4
South East	Abia	53.8	28.9	57.0	86.6	-
	Anambra	80.5	60.4		97.4	91.8
	Ebonyi	45.9	26.3		64.3	54.6
	Enugu	77.3	19.9		81.6	-
	Imo	80.8	51.3		51.3	44.9
South South	Akwa Ibom	48.2	28.3	90.6	69.5	55.9
	Bayelsa	27.4	12.4		71.8	-
	Cross River	39.3	21.8		83.5	-
	Delta	52.6	30.0		-Mr.	-
	Edo	70.0	48.2		78.3	-
	Rivers	32.0	28.5		89.9	70.8
South West	Ekiti	72.2	26.8	72.4	61.8	39.5
	Lagos	66.8	56.2		78.4	66.4
	Ogun	70.7	20.9		-	-
	Ondo	71.9	39.7		61.0	42.3
	Osun	82.0	17.2		65.8	35.9
	Oyo	74.6	16.6		80.8	83.6
Zone	North Central	42.2	20.0	59.7	58.7	53.1
	North East	31.1	12.4	73.0	72.6	65.6
	North West	16.9	11.3	84.6	74.9	69.1
	South East	69.0	42.0	57.0	70.8	60.7
	South South	44.6	29.3	90.6	81.5	68.3
	South West	71.7	34.9	72.4	72.6	58.4
National average		37.9	21.0	74.5	72.8	64.9
Rural		26.2	12.9	71.3	70.2	63.2
Urban		56.5	33.4	82.3	78.8	68.7
Wealth Quintile Lowest <sup>2</sup>		15.4	7.4	71.5	67.8	61.0

Wealth Quintile Wealthiest*3	70.5	48.3	93.8	85.2	81.3
------------------------------	------	------	------	------	------

\*1: Acute respiratory infections

\*2: Lowermost quintile obtained (0-20%)

\*3: Uppermost quintile obtained (80-100%)

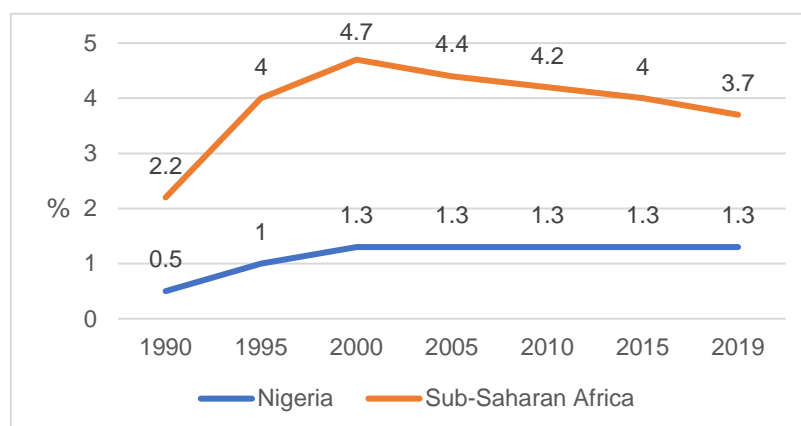
Source: National Population Commission (2019). Nigeria Demographic & Health Survey 2018.

### 2.1.5 Infectious Diseases

Despite having the largest economy in Africa, Nigeria, like other lower-middle-income countries, has a disease structure that is at the pre-epidemiological shift, with infectious diseases being the leading cause of death. Among infectious diseases, enteric infections, respiratory infections and tuberculosis, and neglected tropical diseases account for a large proportion, accounting for 14% (2019), 14% (same year), and 13% (same year), of deaths, respectively. As for polio, no new cases have been reported since 2016 as of 2020, but outbreaks of emerging infectious diseases such as the Ebola virus disease outbreak in 2014, and the Lassa fever epidemic, have been reported, and the risk of imported highly pathogenic infectious diseases from indigenous and neighboring countries is extremely high. In the Lassa fever outbreak that began in January 2019, there were 6,252 suspected cases and 1,138 confirmed cases, of which 235 deaths (20.7% fatality rate) were reported (as of May 26, 2019).<sup>5</sup>

#### (1) HIV/AIDS

Nigeria has the second-largest HIV-positive population in the world, accounting for 51% of the HIV burden in the African region. It is characterized by the highest number of pediatric cases in the world, and a higher proportion of females (1.9%) than males (1.1%).<sup>6</sup> Nigeria's HIV infection rate among the 15-49-year-old population is low compared to the average for sub-Saharan Africa but has remained static for the past 20 years with no progress.



**Figure 10: Trends in HIV Infection Rate (15-49 years old) (%)**

Source: World Bank Open Data HIV Infection Rate: the percentage of people ages 15-49 who are infected with HIV

#### (2) Malaria

In Nigeria, 76% of the population lives in high malaria transmission areas, and the

<sup>5</sup> Nigeria Centre for Disease Control: An update of Lassa fever outbreak in Nigeria

<sup>6</sup> UNAIDS 2020

transmission season in the North lasts less than three months out of the year, while in the South, transmission is all-year-round. The number of malaria-infected people in Nigeria is among the highest in the world and the rate of infection among pregnant women the highest in the world.<sup>7</sup> The number of malaria cases in Nigeria (per 1,000 population) is 291, which is very high compared to the sub-Saharan African average of 219 and the lower-middle-income country average of 49. In addition, the gap with sub-Saharan Africa and lower-middle-income countries has not closed, although it has gradually decreased over the past two decades. By geopolitical zone, intermittent preventive treatment in pregnancy (IPTp) use during pregnancy is higher in the South (16.6–37.8) than in the North (10.8–14.8), and the under-five malaria prevalence is lower in the South (25.4–28.9) than in the North (35.6–49.5). The percentage with access to insecticide-applied net use is higher in the North (41.9–64.9) than in the South (34.6–37.3). This means that although insecticide-treated nets are used in the North, despite the short malaria transmission season, IPTp use is low and malaria prevalence among children under-five is high. The situation is such that there is a large regional disparity between the North and South of the country. In addition, compared to the malaria prevalence rate of the richest group (10.7%), the rate of the poorest group is 57.1%, and the disparity between the rich and poor is very large.

---

<sup>7</sup> WHO: World Malaria Report 2019.

**Table 7: Status of Insecticide-applied Net Use, IPTp Use during Pregnancy, and Malaria Infection Rates among Children Under-five by State**

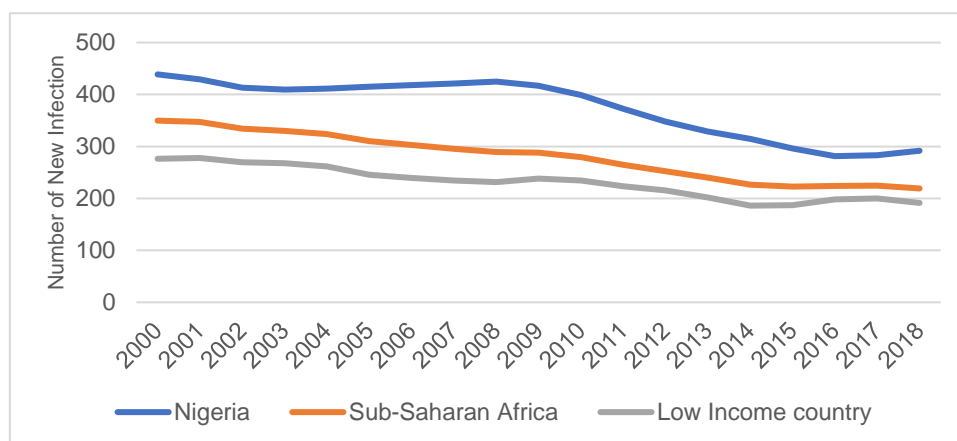
Region	State	Percentage with access to an insecticide-treated net (%) <sup>*3</sup>	Intermittent prophylactic treatment during pregnancy (IPTp: 3 or more times) (%)	Prevalence of malaria in children under 5 (RDT positive) (%)
North Central	FCT-Abuja	24.4	27.0	31.3
	Benue	48.4	17.6	26.0
	Kogi	55.5	29.8	46.0
	Kwara	49.6	14.6	43.7
	Nasarawa	59.1	14.9	32.1
	Niger	29.0	4.9	43.8
North East	Plateau	31.8	17.6	37.2
	Adamawa	45.2	4.4	38.9
	Bauti	55.5	14.6	48.6
	Bomo	42.2	9.1	16.2
	Gombe	48.3	14.8	52.0
	Taraba	24.7	7.4	35.2
North West	Yobe	53.2	29.0	30.3
	Jigawa	86.1	22.9	49.4
	Kaduna	51.0	9.2	34.3
	Kano	63.3	7.2	43.0
	Katsina	71.3	6.3	55.4
	Kebbi	77.6	5.4	76.8
South East	Sokoto	61.0	22.5	54.7
	Zamfara	49.7	11.9	51.8
	Abia	32.2	73.7	20.7
	Anambra	25.0	43.4	15.2
	Ebonyi	58.3	24.2	49.3
South South	Enugu	26.9	23.9	30.2
	Imo	45.1	32.0	15.6
	Akwa Ibom	48.0	16.5	33.2
	Bayelsa	32.4	7.2	30.1
	Cross River	43.7	32.6	26.4
	Delta	29.2	15.1	24.9
South West	Edo	47.7	47.1	19.1
	Rivers	24.4	25.2	22.3
	Ekiti	31.4	24.0	46.3
	Lagos	20.9	20.0	3.4
	Ogun	44.2	21.2	32.2
	Ondo	68.5	26.7	41.6
Zone	Osun	32.7	11.7	54.9
	Oyo	39.0	4.4	33.9
	North Central	41.9	14.8	37.0
	North East	46.4	14.0	35.6
	North West	64.9	10.8	49.5
	South East	37.3	37.8	26.1
National average	South South	35.7	23.7	25.4
	South West	34.6	16.6	28.9
Rural		47.5	16.6	36.2
Urban		52.2	14.0	47.2
Wealth Quintile Lowest <sup>*1</sup>		41.3	20.7	22.3
Wealth Quintile Wealthiest <sup>*2</sup>		54.5	12.0	57.1
		37.9	24.1	10.7

\*1: Lowermost quintile obtained (0-20%)

\*2: Uppermost quintile obtained (80-100%)

\*3: Percentage of household population who could sleep under the net if each net in the household were used by up to two people

Source: National Population Commission (2019). Nigeria Demographic & Health Survey 2018.



**Figure 11: Trends in Number of Malaria Cases per Thousand Population**

Source: World Bank Open Data

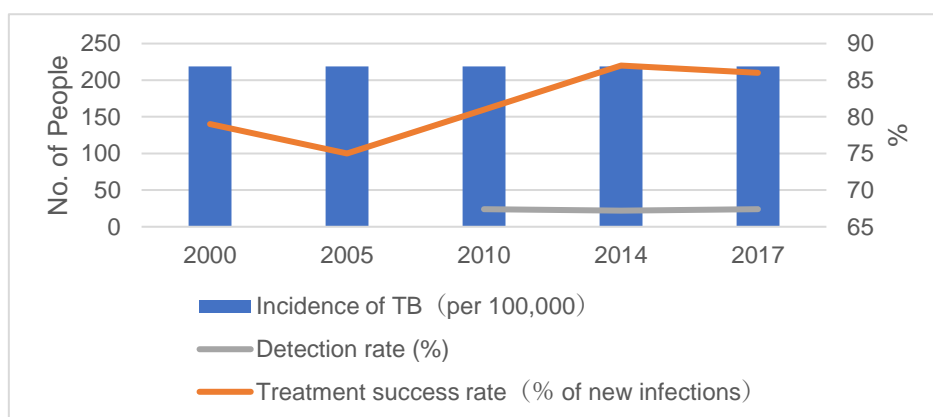
### (3) Tuberculosis

The number of tuberculosis (TB) cases per 100,000 people in Nigeria has remained high for the past 20 years, with no sign of improvement. For the past 10 years, the treatment success rate has increased since 2005 and has remained at about 85%, but the detection rate remains low within the 22–24% range. Reasons for the low detection rate include poor access to diagnostic services, inadequate knowledge of TB among the public, and avoidance of medical examinations due to prejudice against TB.<sup>8</sup> TB is a major challenge for Nigeria, which has the highest number of cases in Africa, causing 150,000 deaths annually (2019). The federal government has launched The National Tuberculosis and Leprosy Control Program (NTBLCP) with the goal of reducing prevalence by 50% and mortality by 75% by 2025, but it is unlikely to be achieved. Low detection rates, low treatment success rates for HIV-positive patients, and widespread malnutrition have been cited as reasons for the difficult situation.<sup>9,10</sup>

8 Adejumo OA, et al. Trend of tuberculosis case notification and treatment outcome in Lagos State, Nigeria: a 5-year retrospective study. 2017

9 WHO:Global tuberculosis report 2020 country profiles.

10 Oshi DC et al: Tuberculosis Research and Treatment <https://www.hindawi.com/journals/trt/2014/202983/>



**Figure 12: Trends in Incidence of TB cases (per 100,000 people), TB Detection Rate, and TB Treatment Success Rate**

Source: World Bank Open Data

### 2.1.6 Nutrition

In Nigeria, poverty is particularly acute in the North East and North West, where poor maternal nutrition, suboptimal infant and young child feeding practices, limited access to a variety of nutritious foods, and inadequate health services, contribute to child undernutrition. More than 40 percent of children aged 0–59 months are chronically malnourished (stunted), 11 percent are seriously malnourished, and 32 percent are underweight.<sup>11</sup> Some reports suggest that the prevalence of hunger in rural areas is related to declining agricultural productivity<sup>11</sup>, but since multi-sectoral efforts are critical to improving nutrition, drastic reform of these efforts is expected. As mentioned earlier, Nigeria Vision 50 is scheduled to be enacted in 2021, and it is expected to focus on poverty alleviation, so future developments should be closely monitored.



**Figure 13: Prevalence of Stunting among Children Under-five by State**

Source: National Population Commission (2019). Nigeria Demographic & Health Survey 2018.

<sup>11</sup> WFP, Nigeria Country Strategic Plan (2019–2022)

**Table 8: Key Indicators of Nutrition (%)**

Region	State	Percentage of children who are stunted	Percentage of children with anemia	Percentage of children who are exclusively breastfed for the first 6 months
North Central	FCT-Abuja	21.2	58.8	24.9
	Benue	20.8	62.0	
	Kogi	20.0	63.6	
	Kwara.	32.9	69.4	
	Nasarawa	31.4	67.9	
	Niger	28.2	75.0	
North East	Plateau	44.7	55.3	21.3
	Adamawa	39.7	56.0	
	Bauti	54.7	75.7	
	Bomo	45.1	71.2	
	Gombe	51.2	77.3	
	Taraba	41.9	70.9	
North West	Yobe	57.2	69.1	18.5
	Jigawa	64.0	81.9	
	Kaduna	48.1	48.4	
	Kano	56.9	72.9	
	Katsina	60.5	64.8	
	Kebbi	66.1	80.8	
	Sokoto	54.8	79.6	
South East	Zamfara	50.8	83.6	25.3
	Abia	22.2	67.1	
	Anambra	14.0	75.2	
	Ebonyi	25.2	79.3	
	Enugu	14.8	58.9	
South South	Imo	17.6	59.2	27.2
	Akwa Ibom	19.6	74.7	
	Bayelsa	24.9	67.4	
	Cross River	22.9	69.8	
	Delta	23.7	69.8	
	Edo	16.0	65.9	
South West	Rivers	16.8	78.9	43.9
	Ekiti	22.1	71.9	
	Lagos	17.2	51.8	
	Ogun	26.6	59.5	
	Ondo	20.4	64.2	
	Osun	23.7	57.6	
Zone	Oyo	34.5	65.0	23.7
	North Central	28.7	65.9	
	North East	49.1	70.4	
	North West	56.8	69.9	
	South East	18.4	69.9	
	South South	19.7	73.2	
National average	24.7	59.6	43.9	
Rural	36.8	67.9	23.7	
Urban	44.8	72.5	20.7	
Wealth Quintile Lowest <sup>*1</sup>	26.8	62.0	31.7	
Wealth Quintile Wealthiest <sup>*2</sup>	55.4	80.1	16.4	
	16.8	53.3	35.8	

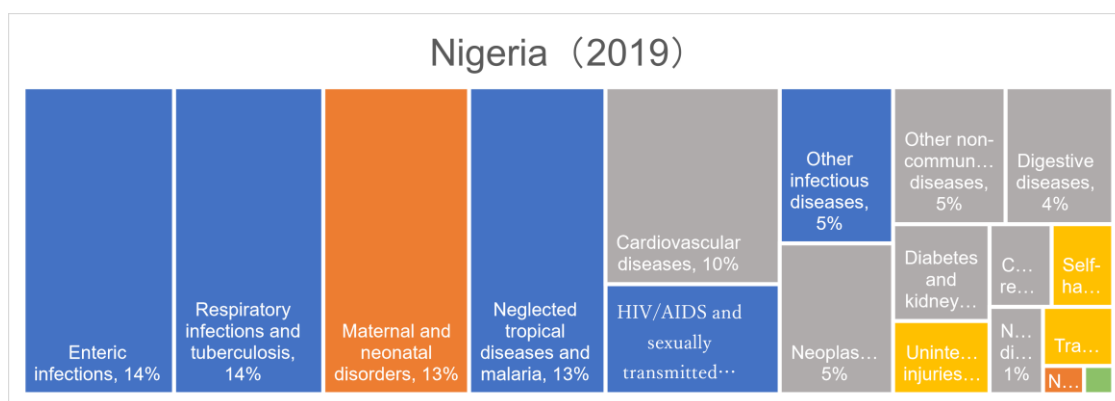
\*1: Lowermost quintile obtained (0–20%)

\*2: Uppermost quintile obtained (80–100%)

Sources: National Population Commission (2019). Nigeria Demographic & Health Survey 2018., National Bureau of Statistics. Nigeria Multiple Indicator Cluster Survey 2016–2017. 2018

## 2.1.7 Non-communicable Diseases

As mentioned in section 1.1.2 “Disease Structure”, non-communicable diseases (NCDs) are gradually increasing as NCDs accounted for 25% of all deaths in 2010, increasing to 30% in 2019. In 2019, the leading cause of non-infection-related deaths was cardiovascular disease (13%), followed by cancer (7%) and diabetes (4%).<sup>12</sup> The risk of premature death from NCDs (cardiovascular disease, cancer, chronic respiratory disease, and diabetes) was estimated at 22.5% in 2016.<sup>13</sup>



**Figure 14: Major Causes of Death for All Ages in Nigeria, 2019 (% of all deaths; reprinted)**

Source: Prepared by the Survey team based on the Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Seattle, WA: IHME, University of Washington, 2018. Available from <http://vizhub.healthdata.org/gbd-compare>. (Accessed 2020.11.20)

## 2.2 National Development Plans and Related Policies and Plans in the Health Sector

### 2.2.1 National Development Plan

In the National Development Plan (Nigeria Vision 20: 2020) formulated in 2008, Nigeria aimed to become one of the top 20 economies in the world by 2020. The two main pillars were to: 1) efficiently utilize human and natural resources to achieve economic growth, and 2) transform economic growth into equitable social development for all citizens. However, due to the stalling of economic growth, the country is far from achieving these goals by 2020. In this context, President Buhari declared the transition from Nigeria Vision 20 to Nigeria Vision 50 and launched the Organizing Committee for the Formulation of the National Development Plan, which will formulate and publish Nigeria Vision 50 as the new National Development Plan in January 2021. According to the President’s announcement, Nigeria Vision 50 will aim to lift one million Nigerians out of poverty by 2030.

### 2.2.2 Position of the Health Sector in National Development Plans

In the health sector, the National Health Act was enacted in 2014 to promote Universal Health

<sup>12</sup> Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Seattle, WA: IHME, University of Washington, 2018. Available from <http://vizhub.healthdata.org/gbd-compare>. (Accessed 2020.11.20)

<sup>13</sup> WHO Global Health Observatory data: Percent of 30-year-olds who die from these NCDs before their 70th birthday



Coverage (UHC). As a strategic action plan of the National Health Policy, the first National Strategic Health Development Plan (NSHDP) 2010–2015 was launched in 2010. With the promulgation of the National Health Policy 2016, the government outlined measures aimed at further promoting UHC, providing primary care services, and protecting against financial risks, along with the roles and responsibilities of the relevant ministries and agencies involved in the collaboration. In the area of maternal and child health, there were moves to introduce the Midwifery Service Scheme<sup>14</sup> and free maternal and child health care. However, as described in section 2.2.3 “Health Coverage System”, the situation continues to be that people are required to pay out-of-pocket at the health facility for the use of maternal and child health services. Thus, in 2018, the NSHDP II<sup>15</sup> was formulated to strengthen further policy implementation. The NSHDP II has five major priority areas:

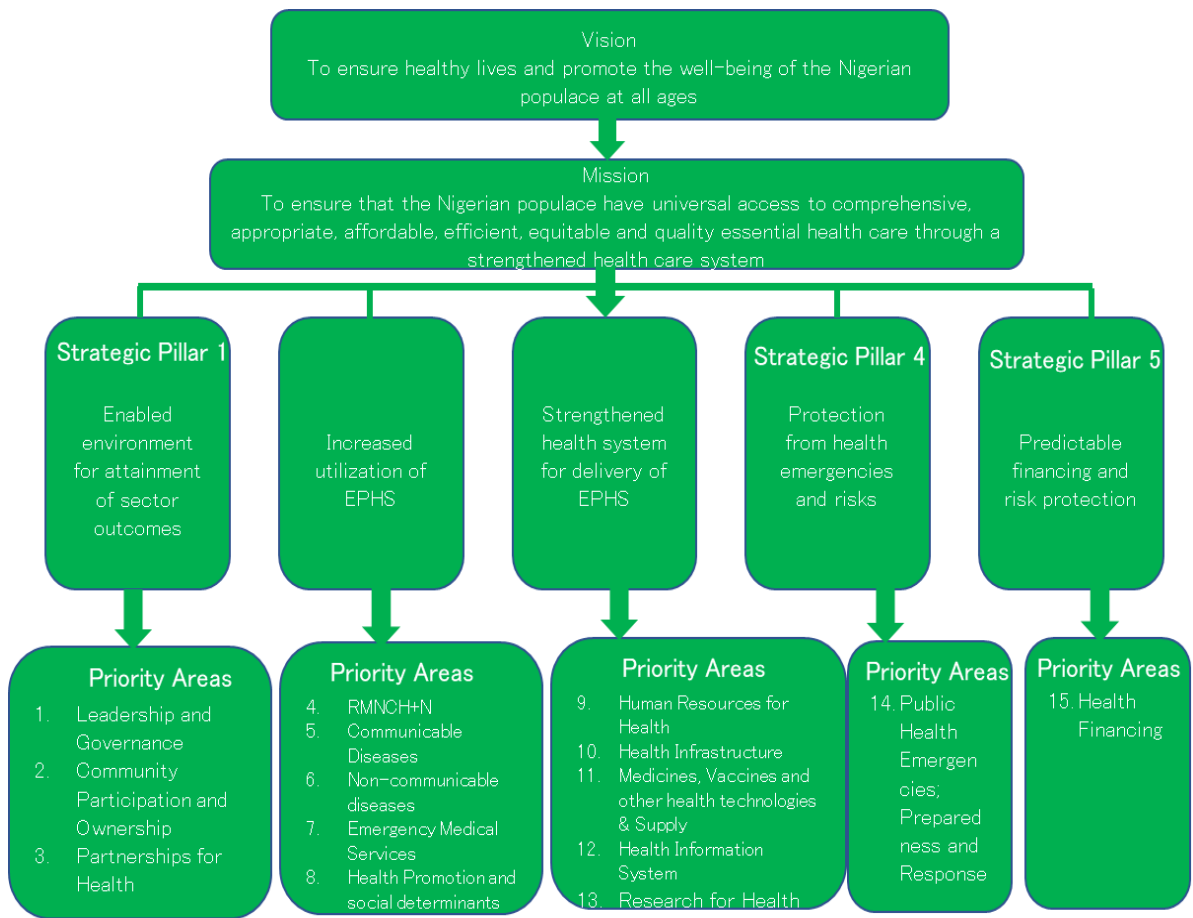
1. Strengthening the environment for achieving sector results with a focus on leadership, governance, community participation, and partnerships for health
2. Increase basic service utilization of health care services covering reproductive, maternal, child, health and nutrition, communicable diseases, NCDs, mental health, elderly care, and NTDs
3. Strengthen the health system to provide basic health care services
4. Increased protection against health emergencies and risks
5. Sustainable and predictable financing and enhanced risk protection

In addition, as stated in the second major priority area, special emphasis will be placed on the area of maternal and child health (mainly in reduction of maternal and neonatal mortality and improvement of nutrition). The Nigeria Health Financing Policy and Strategy 2017 calls for a 5% increase in the health budget in the national budget to improve UHC within five years. In contrast to the first plan, the second plan will be linked to the SDGs global indicators and will conduct monitoring and evaluation to monitor progress towards achieving the goals.

---

<sup>14</sup> A policy launched in 2009 by the National Primary Health Care Development Agency. New midwives, non-employee midwives and retired midwives were placed in rural primary health care facilities and training was provided. By 2010, 2,622 midwives had been assigned to PHC facilities in rural areas. <https://www.who.int/workforcealliance/forum/2011/hrhawardscs26/en/>

<sup>15</sup> National Strategic Health Development Plan II (2018–2022)



**Figure 15: Overview of the NSHDP II Framework**

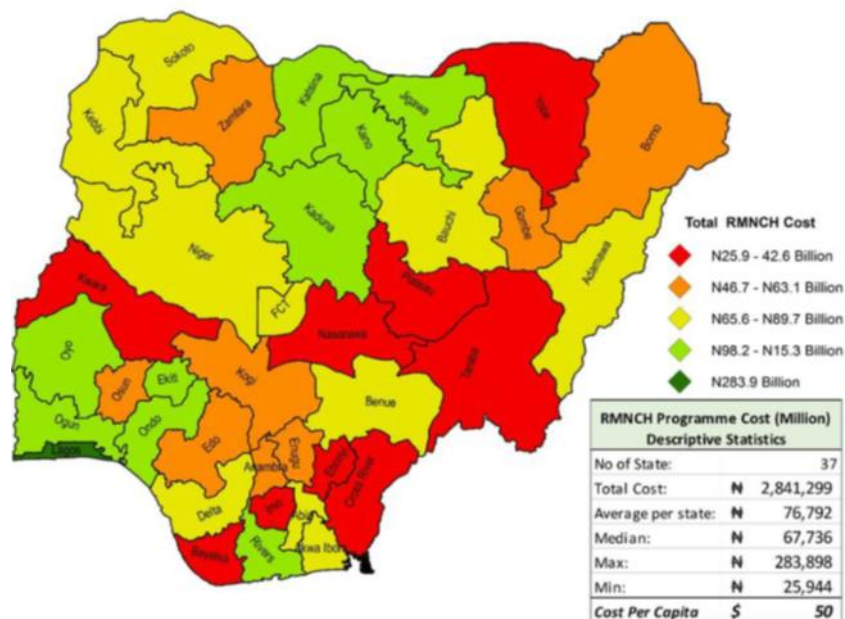
Source: National Strategic Health Development Plan II (2018–2022)

**Table 9: Summary of the Second National Strategic Health Development Plan (NSHDP II) 2018–2022 Framework**

Strategic Objectives	Overview of priority areas in the strategy
Strategy 1. Create an enabling environment to achieve sector results	1. Provide effective leadership and an enabling policy environment that ensures adequate oversight and accountability for the delivery of quality health care for sustainable development of the national health system
	2. To promote community engagement for sustainable health development
	3. Enhance harmonized implementation of Essential Package of Health Service (EPHS) in line with national health policy goals
Strategy 2. Increase EPHS utilization	4. Promote universal access to comprehensive, high-quality services for sexual and reproductive health throughout the life cycle and reduce
	5. To improve prevention, case detection, and coordinated response for the prevention, control, and management of communicable diseases and NTDs
	6. To reduce the burden of morbidity, mortality, and disability due to NCDs
	7. Improve health outcomes through prompt and effective response to medical emergencies
Strategy 3: Health system strengthening for EPHS supply	8. Improve the wellbeing, safety, and quality of life of Nigerians through health promotion and creating a healthy environment
	9. To have in place the right number, skill mix of competent, motivated, productive, and equitably distributed health workforce for optimal and quality health care services provision
	10. To improve availability and functionality of health infrastructure required to optimize service delivery at all levels and ensure equitable access to effective and responsive health services throughout the country
	11. To ensure that quality medicines, vaccines, and other health commodities and technologies are available, affordable, and accessible to all Nigerians
	12. To institutionalize an integrated and sustainable health information system for decision-making at all levels in Nigeria
Strategy 4. Urgent medical crises and risks	13. To utilize research to inform policy and programming for improved performance of the health sector and better health outcomes; and also contribute to global health knowledge production
	14. Significantly reduce the incidence and impact of public health emergencies
Strategy 5: Predictable finances and risk protection	15. Ensure all Nigerians have access to health services without any financial barriers or impediments at the point of accessing care

Source: National Strategic Health Development Plan II (2018–2022), <https://www.health.gov.ng/doc/NSHDP%20II%20Final.pdf>

NSHDP II also provides cost estimates for the implementation of this measure. For the status quo scenario, the moderate service coverage expansion scenario, and the major service coverage expansion scenario, the four-year costs are estimated to be 4,369 billion NGN (\$11.5 billion), 6,071 billion NGN (\$16 billion), and 7,321 billion NGN (\$19.3 billion), respectively. As described in section 2.2, “Health Financing”, the government’s budgeted share of recurrent health expenditures in 2017 was NGN 581 billion (\$ 1.5 billion), so even under the status quo scenario, a large amount of money will be required given the current government budget. The required costs for each state in the area of Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) have also been estimated, as shown in Figure 16.



**Figure 16: Required Budget by State for the Field of Reproductive, Maternal, Newborn, Child and Adolescent Health: RMNCAH**

Source: National Strategic Health Development Plan II (2018–2022), <https://www.health.gov.ng/doc/NSHDP%20II%20Final.pdf>

## 2.3 Status of Other Donors' Support in Nigeria

### 2.3.1 Assistance Achievements

In the area of health in sub-Saharan Africa, the U.S. has been the largest bilateral aid donor with \$8.7 billion in 2009–2018, compared to the U.K. with \$4.2 billion, Canada with \$2.4 billion, and Japan with \$1.2 billion.<sup>16</sup> However, in the area of health in Nigeria, the U.K. ranks first (\$683.19 million) and the U.S. ranks second (\$568.74 million), followed by Germany and Canada, with Japan in fifth place. In addition, from 2009–2018, multilateral organizations have provided \$11.4 billion in aid to the health sector in sub-Saharan Africa from the Global Fund, \$6.7 billion from GAVI, and \$4.9 billion from the World Bank. The trend is similar in Nigeria, with the Global Fund (\$1,242.92 million), the World Bank (\$1,048.47 million), and GAVI (\$783.25 million). The Bill & Melinda Gates Foundation (BMGF), a private institution, has provided \$783.94 million in aid from 2009–2018, more than the UK.

Based on the classification method used by OECD.Stat, there are a large number of donors and aid results (amount) that support health policy and administration, basic health services, communicable disease control, and malaria control.

<sup>16</sup> Organization for Economic Co-operation and Development OECD.Stat. <https://stats.oecd.org/> (Accessed on November 25, 2020).

**Table 10: Top Aid Donors in the Health Sector (Total Amount, 2009–2018)**

Classification	Rank	Name of country/institution	Amount (in millions of dollars)
Bilateral	1	United Kingdom	683.19
	2	United States of America	568.74
	3	Germany	190.85
	4	Canada	162.70
	5	Japan	111.08
	6	Norway	27.13
	7	The Netherlands	23.33
	8	Ireland	28.83
	9	Italy	1.31
	10	Finland	0.68
	11	Belgium	0.53
Multilateral organization	1	Global Funds	1242.82
	2	World Bank	1048.47
	3	GAVI	783.25
	4	UNICEF	149.88
	5	EU	134.19
	6	WHO	27.04
Private institution	1	Bill & Melinda Gates Foundation	783.94
	2	Children's Investment Fund Foundation	21.31

Source: Prepared by the Survey team from OECD.Stat

**Table 11: Areas of Cooperation of Development Partners in Nigeria, 2009-2018<sup>17</sup>**  
**(Up to about \$5 million is shown, units in million dollars)**

Health policy and administrative management	Medical education and training	Human Resources training	Medical Research	Medical care Services	Basic Health Care Services	Basic Health Care Infrastructure	Nutrition	Health Education	Infectious Disease Control	Malaria Control	Tuberculosis Control
UK: 263 BMGF: 26 Netherlands: 23 Canada: 23 US: 18 ADF: 15 UNICEF: 12 WB:11 WHO: 9 Norway: 7	Canada:8	Canada: 13	UK: 21	UNICEF: 25 Norway: 13	GAVI:783 WB:178 EU:62 UNICEF:52 BMGF:43 Canada: 33 UK: 29 GF: 21	Canada: 8 EU:5	UK: 161 WB:50 UNICEF: 29 CIF:21 BMGF:19 US: 10 Canada: 8	UK: 12 Canada: 10	BMGF:689 WB:527 Germany: 186 Japan: 95 UK: 69 EU: 63 Canada: 41 US: 37 UNICEF: 26 WHO:9 Norway: 6	GF:966 US:404 WB:282 UK: 125 Canada: 18 Japan: 10 BMGF: 6	GF:256 US: 97

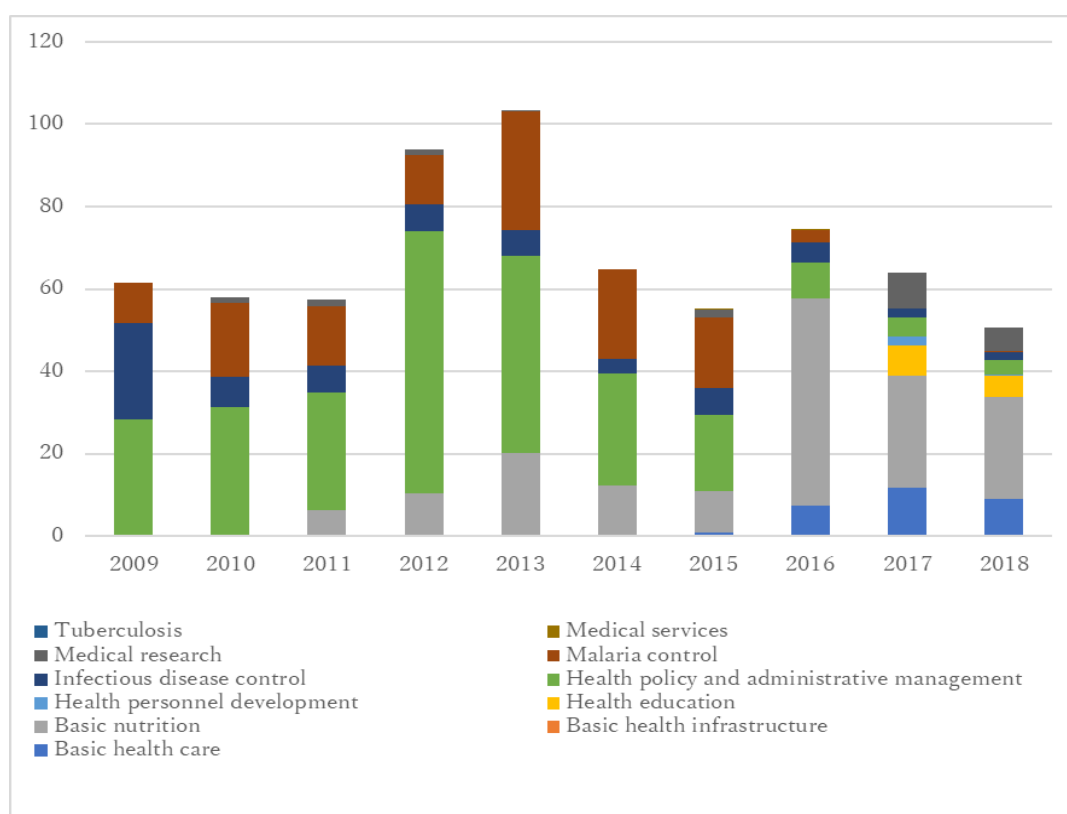
Note: ADF: African Development Fund, BMGF: Bill & Melinda Gates Foundation, GF: Global Fund to Fight AIDS, Tuberculosis and Malaria, UK: United Kingdom, US: United States, WB: World Bank, WHO: World Health Organization, EU: European Union  
Source: Prepared by the research team from OECD.Stat

<sup>17</sup> The classification of cooperation areas is based on the DAC and CRS code lists used by the OECD. The detailed information; <http://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/dacandcrscodelists.htm>

(1) Bilateral cooperation #1: United Kingdom

Around 2012, the emphasis shifted from health policy and operational management to basic nutrition, with the UK-Brazil High Level Nutrition Event at the London 2012 Olympics, the G8 High Level Nutrition Event “Nutrition for Growth” in 2013, and the Brazil-UK-Japan Nutrition for Growth Event at the Rio 2016 Olympics. In 2013, the G8 High Level Nutrition Event “Nutrition for Growth” was co-hosted by the UK and Brazil, and at the Rio 2016 Olympic Games, the UK, Brazil, and Japan co-hosted the “Nutrition for Growth Event”. Due to these influences, basic nutrition has become a priority in the UK’s cooperation. Major projects are as follows:

- Health policy and administrative management: Partnership for Transforming Health Systems 2 - Procurement of Services (2012–2017, 259 million USD)
- Malaria: Support to National Malaria Programme (2009–2018, 12.5 Million USD)
- Nutrition: World Food Programme Humanitarian Nutrition Project (2009–2018, 39 Million USD)/WFP - Integrated Nutrition Programme plus (INP) (2010–2018, 22 Million USD)/UNICEF - Provision of Food and Nutrition Supplements (2017–2018, 30 Million USD)



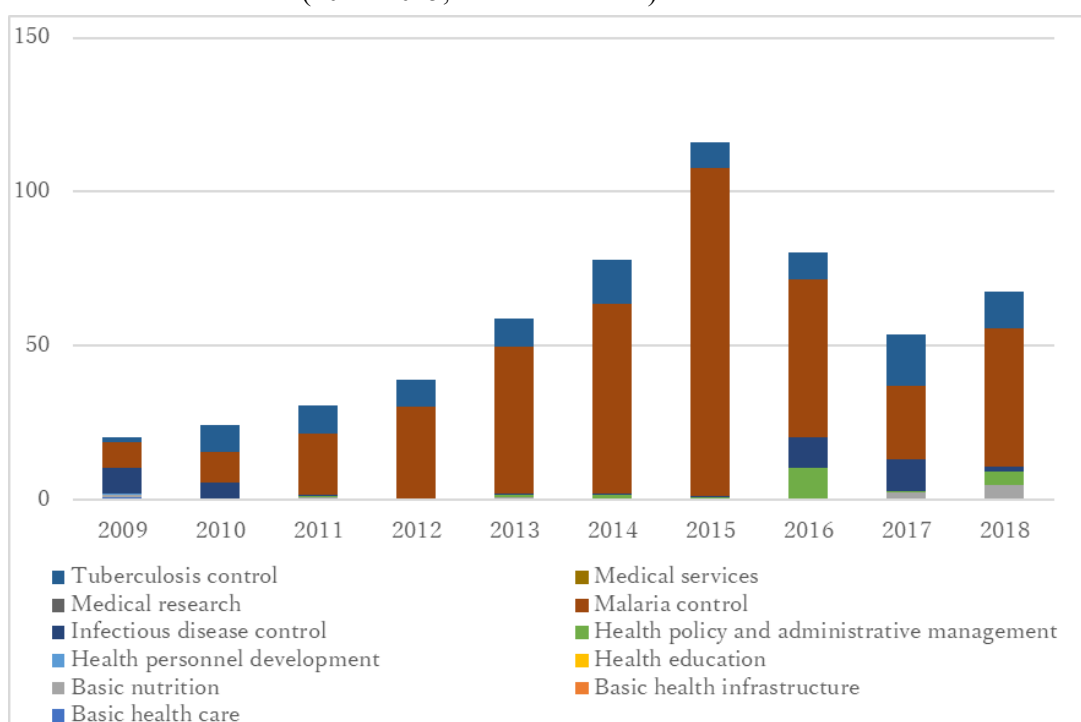
**Figure 17: UK Assistance to Nigerian Health (USD million)**

Source: Prepared by the survey team from OECD.Stat

(2) Bilateral cooperation #2: United States

The second-largest source of bilateral cooperation with the Nigerian health sector is the United States of America, which, along with the United Kingdom, accounts for a large share of aid to Nigeria. From around 2010 to 2015, malaria control has been a priority, increasing each year. Malaria control is still the largest, but more emphasis is being placed on tuberculosis control. Major projects are as follows:

- Malaria: Deliver Project for Malaria – Malaria (2010–2018, 183 Million USD)/Malaria Action Program for the States (MAPS) (2010–2017, 83 Million USD)/Targeted States High Impact Project (TSHIP) – Malaria (2010–2015, 12.2 Million USD) Malaria Action Program for States (MAPS)
- Health policy and administrative management: Global Health Supply Chain - Procurement and Supply Management (GSHC-PSM) (2016–2018, 52 Million USD)
- Tuberculosis: Challenge Tuberculosis (TB) (2016–2018, 25.3 Million USD)/TB CARE I – Tuberculosis (2011–2015, 22 Million USD)



**Figure 18: U.S. Assistance to Nigerian Health Sector (USD million)**

Source: Prepared by the survey team from OECD.Stat

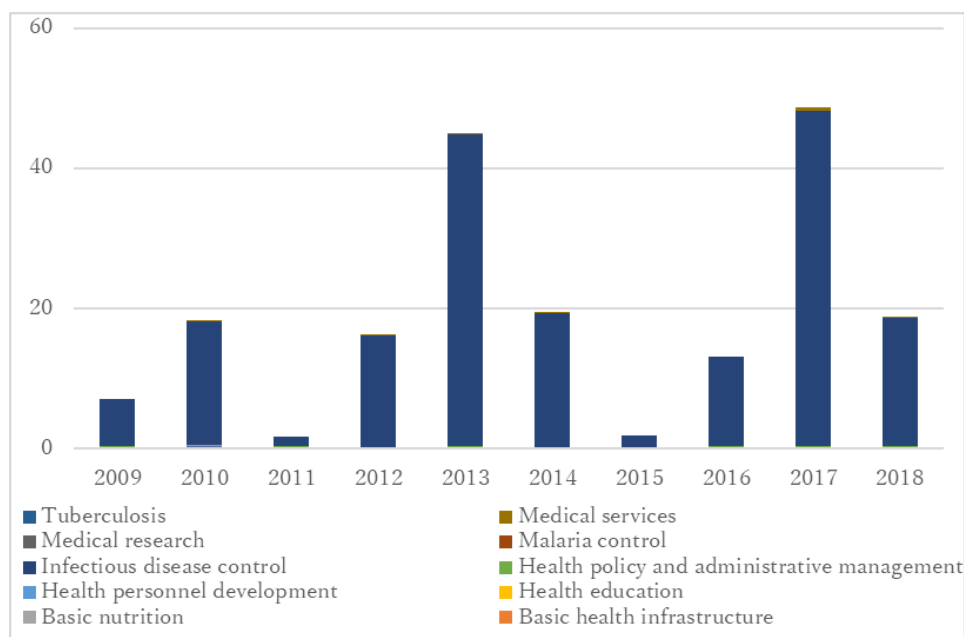
(3) Bilateral cooperation #3: Germany

The third-largest source of bilateral cooperation with the Nigerian health sector is Germany. Germany is concentrating its resources on polio control. Its major projects are the following:

- Infectious disease control: Polio Eradication Programme V (Vaccination Campaigns Support) (2010–2018, 122 Million USD)/Polio Control Programme IX,VIII (2017,



47.9 Million USD)



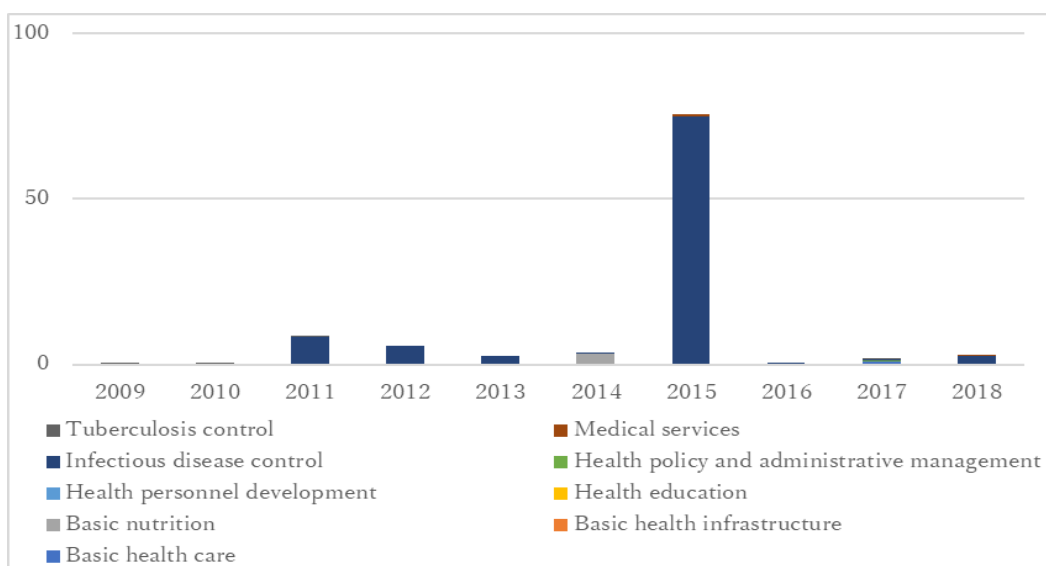
**Figure 19: Germany's Assistance to Nigerian Health Sector (USD million)**

Source: Prepared by the survey team from OECD.Stat

(4) Bilateral cooperation #5: Japan

The fifth-largest contributor to bilateral cooperation with the Nigerian health sector is Japan, by far the largest contributor with \$74.8 million contributed to polio control projects in 2015, with other projects also focusing on infectious disease control. Major projects are as follows:

- Polio Eradication Program (2015–2016, 75 Million USD)
- Project for Infectious Diseases Prevention for Children (2009–2013, 23.64 Million USD)
- Emergency Primary Health Care Convergence Intervention for Sahelian northern states in Nigeria (2014, 3.13 Million USD)



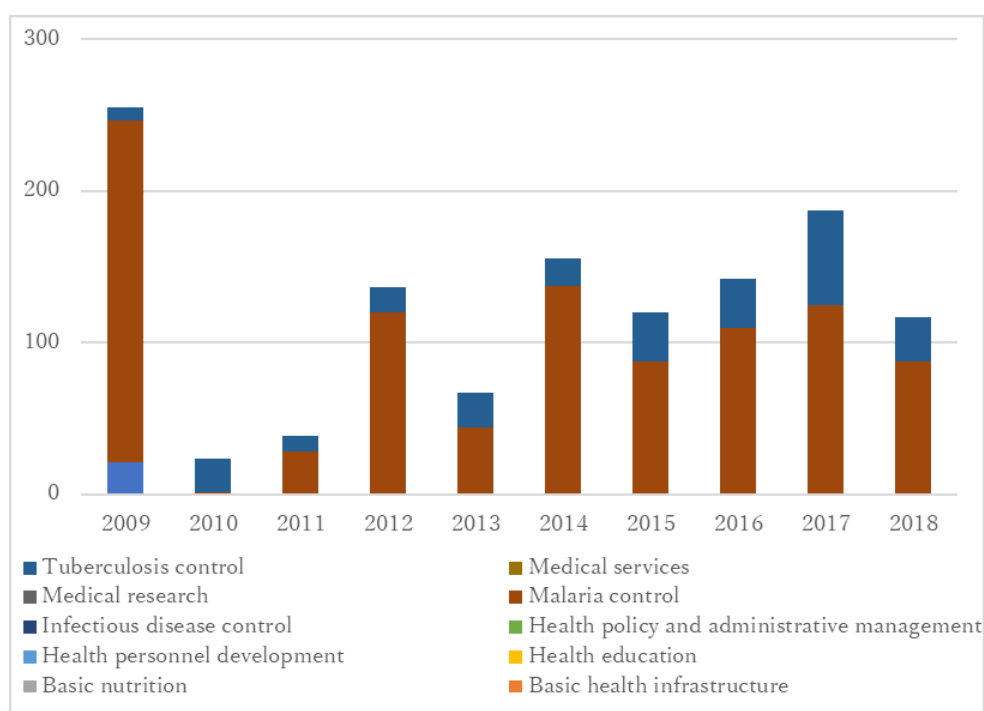
**Figure 20: Japan's Assistance to Nigerian Health Sector (USD million)**

Source: Prepared by the survey team from OECD.Stat

(5) Multilateral Organization #1: Global Fund

The Global Fund is the number one multilateral organization providing assistance to the Nigerian health sector. The focus has been consistently on malaria control, but the focus on tuberculosis control has also been increasing. Major projects are as follows:

- Malaria: Contributing to rapid and sustained scale-up of Malaria Control Interventions for Impact in Nigeria (2009–2018, 598 Million USD)/Scaling Up Malaria Control in 18 States of Nigeria (2009, 12.4 Million USD)
- Tuberculosis: Further DOTS Expansion (2009–2017, 226.69 Million USD)



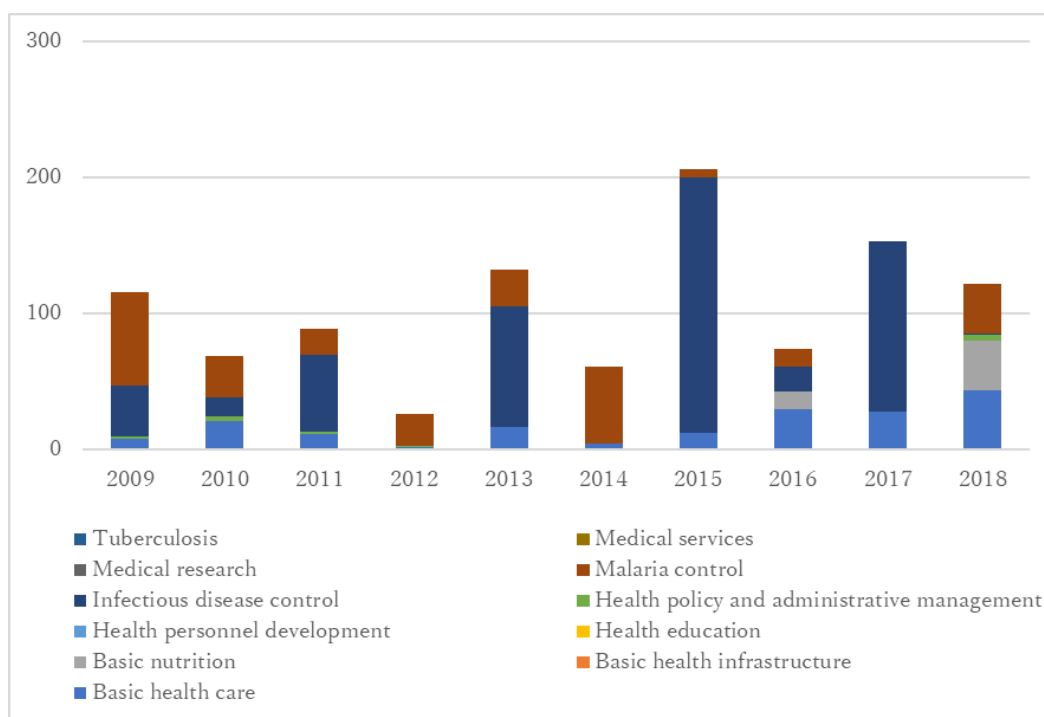
**Figure 21: Global Fund's Support to Nigerian Health Sector (USD million)**

Source: Prepared by the survey team from OECD.Stat

(6) Multilateral Organization #2: World Bank

The second-largest multilateral organization to the Nigerian health sector is the World Bank. It focuses its assistance on infectious diseases. In 2018, it diversified its areas of support to include nutrition and malaria control. Major projects are as follows:

- Infectious Disease Control: Polio Eradication Support Project (2013–2016, 295.1 Million USD)/Partnership for Polio Eradication Project (2009–2013, 105.45 Million USD)
- Malaria: Malaria Control Booster Project (2009–2015, 231.96 Million USD)
- Health Policy and administrative management: Nigeria States Health Investment Project (2013–2018, 56.05 Million USD)/Second Health Systems Development (2009–2012, 48.56Million USD)



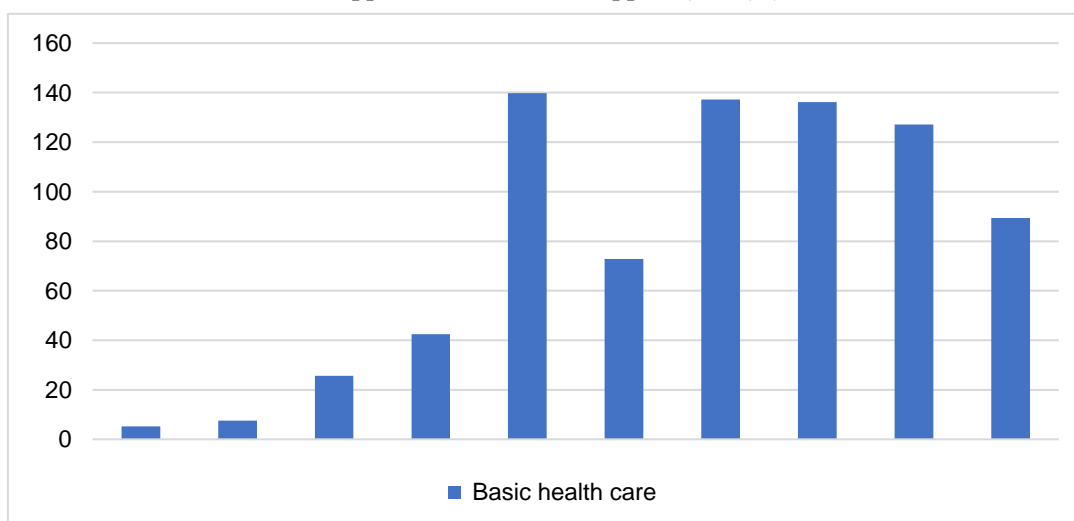
**Figure 22: World Bank Assistance to Nigerian Health Sector (USD million)**

Source: Prepared by the survey team from OECD.Stat

(7) Multilateral Organization #3: GAVI the Vaccine Alliance (GAVI)

The third-largest multilateral organization is GAVI, with consistent support for solely basic health care (vaccination). It focuses on:

- Basic health care support: New vaccine support (NVS) (2010–2018, 618 Million USD).



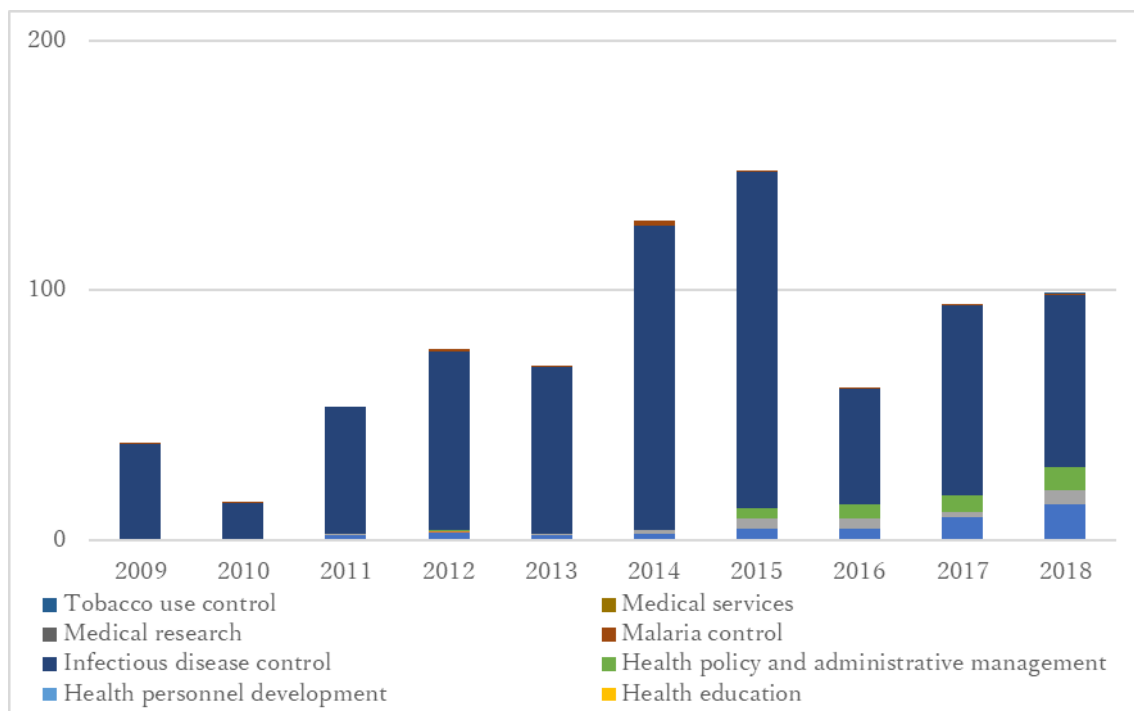
**Figure 23: GAVI's Assistance to Nigerian Health Sector (USD million)**

Source: Prepared by the survey team from OECD.Stat

(8) Private Sector #1: Bill & Melinda Gates Foundation (BMGF)

The number one private sector organization is the BMGF. It provides intensive support for infectious disease control and is the strongest existence in the private sector. It focuses on:

- Infectious disease control: WHO Nigeria Program Support/Nigeria Country Office (2012–2018, 260.46 Million USD)



**Figure 24: BMGF's Support to Nigerian Health Sector (USD million)**

Source: Prepared by the survey team from OECD.Stat

### 2.3.2 Development Cooperation Strategy

(1) World Health Organization (WHO)

WHO has identified the following five priorities in its strategy for cooperation with Nigeria (2014–2019):

1. Achieving and sustaining UHC through a revitalized primary health care approach and sustainable service delivery through the strengthening of health systems
2. Promote health and scale up priority interventions through the life-course
3. Scale up priority interventions for communicable and NCDs, towards UHC
4. Scale up national capacity for preparedness and response to public health emergencies, including polio eradication and crisis management
5. Promote partnership coordination and resource mobilization in alignment with national, regional, and global priorities

Priority 1 focuses on establishing leadership and governance through health human resource development and health information system development and developing evidence-

based laws and strategic plans. Priority 2 focuses on improving maternal and child health guidelines and working with the United Nations on “Basic Nutrition Action in the First 1000 Days of Life”. Priority 3 focuses on HIV/AIDS, tuberculosis control, NTDs, and NCDs including mental health, while priority 4 focuses on emergency risk response and capacity building for national disease surveillance.

(2) World Bank

The World Bank’s 2014–2017 Cooperation Strategy for Nigeria, the most recent available, identifies the following key priority areas: 1) addressing infrastructure reform, agricultural productivity improvement, and financial reform, 2) improving the quality and efficiency of social service delivery at the state level, and 3) strengthening governance and public sector operations with a focus on gender and equity. Although not directly related to the health sector, one of the projects currently in operation is a multi-sectoral social service delivery support for emergencies in the northeastern states of Borno, Yobe, and Adamawa, which is linked to the Reconstruction and Peacebuilding Assessment plan led by the Nigerian government.

(3) United States Agency for International Development (USAID)

In its Strategy for Development Cooperation with Nigeria 2020–2025, USAID has identified four priority areas: 1) comprehensive assistance for economic development, 2) health and education, 3) strengthening governance for conflict prevention and protection of people’s rights, and 4) humanitarian assistance targeting several states. In the health sector, within the framework of the health and education priority, it cites the improvement of the quality and efficiency of basic health services.

### 2.3.3 Support to Health System by Major Development Partners

Following the health system regime under the federal system, many development partners also target local governments for funding and technical cooperation.

The Global Fund has provided support to Lagos State for tuberculosis and HIV over the past four years, with the Lagos State Ministry of Health’s Grant Management Unit managing the service delivery. In Imo, Kaduna, and Oyo States, as in Lagos State, the Cooperative Fund Management Unit is rapidly moving forward the approach of “Decentralized Portfolio Management for State Health Systems” with the support from Global Fund.

The BMGF has also started providing direct aid to states, starting with Lagos State. The assistance is aimed at strengthening the management capacity of the State Ministry of Health’s Cooperative Funding Unit and supporting UHC promotion through the revitalization of primary

health care in the state. Assistance worth \$2 million is being provided to the Lagos State Ministry of Health's Aid Management Bureau for the 2020–2023 period. Table 12 shows the status of support for health systems by key development partners.

**Table 12: Major Development Partners and Donors Supporting Health Sector in Nigeria**

Development Partner	Description	Scope of Technical Assistance	Focus States
<b>BILATERAL</b>			
Foreign, Commonwealth & Development Office (FCDO)	<p><b>1. LAFIYA: UK Support to Health in Nigeria<sup>18</sup></b></p> <p>The Lafiya programme is a £235 million seven-year UK Government supplier contract through the FCDO which began in February 2020. The programme is delivered by a consortium of seven partners led by the Palladium Group and its objective is to contribute to improving health outcomes for the poorest and most vulnerable in Nigeria through:</p> <ul style="list-style-type: none"> <li>• Encouraging the Government of Nigeria to increase resources invested in health;</li> <li>• Improving effectiveness and efficiency of public and private health services; and</li> <li>• Improved access to modern contraceptive methods</li> </ul>	<ol style="list-style-type: none"> <li>1. Civil society advocacy &amp; community accountability</li> <li>2. Improvement of delivery and decision making based on health data</li> <li>3. Support to Basic Health Care Provision Fund (BHCPF) (through innovative financing mechanisms such as decentralized facility financing and performance-based financing)</li> <li>4. Technical assistance to maximize Government resources and efficiency through the provision of TA to strengthen leadership and governance, and health financing (in addition to providing technical support for exploring efficiencies in human resources (for deployments and in-service training) and in the drug supply chain (for procurement and drug revolving fund)</li> <li>5. Private sector delivering affordable health services (work with government partners and private providers that serve poor people, including patent medicine vendors - to support an enabling environment, to improve quality, cost-effectiveness, and relevance of private health services)</li> <li>6. Flex to crises - Support for essential health and nutrition services for crisis-affected populations as required</li> <li>7. Family planning commodities</li> <li>8. Family planning demand and delivery</li> </ol>	<ol style="list-style-type: none"> <li>1. Borno</li> <li>2. Jigawa</li> <li>3. Kaduna</li> <li>4. Kano</li> <li>5. Yobe</li> </ol>

<sup>18</sup> LAFIYA -UK Support for Health in Nigeria (<https://devtracker.fcdo.gov.uk/projects/GB-GOV-1-300495/documents>). (Accessed on April 5, 2021)



Development Partner	Description	Scope of Technical Assistance	Focus States
	<p><b>2. Support to National Malaria Programme phase 2 (SUNMAP 2)<sup>19</sup></b>  This is a £50million, seven-year (2018–2024), support to the Government of Nigeria led by Malaria Consortium. It builds on the successful predecessor (SUNMAP, £89million, 2008–2016) and it is geared to improve local capacity, complement DFID multilateral support through the Global Fund to fight Aids, Tuberculosis and Malaria (The Global Fund, GFATM), and secure greater domestic ownership and funding for malaria control, reducing the burden of malaria and the risk of malaria resurgence.</p>	<ol style="list-style-type: none"> <li>1. Strengthen government stewardship, including planning and budgeting for malaria control, strengthening financial management and expenditure tracking as well as Nigerian government’s resource mobilizing for malaria control;</li> <li>2. Strengthen procurement and supply systems to ensure the sustainable availability of malaria commodities;</li> <li>3. Support local health authorities to develop and scale up more efficient equitable malaria prevention and treatment service delivery systems such as Integrated Community Case Management;</li> <li>4. Support local health authorities and civil society to engage individuals and institutions to use malaria control measures and advocate for more domestic funding; and</li> <li>5. Support local malaria control agencies to improve their use of research and evidence by embedding an evidence-based learning environment in both National and State Malaria Elimination Programmes (N/SMEP)</li> </ol>	<ol style="list-style-type: none"> <li>1. Jigawa</li> <li>2. Kaduna</li> <li>3. Kano</li> <li>4. Katsina</li> <li>5. Lagos</li> <li>6. Yobe</li> </ol>
	<p><b>3. Women’s Integrated Sexual Health Programme (WISH)<sup>20</sup></b>  This is a centrally managed FCDO funded programme being implemented in 26 African and Asian countries including Nigeria (£8.47million). In Nigeria, it is implemented by Options UK and focuses on addressing social norms, family planning national ownership, family planning / sexual and</p>	<ol style="list-style-type: none"> <li>1. Strengthening individuals’ knowledge and choice, and building community support for sexual reproductive health rights</li> <li>2. Driving sustainability and national ownership of sexual reproductive health programmes through supportive legal, financial and policy frameworks</li> </ol>	<ol style="list-style-type: none"> <li>1. Jigawa</li> <li>2. Zamfara</li> <li>3. Yobe</li> <li>4. Borno</li> <li>5. Adamawa</li> <li>6. Gombe</li> <li>7. Taraba</li> <li>8. Bauchi</li> </ol>

<sup>19</sup> Support to National Malaria Programme Phase 2 (<https://devtracker.fcdo.gov.uk/projects/GB-1-202979/documents>). (Accessed on April 5, 2021)

<sup>20</sup> Women’s Integrated Sexual Health (<https://devtracker.fcdo.gov.uk/projects/GB-1-205241>). (Accessed on April 5, 2021)

Development Partner	Description	Scope of Technical Assistance	Focus States
	reproductive health services, and regional collaboration.	<ol style="list-style-type: none"> <li>Improving access to and expanding choice of voluntary family planning and other sexual reproductive health services through evidence-based innovations and best practice</li> <li>Leverage domestic financing and commitments for family planning and sexual and reproductive health services</li> </ol>	<ol style="list-style-type: none"> <li>Benue</li> <li>Kano</li> <li>Sokoto</li> <li>Katsina</li> </ol>
United States Agency for International Development (USAID)	<p><b>1. HIV/AIDS</b></p> <p>The U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), led by the U.S. Agency for International Development (USAID) and implemented together with the U.S. Centers for Disease Control and Prevention (CDC), Department of Defense (DOD) currently assists more than 600,000 Nigerians with life-saving HIV therapy, which is 90 percent of the people living with HIV/AIDS in the country.</p> <p>In Nigeria alone, PEPFAR has invested more than \$6 billion in the national HIV/AIDS response since its commencement in 2004.<sup>21</sup></p>	<ol style="list-style-type: none"> <li>Expansion of programs that prevent transmission to the most at-risk populations, while also stopping the high rate of mother-to-child transmission.</li> <li>Supports Nigeria in the critical areas of policy development, human resource development, and overarching health systems strengthening, including the provision of state-of-the-art laboratories and pharmaceutical warehouses, to enhance Nigeria’s health systems to tackle not only HIV/AIDS but also other diseases.<sup>22</sup></li> </ol>	36 States and FCT
	<p><b>2. Malaria<sup>23</sup></b></p> <p>The U.S. President’s Malaria Initiative (PMI)—led by the USAID and implemented together with the CDC—delivers cost-effective, lifesaving malaria interventions alongside catalytic technical and operational assistance to support Nigeria to end</p>	<ol style="list-style-type: none"> <li>Vector control through entomological monitoring, insecticide-treated nets, and indoor residual spraying</li> <li>Strengthen diagnosis and drug-based treatment and prevention</li> <li>Health systems strengthening through support for supply chain, strategic information, and human resources for health</li> </ol>	<p><b>States (11 in total)</b></p> <ol style="list-style-type: none"> <li>Bauchi</li> <li>Kebbi</li> <li>Sokoto</li> <li>Akwa Ibom</li> <li>Benue</li> </ol>

<sup>21</sup> PEPFAR. <https://ng.usembassy.gov/embassy-consulate/abuja/sections-offices/pepfar/>. (Accessed on April 5, 2021)

<sup>22</sup> PEPFAR Nigeria. Nigeria Country Operational Plan (COP) 2020. Strategic Direction Summary

<sup>23</sup> U.S. President’s Malaria Initiative Nigeria. Malaria Operational Plan FY 2020

Development Partner	Description	Scope of Technical Assistance	Focus States
	<p>malaria.</p> <p>Nigeria began implementation as a PMI focus country in FY 2011. The total PMI investment to date at the end of FY 2020 is about \$611.19 million.</p>		<p>6. Cross River</p> <p>7. Ebonyi</p> <p>8. Nasarawa</p> <p>9. Oyo</p> <p>10. Plateau</p> <p>11. Zamfara</p>
	<p><b>3. Tuberculosis<sup>24</sup></b></p> <p>Another 5-year (2020–2025) \$45 million grant from USAID to the Government of Nigeria was given to fund the Local Organizations Network (TB-LON) in the 18 states where data show the burden of TB to be highest.</p> <p>The first \$30 million award will establish a Tuberculosis Local Organizations Network (TB-LON) Regions 1 and 2 (14 states) to be implemented by KNCV Tuberculosis Foundation Nigeria. The second, \$15 million award to the Institute of Human Virology, Nigeria (IHVN) covers four states in Region 3. USAID has collaborated with the National TB Control Program since 2003, having invested more than \$207 million toward TB control.</p>	<ol style="list-style-type: none"> <li>1. Improve TB case detection and treatment in communities using a differentiated model approach while strengthening resilient and sustainable systems for TB control.</li> <li>2. Support quality tuberculosis treatment for adults and children by linking them to primary health care centers and resources, including laboratory test kits and anti-retroviral medications.</li> <li>3. In collaboration with Nigeria’s National Tuberculosis Program, roll out an innovative regimen for Multi-Drug Resistant Tuberculosis that will significantly reduce treatment times.</li> </ol>	<p><b>Regions 1 (7 States)</b></p> <ol style="list-style-type: none"> <li>1. Bauchi</li> <li>2. Kaduna</li> <li>3. Katsina</li> <li>4. Kano</li> <li>5. Nasarawa</li> <li>6. Plateau</li> <li>7. Taraba</li> </ol> <p><b>Region 2 (7 States)</b></p> <ol style="list-style-type: none"> <li>1. Anambra</li> <li>2. Akwa Ibom</li> <li>3. Benue</li> <li>4. Cross River</li> <li>5. Delta</li> <li>6. Imo</li> <li>7. Rivers</li> </ol> <p><b>Region 3 (4 States)</b></p> <ol style="list-style-type: none"> <li>1. Lagos</li> </ol>

<sup>24</sup> USAID TB LON. <https://www.usaid.gov/nigeria/press-releases/usaid-establishes-two-new-45-million-%E2%80%98local-organizations>. (Accessed on April 5, 2021)

Development Partner	Description	Scope of Technical Assistance	Focus States
			2. Ogun 3. Oyo 4. Osun
	<b>4. USAID’s family planning and reproductive health (FP/RH)</b>	<ol style="list-style-type: none"> <li>1. Funds programs to improve access to FP commodities and services across the country</li> <li>2. Support the private sector with FP Commodities</li> <li>3. Provide funding and commodities gap in the public sector as needed</li> </ol>	<b>States (6 in total)</b> <ol style="list-style-type: none"> <li>1. Abia</li> <li>2. Benue</li> <li>3. Edo</li> <li>4. Kaduna</li> <li>5. Lagos</li> <li>6. Nasarawa</li> </ol>
	<p><b>5. Global Health Supply Chain Programme – Procurement Supply Management (GHSC-PSM)<sup>25</sup></b></p> <p>GHSC-PSM purchases and delivers health commodities, strengthens national supply chain systems, and provides global supply chain leadership to ensure lifesaving health supplies reach those in need when they need them.</p> <p>The project supports five health areas: HIV/AIDS, Malaria, voluntary FP/RH, maternal and child health, and emerging public health threats such as Zika, Ebola and COVID-19, and hinges on three key objectives: Commodity Procurement, Health Systems Technical Assistance, and Global Collaboration.</p> <p>The program is implemented via 4 task orders:</p>	<ol style="list-style-type: none"> <li>1. Transition the supply chain from parallel to government-led and GHSC-PSM supported.</li> <li>2. Provide technical assistance in strategy and planning, forecasting and supply planning, quality assurance, warehousing and inventory management, transportation and distribution, management information systems, governance, and financing, and monitoring and evaluation.</li> <li>3. Support the scale-up of HIV/AIDS programs to achieve the UNAIDS 90-90-90 strategy through multi-scripting and revision of the maximum-minimum inventory control system in Nigeria.</li> <li>4. Implement targeted local procurement by engaging local service vendors.</li> <li>5. Develop government staff capacity to conduct post-market validation of laboratory commodities and support the development of a functional National Laboratory Technical</li> </ol>	<p>GHSC-PSM Project supports the scale-up of HIV/AIDS services across 36 states and the federal capital territory.</p> <p>GHSC-PSM through PMI also supports scale-up of malaria services in 11 states: <i>Bauchi, Kebbi, Sokoto, Akwa Ibom, Benue, Cross River, Ebonyi, Nasarawa, Oyo, Plateau, Zamfara.</i></p>

<sup>25</sup> USAID Global Health Supply Chain Programme. Nigeria: Country Snapshot. <https://www.ghsupplychain.org/country-profile/nigeria>. (Accessed on April 5, 2021)

Development Partner	Description	Scope of Technical Assistance	Focus States
	<ol style="list-style-type: none"> <li>1. <b>HIV/AIDS</b> (Task Order 1) – Technical Assistance, Commodity Procurement</li> <li>2. <b>Malaria</b> (Task Order 2) – Technical Assistance, Commodity Procurement</li> <li>3. <b>Reproductive Health and Population</b> (Task Order 3) – Technical Assistance, Commodity Procurement</li> <li>4. <b>Maternal and Child Health</b> (Task Order 4) – Technical Assistance, Commodity Procurement.</li> </ol>	<p>Working Group that can provide direction to the government on the logistics management of laboratory commodities.</p> <ol style="list-style-type: none"> <li>6. Improve the use and application of a laboratory management information system through monitoring and support visits and capacity enhancement/development of laboratory personnel</li> <li>7. Design and implement laboratory sample referral networks by engaging all relevant stakeholders</li> <li>8. Support and coordinate national annual review meeting of long-lasting insecticidal nets (LLIN) continuous distribution systems and provide technical assistance for forecasting and quantification of LLIN continuous distribution in 11 PMI focus states</li> <li>9. Support procurement of commodities including antiretrovirals (ARVs), artemether/lumefantrine/ artemisinin-based combination therapies (ACTs), artesunate injection, cycle beads, opportunistic infections medicines, intrauterine contraceptive devices (IUDs), isoniazid and co-trimoxazole, laboratory reagents and consumables, LLINs, malaria rapid diagnostic tests (RDTs), male and female condoms and lubricants, oral, injectable, and implantable contraceptives, sulfadoxine/pyrithemamine (SP)</li> </ol>	<p>GHSC-PSM through USAID’s FP/RH program supports family planning services in 6 states: Abia, Benue, Edo, Kaduna, Lagos, and Nasarawa</p>
	<p><b>6. Health Policy Plus (HP+)</b> <sup>26</sup>  HP+ Program was funded by USAID from 2017-2020 (2018–2019 for Ebonyi State, 2018–2020 for</p>	<ul style="list-style-type: none"> <li>• Support to Increase Domestic Resources for Health : <ul style="list-style-type: none"> <li>➢ Advocated for the enactment of laws to provide legal backing for state primary healthcare development and health insurance agency.</li> </ul> </li> </ul>	<p>FCT, Abia, Ebonyi, Osun</p>

<sup>26</sup> Health Policy Plus. Nigeria’s Journey toward Universal Health Coverage: HP+ Support in the FCT and Three States. 2020

Development Partner	Description	Scope of Technical Assistance	Focus States
	<p>Abia, Osun States, 2017–2019 for FCT). The objectives of this program include:</p> <ul style="list-style-type: none"> <li>• Mobilize domestic resources for health by improving the availability and quality of</li> <li>• Evidence to inform advocacy and policy reforms</li> <li>• Improve healthcare access by expanding health insurance coverage</li> <li>• Strengthen quality services by implementing</li> <li>• Ensure financial risk protection and basic health services for Nigeria’s most vulnerable groups by operationalizing the BHCPF</li> </ul>	<ul style="list-style-type: none"> <li>➤ Conducted health financing landscape assessments</li> <li>➤ Support states for health financing and governance reform.</li> <li>• Over US\$60 Million mobilized in domestic resource for Health (Improved budget allocation 52 million, New resource for State Health Insurance Schemes 6 million, New resource for BHCPF 1.8 million)</li> <li>• Improving health care access by expanding health insurance: <ul style="list-style-type: none"> <li>➤ Strengthening support for organization capacity of state health insurance schemes</li> <li>➤ Finalizing operational guidelines</li> <li>➤ Provided guidance for state health insurance agencies to develop or revise health insurance benefits packages and premiums</li> <li>➤ Supported the inauguration of state health insurance agency governing boards</li> </ul> </li> <li>• Strengthening the quality of services by implementing Primary Healthcare Under One Roof (PHCUOR) <ul style="list-style-type: none"> <li>➤ Supported the development and implementation of state-specific improvement plans based on measured performance, helping implementation of PHCUOR</li> <li>➤ Strengthened organization capacity of state primary health care development agencies and trained its staff to conduct supportive supervision in health facilities</li> <li>➤ Inaugurated and strengthened 66 LGA health authorities</li> </ul> </li> <li>• Support to operationalize the BHCPF</li> </ul>	

Development Partner	Description	Scope of Technical Assistance	Focus States
		<ul style="list-style-type: none"> <li>➤ Facilitated establishment and strengthening state steering committees to coordinate BHCPF implementation</li> <li>➤ Develop training manual and supported the cascade training</li> <li>➤ Supported to conduct town halls to sensitize citizens on benefits of enrolling in the BHCPF</li> <li>➤ Aided state steering committees on business plans and mentor health facilities to enroll beneficiaries, etc. for providing high quality service</li> <li>➤ Publicity support for BHCPF to the public</li> </ul>	
<b>Multilateral</b>			
World Bank	<p><b>Second Health Systems Development Project<sup>27</sup></b> Supported the following 3 parts with 127 million USD in 10 years from 2002–2012</p> <p><b>Part A:</b> Strengthening Capacity for System Management at State level (including budget management processes, develop health accounts)</p> <p><b>Part B:</b> Strengthening Delivery of Priority Health Services in 18 states</p> <p><b>Part C:</b> Capacity Strengthening at Federal Level and Project Coordination, Monitoring and Evaluation</p> <p>In the final report, the project was rated as Moderately Unsatisfactory on the assessment of Outcome, Bank Performance, Borrower</p>	<p><b>Part A</b></p> <ul style="list-style-type: none"> <li>• To strengthen capacity at State Ministries of Health to improve budget management processes, develop health accounts, increase the autonomy of local health facilities through service agreements, and carry out annual performance reviews to discuss results and share lessons learned with stakeholders</li> <li>• Human resources were to be developed through training on maternal and child health and communicable disease control, and improved quality of training programs in schools of nursing, midwifery and health technology</li> <li>• The health management information system (HMIS) was to be strengthened to improve access to information for decision-making.</li> </ul>	<p><b>Part A:</b> 37 states plus FCT</p> <p><b>Part B:</b> 18 States out of initially scheduled 22 States Akwa Ibom, Abia, Anambra, Bauchi, Benue, Borno, Ekiti, Enugu, Gombe, Imo, Jigawa, Kebbi, Kogi, Kano, Kwara, Nasarawa, Ondo, Osun, Plateau, Sokoto</p>

<sup>27</sup> The World Bank, Second Health Systems Development: <https://projects.worldbank.org/en/projects-operations/project-detail/P070290>. (Accessed on April 5, 2021)

Development Partner	Description	Scope of Technical Assistance	Focus States
	Performance, Government Performance, and Implementing Agency Performance	<ul style="list-style-type: none"> <li>• Access to information technology and communications was to be enhanced through improvements to internet and technology access</li> <li>• Implementation of study and technical audits</li> </ul> <p><b>Part B</b></p> <ul style="list-style-type: none"> <li>• Support access to quality primary health care services, including rehabilitating, equipping, and supplying water</li> <li>• The delivery of primary health care services and disease control were to be improved through the provision of training and equipment</li> <li>• Essential drugs were to be supplied to health facilities</li> <li>• The quality of training in nursing, midwifery and health technology schools was to be improved, and selected schools were to be rehabilitated</li> </ul> <p><b>Part C</b></p> <ul style="list-style-type: none"> <li>• Support the formulation of following health policies and strategies and the implementation of health reforms</li> <li>• the implementation of the National HMIS and annual health sector performance assessments</li> <li>• promotion of research on health care financing, and research, studies and audits on key systemic issues</li> <li>• Project management, coordination and evaluation, including assisting participating States, consolidation of annual work programs, reports, and accounts, monitoring progress in Project implementation, and providing information to the National Project Steering Committee</li> </ul>	Taraba, FCT.  <b>Part C:</b> Federal level
Global Fund	<p><b>1. Malaria</b></p> <p>The GFATM has disbursed a cumulative grant</p>	<p>1. Full coverage of malaria case management in the public sector in all 13 states</p>	<p>1. Adamawa</p> <p>2. Delta</p>



Development Partner	Description	Scope of Technical Assistance	Focus States
	amount of \$1.244 billion towards Malaria Programme in Nigeria. A total of 9 grants have been awarded and implemented by the NMEP, Catholic Relief Services (CRS), Society for Family Health (SFH), and The Yakubu Gowon Center for National Unity and International Cooperation. <sup>28</sup>	<ol style="list-style-type: none"> <li>Supportive interventions such as outreach training and supportive supervision (OTSS) of health workers in both the public and private sectors</li> <li>Universal coverage with LLINs through mass campaigns in all the 7 states due for replacement in 2018 and LLINs for routine distribution in all 13 states through ANC and EPI over the 3-year implementation period</li> <li>Enhanced Social Behaviour Change Communication (SBCC) activities to promote adoption of appropriate practices for malaria control.<sup>29</sup></li> </ol>	<ol style="list-style-type: none"> <li>Gombe</li> <li>Jigawa</li> <li>Niger</li> <li>Kaduna</li> <li>Kano</li> <li>Kwara</li> <li>Katsina</li> <li>Ogun</li> <li>Osun</li> <li>Taraba</li> <li>Yobe</li> </ol>
	<p><b>2. HIV/AIDS</b></p> <p>The GFATM has disbursed a cumulative grant amount of \$963.101 million towards HIV Programme in Nigeria and another grant of \$13.756 million to Lagos State for TB/HIV intervention. A total of 13 grants have been awarded and implemented by the National Agency for the Control of AIDS (NACA), Lagos State Ministry of Health, Family Health International (FHI360), Society for Family Health (SFH), Association for Reproductive and Family Health (ARFH), Civil Society for HIV/AIDS in Nigeria (CiSHAN), and The Yakubu Gowon Center for National Unity and International</p>	<ol style="list-style-type: none"> <li>Optimizing current GF investments for impact: Use a differentiated care approach to improve quality across the entire continuum of care by addressing leakages and coverage gaps in cascades for treatment, PMTCT, TB/HIV, and Key Populations interventions;</li> <li>Targeting new GF investments for impact: Focus HIV services scale-up efforts to sub-national units with high disease burden, targeting populations at greatest risk; and</li> <li>Leveraging on existing programs for impact: Build synergies with PEPFAR and national treatment program for cross-learning and coherence of program strategies<sup>31</sup></li> </ol>	36 States and FCT

<sup>28</sup> The Global Fund Data Explorer (<https://data.theglobalfund.org/investments/grants/NGA>)

<sup>29</sup> Nigeria CCM (2017). Malaria Funding Request Application Form. <https://data.theglobalfund.org/investments/documents/NGA>. (Accessed on April 5, 2021)

<sup>31</sup> CCM, Nigeria (2017). HIV/AIDS Funding Request Application Form: Full Review. <https://data.theglobalfund.org/investments/documents/NGA>. (Accessed on April 5, 2021)

Development Partner	Description	Scope of Technical Assistance	Focus States
	Cooperation. <sup>30</sup>		
	<p><b>3. TB</b></p> <p>The GFATM has disbursed a cumulative grant amount of \$360 million towards tuberculosis control programme in Nigeria. A total of 6 grants have been awarded and implemented by National Tuberculosis &amp; Leprosy Control Programme (NTBLCP), Lagos State Ministry of Health, Institute of Human Virology Nigeria (IHVN), Association for Reproductive and Family Health (ARFH), and Christian Health Association of Nigeria</p>	<ol style="list-style-type: none"> <li>1. Find the missing persons with TB</li> <li>2. Address the huge gap in MDR/RR-TB detection and treatment in enrolment</li> <li>3. Address the low TB service coverage by use of a differentiated approach to establishing TB services in PHC facilities and expanding TB services to all FBO facilities</li> <li>4. More ambitious scale up of TB services in the 'for-profit' private sector</li> <li>5. Address the suboptimal access to and utilization of GeneXpert MTB/RIF Services</li> <li>6. Scale up active TB case-finding among key and vulnerable populations</li> <li>7. Address the low TB IPT coverage and TB case-finding among PLHIV</li> </ol>	36 States and FCT
	<p><b>4. Resilient and Sustainable System for Health (RSSH)<sup>32</sup></b></p> <p>The Global Fund RSSH Grant (\$54 million) is contributing to improving Nigeria's health system, particularly, provision of infrastructure for warehousing and distribution of health commodities, laboratory services, data management, and capacity building for our healthcare providers, including support to community systems.</p>	<ol style="list-style-type: none"> <li>1. Human resources for health</li> <li>2. Improved procurement and supply chain management systems</li> <li>3. Strengthened health management information systems (HMIS) and monitoring and evaluation (M&amp;E)</li> <li>4. Integrated service delivery and laboratory service</li> <li>5. Governance and health financing improvement through an effective and efficient public financial management system</li> <li>6. Strengthening of community systems and responses</li> <li>7. Development of national health strategies</li> </ol>	<ol style="list-style-type: none"> <li>1. Lagos</li> <li>2. Oyo</li> <li>3. Imo</li> <li>4. Kaduna</li> </ol>

<sup>30</sup> The Global Fund Data Explorer. <https://data.theglobalfund.org/investments/grants/NGA>. (Accessed on April 5, 2021)

<sup>32</sup> The Global Fund Data Explorer. <https://data.theglobalfund.org/investments/grants/NGA>. (Accessed on April 5, 2021)

Development Partner	Description	Scope of Technical Assistance	Focus States
GAVI	Nigeria is one of the largest recipients of GAVI grants in Africa having received \$1,092 million and \$954 million in approvals and disbursements respectively from 2001 to Sept 2019. The country has prepared a comprehensive multi-year plan 2018–2028 – in line with Nigeria’s proposed timeline for graduating from Gavi support. <sup>33</sup>	<ol style="list-style-type: none"> <li>1. Funding support for procurement of vaccines and introduction of new vaccines</li> <li>2. Health systems strengthening support</li> <li>3. Cold chain equipment optimization platform (CCEOP)</li> <li>4. to ensure that all wards in the country are equipped with at least 1 Solar CCE per ward</li> <li>5. Injection safety devices and injection safety support</li> </ol>	Federal and all States
UNICEF		<ol style="list-style-type: none"> <li>1. Procurement of vaccines through UNICEF SD</li> <li>2. Operationalize the 'one PHC center per ward strategy for achieving universal health coverage</li> <li>3. Strengthen routine immunization nationwide, including vaccine security, and contribute to other accelerated disease control strategies, including polio eradication and measles elimination</li> </ol>	Federal and all states
UNFPA		<ol style="list-style-type: none"> <li>1. Procurement of FP commodities for Nigeria from a basket fund for FP</li> <li>2. Supports last-mile distribution of FP commodities and supportive supervision in 17 States</li> </ol>	FP commodities Federal and all States LMD (in 14 States) Abia, Adamawa, Benue, Gombe, Imo, and Yobe, Cross River, Borno, Jigawa, Kaduna, Kano, Katsina, Taraba, and Zamfara <sup>34</sup>

<sup>33</sup> GAVI (2021). Nigeria: Programmes and Impact. <https://www.gavi.org/programmes-impact/country-hub/africa/nigeria>. (Accessed on April 5, 2021)

<sup>34</sup> Interview with key informant from UNFPA

Development Partner	Description	Scope of Technical Assistance	Focus States
BMGF <sup>35</sup>	Polio Eradication	Work at the international level with the World Health Organization and UNICEF, as well as at the country level, with the NPHCDA and state governments, to ensure regular vaccinations and immunizations	
	Family Health (Maternal and Child Health)	<ol style="list-style-type: none"> <li>1. Reduction of preventable deaths by focusing on maternal and child health; investment in programs that provide prenatal through postnatal care, as well as childhood immunization programs</li> <li>2. Address common healthcare challenges, including pneumonia, diarrheal diseases, and neglected tropical diseases, as well as access to clean water and proper sanitation and hygiene</li> </ol>	
	Health Systems Strengthening	Bolster primary healthcare and develop strategies for integration of healthcare services to ensure a strong system for Nigeria's people	
	Nutrition	In partnership with Aliko Dangote Foundation and other partners, address severe malnutrition and improve overall childhood nutrition	

---

<sup>35</sup> BMGF. Our work in Nigeria. <https://www.gatesfoundation.org/Where-We-Work/Africa-Office/Focus-Countries/Nigeria>. (Accessed on April 5, 2021)

### 2.3.4 Achievements and Current Status of Japan's Cooperation to Date

In its Country Development Cooperation Policy for Nigeria, Japan has set “Promotion of high-quality and inclusive economic and social development as well as stabilization of society” as a basic policy of Japanese ODA. The priority areas are: 1) building a foundation for quality economic growth, 2) developing an inclusive and resilient health and medical system, and 3) promoting peace and stability, including reconstruction assistance in the northeast. In the health sector 2), it focuses mainly on support for strengthening community health services, achieving UHC, improving nutrition through food, and strengthening the infectious disease response capacity, including strengthening laboratories and disease prevention centers. The main supports in the health sector so far are shown in Table 13 and the areas to be supported are shown in Figure 25.

**Table 13: Japan's Major Assistance in the Health Sector over the Past Decade**

Scheme	Period of cooperation	Project Name
ODA Loan Projects	2014	Polio Eradication Project
Grant Aid	2019	The Project for Strengthening the Capacity of Network Laboratories of the Nigeria Centre for Disease Control
	2019	The Project for Strengthening the Diagnostic Capacity of Nigeria Center for Disease Control
	2012	Infectious Diseases Prevention for Children in Nigeria (United Nations Children's Fund (UNICEF) collaboration)
Technical Cooperation Projects	2019–2023	Project for Strengthening Detection of and Response to Public Health Threats in Nigeria
	2014–2018	Project for Strengthening Pro-Poor Community Health Services in Lagos State
	2010–2014	Project for Improving Maternal, New Born and Child Health in Lagos State
Grassroots Technical Cooperation Projects	2015	The Project for Procurement of Medical Equipment for Bwari General Hospital in Bwari Area Council in the Federal Capital Territory
	2015	Improvement in the Access to Primary Health Services - Shere Koko Community in Bwari
	2014	Project for Procurement of Medical Equipment for Suleja General Hospital in Suleja Local Government Area in Niger State
	2014	Project for the Construction of Gbogbodo Maternal and Child Health Centre in Abadi Regional Council District, Federal Capital Region

Source: Official Development Assistance (ODA) Country Data Book, Ministry of Foreign Affairs of Japan



**Figure 25: Target Areas for Japan's Health Sector Assistance over the Past Decade**

Source: Prepared by the Survey team from the Official Development Assistance (ODA) Country Data Book of the Ministry of Foreign Affairs of Japan.

### 3 Current Status and Challenges of Health Systems in the Target Countries

#### 3.1 Human Resources for Health

Nigeria has one of the largest pools of human resources for health in Africa, but the challenges are the shortage in number and inequitable deployment of health personnel to provide quality health services. The health workforce is concentrated in the provision of tertiary health care services in the south, especially in urban areas around Lagos. As for the possible reasons, it is reported that there is a lack of coordination between the public and private sectors by the government to accurately grasp the status of health personnel deployment, share information, and discuss concrete measures for appropriate deployment in order to solve the uneven distribution of human resources, and that there is a high turnover rate, especially in rural areas.<sup>36</sup> In addition, the inability to forecast the number of health personnel needed by job category has been cited as a challenge, resulting in the inability to develop appropriate staffing and staffing plans.<sup>37</sup>

To address staffing challenges, national task-shifting and task-sharing (TSS) policies with standard operating procedures (SOPs) have been developed to optimize the deployment and

<sup>36</sup> WHO: <https://www.who.int/workforcealliance/countries/nga/en/>. (Accessed on April 5, 2021)

<sup>37</sup> Federal Republic of Nigeria HRH Strategic Plan 2008-2012

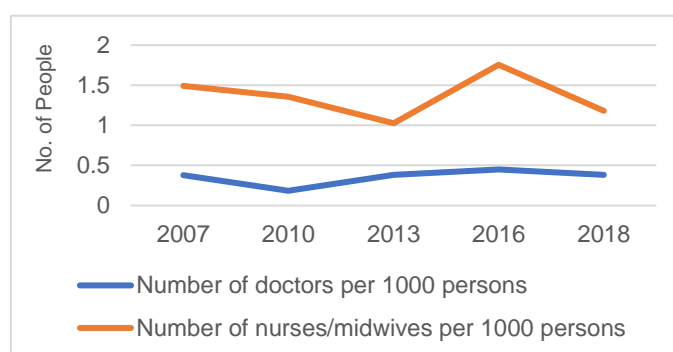
workforce of health personnel, but the number of health personnel has not been growing steadily over the past decade (Table 14, Figure 26); it is slightly higher than the average for the sub-Saharan Africa region in 2018 (0.23 doctors and 0.98 nurses), but not as high as the average for lower-middle-income countries (0.8 doctors and 1.79 nurses). There is also an outflow of doctors and other health personnel to other countries. Comparing the distribution of human resources by cadre between the three northern zones and the three southern zones, there is a large concentration of human resources in the south for all cadres. In particular, 43.9% of all doctors are located in the southwest (Figure 27). There is a large unevenness in the allocation of health personnel depending on the region.

However, as mentioned earlier, Nigeria holds one of the largest numbers of health human resources in Africa, with an overall increase of about 31% in the number of clinical medical specialists and general health human resources between 2012 and 2018, according to the Health Human Resources Assessment of the National Health Human Resources Profile 2012, 2018.<sup>38</sup> Thus, the workforce of health personnel is clearly increasing, but well-trained health personnel need to be equitably distributed to provide optimal and quality health services.<sup>39</sup>

**Table 14: Number of Healthcare Workers per Thousand Population**

	2007	2010	2013	2016	2018
Number of doctors	0.378	0.1836	0.3828	0.4494	0.3806
Number of nurses/midwives	1.49	1.3568	1.0258	1.7551	1.1792

Source: World Bank Open Data

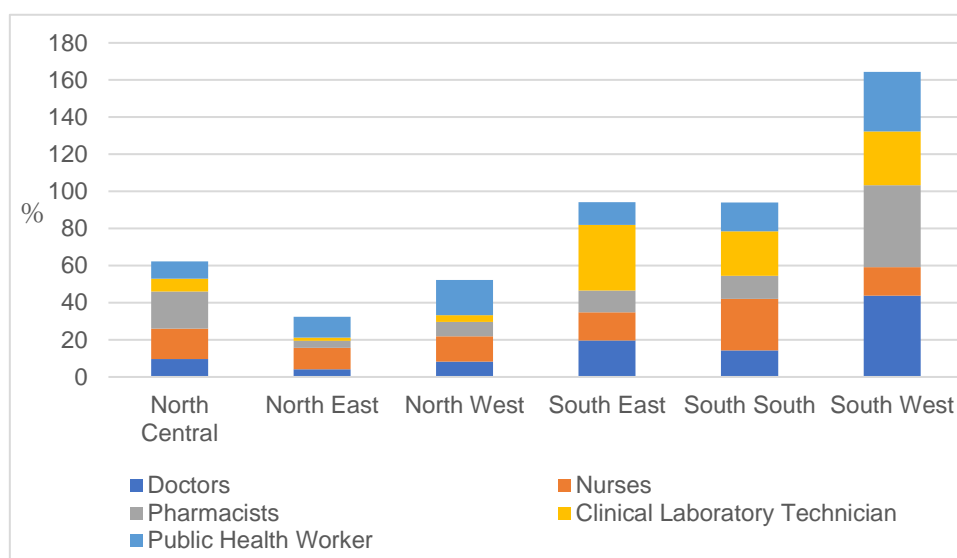


Source: World Bank Open Data

**Figure 26: Number of Healthcare Workers per Thousand Population**

<sup>38</sup> The National Health Workforce Profiles for Year 2012, 2018

<sup>39</sup> Federal Government of Nigeria. National Strategic Health Development Plan 2008 – 2022. 2018



**Figure 27: Distribution of Human Resources for Health by Region**

Source: National Health Policy 2016 Promoting the Health of Nigerians to Accelerate Socio-economic Development

### 3.1.1 Standardization of Health Human Resource Development

Standardization of health human resources (doctors, nurses, community health workers) across the country is done by the regulatory body responsible for accreditation and certification of health human resources. It is centralized at the federal level through a regulatory body that oversees the selection, training, and accreditation of trainees as well as the certification and licensing of training institutions. Health training institutions are established by federal and state governments and private entities, including private companies, churches, and foundations.

There are at present 14 professional regulatory bodies responsible for maintaining and managing the standards of training for human resources of health in Nigeria. These include the Medical and Dental Council of Nigeria, the Pharmacists Council of Nigeria, the Nursing & Midwifery Council, the Community Health Practitioners Board, and the Medical Laboratory Science Council, etc. Table 15 shows the regulatory bodies that oversee the training and certification of human resources for health, including at the primary health care level. However, these regulatory bodies are not fully functional due to weak structural and institutional capacity to carry out their statutory functions of effective oversight of health human resource development agencies to exercise decertification and accreditation of training agency programs in their jurisdictions.<sup>40</sup>

<sup>40</sup> National Health Policy 2016



**Table 15: Accreditation and Licensing Bodies for Different Cadres of Health Workforce**

<b>Cadre of Health workforce</b>	<b>Accreditation and Licensing Body</b>
Medical Doctors	Medical and Dental Council of Nigeria (MDCN)
Nurses and Midwives	Nursing and Midwifery Council of Nigeria (NMCN)
Pharmacists and Pharmacy Technicians	Pharmacists Council of Nigeria (PCN)
Community Health Practitioners comprising of three categories: Community Health Officer (CHO), Community Health Extension Worker (CHEW), and Junior Community Health Extension Worker (JCHEW)	Community Health Practitioners Registration Board of Nigeria (CHPRBN)
Dental Technologist	Dental Technologists Registration Board of Nigeria (DTRBN)
Environmental Health Officers/ Environmental Health Technicians/ Environmental Health Assistants	Environmental Health Officers Registration Council of Nigeria (EHORCN)
Health Record Officers/ Health Record Technicians	Health Records Officers Registration Board of Nigeria (HRORBN)
Radiographers or radiological technologists	Radiographers Registration Board of Nigeria (RRBN)
Medical Laboratory Scientists/ Medical Laboratory Technicians/ Medical Laboratory Assistants	Medical Laboratory Science Council of Nigeria (MLSCN)

Source: Nigeria Health Workforce Country Profile 2018

Each of the State of federation has various bodies under the State Ministry of Health responsible for overseeing the standards of practice (regulations and standards of practice to be followed by health personnel to improve the quality and efficiency of health services to patients) of each of these cadres of health workforce within the health facilities in the State. In Lagos State, Health Facility Monitoring and Accreditation Agency (HEFAMAA) is responsible for overseeing the standards of practice in both the public and the private sectors and it is to improve the quality and efficiency of health care services to patients and ensure compliance with uniform service delivery. HEFAMAA has a pyramidal organizational structure, and recently, they have been using the professional associations to which health cadres belong to conduct more extensive additional monitoring to regulate the standards of practice of health personnel members, such as doctors, nurses, and clinical laboratory technicians. In Lagos State, state health human resource development institutions have been transferred from under the Ministry of Health and are now directly supervised by the Ministry of Education. In some cases, there is this kind of collaboration between the two ministries in governance for increasing health human resources, policy formulation, and workforce planning.

The training of human resources for health is carried out in institutions accredited by the Nigerian Medical and Dental Council and the National Universities Commission, and by the Nigerian Nursing and Midwifery Council for nurses and midwives, with 38 medical universities, 9 dental universities, and 234 nursing and midwifery schools. According to the 2012 report, 78% of the medical colleges are located in the southern part of the country, producing a total of 2,300

graduates each year. Also, in 2012, there were 56 accredited colleges and health technology schools offering training programs for community health. These colleges and schools train Community Health Extension Workers (CHEWs), Junior Community Health Extension Workers (JCHEWs), and Community Health Officers (CHOs) to work at the primary health care level. There are 243 nursing and midwifery schools in the country, but from 2009 to 2012, 13 schools had their accreditation withdrawn and were closed due to lack of proper school buildings, equipment, and other infrastructure management, and inadequate quality of instructors.<sup>41</sup>

**Table 16: The number of Training Institutions for Health Personnel**

Certification Status	Medical science	Dentistry	Nurses/Midwives
Full	32	9	92
Partial	6	-	142
Total	38	9	234

Source: [https://www.mdcn.gov.ng/public/storage/documents/document\\_501308240.pdf](https://www.mdcn.gov.ng/public/storage/documents/document_501308240.pdf)  
<https://www.nmcn.gov.ng/apschool.html>

### 3.1.2 Standardization of Numbers of Health Workforce Required for Primary Health Care

The NPHCDA of the Federal Ministry of Health sets the specifications for the national minimum standards for primary health care into three points as listed below:

1. Health Infrastructure that specifies categories of PHCs in the country including recommended infrastructure dimensions, furniture, and equipment
2. Human Resources for Health specifying the minimum number and cadres of human resources for health requirements for running the categories of PHCs specified above
3. Service Provision requirements based on each facility type including the minimum requirement of medical equipment and essential drugs (derived from the Nigeria Essential Medicines List) required to achieve these services

**Table 17: Minimum recommended staff number and cadre for each type of health facility**

	Health posts: 1 facility per 500 people	Health clinics: 1 facility per 2,000 to 5,000 people	Health centers: 1 facility per 10,000 to 20,000 people
CORPs <sup>1</sup>	As many as available	As many as available	As many as available
Nursing and Midwifery	-	2	4
CHEW <sup>2</sup>	-	2	3
JCHEW <sup>3</sup>	At least 1	4	6
Pharmacist	-	-	1
Environmental administrator	-	-	1
Medical archivist	-	-	1

<sup>41</sup> Nigeria HIS Policy in 2014

Clinical laboratory technician	-	-	1
Physician	-	-	1
CHO <sup>*4</sup>	-	-	1

\*1: CORPs - Community Resource Persons

\*2: CHEW - Community Health Extension Worker

\*3: JCHEW - Junior Health Extension Workers

\*4: CHO - Community Health Officer

Source: NPHCDA, Nigeria Minimum Standard for Primary Health Care in Nigeria

### 3.1.3 Employment and Management of Human Resources of Health for PHC in Lagos and Ogun State

#### (1) Lagos State

PHC's health workforce is broadly categorized as junior and senior, based on their grade in terms of education, professional qualifications, and the range of services they can provide. Junior PHC personnel are those in ranks 1–6, while those in ranks 7 and above are called senior PHC personnel. PHC human resources of ranks 1–6 will be employed by the local administrative district governments. The Local District Health Bureaus will appoint, promote, train, and develop the junior PHC personnel under the supervision of the Lagos State Primary Health Care Board (LSPHCB). However, dismissal and resignation applications will be handled by the LSPHCB. The LSPHCB will also be responsible for approving the promotion of junior PHC personnel.

The approval for recruitment and deployment of Senior PHC personnel is an appointment from the State Governor through the State Ministry of Health and the LSPHCB is authorized to hold direct responsibility for recruitment, training, human resource development, promotion, and discipline of Senior PHC personnel. The payment of salaries and allowances of all PHC personnel in the state is the responsibility of the LSPHCB.

#### (2) Ogun State

The categories of PHCs in the state include health posts, clinics, and comprehensive PHC centers. The staffing of these facilities is supposed to be in line with the mandatory standards set by the NPHCDA as mentioned above, but there are many facilities that do not meet the mandatory standards. Responsibility for the hiring, deployment, and promotion of PHC health personnel lies primarily with the local government with support and oversight from the state and federal governments. In addition, efforts are underway in Ogun State to transfer health personnel for PHC provision from agencies such as the Local Government Service Commission to the management of the Ogun State Primary Health Care Development Board (OGSPHCDB).

The Local Government Service Commission is responsible for hiring, posting, promotion, and discipline of junior PHC workers. The State, through the PHC board, hires senior PHC health workforce including nurses and doctors, and also provides in-service training for the staff. The Federal Government contributes to staffing through the BHCPF which provides for 2 categories of health workforce at the PHC – ad-hoc health attendants and Community Health Influencer

Promoters and Services (CHIPS) agents.

## 3.2 Health Financing

### 3.2.1 National Health Account

To promote UHC, it is essential that the government budget (including social insurance) contributes to the health system. In 2001, the African Union issued the Abuja Declaration, which aims to increase the share of government health expenditure to at least 15% of government expenditure. In contrast, the same figure for the Nigerian government is only 4.6% (2017), indicating insufficient budget allocation to the health sector.

In order to achieve UHC, government spending must be at the level of “out-of-pocket health expenditure as a percentage of current health expenditure: 20% or less”<sup>42</sup>, “government health expenditure as a percentage of GDP: 5% or more”, and “government health expenditure per capita: \$86.3 or more.”<sup>43</sup> However, these values in Nigeria are 77.2%, 0.5%, and \$10.5 (all in 2017) (Table 18). Government health expenditure, both as a percentage of GDP and as a per capita amount, is very low compared to the sub-Saharan African average. And the out-of-pocket percentage of current health expenditure is more than double the sub-Saharan African average of 35.5% (2017), indicating that the out-of-pocket rate is very large and needs to be protected from fiscal risks.

---

<sup>42</sup> Xu, K., Saksena, P., Jowett, M., Indikadahena, C., Kutzin, J., & Evans, D. B. Exploring the thresholds of health expenditure for protection against financial risk, World Health Report; 2010

<sup>43</sup> McIntyre, D., Meheus, F. Fiscal Space for Domestic Funding of Health and Other Social Services. Chatham House Centre on Global Health Security Working Group Papers; 2017

**Table 18: Key Health Financing Indicators**

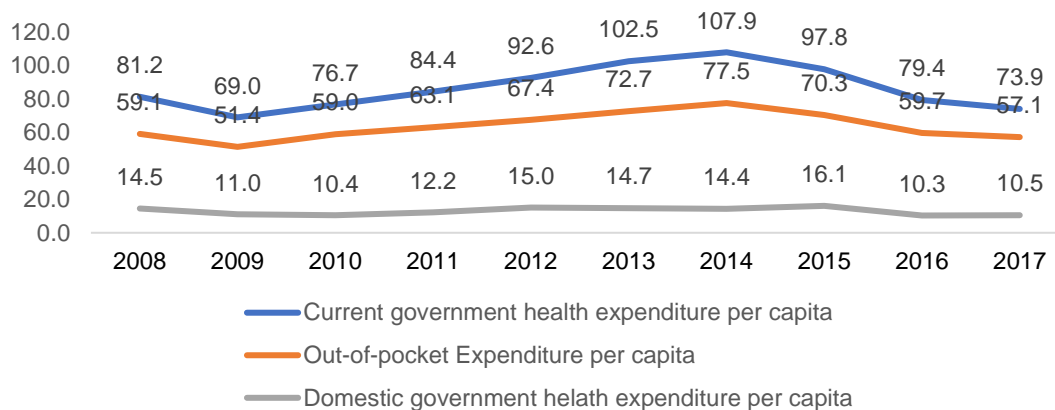
Health Financing Indicators	Nigeria	Average for Sub-Saharan Africa	Average for low-and middle-income countries	Japan	International Goals
Current Health Expenditure (US dollar 1millions)	14,111 (2017)	-	-	531,481 (2017)	-
Current health expenditure as a percentage of GDP (%)	3.8 (2017)	5.1 (2017)	4.1 (2017)	10.9 (2017)	-
Current health expenditure per capita (US dollar)	73.9 (2017)	83.8 (2017)	80.5 (2017)	4,169.0 (2017)	-
Domestic government health expenditure as a percentage of current health expenditure (%)	14.2 (2017)	36.1 (2017)	33.7 (2017)	84.1 (2017)	-
Out-of-pocket as a percentage of current health expenditure (%)	77.2 (2017)	35.5 (2017)	55.7 (2017)	12.9 (2017)	Less than 20%*1
Foreign aid as a percentage of current health expenditure (%)	7.9 (2017)	11.2 (2017)	3.4 (2017)	-	-
Domestic government health expenditure as a percentage of GDP (%)	0.5 (2017)	1.9 (2017)	1.4 (2017)	9.2 (2017)	5% or more*2
Domestic government health expenditure per capita (U.S. dollar rate in dollars)	10.5 (2017)	30.2 (2017)	27.1 (2017)	3,505.8 (2017)	86.3 or more*2
Domestic government health expenditure as a percentage of government expenditure (%)	4.6 (2017)	-	5.0 (2017)	23.6 (2017)	15% or more

\*1: Xu, K., Saksena, P., Jowett, M., Indikadahena, C., Kutzin, J., & Evans, D. B. Exploring the thresholds of health expenditure for protection against financial risk, World Health Report; 2010

\*2: McIntyre, D., Meheus, F. Fiscal Space for Domestic Funding of Health and Other Social Services. Chatham House Centre on Global Health Security Working Group Papers; 2017

Source: Prepared by Survey team by World Health Organization Global Health Expenditure database and Africa Scorecard on Domestic Financing for Health, 2018

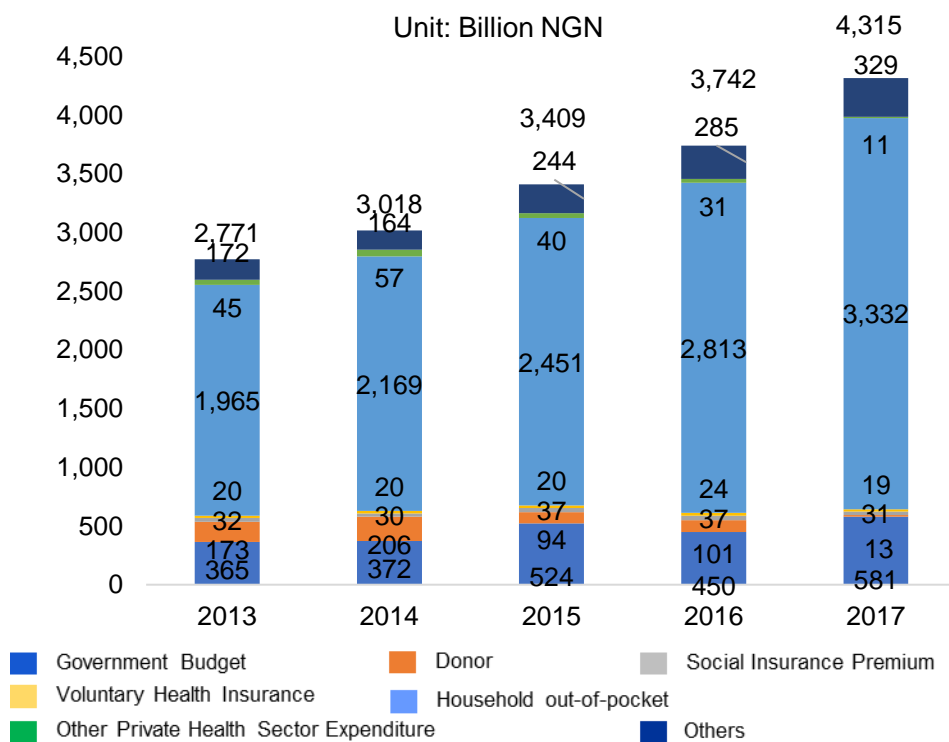
With the exception of the most recent three years, current health expenditure per capita has increased rapidly, rising from \$69.0 in 2009 to \$107.9 in 2014. However, domestic government health expenditure per capita has not changed significantly, and out-of-pocket expenditure per capita has increased.



**Figure 28: Per Capita Health Expenditure in Nigeria (US dollar)**

Source: World Health Organization Global Health Expenditure database

Most of the sources of health expenditure in Nigeria are household out-of-pocket payments, and in recent years, approximately 80% of current health expenditure has been household out-of-pocket payments. On the other hand, “foreign aid as a percentage of current health expenditure” is 7.9% (2017), which is not highly dependent on foreign aid compared to the average of 11.2% in sub-Saharan Africa (yet, there are some differences in values due to slightly different classification methods, such as “foreign aid” in Table 18 and “aid agencies” in Figure 29).



**Figure 29: Breakdown of Sources of Current Health Expenditure in Nigeria**

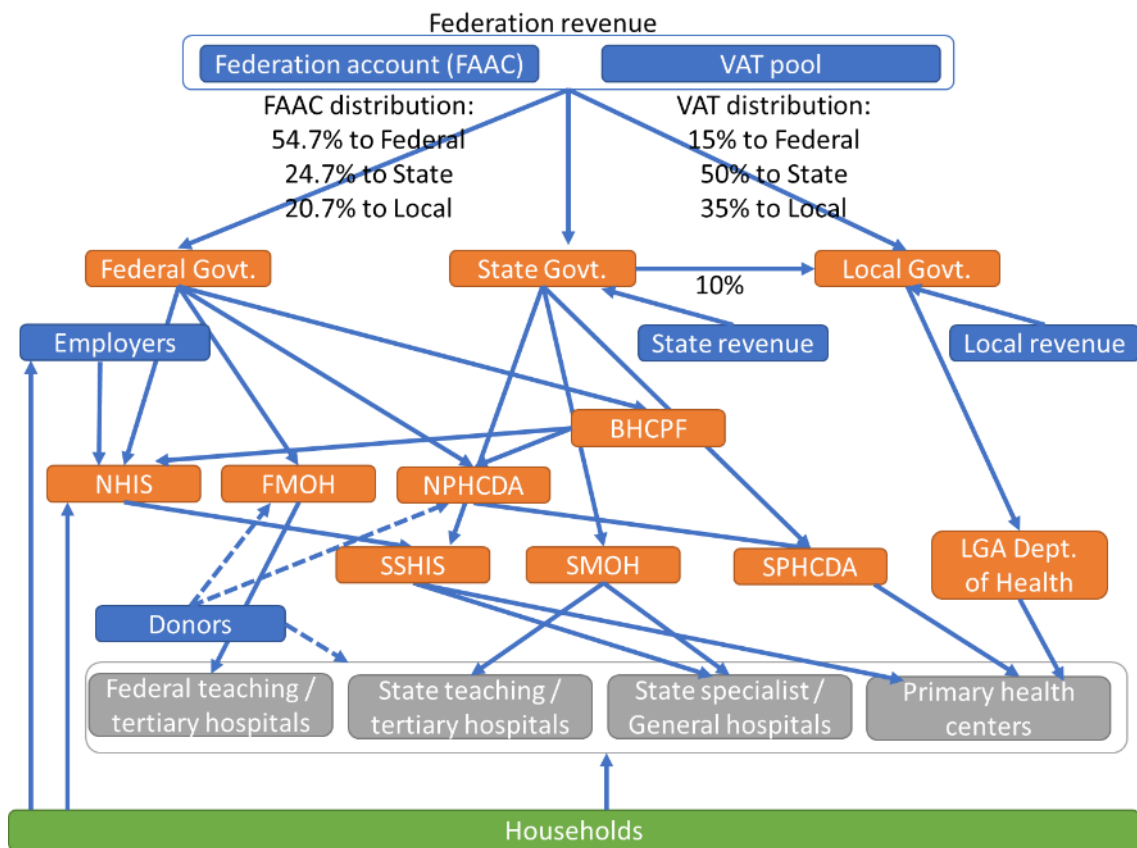
Source: World Health Organization Global Health Expenditure database

### 3.2.2 Health Budget

#### (1) Flow of Health Budget

The federal government has two major sources of revenue: the value-added tax (VAT) pool account, and the federal account for oil and non-oil revenues. These two sources of revenue are allocated to the federal, state, and local governments according to a formula based on the principle of vertical distribution. The federal government allocates the budget to the Federal Ministry of Health, the NPHCDA, the National Health Insurance Scheme (NHIS), and the Basic Health Care Provision Fund (BHCPF). In addition to budgeting for tertiary care health facilities under its jurisdiction, the Federal Ministry of Health will provide medicines and other supplies to the State Ministry of Health, as described in section 2.4.3 “Medicines”. The BHCPF provides funding for the NHIS and the NPHCDA. The NHIS will make budgetary provision for the State Social Health Insurance Scheme, and the NPHCDA will also make a budgetary provision for the State Primary Health Care Development Agency, as well as provide immunization to each health facility.

The state government will pay subsidies to the state Ministry of Health and the state primary health care development agency as well as the State Social Health Insurance Scheme. It is also stipulated that 10% of the state government’s budget be granted to the local district governments. The local government, through the Health Department, provides budgetary support to primary health care facilities.



**Figure 30: Flow of Health Budget**

Source: Prepared by the survey team based on World Bank, Nigeria health financing system assessment. 2018

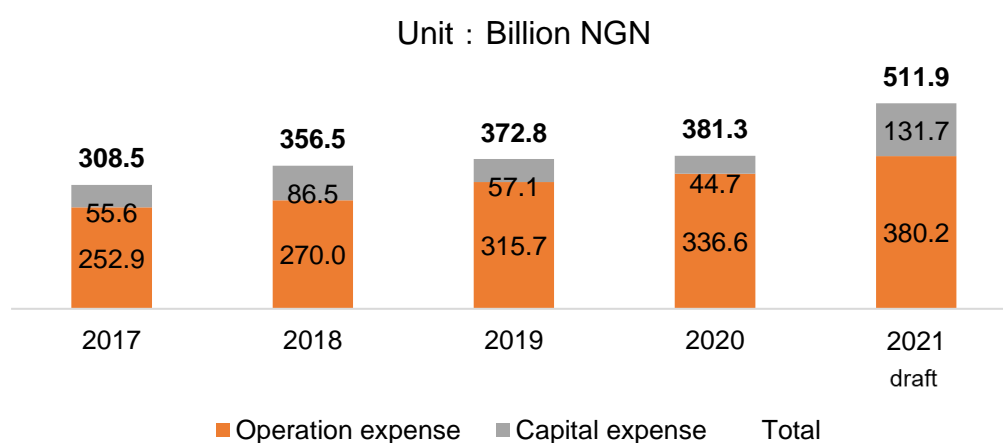
The provision of primary health care and many other health services is the responsibility of the state and local governments, but much of the health-related budget is spent by the federal government or tertiary care. In 2016, the federal level accounted for 67% of total health sector expenditure (7.1% of the total federal budget), the state-level accounted for 26% (4.2% of the total state budget), and the local government level accounted for 7% (3.8% of the total local government budget). Another challenge is that state and local governments depend on federal grants for much of their budgets, which are not efficiently allocated. Federal grants are divided into “vertical distribution: ability-to-pay principle” and “horizontal distribution: beneficial principle”, with vertical distribution concentrated in oil-producing regions. Horizontal distribution is based on socio-economic indicators, but the health indicators used are at the level of inputs, such as the number of hospital beds and the number of health personnel. This turns out to bring results where: wealthier regions receive more grants; there is more focus on inputs than



outputs (e.g., health service utilization) and outcomes (e.g., mortality rate).<sup>44</sup>

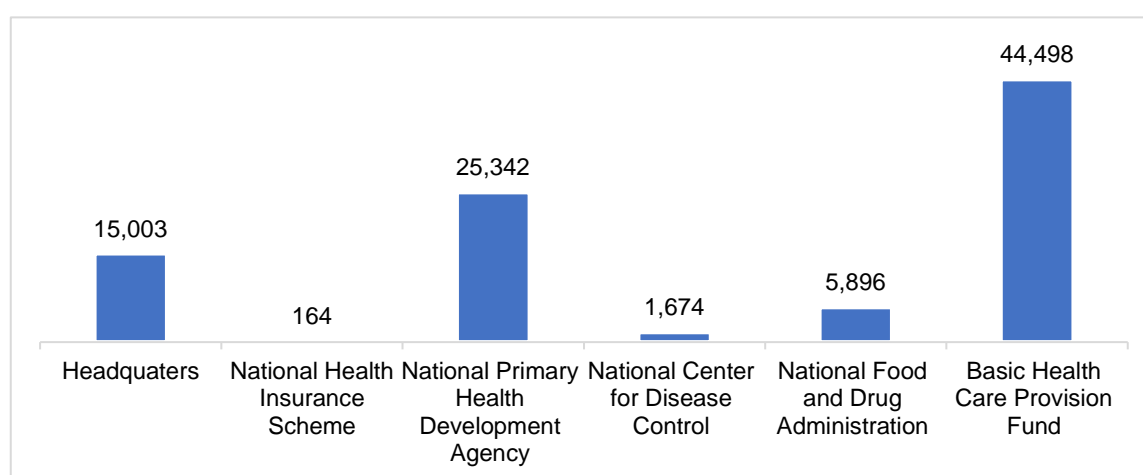
## (2) Federal Ministry of Health

The draft budget of the Federal Ministry of Health for 2021 is NGN 511.9 billion (\$1.33 billion), which has been increasing in recent years. In the budget breakdown, “operating expenses” accounted for the majority of the budget, but in the draft 2021 budget, the share of capital expenditures has increased to 25.7% of the total. In addition, the proposed budget of the Federal Ministry of Health Headquarters for 2020 allocated NGN 44.5 billion (\$0.116 billion) for the BHCPF and NGN 25.3 billion (\$0.66 billion) for the NPHCDA, more than the headquarters’ NGN15 billion (\$0.39 billion).



**Figure 31: Breakdown of the Federal Ministry of Health Budget**

Source: National Budget, Ministry of Finance, Nigeria



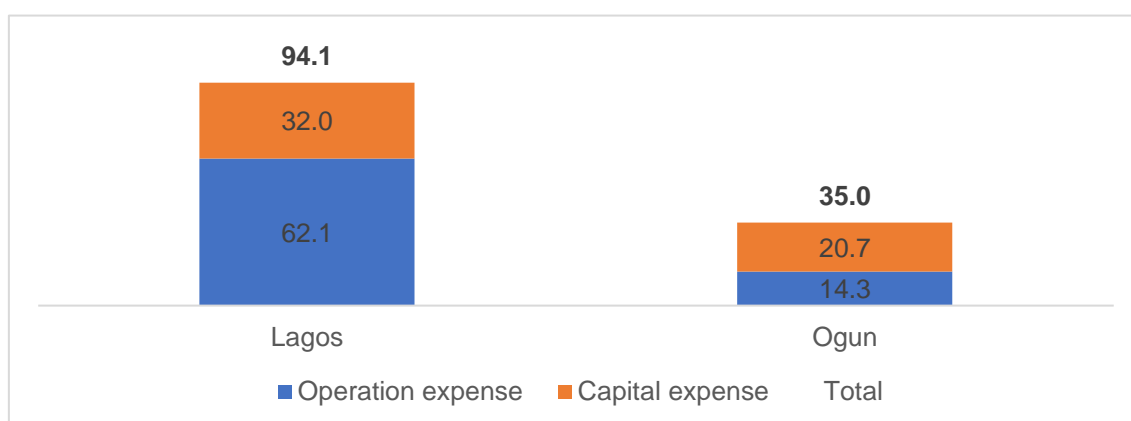
**Figure 32: 2020 Budgets for Major Departments of the Federal Ministry of Health (in NGN million)**

Source: National Budget, Ministry of Finance, Nigeria

<sup>44</sup> World Bank. Nigeria health financing system assessment. 2018

### (3) State Ministry of Health

The Lagos State Ministry of Health budget for 2021 is NGN 94.1 billion (\$0.246 billion), which represents 8.1% of the state government budget of NGN 1,163.5 billion (\$3.04 billion). The breakdown is NGN 62.1 billion (\$0.162 billion, 66.0% of the state health ministry budget) for operating expenses and NGN 32 billion (\$0.83 billion, 34.0%) for capital expenditures. The budget of the Ogun State Ministry of Health for the same year was NGN 35 billion (\$0.091 billion), accounting for 10.3% of the state government budget of NGN 338.6 billion (\$0.89 billion). The breakdown is NGN 14.3 billion (\$0.37 billion, or 40.9% of the state Ministry of health budget) for operating expenses and NGN 20.7 billion (\$0.054 billion, or 59.1%) for capital expenditures.



**Figure 33: 2021 Budget of State Ministry of Health (Unit: Billion NGN)**

Source: Lagos, Ogun State Government Budget

### 3.2.3 Health Coverage System

Seventy-seven percent of health facilities including public health facilities reported that they charged user fees. Among the various health services, a large percentage of health facilities (68%) required user fees for drugs or other commodities.<sup>45</sup> While the federal government and many state governments have measures to make primary health care and maternal and child health services free, the percentage of health facilities that require user fees for delivery and antenatal care was also 44% and 39%, respectively. Many primary health care level health facilities lack operating funds and rely on out-of-pocket expenditure from users to operate the facilities and provide services.<sup>44</sup>

<sup>45</sup> Federal Ministry of Health (2017). National Health Facility Survey 2016.

**Table 19: Percentage of Health Facilities with Out-of-Pocket Expenditure at the Health Facility (%)**

Child immunization	Delivery	Drugs and commodities	Laboratory tests	Family Planning	ANC	Outpatient consultation
5	44	68	35	14	39	32

Source: Federal Ministry of Health (2017). National Health Facility Survey 2016.

As of 2018, only 2.6% of women (aged 15–49) and 3.0% of men (aged 15–49) had health insurance coverage, and the overwhelming majority of the population pays out-of-pocket at health facilities.

**Table 20: Female (15–49 years) Health Insurance Coverage (%: 2018)**

Region	Employee insurance	Community-based insurance	Private commerce insurance	Other	Uninsured	Any insurance
North Central	2.2	0.0	0.1	0.0	97.6	2.4
North West	1.0	0.2	0.1	0.0	98.7	1.3
North East	1.7	1.0	0.1	0.1	97.2	2.8
South West	2.1	0.5	0.6	0.1	96.8	3.2
South South	2.3	0.4	0.1	0.2	97.1	2.9
South West	2.7	0.2	0.2	0.1	96.7	3.3
Rural	0.6	0.5	0.2	0.1	98.6	1.4
Urban	3.5	0.4	0.2	0.1	95.8	4.2
Poorest* <sup>1</sup>	0.0	0.5	0.0	0.0	99.4	0.6
Wealthiest* <sup>2</sup>	6.9	0.5	0.6	0.2	92.0	8.0
National	1.9	0.5	0.2	0.1	97.4	2.6

\*1: Uppermost quintile obtained (80–100%)

\*2: Lowermost quintile obtained (0–20%)

Source: National Population Commission (2019). Nigeria Demographic & Health Survey 2018.

**Table 21: Male (15–49 years) Health Insurance Coverage (%: 2018)**

Region	Employee insurance	Community-based insurance	Private commerce insurance	Other	Uninsured	Any insurance
North Central	4.0	0.2	0.1	0.1	95.5	4.5
North West	1.6	0.1	0.0	0.0	98.4	1.6
North East	2.0	0.0	0.0	0.2	97.8	2.2
South West	1.7	0.2	0.0	0.0	98.0	2.0
South South	1.6	0.1	0.2	0.2	98.0	2.0
South West	4.7	0.5	0.1	0.3	94.4	5.6
Rural	1.3	0.1	0.1	0.1	98.6	1.4
Urban	4.3	0.3	0.1	0.2	95.2	4.8
Poorest* <sup>1</sup>	0.0	0.0	0.0	0.0	100.0	0.0
Wealthiest* <sup>2</sup>	8.4	0.7	0.3	0.6	90.2	9.8
National	2.7	0.2	0.1	0.1	97.0	3.0

\*1: Uppermost quintile obtained (80–100%)

\*2: Lowermost quintile obtained (0–20%)

Source: National Population Commission (2019). Nigeria Demographic & Health Survey 2018.

The NHIS was formulated in 1999 and provides a range of health insurance coverage for the formal sector (civil servants and private sector), informal sector employees, and vulnerable groups

to protect them from financial risk. The NHIS also serves as a gateway for the budget from the BHCPF, which will be described later. The NHIS, which is at the federal level, designs and regulates each health insurance program and also plays the role of the insurer for programs covering federal government employees. Each state government then establishes a State Social Health Insurance Scheme (SSHIS), which plays the role of the insurer for each program.

The system is designed and regulated in a way that the NHIS is responsible for is the foundation of the insurance system, including the benefits package (health services to be covered), reimbursement (payment method and amount of reimbursement, such as capitation or fee for service), and premiums for each program. It also authenticates the administrative agent (Third-party Administrator). This administrative agent is an organization that operates various administrations such as appointing health facilities for the programs, promoting enrollment of insured persons, collecting premiums, and examines and pays medical fees on behalf of the insurer, the NHIS.

The BHCPF was established in 2014 because health insurance requires not only premiums from subscribers and employers, but also subsidies from the government in order for it to be widely available to the public. The Federal Ministry of Health, the NHIS, and the NPHCDA jointly formulated the “Guidelines for the Administration, Disbursement, Monitoring and Fund Management of the BHCPF”, under which 50% of the funds will be allocated to the NHIS, 45% to the NPHCDA, and 5% to the National Emergency Medical Treatment Committee (NEMTC). The three organizations that receive funds are also called gateways. Funds from the BHCPF to the NHIS are not strictly earmarked but are required to be used primarily for reimbursement for medical services. The 45% that will be contributed from the BHCPF to the NPHCDA is earmarked to be used for medicines (20%), maintenance of facilities and equipment (15%), and human resource development such as training (10%). State governments and local government must contribute their own budgets in an amount equal to 25% of the funds from the BHCPF.

Table 22 shows the progress of health insurance development in the Federal Capital Territory, Lagos State, and Ogun State, and Tables 23–25 provide an overview of the social health insurance system in each area. Among the three regions, Lagos State was the first to pass a bill related to the state social health insurance scheme in 2015; the development and implementation of social health insurance are progressing. Nevertheless, only programs targeting the informal sector and poor and vulnerable groups are available, and programs targeting civil servants and private sector employees are planned to be launched in the future. In the federal capital region, efforts are also underway, but without a legal framework in place, as the bill for the Federal Capital territory social health insurance scheme was not passed in the last session of the federal parliament. Ogun

State has just passed a bill in 2018 and the state social health insurance scheme officially started its operation in 2019. As such, the social health insurance scheme is yet to be fully operational, starting with the development of health administration manuals and other documents.

Each region has adopted a reimbursement system of capitation payment for primary health care and fee for service payment for secondary health care, requires a 10% out of pocket payment for prescription drugs, etc. The system is designed based on the guidelines set by the NHIS. However, there are some differences, such as different premiums in different regions, and in Lagos State, secondary care is not included in the “basic” benefits package.

**Table 22: Progress on Implementation of the Social Health Insurance Scheme in Each Region**

	FCT	Lagos State	Ogun State
Passage of legislation related to state social health insurance schemes			
Development of insurance administration manuals, etc.			
Start of insurance enrollment			
Certification and appointment of health facilities			
Contract with a third-party administrator			
Budget allocation from state government <sup>*1</sup>			

Note: Completed processes are highlighted in green and incomplete processes are highlighted in red.

\*1: Some budgets are specifically allocated by the state government at the time of establishment of state social health insurance schemes, but here we refer to recurring budget allocations.

Source: Interview from Region/State Social Health Insurance Scheme

**Table 23: Outline of the Health Insurance Scheme of FCT**

Item	Outline
Regulatory	<ul style="list-style-type: none"> <li>The bill for the establishment of the FCT health insurance scheme is currently at the federal parliament to be passed</li> <li>The scheme currently operates without the necessary legal framework</li> </ul>
Population covered	<ul style="list-style-type: none"> <li>Employees of FCT Administration and formal sector employee of 6 Area Councils and residents of FCTs (in particular, focusing on pregnant women, children and adolescents, and the elderly as vulnerable groups, are using the National Social Register to identify them with local district governments)</li> </ul>
Benefit Package	<ul style="list-style-type: none"> <li>The benefit package set by the NHIS has been revised and is being used</li> <li>Secondary care is also included in the package</li> </ul>
Premium	<ul style="list-style-type: none"> <li>The premium for the civil service consists of 3.25% of the basic salary of employees (a compromise of 1.75% each between employer and employee). The premium for the informal sector is 13,500 NGN (35.7 USD) for a single enrolment and 65,000 NGN (172 USD) for a family enrolment</li> <li>The premium for BHCPF (targeted mainly at vulnerable group) benefits package is 12,000NGN (32 USD)/year</li> </ul>
Enrolment	<ul style="list-style-type: none"> <li>Number of enrolments: 160,000 (representing about 4.4% of the population of</li> </ul>

	<p>FCT)</p> <ul style="list-style-type: none"> <li>Enrolment is promoted using ICT</li> </ul>
Accreditation of Health Facility	<ul style="list-style-type: none"> <li>20 public health facilities and 230 public health facilities are given accreditation, and a total of 62 public primary health care facilities are renovated using the fund from BHCPF</li> </ul>
Provider Payment Mechanisms	<ul style="list-style-type: none"> <li>Per capita payment for primary care, piece-rate payment for secondary care</li> </ul>
Administrative agent	<ul style="list-style-type: none"> <li>The processing of provider payment is outsourced to an administrative agent.</li> </ul>

Source: Interview with stakeholder at FCT Health Insurance Scheme

**Table 24: Outline of the Health Insurance Scheme of Lagos State**

Item	Outline
Regulatory	<ul style="list-style-type: none"> <li>The bill for the establishment of the Lagos State Health Management Agency (LASHMA) was passed in 2015 and officially started its operation in 2018</li> </ul>
Population covered	<ul style="list-style-type: none"> <li>Currently, only programs targeting the informal sector and poor and vulnerable groups (especially pregnant and nursing mothers, children under five, and the elderly) have been initiated</li> <li>The poor group is identified in collaboration with the Ministry of Women Affairs and Poverty alleviation</li> <li>It plans to launch programs targeting the formal sector employees of State and LGA</li> </ul>
Benefit Package	<ul style="list-style-type: none"> <li>The benefits package set by the NHIS has been revised and is being used.</li> <li>Primary care is included in the “basic” package but secondary care is an “affordable” supplementary benefit package</li> </ul>
Premium	<ul style="list-style-type: none"> <li>The premium for a single enrolment from the informal sector is 8,500 NGN (22 USD), and 40,000 NGN (106 USD) for family enrolment (a couple with four children under the age of 18 years) per year</li> <li>The premium for BHCPF (targeted mainly at vulnerable groups) benefit package is 12,000 NGN (32 USD) per year</li> </ul>
Enrolment	<ul style="list-style-type: none"> <li>Number of enrolments: 390,000</li> <li>Enrolment is promoted using ICT</li> </ul>
Accreditation of Health Facility	<ul style="list-style-type: none"> <li>BHCPF has given accreditation to 181 public health facilities</li> <li>HEFAMAA has given accreditation to 77 public health facilities and 125 private facilities up to present</li> </ul>
Provider Payment Mechanisms	<ul style="list-style-type: none"> <li>Per capita payment for primary care, piece-rate payment for secondary care</li> </ul>
Administrative agent	<ul style="list-style-type: none"> <li>Enrolment promotion, enrolment management, identification of poor and vulnerable groups, processing of provider payment is outsourced to the administrative agent</li> </ul>

Source: Interview with Lagos State Health Management Agency

**Table 25: Outline of the Health Insurance Scheme of Ogun State**

Item	Outline
Regulatory	<ul style="list-style-type: none"> <li>The bill for the establishment of the Ogun State Health Insurance Agency (OGSHIA) was passed in 2018 and officially started its operation in 2019</li> </ul>
Population covered	<ul style="list-style-type: none"> <li>Programs will be launched for the civil servant of state and local governments, private sector employees, the informal sector, and the poor and vulnerable, but enrolment has not yet begun</li> </ul>
Benefit Package	<ul style="list-style-type: none"> <li>The benefits package set by the NHIS has been revised and is being used</li> <li>Secondary care is also included in the package</li> </ul>
Premium	<ul style="list-style-type: none"> <li>The premium for the civil servant consists of 15% of the basic salary of employees (a compromise of 7.5% each between employer and employee)</li> <li>Enrolment is on a household basis, not on an individual basis. The premium for</li> </ul>

	<p>the informal sector is 12,000 NGN (32 USD) for single enrolment while family enrolment is 65,000 NGN (172USD).</p> <ul style="list-style-type: none"> <li>• The premium for the BHCPF program (targeted mainly at vulnerable groups) benefit package is 12,000 NGN (32 USD) per year.</li> </ul>
Enrolment	<ul style="list-style-type: none"> <li>• Programs for the informal sector will be initiated on a priority basis</li> <li>• No enrolment has started to date</li> </ul>
Accreditation of Health Facility	<ul style="list-style-type: none"> <li>• Both public and private health facilities are planned to be accredited</li> </ul>
Provider Payment Mechanisms	<ul style="list-style-type: none"> <li>• Per capita payment for primary care, piece-rate payment for secondary care</li> </ul>
Administrative agent	<ul style="list-style-type: none"> <li>• Enrolment promotion, enrolment management, identification of poor and vulnerable groups, processing of provider payment will be outsourced to the administrative agent.</li> </ul>

Source: Interview with Ogun State Health Insurance Agency

Disbursement through the gateway of the NPHCDA is also defined in the Guidelines for the Administration, Disbursement, Monitoring, and Fund Management of the BHCPF. According to the guidelines, the NPHCDA will set the standards for health facilities, and the State Primary Health Care Development Agency will revise the standards as necessary. To receive a disbursement from the fund, health facilities need to be accredited according to the same standards. In terms of fund management, the State Primary Health Care Development Agency is required to remit funds to the health facilities on a monthly or quarterly basis, which must be done within two weeks of receipt from the NPHCDA, and the administrative costs of the National and State Primary Health Care Development Agencies must not exceed 2.25% of the fund.<sup>46</sup>

For the NPHCDA gateways, health facility assessments have been conducted in 26 states and FCTs, and training on the implementation of the Basic Health Care Delivery Fund program for health workers has been conducted in 18 states and FCTs. Disbursements are then made from the fund to all State Primary Health Care Development Agencies, including the FCT. However, only six states (Abia, Anambra, Ebonyi, Delta, Niger, and Osun) and the FCT have been able to fund the primary health care facilities. Challenges include coordination among the various stakeholders involved and greater use of ICT in program management to centrally deal with and keep information from a number of health facility.<sup>47</sup> In some areas, USAID has developed the essential service packages and guidelines.<sup>26</sup> These kinds of guiding documents may also be needed in other regions, however, information on operational issues was not collected for the purpose of this survey.

<sup>46</sup> Federal Ministry of Health, National Health Insurance Scheme and National Primary Care Development Agency. Guidelines for the Administration, Disbursement, Monitoring and Fund Management of the Basic Healthcare Provision Fund. 2016

<sup>47</sup> Results for Development. Preliminary learnings from Nigeria's Basic Health Care Provision Fund. <https://r4d.org/blog/preliminary-learnings-from-nigerias-basic-health-care-provision-fund/> (Accessed on April 18, 2021)

### 3.3 Health Information System

#### 3.3.1 Health Information System Overview

In 2014, the Federal Ministry of Health formulated the Nigeria Health Information Policy and Strategy as a roadmap for strengthening the health information system, and in 2015, the National Health ICT Strategic Framework 2015–2020 was released. The USAID-supported MEASURE Evaluation Project has identified (1) a system to regularly collect information on health service delivery, (2) a master list of health facilities, and (3) a health survey as the core components of a health information system. In Nigeria, these are also known as (1) the District Health Information Software (DHIS2), (2) the Health Facility Registry, and (3) the Demographic and Health Survey (DHS) and Multiple Indicator Cluster Survey (MICS), respectively. The introduction of DHIS2 began in 2010, and by 2014, it had been introduced in all 36 states, however, there remain many challenges. As one example, the DHIS2 module, for which the BMGF and the U.S. Centers for Disease Control and Prevention (CDC) provided five-year support to collect routine immunization data and vaccine management information, has been deployed in all 36 states and the Federal Capital District, and all states have reported that they are now able to report vaccination and administration data. In this module, paper-based information from each health facility is compiled by the Local Government Area (LGA), entered into the data, and sent to the state government.<sup>48</sup>

The master list of health facilities (Health Facility Registry) was created in 2018 and is updated once in 2020. The DHS and MICS have been conducted in many lower-and-middle-income countries with support from USAID and UNICEF, respectively, most recently in Nigeria in 2018 and 2016–2017. An information system for human resources for health is currently in the process of being developed.<sup>49</sup> The information system for managing the logistics of medicines and other products is in limited operation in 13 out of 36 states in the country.<sup>50</sup>

#### 3.3.2 Revision of the Health Information Policy

After establishing the National Health Management Information System Policy in 2006, the Federal Ministry of Health conducted an interagency review and revision of its progress in 2013. The review was based on the World Health Organization's Framework and Standards for National Health Information Systems. Among the issues identified was the lack of governance mechanisms in policy implementation, including the lack of a governance process for data management. It was also found that there are fragmented data systems in place due to the concurrent implementation

---

<sup>48</sup> Faisai Shuaib et al: Implementing the routine immunisation data module and dashboard of DHIS2 in Nigeria, 2014–2019. *BMJ Global Health* 2020

<sup>49</sup> Measure Evaluation, <https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/nigeria>. (Accessed on April 5, 2021)

<sup>50</sup> Nigeria Supply Chain Integration Project, <https://nscip.gov.ng/>. (Accessed on April 5, 2021)



of vertical programs.<sup>51</sup> Then, in 2014, the National Health Information Policy and Strategy of Nigeria was enacted, and a roadmap for strengthening the health information system was formulated. This was followed by the enactment of the National Health ICT Strategic Framework 2015–2020 in 2015. This should be referred to as the national e-Health strategy of the country at present.<sup>52</sup>

### 3.3.3 Operation Status of the District Health Information System (DHIS) and Integrated Disease Surveillance and Response (IDSR).

The federal government has implemented DHIS2 to provide routine health services and disease burden information systems. However, progress in integrating the various versions of the software by disease programs and partners has been slow. Although a review and harmonization of data reporting tools were undertaken in 2013, the level of compliance and implementation is still low and overall reporting rates have been found to be uneven.

Integrated disease surveillance and response (IDSR) systems have contributed to the detection of outbreaks, but their response capacity is still inadequate. There are still challenges in the quality of data and the use of data. Other challenges related to health information systems include lack of regular data reporting, inappropriate use of data, data management that is not reflected in planning and decision making, and limited provision of information from the private sector. In addition to the operational aspects, another major problem is the inadequate budgeting and allocation of funds for health information systems by the federal and state governments. The federal government is unable to take overall control of the system, causing further fragmentation.<sup>53</sup>

### 3.3.4 Demographic Statistics

Birth registration is a fundamental child right enshrined in the International Convention on the Rights of the Child and the African Charter (Article 6) to ensure that every child has the right to citizenship through a birth certificate. However, in Nigeria, only 42.6% of children under five years of age have a birth registration. The National Population Commission under the Ministry of Home Affairs is in charge of birth registration, which is free of charge and a legal obligation to be done within 60 days of birth.<sup>54</sup> The following information is required for birth registration (Table 26), and information is registered and accepted in paper form, not electronically. Birth records are obtained after birth registration, and birth records are required for education, personal

---

<sup>51</sup> E.C. Meribole et al: The Nigerian health information system policy review of 2014. 2018

<sup>52</sup> Measure Evaluation, <https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/nigeria>. (Accessed on April 5, 2021)

<sup>53</sup> National Health Policy 2016

<sup>54</sup> UNICEF Data: Monitoring the situation of children and women

identification, and travel.

**Table 26: Information Required during Birth Registration**

	Information needed
Child	Name, sex, date of birth, date of registration, place of occurrence [of the birth], place of registration
Mother of the child	Place of usual residence, marital status
Father of the child	Father's information is not requested at the time of birth registration.

Source: UNICEF. CRVS profiles - Nigeria. Available <https://data.unicef.org/crvs/Nigeria/> (Accessed 2020.12.05)

The National Population Commission of the Ministry of Interior is also responsible for notification of death registration. Death registration is free of charge and is a legal obligation that should be done within 48 hours of death. In addition, the following information is required for death registration (Table 27), and the method of registering and receiving information is paper-based and not electronic.

**Table 27: Information Required at the time of Death Registration**

	Required information and documents
About the deceased	Name, sex, date of birth or age, marital status, place of usual residence
Deaths	Date of death, place of occurrence, type of place of occurrence (hospital, home, etc.), date of registration, cause of death, certifier

Source: UNICEF. CRVS profiles - Nigeria. Available <https://data.unicef.org/crvs/Nigeria/> (Accessed 2020.12.05)

### 3.3.5 Examples of eHealth Contributions to Health Administration Efficiency

The eHealth landscape assessment conducted in the FCT in collaboration with the Federal Ministry of Health showed that there are 114 eHealth initiatives across the public and private health sectors. Of these, 40.4% were services for patients and residents; the remaining 30.3% were for health service providers, such as health information systems, clinical diagnostic support tools, and health human resource training; 25.7% were eHealth solutions for health system administrators (resource management, disease monitoring, supply chain management platforms, and registration of demographic statistics), and the remaining 3.6% were eHealth solutions for data collection and utilization. Table 28 shows the eHealth solutions that appear to have contributed to efficiency improvement in the FCT, Lagos, and Ogun states.

**Table 28: Example of eHealth Solution**

eHealth Applications	Description
<b>1. Talamus Health Nigeria</b> Functions <ul style="list-style-type: none"> <li>- A complete ecosystem for healthcare business management across private and public sectors. It is currently deployed across over 1000 health facilities in 6 States of Nigeria.</li> <li>- Offered as software as a service thereby reducing the barrier for entry and little or no cost for infrastructure or maintenance</li> <li>- Cloud-based records and real-time access across multiple platforms and devices coupled with in-built telemedicine capability promotes continuity of care</li> <li>- Adequate privacy, access control, and security backed up by Microsoft Azure</li> </ul>	
<b>TALAMUS EMR</b>	<ul style="list-style-type: none"> <li>• The Talamus EMR is an innovative, secure, mobile/mobile responsive, and cloud-based healthcare platform that is built for seamless integration of the health care ecosystem. The application provides mobile-based end-to-end management of patients' records including vitals, medical records, labs, diagnostics, pharmacy, bills management, and two-way referral as needed. The app also provides for the digitization of old medical records using a mobile phone is very intuitive and simple steps. Bill management and appointment scheduling are also key features of this eHealth solution.</li> <li>• The solution can be implemented across multiple facility locations, allows for dictation or typing of consult notes with an embedded machine learning algorithm which continues to improve dictation.</li> </ul>
<b>TALAMUS Pharmacy and Inventory Management System</b>	<ul style="list-style-type: none"> <li>• This is a complete solution for automated prescription and dispensing of medicines, bill settlement, and inter-operability with EMR solutions outside of Talamus health ecosystem. It also comes with inventory management for pharmacies, batch upload of drug list, allows for an unlimited number of products, and backed by Microsoft Azure Data Security.</li> <li>• The solution can be deployed across multiple pharmacy locations and has online and offline capabilities and integration with health insurance modules for claims management.</li> </ul>
<b>TALAMUS HMO Claims Platform</b>	<ul style="list-style-type: none"> <li>• This is a mobile, cloud-based platform for end-to-end management of health insurance operations including medical underwriting and beneficiaries onboarding, encounter and claims management for hospitals, pharmacies, and laboratories including capacity for real-time pre-authentication, claims adjudication and interoperability with other applications.</li> </ul>
<b>2. InStrat Global Health Solutions</b>	
<b>Electronic Health Data Management (HDM)</b>	<ul style="list-style-type: none"> <li>• This is a point-of-care data capture and decision support tool that acts as a streamlined electronic medical record, designed to run on Android phones and tablet computers. With HDM, health workers can capture and send patients' health information through any of the available mobile or satellite internet networks, and this is also linked to the NHMIS allowing automatic transfer of data to DHIS 2; thus, it is a PHC based Medical Records application.</li> </ul>
<b>VTR Mobile Health Worker Training</b>	<ul style="list-style-type: none"> <li>• <b>VTR Mobile</b> Health Worker Training is a mobile training platform that can be used on any smartphone tablet computer, or laptop/desktop computer. It features a web application that allows viewing of high-quality training content on demand. The Android mobile application allows users to view content offline where there is no internet, or to save data costs.</li> <li>• <b>VTR Direct</b> is available to individuals through a web portal. It is now being used to offer mobile Continuing Professional Development Courses (CPD courses) for Nigerian Doctors. The offering is now being extended to include all medical specialties and other cadres of the health workforce including nurses, pharmacists, dentists, lab technicians, etc. It has also been used for teaching pain management across 5 leading medical schools in Nigeria.<sup>55</sup></li> <li>• Users can monitor their progress and test scores on the web or mobile application and get certification delivered to their inbox on completion of training.</li> </ul>

<sup>55</sup> Tonia C et al. roject OPUS: Development and evaluation of an electronic platform for pain management education of medical undergraduates in resource-limited settings. 2020

	<ul style="list-style-type: none"> <li>• Training contents are developed in-house and in partnership with other content providers such as the University of Leeds, UK, Stanford University, US, Medical Aids Films (UK).</li> </ul>
<b>Early Warning Disease Outbreak Recognition System (EWORS)</b>	<ul style="list-style-type: none"> <li>• EWORS allows for the electronic collection and analysis of routine clinical and nonclinical data, to identify the likelihood of occurrence of a disease outbreak in given geography earlier than is possible with routine surveillance mechanisms. The application automatically sends Elevated Disease Activity (EDA) alerts to State and Local Government Disease Surveillance and Notification Officers for further investigation in affected areas. The EWORS uses a machine-learning algorithm and also provides heat maps showing the real-time status of actively monitored diseases in active surveillance areas.</li> <li>• EWORS have been in use in Badagry and Epe LGA of Lagos State (Nigeria) and Ifedore LGA of Ondo State (Nigeria) since 2017. Routine electronic disease surveillance is now being conducted in 110 health facilities in these two states. It is also currently deployed in 14 States supported by USAID to detect missing persons with TB.</li> </ul>
<b>Health Insurance Package</b>	<ul style="list-style-type: none"> <li>• The MediExcel Health Insurance Platform has been designed for end-to-end management of health insurance operations – medical underwriting, encounter, and claims management, etc. This solution has been deployed for the management of three State Social Health Insurance Schemes – Adamawa, Ondo, and Ogun States. Five other states will be onboarded shortly.</li> </ul>

### 3.3.6 Key Challenges in Implementing eHealth Solutions

The following five points<sup>56</sup> were identified as the main challenges in implementing eHealth solutions:

- **Fund Procurement**  
Ensuring that the public and private health sectors have the necessary funding to implement eHealth solutions, develop the ICT infrastructure, and train the health workforce to be the users is a major implementation challenge.
- **Low digital literacy**  
The low level of digital literacy is a barrier, especially among primary health care level health workers. In addition to the development of a user-friendly interface, on-site operational support such as training is needed.
- **Resistance to change**  
Among health personnel, fear of job loss, cumbersome record-keeping, and resistance to the use of digital devices exist, which can be barriers to implementation.
- **Limited Internet access outside urban areas**  
Internet access tends to be limited, especially in rural and regional areas, and even in urban areas, there are situations that result in irregular access.
- **Limited implementation of standardization and interoperability framework in eHealth selection and deployment**  
The limited implementation of the health ICT strategic framework and eHealth policy has resulted in a rash of incomplete eHealth that does not conform to both the semantic

<sup>56</sup> Interview from key informant of Government, Private sector/Development partners.

interoperability and technical interoperability<sup>57</sup> required for interoperability. There are also challenges in implementing basic design concepts for software that ensure confidentiality, confidentiality, and security of health data.

### 3.3.7 Success Factors for Implementing e-Health Solutions

- **Existence of an Empowered and Influential Steering Committee**  
Since the introduction and deployment of eHealth are often met with resistance from stakeholders, it is important that an implementation steering committee with the appropriate authority and influence is identified at an early stage, shares the value of the solution with stakeholders from the beginning of the project, and meets regularly to build consensus for a smooth implementation.
- **Capacity building of health care workers**  
The inclusion of eHealth training in statutory training for health care professionals will contribute to eHealth adoption and mainstreaming.
- **Use of Mobile Devices**  
One of the barriers to eHealth implementation is the provision of ICT infrastructure, including laptops, backup UPSs, and servers. Adopting smartphones, tablets, and pads as devices, which health personnel is accustomed to using and operating on a daily basis, will reduce the barriers.
- **Building a partnership relationship between the application designer and the user, the health care worker**  
Even if the application is designed by the application developer, it must meet the convenience and case-specific requirements of the user, the health care worker side, so an environment in which both parties can collaborate to refine the application is necessary.

## 3.4 Procurement and Supply for Facilities, Equipment, and Medical Supplies

### 3.4.1 Health Facility

In Nigeria, there are primary to tertiary health care levels, with each health facility type having its own governing body and required number of installations (Table 29). In addition, there are 29,496 public health facilities and 10,899 private health facilities in the Federal Capital Territory and all states as of 2018.<sup>58</sup> The total number of health facilities over the past five years has increased by 1.28 for public health facilities and decreased by -0.05 for private facilities (Table 30).

---

<sup>57</sup> Semantic interoperability: the ability to interoperate with a system that understands the unified meaning of the exchanged data so that they have the same dictionary. Technical interoperability: Data communication between devices must have the same software hardware configuration, system, and platform to enable interoperability.

<sup>58</sup> Nigeria Health Facility Registry (HFR): (Accessed November 25, 2020)

**Table 29: Types and Overview of Health Facilities**

Medical level	Facility Type	Management (governmental) organization	Target
Tertiary care	Tertiary hospital*1	Federal Government	37 facilities (1 per state + 1 federal capital district)
Secondary care	General hospital	State Government	774 facilities (1 in each LGA)
Primary Health care	Primary Health Center	LGA and District	7,740 facilities (1 per county (average 10 counties per LGA))
	Primary Health Clinic	LGA and Ward Development Committee (WDC)	One facility per area of about 2,000-5,000 people (one facility for several villages)
	Health Post	Village Development Committees (VDCs)/Community Development Committees (CDCs)	One facility per village, or one facility per area of about 500 people

\*1: Includes hospitals that provide medical education.

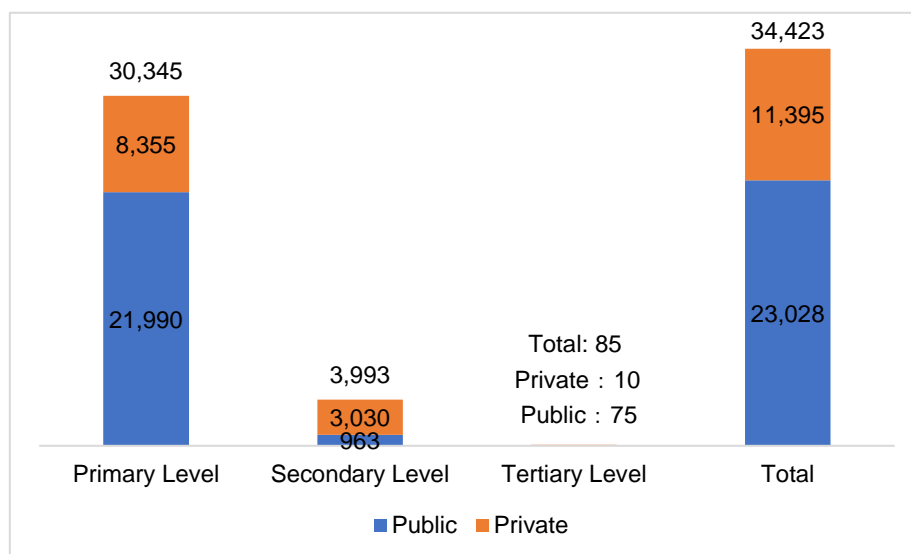
Source: National Primary Health Care Development Agency (NPHCDA): Minimum Standards for Primary Health Care in Nigeria

**Table 30: Number of Health Facilities over the Past Five Years**

	2013	2018
Public	23,028	29,496
Private	11,395	10,899
Total	34,423	40,395

Source: Nigeria Health Facility Registry, Makinde OA. et al: Int J Health Plan Manage. 2018, 33(4):e1179-e1192

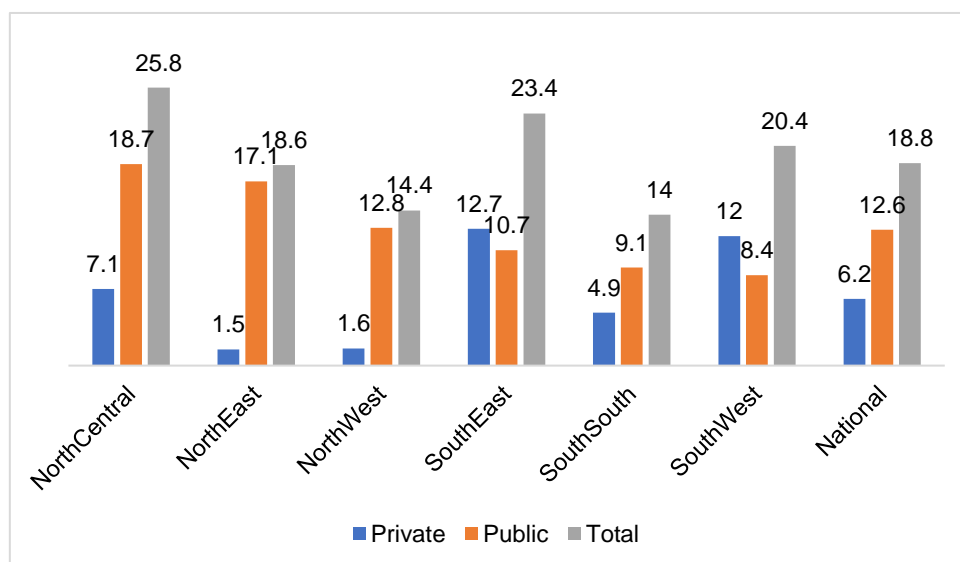
As for the ratio of public and private health facilities at each health care level, the ratio of public to private was 72:28 at the primary level, with the overwhelming majority of public health facilities. At the secondary level, the ratio of public to private is 24:76, with a large proportion of private health facilities. The tertiary care level is under the jurisdiction of the federal government, and the ratio of public health facilities is very high.



**Figure 34: Percentage of Public and Private Health Facilities at each Level of Care**

Source: Makinde OA, et al: Distribution of health facilities in Nigeria: Implications and options for UHC. Int J Health Plan Manage. 2018 Oct;33(4):e1179-e1192. doi: 10.1002/hpm.2603. Epub 2018 Aug 9. PMID: 30091473.

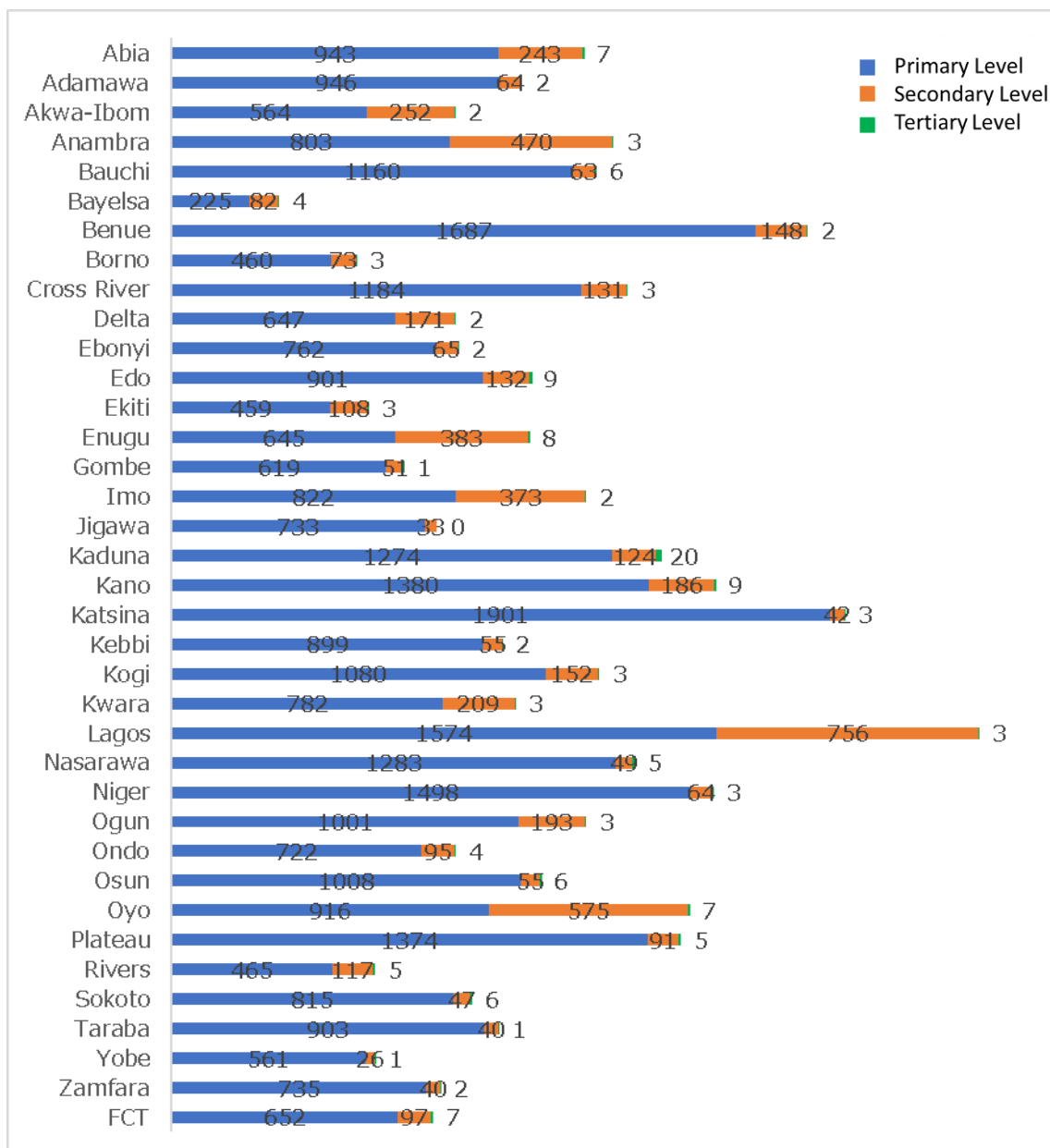
The distribution of public and private health facilities by geopolitical zone (per 100,000 population) shows that the North has more public medical facilities and that the South has more and a higher concentration private health facilities.



**Figure 35: Distribution of Public and Private Health Facilities by Geopolitical zone (Distribution per 100,000 Population)**

Source: Nigeria Health Facility Registry, Makinde OA. et al: Int J Health Plan Manage. 2018, 33(4):e1179-e1192

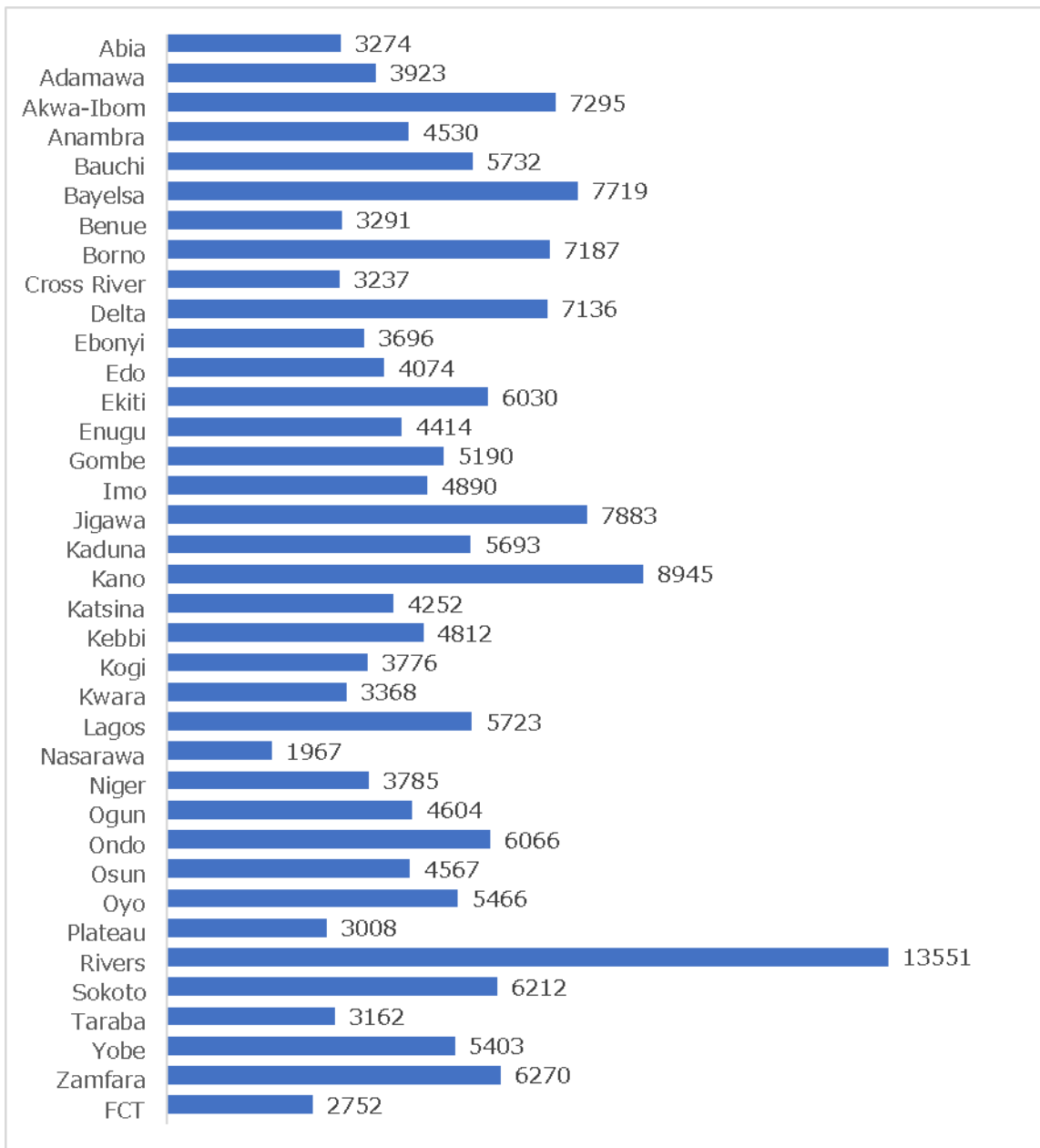
The number of health facilities at each health care level and by the state in Nigeria is shown in Figure 36. In terms of numbers, the number of health facilities required by the federal government is met at each level. However, in terms of the number of people per facility, the majority of states have one facility per 4,000 to 5,000 people (Figure 37). In terms of the number of hospital beds (per 1,000 population) shown in Table 2, the average for lower-middle-income countries is 1.0 (2011), while Nigeria's average is 0.5 (2004).



**Figure 36: The number of Health Facility by Health Care Level (2018)**

Source: Nigeria Health Facility Registry (HFR)





**Figure 37: Population per Health Facility (2019)**

Source: Nigeria Health Facility Registry (HFR)

### 3.4.2 Medical equipment

In Nigeria, the National Agency for Food and Drugs Administration and Control (NAFDAC) sets and oversees the laws and regulations governing the manufacture, import/export, distribution, advertising, sale, and use of drugs, food, medical devices, cosmetics, detergents, and other ready-made products. In addition, the Nigeria Institute for Pharmaceutical Research and Development (NIPRD), a subsidiary organization under the direct control of the Federal Ministry of Health, is responsible for the manufacture and development of drugs, including products derived from

indigenous resources.

As shown in Table 31, NPHCDA has set minimum standards for medical equipment for each type of health facility in the “Minimum Standards for Primary Health Care in Nigeria”, and in some cases, the State Ministries of Health may modify some of the standards for procurement and distribution of equipment. All facilities, equipment, human resources, drugs, and management systems in PHCs are to be supervised and monitored at the LGA level.<sup>59</sup> At the lowest level, health posts are required to have basic items such as height, weight, and blood pressure meters. Health clinics, which are the next level after the health posts, are required to have obstetric examination tables, infant scales, and medical equipment for childbirth; health centers, which are at a higher level, are required to have additional supplies and medical equipment for unusual childbirths and sterilization equipment.

**Table 31: Equipment, etc. Required for each Health Facility Type that Provides PHC**

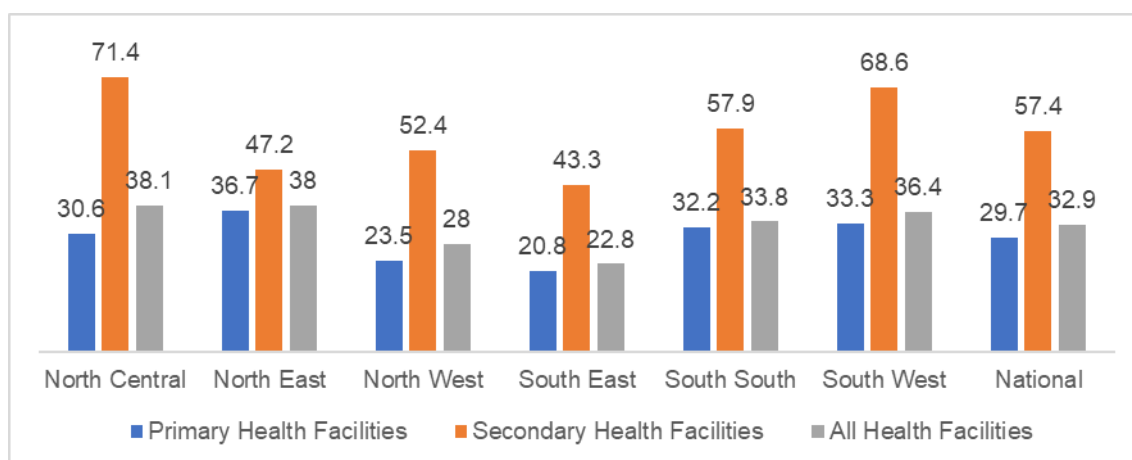
	Health post	Health clinic	Health center
<b>Fixtures</b>			
Benches, chairs	○	○	○
Examination table (at a doctor's office)	○	○	○
Washbasin	○	○	○
Examination table for obstetrics		○	○
Wheelchair		○	○
Bed		○	○
Lantern		○	○
Refrigerator		○	○
<b>Medical Equipment</b>			
Forceps	○	○	○
Fetal scope	○	○	○
Vaccine transport case	○	○	○
Refrigerant	○	○	○
Syringe storage case	○	○	○
Kidney dish	○	○	○
Scissors	○	○	○
Solar-powered refrigerators	○	○	○
Sphygmomanometer	○	○	○
Stethoscope	○	○	○
Thermometer	○	○	○
Infant scales		○	○
Adult scales	○	○	○
Resuscitation bag		○	○
Artery forceps		○	○
Bedpan		○	○
Vaginal speculum		○	○
Enema kit		○	○
Fetal stethoscope		○	○

<sup>59</sup> National Primary Health Care Development Agency. Minimum standards for primary health care in Nigeria. 2015

Sterilization equipment		○	○
Suction device		○	○
Urinary catheter		○	○
<b>Department of Obstetrics and Gynecology</b>			
Infant height meter			○
Cold storage box for vaccines			○
Oropharyngeal tube			○
Delivery bed			○
Observation beds			○
Suture kit			○
<b>Sterilization section</b>			
Autoclave			○
Tape dispenser			○
Test tube tray			○
IUD kit			○

Source: Minimum standards for primary health care in Nigeria

The percentage of health facilities that have all the very basic medical equipment - thermometers, scales, sphygmomanometers, and stethoscopes - is shown in Figure 38. On the national average, only 29.7% of primary health care facilities (including private health facilities) had all four of these items, and even at the secondary care level, the percentage was 57.4%.



Note: The following four items are considered basic medical equipment: thermometer, scale, sphygmomanometer, and stethoscope.

**Figure 38: Percentage of health facilities with basic medical equipment (%: 2016)**

Source: 2016 National Health Facility Survey

### 3.4.3 Medicine

The National Drug Formulary/Essential Drug List Review Committee, an organization under the Federal Ministry of Health, is responsible for preparing and revising the essential drug list. The list of essential medicines is divided into two target population groups: children (under 12 years old) and adults (over 12 years old), and also by the type of health facilities being targeted, such as health posts or health centers. This list of essential medicines has been incorporated into the “Minimum Standards for Primary Health Care” set by the NPHCDA.

With support from development partners, the National Products Supply Chain Management Program (NPSCMP) under the Department of Food and Drug Service of the Federal Ministry of Health coordinates, manages and oversees the supply chain of medicine, including essential medicines. The program integrates the procurement and logistics management of medicines and other products in five areas that were previously managed separately: HIV/AIDS and sexually transmitted diseases, tuberculosis and leprosy control, family planning, malaria elimination, and immunization. For other medicines, the State Ministry of Health and the District Health Office is responsible for procurement and logistics management. However, in addition to stock-outs, there are many expiry dates at the health facility level, and weak logistics management and inappropriate storage methods have been pointed out as factors that cause these problems.<sup>37</sup> For State level Logistics Management Coordination Units (LMCUs), there is a need to strengthen capacity in demand estimation and procurement processes, and to develop standard operating procedures for logistics management, including distribution plans and various ledgers.<sup>60</sup>

**Table 32: Procurement and Logistics Management System for Medicines and Other Supplies in Each Region**

	FCT		Lagos State		Ogun State	
	Procurement	Logistics	Procurement	Logistics	Procurement	Logistics
HIV/AIDS	Federal Level Products Supply Chain Management Program	Local Level Logistics Management Coordination Units	National Products Supply Chain Management Program of Federal Level	State Level Logistics Management Coordination Units	Federal Level National Products Supply Chain Management Program	State Level Logistics Management Coordination Units
Tuberculosis						
Family Planning						
Malaria			State Level Malaria Eradication Program			
Vaccination	NPHCDA		NPHCDA	Contracted logistic firm	NPHCDA	Contracted logistic firm
Other essential medicine	Abja Central Medical Store	Health Facility	State Central Medical Store	Health Facility	State Central Medical Store	Health Facility

Source: Interview with Local/State Ministry of Health

#### (1) Federal Capital Territory

Medicines and other supplies for four programs (HIV/AIDS and sexually transmitted diseases, tuberculosis and leprosy control, family planning, and malaria elimination) procured by the National Supply Chain Management Program at the federal level are transported to the Federal Medical Store in Abuja. The LMCU of the District Health and Social Welfare Department, which is the equivalent of the State Ministry of Health, is responsible for logistics management within

<sup>60</sup> USAID Deliver Project. Nigeria National Supply Chain Assessment Results. 2015

the Federal Capital Territory. However, some medicines and other items related to malaria elimination will also be procured by the Public Health Division of the Department of Health and Welfare. Vaccinations will be procured by NPHCDA and transported to the area councils within the Federal Capital Territory. Other drugs, especially essential drugs, will be procured by the Abuja Central Medical Store (ACMS) of the Department of Health and Social Welfare. Each public health facility then uses its own revolving drug fund to purchase drugs and other supplies from Abuja Central Stores and selected wholesalers.

## (2) Lagos State and Ogun State

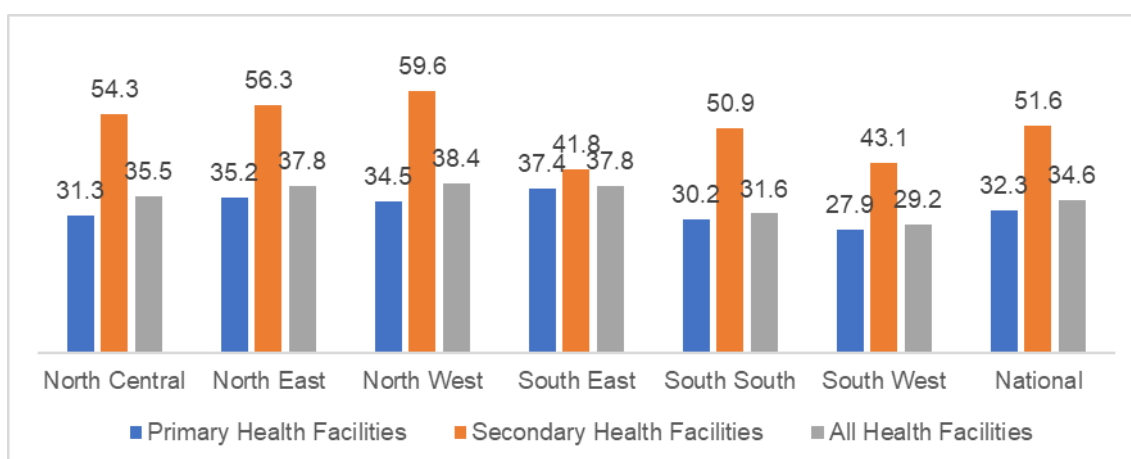
The National Supply Chain Management Program, which is at the federal level, procures pharmaceuticals and other products for the following four programs, but each program has different logistics management. HIV/AIDS and sexually transmitted disease medicines are transported from the federal medical store to each health facility in each state by contracted logistics companies. Medicines for malaria elimination, tuberculosis and leprosy control, and family planning are transported by the National Supply Chain Management Program to the state Central Medical Store, and from the State Central Store to each health facility by the Logistics Management and Coordination Unit under the Department of Pharmaceutical Services (DPS) of the State Ministry of Health. However, in Lagos State, medicines and other items related to malaria elimination are not provided by the federal level but are procured by the State Malaria Elimination Program. The vaccinations will be procured by the NPHCDA, coordinated with the LMCU of the State Ministry of Health, and transported to the cold chain stores in the state and to the stores in the local government areas by contracted logistics companies. For other medicines, especially essential medicines, each public health facility will use its own revolving fund to purchase medicines and other supplies from a central store.

## (3) Availability of Medicines in Health Facilities

On average, only 32.3% of primary health care facilities (including private health facilities) and 51.6% of secondary health care facilities had all essential medicines.<sup>61</sup>

---

<sup>61</sup> Federal Ministry of Health. 2016 National Health Facility Survey



**Figure 39: Percentage of Health Facilities that Have All Essential Medicines Available (%: 2016)**

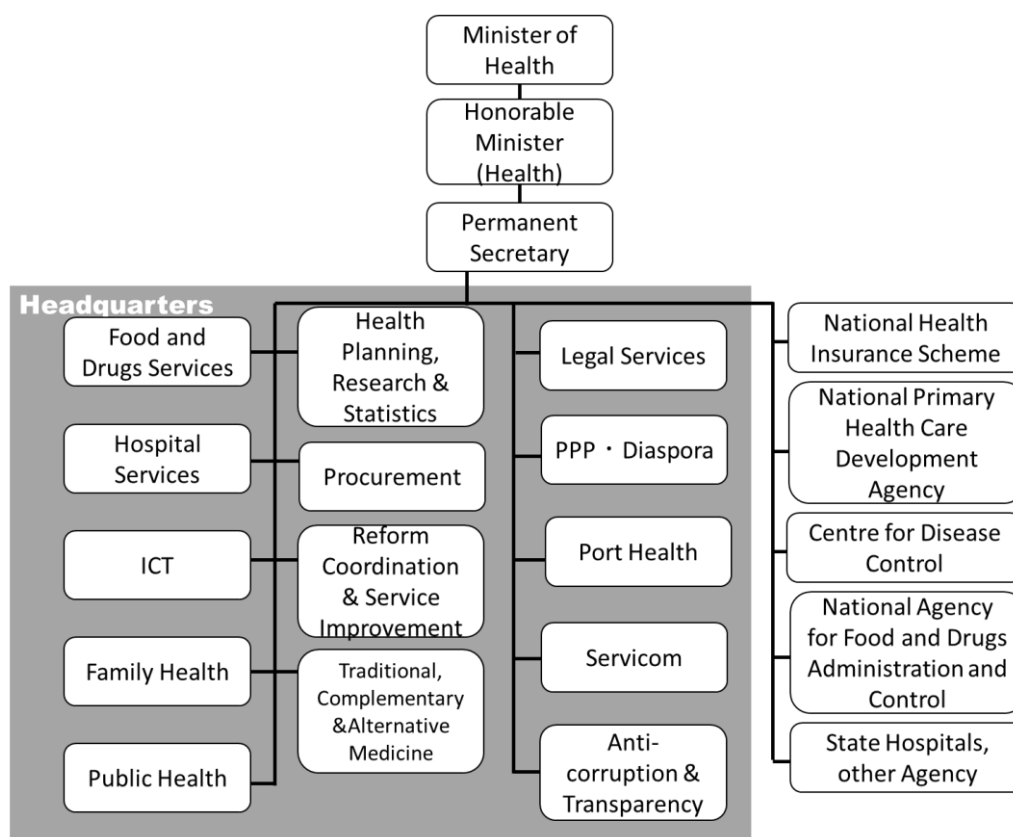
Source: Federal Ministry of Health. 2016 National Health Facility Survey

### 3.5 Management and Supervisory Functions

#### 3.5.1 Federal Ministry of Health

The Federal Ministry of Health is responsible for policy, planning and regulation, and for the management and operation of tertiary care facilities (e.g., federal/national hospitals). The State Ministries of Health are responsible for the management and operation of secondary and tertiary health care facilities (state hospitals), and the LGA is responsible for the management and operation of primary health care facilities. The National Primary Health Care Development Agency (NPHCDA) was established in 1992 and is responsible for policy and planning related to primary health under the jurisdiction of the Federal Ministry of Health, while the State Primary Health Care Directorate (SPHCDA) is responsible for primary health implementation. NPHCDA also provides in-kind support to a primary health facility. The NHIS was established in 1999, and the State Health Insurance Scheme (SHIS) is currently being established in each state. The BHCDF was established in 2014 because health insurance requires government subsidies as well as premiums from subscribers and employers in order to be widely available to the population.

The organizational chart of the Federal Ministry of Health of Nigeria is shown in Figure 40. Under the supervision of the Minister, the Honorable Minister (Health), and Permanent Secretary, the headquarters consists of nine departments in charge of food and drug services and hospital services, etc., and five bureaus in charge of legal affairs PPP, and overseas migration, among others. Also, there is the NHIS under the jurisdiction of the Federal Ministry of Health, the National Primary Health Development Agency, and the Federal Hospital.



**Figure 40: Organizational Chart of the Federal Ministry of Health, Nigeria**

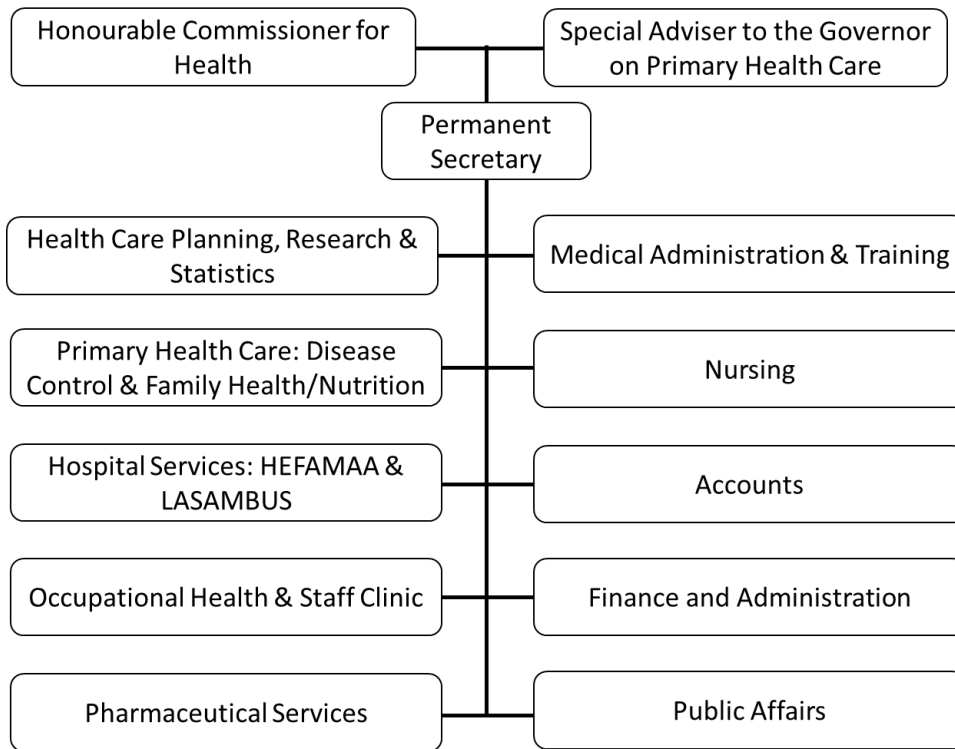
Source: Prepared by the Survey team from the website of the Federal Ministry of Health, Nigeria

### 3.5.2 State Ministry of Health

#### (1) Lagos State Ministry of Health

Since Nigeria is a federal country, the state health ministry system differs from state to state. The organizational chart of the Lagos State Ministry of Health is shown in Figure 41. In Lagos, the Honorable Commissioner for Health (in charge of hospital services), and the Special Adviser to the Governor on Primary Health Care (who oversee the Permanent Secretary) are followed by 9 departments including Health Planning, Research, and Statistics department, Primary Health Care: Disease Control & Family Health/Nutrition department, and other units in charge of Public Affairs. The Secretary of Health and the Special Advisor for Primary Health Care are responsible to the State Executive Council and the Governor of the State, and not to the Federal Ministry of Health.

In addition to the State Ministry of Health, there is a semi-governmental organization (parastatals) such as the Lagos State Primary Health Care Board, the Lagos State Traditional Medicine Board, the Lagos State University Teaching Hospital, and the Lagos State Health Management Agency, etc.



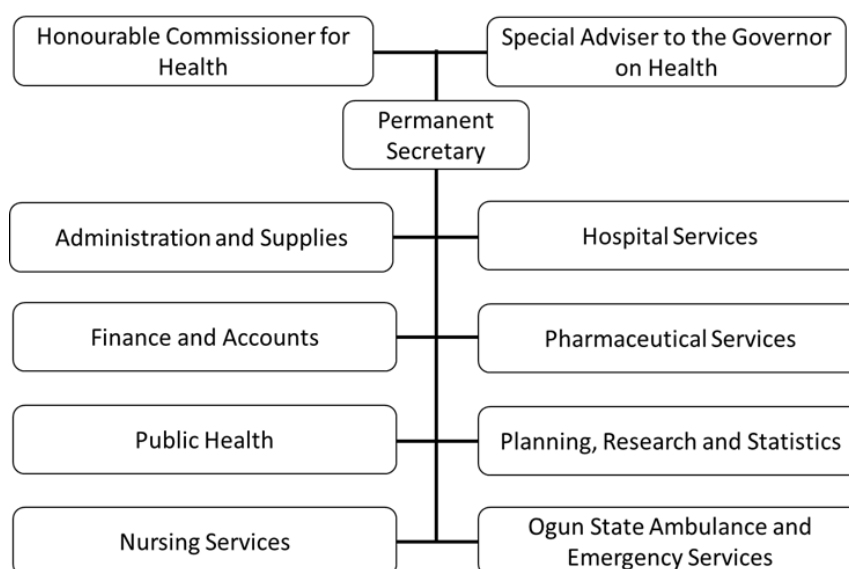
**Figure 41: Lagos State Ministry of Health Organizational Chart**

Source: Prepared by the Survey team from the Lagos State Ministry of Health website.

(2) Ogun State Ministry of Health

The organizational chart of the Ogun State Ministry of Health is shown in Figure 42. As in the Lagos State Ministry of Health, there are eight Departments under the Honorable Commissioner for Health and Special Adviser to the Governor on Health, including Public Health and Nursing Services. In addition to the State Ministry of Health, there exists the Ogun State Primary Health Care Development Board, the Ogun State Health Insurance Agency, and the Ogun State Hospital Management Board.





**Figure 42: Ogun State Ministry of Health Organizational Chart**

Source: Prepared by the Survey team from the Ogun State Ministry of Health website.

## 4 Identification of Cooperation Needs and Recommendations

### 4.1 Health sector challenges and cooperation needs

The challenges and needs identified in the analysis of the current state of the health sector in Nigeria can be summarized as shown in Table 33.

**Table 33: Challenges and Needs of the Health Sector in Nigeria**

Current status of disease burden	<ul style="list-style-type: none"> <li>High burden for maternal and child health, and infectious diseases</li> <li>Various health indicators are poor, especially in the northern part of the country, and there are large regional disparities</li> </ul>	
Challenges	Use of primary health care is hindered	
	Large out-of-pocket payment putting people at financial risk	Poor physical access due to the lack of medicines and consumables
Possible causes	Lack of operating costs for health facilities (including the budget for medicines, etc.) and reliance on user fees	Procurement and logistics management of medicines, etc. are dysfunctional
Necessary measures	Appropriate management of budget allocations from the Basic Health Care Provision Fund through the National Primary Health Care Development Agency to provide sufficient operating funds for health facilities	Promote appropriate distribution of medicines and other commodities by strengthening procurement and logistics management capabilities

#### (1) Current Status of Disease Burden

High burden in maternal and child health and infectious diseases, having regional disparities in the health status of the population

Nigeria's maternal (100,000 live births) and neonatal (1,000 live births) mortality rates of 917 (2017) and 36 (2018), respectively are poorer compared to the sub-Saharan African average (534

and 27.7, respectively) and the average for lower-middle-income countries (265 and 23.7, respectively). The maternal mortality rate is almost double that of the South, at 365 as of 2013, while the North was at 709, and has have worsened in recent years. Similarly, regional disparities in child mortality (newborn, infant, and under-five) are very large.

Looking at the major causes of death in all age groups, deaths due to infectious diseases accounted for 51% of all deaths, which is outstandingly larger compared to the second major cause of death, non-communicable diseases (30%). In particular, among infectious diseases, enteric infections (14%), represented by childhood diarrhea, malaria, and neglected tropical diseases (NTDs: 13%) account for a large share.

A large proportion of causes of maternal deaths are due to direct obstetric causes such as gestational hypertension (16.8% of maternal deaths), hemorrhage before and after delivery (postpartum hemorrhage: 15.5%, abnormal hemorrhage before delivery: 8.7%), and sepsis (10.5%). Many of these deaths can be avoided through emergency obstetric care, antenatal care, delivery in the presence of skilled providers, and postnatal care. Enteric infections and malaria, including the above-mentioned childhood diarrhea, should also be preventable or treatable at the primary health care level.

## (2) Challenges

Use of primary health care is hindered.

Maternal and child health and infectious diseases are major health issues in Nigeria, however, many of which can be prevented or treated at the primary health care level. The percentage of women with access to modern family planning was at 33.9% in 2018, the percentage of deliveries by a skilled provider was at 43.4% in 2018, and the DPT immunization coverage was at 57.0% in 2019. These numbers are lower than the average among the countries within the same region and the countries with similar incomes, indicating that the use of primary health care has been limited.

People bear large financial risks when using health services.

When women were asked about the barriers they face when using maternal and child health services, 45.7% of them cited “having money for medical treatment” as the most common barrier, followed by “distance to health facilities” at 25.8%. This indicates that service users perceived financial barriers to be more significant than physical proximity to health facilities. The incidence of catastrophic expenditure of 10% and 25% or more of the household expenditure/income, which is also a UHC monitoring indicator, was 15.1% and 4.1% in 2012, respectively. These are more than double the African averages in 2015, which are 7.3% and 1.8%, respectively. In order to achieve UHC, it is desirable to keep the “out-of-pocket health expenditure as a percentage of

current health expenditure below 20%”, however, in 2017, Nigeria’s ratio was at 77.2% which is two times higher than the sub-Saharan African average of 35.5%, and it is the highest in the world.

#### Poor physical access due to lack of medicines and consumables

The study also revealed that the service delivery structure in the country is not equipped to provide adequate quantity and quality of health services due to a shortage of health personnel and medicines as inputs. In terms of medicines, only 32.3% of primary health care facilities (including private health facilities) have all essential medicines on average and have frequent stock-outs of medicines regardless of region.

### (3) Possible causes and necessary measures

#### Challenge 1: Large out-of-pocket payment hinders the use of health services

Lack of operating costs for health facilities (including the budget for medicines, etc.) has resulted in a situation where health facility been forced to rely on the user fees.

The provision of primary health care and many other health services is the responsibility of state and local governments. Most of the health budget has been spent on tertiary care, which is managed by the federal government, however, budgetary allocations for primary health care, which is mainly administered by local governments, have been very limited. The federal-level accounted for 67% of total health sector spending, the state level 26%, and the local government level 7% in 2016.

As a result, many primary health care facilities are short of operating funds (including the budget for medicines and other commodities) and are forced to rely on user fees to operate the facilities and provide services. Consequently, although the federal government and many state governments have introduced policies to make primary health care free of charge, including maternal and child health services, it is reported that the majority of facilities, including public health facilities, charge user fees.

Budgeting through the Basic Health Care Provision Fund is underway, but not enough money has been disbursed to health facilities yet.

In order to fund primary health care, the various levels of government in Nigeria are reforming health financing. In 2014, the Federal Government of Nigeria established the Basic Health Care Provision Fund and allocated a large budget of NGN 44,498 million (\$117.6 million), three times the size of the Federal Ministry of Health (headquarters), as the fund for 2020. Forty-five percent of the funds in the Basic Health Care Provision Fund will be channeled through the National Primary Health Care Development Agency to pay for the operation of health facilities. This 45% is earmarked for medicines (20%), maintenance of facilities and equipment (15%), and human

resource development such as training (10%). In addition, the states and local governments are required to contribute their own budgets in an amount equivalent to 25% of the funds from the Basic Health Care Provision Fund.

In 2016, the Federal Ministry of Health, the National Health Insurance Scheme, and the National Primary Health Care Development Agency jointly developed the Guidelines for Management, Payment, Monitoring, and Fund Administration of the Basic Health Care Provision Fund. Funds to cover the operating costs of health facilities such as purchase of medicines, are paid from the Basic Health Care Provision Fund to the National Primary Health Care Development Agency and then sent to all State Primary Health Care Development Agencies, including the FCTs. However, there are only six states (Abia, Anambra, Ebonyi, Delta, Niger, and Osun) and the FCT which could fund to primary health care level health facilities. In many states, the operating fund stops at the state level and still do not reach the health facilities.

#### Challenge 2: Poor physical access due to lack of medicines and consumables

Procurement and logistics management of medicines, etc. are dysfunctional.

Essential medicines, except for the major programs described below, are procured by the state central store, and each public health facility uses its allocated budget to purchase from the central store. Medicines for the core programs are procured by the National Supply Chain Management Program at the federal level (immunization is procured by the National Primary Health Care Development Agency), with support from development partners, and are transported to the State Ministry of Health. The Logistics Management and Coordination Unit of the State Ministry of Health is then responsible for managing the logistics within the state. However, the system differs from state to state: in the FCT, the District Health and Welfare Department, which is equivalent to the State Ministry of Health, procures some of the medical supplies for the Malaria Elimination Program, while in Lagos State, the State Malaria Elimination Program procures all of them. Weak logistics management and inappropriate storage methods have been pointed out as factors causing stock-outs of these medicines. For the state-level Logistics Management and Coordination Units, there is a need to strengthen their capacity in demand estimation and procurement processes, and to develop standard operating procedures for logistics management, including distribution plans and various ledgers.

**Table 34: Procurement and Logistics Management Systems for Pharmaceuticals and Commodities in each region (reprinted)**

	FCT		Lagos State		Ogun State	
	Procurement	Logistics	Procurement	Logistics	Procurement	Logistics
HIV/AIDS	Federal Level Products Supply Chain Management Program	Local Level Logistics Management Coordination Units	National Products Supply Chain Management Program of Federal Level	State Level Logistics Management Coordination Units	Federal Level National Products Supply Chain Management Program	State Level Logistics Management Coordination Units
Tuberculosis						
Family Planning						
Malaria			State Level Malaria Eradication Program			
Vaccination	NPHCDA		NPHCDA	Contracted logistic firm	NPHCDA	Contracted logistic firm
Other essential medicine	Abja Central Medical Store	Health Facility	State Central Medical Store	Health Facility	State Central Medical Store	Health Facility

Source: Interviews with the Ministry of Health in each district and state.

#### 4.2 Recommendations for future cooperation policy

To respond to the challenges and needs of the health sector, we would like to propose the two recommendations discussed in the following paragraphs. The first recommendation (1) is a proposal to collect further information and identify needs. The second recommendation (2) is a proposal to directly intervene and convert successful practices into national standards, as well as to spread these to other states under the federal system. New initiatives that have not been implemented in other areas should be piloted. The results must then be presented as high-quality evidence.

(1) Appropriate management of budget allocations from the Basic Health Care Provision Fund through the National Primary Health Care Development Agency to promote adequate operating funds for health facilities.

- Background:

The Basic Health Care Provision Fund has been established to provide operational budgets to primary health care level health facilities through the National Primary Health Care Development Agency's Gateway. For this gateway, 26 states and FCTs have conducted health facility assessments, and 18 states and FCTs have conducted training for health personnel and others on the implementation of the Basic Health Care Provision Fund program. However, only 6 states and FCTs were able to reach primary health care facilities with funds. The challenges include coordination among the various

stakeholders involved and greater use of ICT to centrally deal with and keep information for a number of health facilities. In addition, USAID had developed essential service packages and implementation guidelines in some regions, and it is thought that there was a need to establish these guidelines in other regions, but this information collection survey was not able to get sufficient information regarding this matter. Therefore, it is suggested to collect more detailed information on the bottlenecks in the disbursement of the fund through the National Primary Health Care Development Agency's gateway and identify measures to address them in the future.

The gateway to the National Health Insurance Scheme, which is expected to fund the health facilities as reimbursement for medical services, requires that the public enrolls in the health insurance program by paying enrollment/premiums and that the health services are used. In order to enroll and collect premiums from the people, it is assumed that the people have confidence in the government. In addition, various factors and procedures must be followed in order for the public to use the services and for the cost to be transferred to the health facility. Therefore, it is difficult for technical cooperation projects to be involved in this gateway and facilitate the disbursement of funds.

- Cooperation Target: State Primary Health Care Development Agency
- Overall Goal: The budget allocation from the Basic Health Care Provision Fund will be properly managed, and sufficient operating funds will be provided to health facilities.
- Objective: To identify the causes of the impasse in the funding of the Fund through the National Primary Health Care Development Agency's gateway and the measures to address it
- Activities: A survey needs to be conducted on the structure and implementation status of the State Primary Health Care Development Agency in the pilot areas. The following is a list of possible contents of the survey.
  - Existence of laws and regulations providing for the establishment of a State Primary Health Care Development Agency, the status of the office, and staffing.
  - Status of development of essential service packages, implementation guidelines, and other necessary regulations
  - Status of training (for both the State Primary Health Care Development Agency and health facilities) to disseminate the above provisions.
- Note: USAID provided support to State Primary Health Care Development Agencies in

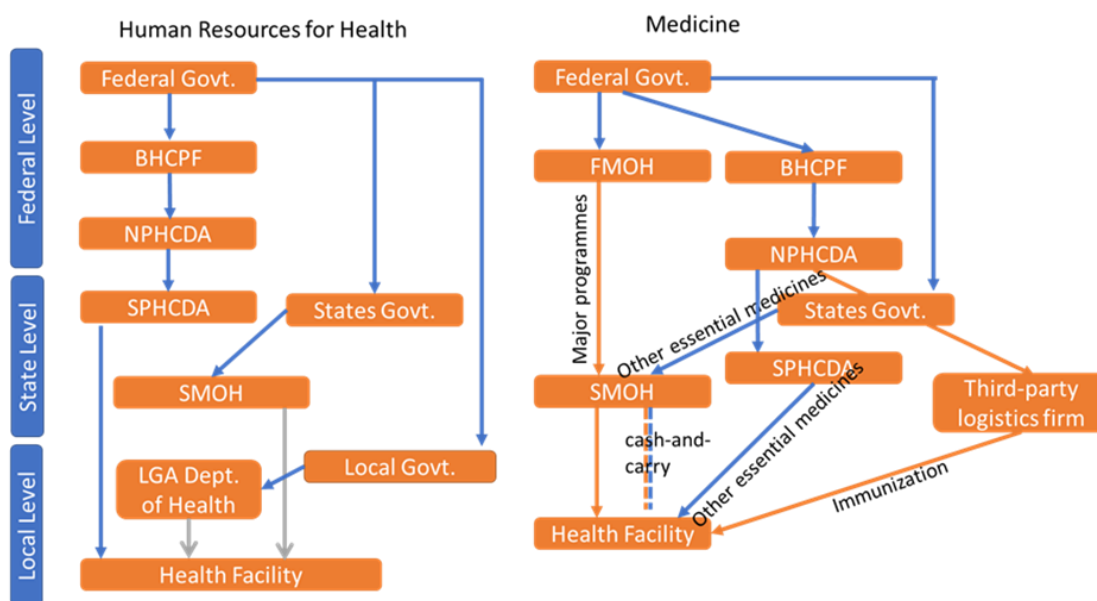
Abia, Ebonyi, Osun, and FCT until April 2020. Although the program has been terminated, USAID may continue to provide assistance in the same areas, so it is necessary to avoid duplication of support areas and activities by other development partners.

- (2) Strengthen the administrative capacity of the State Ministry of Health to manage procurement and logistics of medicines and other products

- Background:

Assuming the scheme of the technical cooperation project, the counterparts are expected to be the State Ministry of Health and the Local Government of Health. Lack of health personnel is one of the challenges in the Nigerian health sector but the budgetary measures required for the recruitment and deployment of health personnel go beyond the authority of the State Ministry of Health and the Local Government of Health, and depend largely on negotiations with the financial authorities of the State and Local Government District governments. Therefore, it is considered to be very difficult for the technical cooperation project to improve the recruitment and deployment of health personnel, which may be bottlenecked by a budget shortage. On the other hand, the procurement and logistics management of medicines is earmarked in that 20% of the funds from the Basic Health Care Provision Fund through the National/State Primary Health Care Development Agency are used for medicines. In addition, medicines for major programs such as HIV/AIDS and family planning are provided in kind to the State Ministry of Health with the support of development partners. Thus, compared to the recruitment and deployment of health personnel, there is more room for the State Ministry of Health to control the procurement and logistics management of medicines. Therefore, it is considered appropriate to strengthen the capacity of the State Ministry of Health with regard to the supply chain of medicines and other products as a technical cooperation project.

For state-level logistics management and coordination units, there is a need to strengthen capacity in demand estimation and procurement processes, and to develop standard operating procedures for logistics management, including distribution plans and various registers. Therefore, the proposed cooperation will work on strengthening these capacities in order to increase the availability of essential medicines, especially in health facilities at the primary care level. As a result, it is expected that physical access to health facilities will be improved and the use of health services will be facilitated.



Note: The flow of funds is indicated by blue arrows, the flow of physical goods by orange arrows, and the deployment of health personnel by gray arrows.

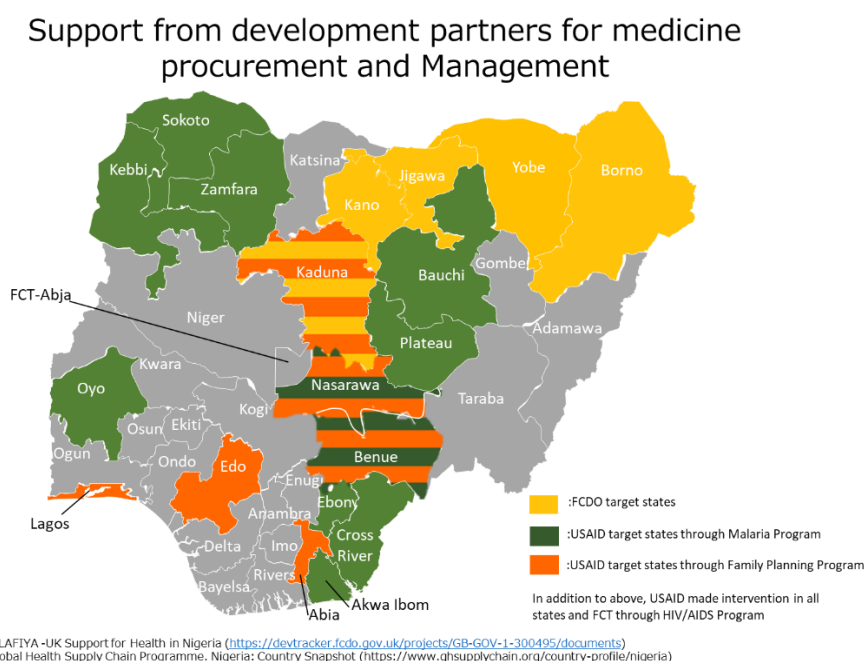
FMOH: Federal Ministry of Health; BHC PF: Basic Health Care Provision Fund; NPHCDA: National Primary Health Care Development Agency; SMOH: State Ministry of Health; SPHCDA: State Primary Health Care Development Agency

**Figure 43: Systems for Hiring and Deploying Health Personnel and Managing the Procurement and Distribution of Medicines and Other Products**

- Cooperation target: Department of Pharmaceutical Services, State Ministry of Health, Central Stores
- Overall Goal: The physical access to health facilities at the primary health care level will be improved and the use of health services (especially primary health care) will be promoted.
- Objective To increase the availability of essential medicines in health facilities.
- Activities:
  - Develop procurement and logistics management guidelines and standard implementation procedures, and provide guidance in accordance with these guidelines, etc.
  - Maintenance and guidance of information systems and various ledgers related to logistics management
- Note: Japan’s assistance is provided at the request of the relevant organizations of the partner country, and since this proposal also involves government procurement, the intentions of the relevant organizations of the partner country are very important. Also as shown in Figure 44, in the area of procurement and logistics management of medicines and other products, the United Kingdom (FCDO) has started to provide support in five states since 2020, and the United States (USAID) has provided support



for HIV/AIDS-related medicines in all states (including FCT), malaria cases in 11 states, and family planning-related cases in six states. Therefore, duplication of support areas and activities by other development partners should be avoided when selecting support areas. In addition, the Food and Drug Administration and the Control of the Federal Ministry of Health are integrating procurement and logistics management related to HIV/AIDS, family planning, and immunization, which were previously managed separately. Therefore, not only avoiding duplication of activity areas and contents with other development partners, but we also have to actively coordinate with other development partners in line with the integration policy pursued by the Federal Ministry of Health.



**Figure 44: Target States for Cooperation by Development Partners in the Procurement and Management of Pharmaceuticals and Other Products**

Source: Prepared by Survey team based on LAFIYA -UK Support for Health in Nigeria (<https://devtracker.fcdo.gov.uk/projects/GB-GOV-1-300495/documents>), USAID Global Health Supply Chain Programme. Nigeria: Country Snapshot (<https://www.ghsupplychain.org/country-profile/nigeria>)

#### 4.3 Items to be confirmed in the future

- (1) Appropriate management of budget allocations from the Basic Health Care Provision Fund through the National Primary Health Care Development Agency to promote adequate operating funds for health facilities.
  - This information collection survey found that the potential for support is higher for the National Primary Health Care Development Agency’s gateway system than for the

National Health Insurance Scheme’s gateway. However, the survey did not provide sufficient information on the current status of the fund management system in this gateway. Therefore, as described in section 3.2. “Recommendations on Future Cooperation Policy,” there is a need to collect more detailed information on the management system and status of the Agency through the National Primary Health Care Development Agency’s gateway to clarify the measures to be taken.

- (2) Strengthen the administrative capacity of the State Ministry of Health to manage procurement and logistics of medicines and other products
  - Information was collected on the availability of medicines and other supplies in health facilities and the roles and responsibilities of each relevant agency in managing procurement and logistics under the federal system. A capacity assessment in the State Ministry of Health is needed in the future to discuss the details of the technical cooperation project.

## Appendix

## SDGs Global Indicators: Mozambique, Angola, Nigeria

グローバル指標名 Global Indicator Name	モザンビーク/ Mozambique			アンゴラ/ Angola			ナイジェリア/ Nigeria		
	Value	Year	Rating	Value	Year	Rating	Value	Year	Rating
ゴール1 : あらゆる場所のあらゆる形態の貧困を終わらせる Goal 1: End Poverty in all its forms everywhere									
国際的な貧困ラインを下回って生活している人口の割合 Poverty headcount ratio at \$1.90/day (%)	55.5	2020	Major challenges	21.0	2020	Major challenges	47.6	2020	Major challenges
国際的な貧困ラインを下回って生活している人口の割合 Population living below the national poverty line(%)	46.1	2014	Significant challenges	36.6	2008	Significant challenges	46	2009	Significant challenges
ゴール2 : 飢餓を終わらせ、食料安全保障及び栄養改善を実現し、持続可能な農業を促進する End hunger, achieve food security and improved nutrition and promote sustainable agriculture									
栄養不足蔓延率 Prevalence of undernourishment (%)	27.9	2017	Major challenges	25.0	2017	Major challenges	13.4	2017	Significant challenges
5歳未満の子供の発育阻害の蔓延率 (WHO子ども成長基準で、年齢に対する身長が中央値から標準偏差-2未満) Prevalence of stunting in children under 5 years of age (%)	43.1	2011	Major challenges	37.6	2016	Major challenges	43.6	2016	Major challenges
5歳未満の子供の栄養不良の蔓延率 (WHOの子ども成長基準で、身長に対する体重が、中央値から標準偏差+2超又は-2未満) (タイプ別 (やせ及び肥満)) Prevalence of wasting in children under 5 years of age (%)	6.1	2011	Challenges remain	4.9	2016	Challenges remain	10.8	2016	Significant challenges
肥満の蔓延率 (成人) Prevalence of obesity, BMI ≥ 30 (% of adult population)	7.2	2016	Challenges remain	8.2	2016	Challenges remain	8.9	2016	Challenges remain
ゴール3 : あらゆる年齢のすべての人々の健康的な生活を確保し、福祉を促進する Goal 3 Ensure healthy lives and promote well-being for all at all ages									
妊産婦死亡率 Maternal mortality rate (per 100,000 live births)	289	2017	Major challenges	241.0	2017	Major challenges	917	2017	Major challenges
専門技能者の立ち会いの下での出産の割合 Proportion of births attended by skilled health personnel	54.3	2011	Major challenges	49.6	2016	Major challenges	40.3	2017	Major challenges
新生児死亡率 Neonatal mortality rate (per 1,000 live births)	27.8	2018	Major challenges	28.5	2018	Major challenges	36.0	2018	Major challenges
5歳未満児死亡率 Mortality rate, under-5 (per 1,000 live births)	73.2	2018	Major challenges	77.2	2018	Major challenges	119.9	2018	Major challenges
非感染者1,000人当たりの新規HIV感染者数 (性別、年齢及び主要層別) Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	5.3	2018	Major challenges	1.0	2018	Challenges remain	0.7	2018	Challenges remain
抗レトロウイルス薬を利用しているHIVを保有する成人の割合 (%) People living with HIV receiving antiretroviral therapy (%)	56	2018	Significant challenges	27.0	2018	Major challenges	53	2018	Significant challenges
10万人当たりの結核感染者数 Tuberculosis incidence per 100,000 population	551	2018	Major challenges	355.0	2018	Major challenges	219	2018	Major challenges
発熱した5歳未満児の適切な抗マラリア薬による治療を受けている割合 (%) Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs (%)	98.6	2018	Challenges remain	76.7	2016	Challenges remain	20.6	2017	Major challenges
10万人当たりのマラリアによる死亡率 Malaria mortality rate (per 100,000 population)	48.9	2018	Significant challenges	43.6	2018	Significant challenges	48.9	2018	Significant challenges
顧みられない熱帯病に対する予防的な化学療法のカバレッジ (%) Coverage of Preventive Chemotherapy for Neglected Tropical Diseases (%)	72.8	2018	Significant challenges	25.3	2018	Major challenges	64.6	2018	Significant challenges
心血管疾患、癌、糖尿病、又は慢性の呼吸器系疾患の死亡率 (30-70歳の成人 %) Age-standardised death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in adults aged 30-70 years (%)	18.4	2016	Significant challenges	16.5	2016	Significant challenges	22.5	2016	Significant challenges
10万人当たりの道路交通事故による死亡率 Traffic deaths (per 100,000 population)	30.1	2016	Major challenges	23.6	2016	Significant challenges	21.4	2016	Significant challenges
1,000人当たりの青年期 (15~19歳の女性) の出生率 Adolescent fertility rate (births per 1,000 adolescent females aged 15 to 19)	148.6	2017	Major challenges	150.5	2017	Major challenges	107.3	2017	Major challenges
サービスカバレッジのユニバーサルヘルスカバレッジ (UHC) 指標 Universal health coverage (UHC) index of service coverage (worst 0-100 best)	46	2017	Major challenges	40.0	2017	Major challenges	42	2017	Major challenges
10万人当たりの家庭内及び外部の大気汚染による死亡率 Age-standardized death rate attributable to household air pollution and ambient air pollution (per 100,000 population)	110	2016	Major challenges	119.0	2016	Major challenges	307	2016	Major challenges
WHO推奨のワクチンのうち2種を接種して生存する乳児の割合 Percentage of surviving infants who received 2 WHO-recommended vaccines (%)	80	2018	Significant challenges	50.0	2018	Major challenges	57	2018	Major challenges
出生時平均余命 Life expectancy at birth (years)	60.1	2016	Significant challenges	62.6	2016	Significant challenges	55.2	2016	Significant challenges
主観的健康感尺度 Subjective well-being (average ladder score, worst 0-10 best)	4.9	2019	Significant challenges	3.8	2014	Major challenges	5.3	2018	Significant challenges
ゴール4 : すべての人々への包摂的かつ公正な質の高い教育を提供し、生涯学習の機会を促進する Goal 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all									
初等教育純就学率 (%) Net primary enrollment rate (%)	93.9	2018	Significant challenges	78.0	2011	Significant challenges	64.1	2010	Significant challenges
識字率 (15-24才 %) Literacy rate (% of population aged 15 to 24)	70.9	2017	Significant challenges	77.4	2014	Significant challenges	75	2018	Significant challenges
ゴール5 : ジェンダー平等を達成し、すべての女性及び女児の能力強化を行う Achieve gender equality and empower all women and girls									
近代的手法によって、家族計画についての自らの要望が満たされている出産可能年齢 (15~49歳) における女性の割合 (%) Demand for family planning satisfied by modern methods (% of females aged 15 to 49 who are married or in unions)	55.5	2015	Significant challenges	29.8	2016	Major challenges	42.8	2018	Major challenges
ゴール6 : すべての人々の水と衛生の利用可能性と持続可能な管理を確保する Ensure availability and sustainable management of water and sanitation for all									
安全に管理された飲料水サービスを利用する人口の割合 (%) Population using at least basic drinking water services (%)	55.7	2017	Significant challenges	55.8	2017	Significant challenges	71.4	2017	Significant challenges
基本的な公衆衛生サービスを利用する人口の割合 (%) Population using at least basic sanitation services (%)	29.4	2017	Significant challenges	49.9	2017	Significant challenges	39.2	2017	Major challenges

出典: 2020 Africa SDGs Index and Dashboards と 外務省 Japan SDGs Action Platform

Source: 2020 Africa SDGs Index and Dashboards and Japan SDGs Action Platform, MOFA.

■ : Major challenges, 
 ■ : Significant challenges, 
 ■ : Challenges remain, 
 ■ : SDG achieved, 
 ■ : Information unavailable

## Trends in Major Causes of Death at All Ages in Nigeria and Sub-Saharan Africa

Nigeria		Sub-Saharan Africa Average	
2010	2019	2019	
Enteric infections	16.4%	Respiratory infections and tuberculosis	14.0%
Neglected tropical diseases and malaria	16.0%	Cardiovascular diseases	13.1%
Respiratory infections and tuberculosis	14.2%	Maternal and neonatal disorders	11.2%
Maternal and neonatal disorders	12.8%	HIV/AIDS and sexually transmitted infections	9.1%
Cardiovascular diseases	8.0%	Enteric infections	8.9%
Other infectious diseases	6.1%	Neglected tropical diseases and malaria	8.3%
HIV/AIDS and sexually transmitted infections	5.5%	Neoplasms	6.8%
Other non-communicable diseases	4.3%	Other infectious diseases	4.4%
Digestive diseases	3.7%	Digestive diseases	4.2%
Neoplasms	3.6%	Diabetes and kidney diseases	3.7%
Diabetes and kidney diseases	2.1%	Other non-communicable diseases	3.7%
Unintentional injuries	1.9%	Unintentional injuries	2.6%
Chronic respiratory diseases	1.3%	Transport injuries	2.4%
Self-harm and interpersonal violence	1.2%	Chronic respiratory diseases	2.3%
Transport injuries	1.1%	Self-harm and interpersonal violence	2.1%
Neurological disorders	1.0%	Nutritional deficiencies	1.4%
Nutritional deficiencies	0.5%	Neurological disorders	1.4%
Skin and subcutaneous diseases	0.1%	Substance use disorders	0.1%
Substance use disorders	0.1%	Skin and subcutaneous diseases	0.1%
Musculoskeletal disorders	0.0%	Musculoskeletal disorders	0.1%
Mental disorders	0.0%	Mental disorders	0.0%

Source : Prepared by Survey team based on Institute for Health Metrics and Evaluation (IHME), GBD Compare Data Visualization. Seattle, WA: IHME, University of Washington. Available from <http://vizhub.healthdata.org/gbd-compare>. (Accessed 2020.11.20)

## Reference List

Footnote No.	References
1	WHO (2018) Global Reference List of 100 Core Health Indicators
3	National Population Commission. Nigeria Demographic & Health Survey 2018. 2019
4	Premium Times, September 11, 2020. <a href="https://www.premiumtimesng.com/news/top-news/413883-nigeria-becomes-worlds-highest-contributor-to-under-5-deaths-unicef.html">https://www.premiumtimesng.com/news/top-news/413883-nigeria-becomes-worlds-highest-contributor-to-under-5-deaths-unicef.html</a> (Accessed on 2020.11.26)
5	Nigeria Centre for Disease Control: An update of Lassa fever outbreak in Nigeria
6	UNAIDS 2020
7	WHO: World Malaria Report 2019.
8	Adejumo OA, et al. Trend of tuberculosis case notification and treatment outcome in Lagos State, Nigeria: a 5-year retrospective study. 2017
9	WHO: Global tuberculosis report 2020 country profiles.
10	Oshi DC et al: Tuberculosis Research and Treatment <a href="https://www.hindawi.com/journals/trt/2014/202983/">https://www.hindawi.com/journals/trt/2014/202983/</a>
11	WFP, Nigeria Country Strategic Plan (2019-2022)
12	Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Seattle, WA: IHME, University of Washington, 2018. Available from <a href="http://vizhub.healthdata.org/gbd-compare">http://vizhub.healthdata.org/gbd-compare</a> . (Accessed 2020.11.20)
15	National Strategic Health Development Plan II (2018-2022)
16	Organization for Economic Co-operation and Development OECD.Stat. <a href="https://stats.oecd.org/">https://stats.oecd.org/</a> (Accessed on 2020.11.25)
18	LAFIYA -UK Support for Health in Nigeria. <a href="https://devtracker.fcdo.gov.uk/projects/GB-GOV-1-300495/documents">https://devtracker.fcdo.gov.uk/projects/GB-GOV-1-300495/documents</a> . (Accessed on 2021.4.5)
19	Support to National Malaria Programme Phase 2. <a href="https://devtracker.fcdo.gov.uk/projects/GB-1-202979/documents">https://devtracker.fcdo.gov.uk/projects/GB-1-202979/documents</a> . (Accessed on 2021.4.5)
20	Women's Integrated Sexual Health. <a href="https://devtracker.fcdo.gov.uk/projects/GB-1-205241">https://devtracker.fcdo.gov.uk/projects/GB-1-205241</a> . (Accessed on 2021.4.5)
21	PEPFAR. <a href="https://ng.usembassy.gov/embassy-consulate/abuja/sections-offices/pepfar/">https://ng.usembassy.gov/embassy-consulate/abuja/sections-offices/pepfar/</a> . (Accessed on 2021.4.5)
22	PEPFAR Nigeria. Nigeria Country Operational Plan (COP) 2020. Strategic Direction Summary
23	U.S. President's Malaria Initiative Nigeria. Malaria Operational Plan FY 2020
24	USAID TB LON. <a href="https://www.usaid.gov/nigeria/press-releases/usaid-establishes-two-new-45-million-%E2%80%98local-organizations">https://www.usaid.gov/nigeria/press-releases/usaid-establishes-two-new-45-million-%E2%80%98local-organizations</a> . (Accessed on 2021.4.5)
25	USAID Global Health Supply Chain Programme. Nigeria: Country Snapshot. <a href="https://www.ghsupplychain.org/country-profile/nigeria">https://www.ghsupplychain.org/country-profile/nigeria</a> . (Accessed on 2021.4.5)
26	Health Policy Plus. Nigeria's Journey toward Universal Health Coverage: HP+ Support in the FCT and Three States. 2020
27	The World Bank, Second Health Systems Development. <a href="https://projects.worldbank.org/en/projects-operations/project-detail/P070290">https://projects.worldbank.org/en/projects-operations/project-detail/P070290</a> . (Accessed on 2021.4.5)
28	The Global Fund Data Explorer. <a href="https://data.theglobalfund.org/investments/grants/NGA">https://data.theglobalfund.org/investments/grants/NGA</a>
29	Nigeria CCM (2017). Malaria Funding Request Application Form. <a href="https://data.theglobalfund.org/investments/documents/NGA">https://data.theglobalfund.org/investments/documents/NGA</a> . (Accessed on 2021.4.5)
30	The Global Fund Data Explorer. <a href="https://data.theglobalfund.org/investments/grants/NGA">https://data.theglobalfund.org/investments/grants/NGA</a> . (Accessed on 2021.4.5)
31	CCM, Nigeria (2017). HIV/AIDS Funding Request Application Form: Full Review. <a href="https://data.theglobalfund.org/investments/documents/NGA">https://data.theglobalfund.org/investments/documents/NGA</a> . (Accessed on 2021.4.5)
32	The Global Fund Data Explorer. <a href="https://data.theglobalfund.org/investments/grants/NGA">https://data.theglobalfund.org/investments/grants/NGA</a> . (Accessed on 2021.4.5)
33	GAVI (2021). Nigeria: Programmes and Impact. <a href="https://www.gavi.org/programmes-impact/country-hub/africa/nigeria">https://www.gavi.org/programmes-impact/country-hub/africa/nigeria</a> . (Accessed on 2021.4.5)
35	BMGF. Our work in Nigeria. <a href="https://www.gatesfoundation.org/Where-We-Work/Africa-Office/Focus-Countries/Nigeria">https://www.gatesfoundation.org/Where-We-Work/Africa-Office/Focus-Countries/Nigeria</a> . (Accessed on 2021.4.5)
36	WHO: <a href="https://www.who.int/workforcealliance/countries/nga/en/">https://www.who.int/workforcealliance/countries/nga/en/</a> . (Accessed on 2021.4.5)

## Reference List

Footnote No.	References
37	Federal Republic of Nigeria HRH Strategic Plan 2008-2012
38	The National Health Workforce Profiles for Year 2012, 2018
39	Federal Government of Nigeria. National Strategic Health Development Plan 2008 – 2022. 2018
40	National Health Policy 2016
41	Nigeria HIS Policy in 2014
42	Xu, K., Saksena, P., Jowett, M., Indikadahena, C., Kutzin, J., & Evans, D. B. Exploring the thresholds of health expenditure for protection against financial risk, World Health Report; 2010
43	McIntyre, D., Meheus, F. Fiscal Space for Domestic Funding of Health and Other Social Services. Chatham House Centre on Global Health Security Working Group Papers; 2017
44	World Bank. Nigeria health financing system assessment. 2018
45	Federal Ministry of Health. National Health Facility Survey 2016. 2017
46	Federal Ministry of Health, National Health Insurance Scheme and National Primary Care Development Agency. Guidelines for the Administration, Disbursement, Monitoring and Fund Management of the Basic Healthcare Provision Fund. 2016
47	Results for Development. Preliminary learnings from Nigeria’s Basic Health Care Provision Fund. <a href="https://r4d.org/blog/preliminary-learnings-from-nigerias-basic-health-care-provision-fund/">https://r4d.org/blog/preliminary-learnings-from-nigerias-basic-health-care-provision-fund/</a> (Accessed on 2021.4.18)
48	Faisai Shuaib et al. Implementing the routine immunization data module and dashboard of DHIS2 in Nigeria, 2014–2019. 2020
49	Measure Evaluation. <a href="https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/nigeria">https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/nigeria</a> . (Accessed on 2021.4.5)
50	Nigeria Supply Chain Integration Project. <a href="https://nscip.gov.ng/">https://nscip.gov.ng/</a> . (Accessed on 2021.4.5)
51	E.C. Meribole et al. The Nigerian health information system policy review of 2014. 2018
52	Measure Evaluation. <a href="https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/nigeria">https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/nigeria</a> . (Accessed on 2021.4.5)
53	National Health Policy 2016
54	UNICEF Data: Monitoring the situation of children and women
55	Tonia C et al. Project OPUS: Development and evaluation of an electronic platform for pain management education of medical undergraduates in resource-limited settings. 2020
58	Nigeria Health Facility Registry (HFR). Nigeria Health Facility Registry (Accessed on 2020.11.25)
59	National Primary Health Care Development Agency. Minimum standards for primary health care in Nigeria. 2015
60	USAID Deliver Project. Nigeria National Supply Chain Assessment Results. 2015
61	Federal Ministry of Health. 2016 National Health Facility Survey