

Sub-National Budget Analysis Focusing on Immunization Under the Nigeria Zero-Dose Learning Hub Consortium in Nigeria

November 2023

Gavi Zero-Dose Learning Hub (ZDLH)

Funded by [Gavi](#), the Zero-Dose Learning Hub (ZDLH) serves as an innovative approach to providing a framework for Nigeria to promptly generate evidence on strategies that can be leveraged to successfully identify, measure, monitor, and reach “zero-dose” children and the “missed” communities in which they live. [The Africa Health Budget Network \(AHBN\)](#) is a sub-partner to the [African Field Epidemiology Network \(AFENET\)](#) on the Nigeria ZDLH. Gavi established the learning hub to address issues around immunization equity by identifying zero-dose and under-immunized children using the IRMMA (Identify, Reach, Monitor, and Advocate) framework in Bauchi, Borno, Kano and Sokoto states in Nigeria. AHBN focuses on the Advocate piece of the framework, particularly analyzing subnational immunization and primary healthcare budgets and financing, using evidence generated for stakeholders' engagement and advocacy.

Recommended Citation

AHBN/AFENET (ZDLH). 2023. Sub-National Budget Analysis Focusing on Immunization Under the Nigeria Zero-Dose Learning Hub Consortium in Nigeria.” Available from <https://zdlh.gavi.org/>.

Contact Information

AHBN Building
630 Ogwu James Onoja Crescent
Wuye District, Abuja
Nigeria

CONTENTS

Contents..... 3

Acronyms 4

INTRODUCTION..... 6

 GOAL 11

 Objective..... 11

 Methodology 11

 Geographic Target 12

 Indicators:..... 12

Findings..... 13

PROPORTION OF ANNUAL HEALTH BUDGET..... 13

PROPORTION OF HEALTH BUDGET PERFORMANCES (RELEASE PER YEAR) 14

PROPORTION OF THE TOTAL HEALTH BUDGET ALLOCATED BY STATE TO THE SPHCMB 15

PERCENTAGE OF STATE ALLOCATION TO SPHCMB RELEASED 17

PROPORTION OF BHCPF FULLY DISBURSED BY SPHCDA GATEWAY TO PHC FACILITIES. 17

PROPORTION OF WARD PHCS BENEFITING FROM BHCPF 19

IMMUNIZATION CO-FINANCING MODEL IN THE FOUR TARGETED STATES - DONOR PARTNERS
SUPPORT FUND TO THE STATES..... 20

FOUR STATE ALLOCATIONS FOR IMMUNIZATION FROM 2021 – 2023..... 22

TIMELINES OF RELEASES OF MOU FUND BY STATE GOVERNMENT & PARTNERS 24

Discussion 26

Conclusion/Recommendations..... 27

References **Error! Bookmark not defined.**

..... 29

ACRONYMS

ADF	Aliko Dangote Foundation
AFENET	African Field Epidemiology Network
AHBN	Africa Health Budget Network
BCG	Bacille Calmette Guerin
BHCPF	Basic Health Care Provision Fund
BMGF	Bill and Melinda Gates Foundation
CDC	Center for Disease Control
CSO	Civil Society Organization
EPI	Expanded Program on Immunization
FDCO	Foreign Commonwealth Development Office
FMoH	Federal Ministry of Health
GAVI	Global Alliance for Vaccine and Immunization
GoN	Government of Nigeria
HSS	Health System Strengthening
KII	Key Informant Interview
MICS/NICS	Nigeria Multiple Indicator Cluster Survey – National Immunization Coverage Survey
MOU	Memorandum of Understanding
NGO	Non-Governmental Organization
NHIA	National Health Insurance Authority
NPHCDA	National Primary Health Care Development Agency
NSIPSS	Nigeria's Strategy for Immunization and PHC System Strengthening
OPV	Oral Polio Virus
PHC	Primary Health Care
PHCUOR	Primary Health Care Under One Roof

RMNCAH	Reproductive Maternal, Newborn, Child and Adolescent Health
R4D	Result for Development
SHIS	State Health Insurance Scheme
SPHCDA	State Primary Health Care Development Agency
SPHCMB	State Primary Health Care Management Board
SMoH	State Ministry of Health
SWAp	Sector Wide Approach
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WHO	World Health Organization
ZDLH	Zero Dose Learning Hub

INTRODUCTION

Nigeria, like many other countries subscribes to the Expanded Program on Immunization (EPI) called the National Program on Immunization in which life-saving vaccines are provided free to all children. Vaccines have been proven to reduce the risk of getting infected with certain diseases and this especially has worked over years across all continents of the world. Such diseases are called vaccine-preventable diseases. At birth, Bacille Calmette Guerin (BCG) and Oral Polio Vaccine (OPV 0) are administered immediately on the first day in health facilities. More doses of OPV, Pentavalent vaccine (or DPT), Measles vaccine and others are later administered at different interval as the child grows. Children given birth to outside health facilities are usually missed. However, on some occasions, volunteer community health mobilizers or Community Health Influencers Promoters and Services (CHIPS) have been trained by the government and partners to identify such child and ensure appropriate vaccines are administered. Although, the 2021 Nigeria Multiple Indicator Cluster Survey – National Immunization Coverage Survey (MICS/NICS) survey* results revealed significant improvement in immunization uptake and utilization, there are still gaps across the country. This improvement is as a result of the sustained commitment of resources by the Government of Nigeria (GoN) and support of donors and implementing partners in improving immunization coverage and overall health outcomes.

Zero-dose children are those that have not received any routine vaccine. For operational purposes, Gavi defines zero-dose children as those who lack the first dose of diphtheria-tetanus-pertussis containing vaccine (DTP1). According to the (NICS/MICS) 2021, the country still has over 2.3 million zero-dose children¹. The National Program on Immunization has documented several reasons why the problem of zero-dose and under-immunized children persists. Several factors such as insecurity, poor access to healthcare service, vaccine hesitancy, demand generation, lack of trust in vaccine efficacy, safety, behavioral and gender-related factors and above all problems associated with financing have significantly contributed to the high number of zero-dose children in the country.

Data available for Routine Immunization (RI) explains government's spending per livebirth in WHO African region to increase slightly from \$4.8 in 2010 to \$5,6 in 2015[†] Estimates put the cost of fully vaccinating a child at US\$25-\$45, but even this figure does not take into account non-vaccine costs of delivering the service, training, supervision, monitoring and tracking outbreaks, addressing population demand for services or managing programs. Several studies suggest that non-vaccine costs represent nearly half of the total cost per child. Investment in immunization

* 2021 Nigeria Multiple Indicator Cluster Survey (MICS) & National Immunization Coverage Survey (NICS)

[†] https://www.afro.who.int/sites/default/files/2017-2/MCIA%20Brief_Immunization%20Financing%20in%20an%20Era%20of%20Transition.pdf

results in direct health benefits that can contribute to economic development, and help to avoid treatment costs that burden households across Africa.

In Nigeria, funding of immunization services is the collective responsibility of all three tiers of government through statutory budgetary allocation from the Federal, State and Local Government Areas (LGA). All the tiers are therefore expected to allocate budget for immunization services. In fact, the FMoH is currently tracking proportion allocated and release for capital budget spent on vaccine financing under the NPHCDA gateways. This is in preparation for Gavi's exit from Nigeria in the next few years as Nigeria must be prepared to finance vaccine procurement and possibly production.[‡] In 2023, total co-financing and traditional obligation of the GoN was over 69 billion naira. As of November, when the last review was carried out by stakeholders on Gavi's support including the NPHCDA, no vaccine financing fund had left the coffers of the GoN. Also in 2022, only about 50% was released for direct vaccine financing. The challenges with poor releases is due to bureaucratic issues leading to delay in fund release and political unwillingness.

The process of budget formulation to appropriation is the same across all the states of the federation. After the State Ministry of Health (SMoH) has developed an annual health budget, the State House of Representatives appropriates the budget; the Governor signs the Budget Appropriation Act into law, The Ministry of Finance, Ministry of Budget & Economic Planning; Accountant General Office; Auditor General Office all play critical roles in monitoring budget approvals, fund releases and execution at the state level.

At the Federal level, the FMoH and implementing partners have identified certain challenges that impact budget execution poor budget planning, delays in funds releases, perceived lack of absorptive capacity, and overdependence on donor/partner funds etc. were key challenges. The unpredictable, dynamic, and complex political economy of Nigeria was also identified. These challenges also apply at the state levels.

Also, in 2022, the version 2.0 of the Nigeria's Strategy for Immunization and PHC System Strengthening (NSIPSS) Accountability Framework was developed for use by the FMoH and the NPHCDA[§]. This framework contains key indicators which guide implementation of health activities especially related to the responsibilities of the government in the area of service delivery and financing in the PHC including Basic Health care Provision Fund (BHCPF), immunization, vaccine procurement and other commitments. The BHCPF is a catalytic fund (one percent of Nigeria's Consolidated Revenue Fund) allocated by the federal government to provide

‡ NSIPSS Accountability Framework 2.0

§ Federal Ministry of Health / National Primary Health Care Development Agency NSIPSS Accountability Framework 2.0 (2022)

access to a defined minimum basic healthcare especially at primary and secondary health centers. The BHCPF is paid mainly through two gateways - National Primary Health Care Development Agency (NPHCDA) and national Health Insurance Authority (NHIA) to the states that contribute 25% counterpart fund of their BHCPF allocation. The NSIPSS indicators of interest are also in consonance with the key indicators in the reviewed accountability framework developed by The Vaccine Alliance (Gavi) for its successful transition of its support to the GoN for a 10-year period (2018-28). It is important to note that the accountability framework and its indicators will be reviewed after the conclusion of Gavi full portfolio planning in collaboration with the NPHCDA, alliance partners and other local organizations, this will be followed through as well. This budget analysis exercise has ensured alignment with some relevant indicators in the aforementioned documents. Some of the Gavi indicators include:

- Proportion of approved GoN budget allocated to health,
- Proportion of partners and donors working on immunization;
- Timeliness of release of funding for traditional and co-financed vaccines.
- Specifically on zero dose is the following indicator - Proportion of targeted LGAs with at least 15% annual reduction in number of zero-dose children. etc.

It is worthy to note that with a new administration in place, the Federal Ministry of Health (FMOH) has come up with some concepts and initiatives to catalyze the renewed hope agenda of the government of the day. One of the initiatives is the Nigerian Health Sector Renewal Investment Program (NHSRIP)** which is a transformational and innovative opportunity to rapidly improve population health outcomes. It is a known fact that there has been very minute improvement in the health statistics of Nigeria. The NHSRIP is meant to unlock the economic potentials of healthcare value chains in Nigeria. One of the key components is the BHCPF which will now be managed through an innovative Sector Wide Approach (SWAp) which pools the financing of the GoN with other available funding from all relevant stakeholders. After BHCPF implementation began in 2019, implementation has not actively been jointly carried out with non-state actors. This calls for redesign of the BHCPF as stakeholders including state actors, donors, and coalitions of CSOs/NGOs will discuss the key elements and features of BHCPF to review. Prudent implementation of the BHCPF would improve national health indices and firmly place Nigeria on the path to achieving universal health coverage.

The findings below are from the review of the approved budgets of the four Zero Dose Learning Hub (ZDLH) states – Bauchi, Borno, Kano and Sokoto and the report of the 2022 Health System

** Federal Ministry of Health Strategic Blueprint: Discussion Document – HMH 4 Points Agenda; Oct 2023

Strengthening (HSS) Program End of the Year Review for the states. This report was presented to the relevant state actors, donors and the implementing partners in each of the states. The partners which have presence across all the focal states include Bill and Melinda Gates Foundation (BMGF), UNICEF, USAID, WHO, Aliko Dangote Foundation (ADF), CDC-AFENET among several others.

Across the four states, there exist some operational structures that fosters collaboration between relevant Ministries, Departments and Agencies (MDAs) and the partners. Some of the MDAs relevant to this assignment include the SMOH, NPHCDA and the State-level Agency or Management Board (SPHCMB), NHIA, State Health Insurance Schemes etc. the later are Gateways through which the BHCPF is released and utilized. To complement government's effort in the implementation of Primary Health Care Under One Roof (PHCUOR) and especially immunization program in the state, some Memoranda of Understanding (MoU) and commitments were signed between the state governments and the implementing partners.

Generally, there is a co-financing approach between the state governments and selected partners. Across the four ZDLH states, MoUs was signed by the state governments, Aliko Dangote Foundation (ADF), and the Bill & Melinda Gates Foundation (BMGF). This tripartite agreement was signed primarily with the aim of improving Routine Immunization (RI) in the state. Depending on when the tripartite agreement was initiated in the state, there has been two to three different Addendums (versions) signed by the parties over the last 10 years. In Kano State for example, the parties signed the second addendum on 28th February 2017 for an additional five years (2017-2021) to focus on broader Child Health interventions and Health Systems Strengthening (The Health MoU). As contained in the MoU, the scope of the 3rd d addendum which was also signed by UNICEF was further expanded in 2022 to include Maternal, Newborn and Child Health services, and subsequently, Nutrition, Family Planning, and Malaria.^{††} Also in Borno, Sokoto and Bauchi in 2021 UNICEF commenced a non-basket contributing MoU partner and joined counterpart contribution which has been used for the implementation of health interventions across the Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAEH) pillar in the states. Immunization intervention is known to be a key part of the RMNCAEH; however, this basket fund is not absolutely for immunization services.

Also, another MoU was signed with the USAID and UNICEF to allow more time to achieve outstanding objectives of the RI MoU and expand the existing MoU to improve primary health care services with an overall aim to strengthen primary health systems and ensure an integrated health care service delivery system. In Sokoto state, the MoU was signed by all five parties

^{††} Kano MoU addendum III document Review 2022

creating a pool fund for integrated PHC.^{##} In Bauchi state, just as in other states, there is a tripartite agreement among the state government, BMGF and ADF to contribute to pool fund for immunization. On the tripartite pool fund, the agreement in the MoU is that BMGF and ADF including UNICEF will deposit their funds within 4 weeks the state releases her contribution to the pool.s

In Kano state for example, the basket fund allocates to the government 500 million naira annually to be paid between March and September of each year. ADF commits 182,929,697.79 naira annually while BMGF and UNICEF are to contribute 650,000 USD and 300,000 USD to the pool respectively. Taking Kano for example, a health financing is when all partners and government fulfil their agreement in line with the MoU.

The scope of this work includes an assessment of sub-national budgets on immunization and other relevant health documents in the four ZDLH states (Kano, Sokoto, Borno, and Bauchi). The level of contribution of partners and government allocation, releases, utilization and accountability of fund and general investment in immunization is determined in this exercise.

Africa Health Budget Network (AHBN) is a sub-partner to the African Field Epidemiology Network (AFENET) on the Nigeria ZDLH. The learning hub was established by Gavi to address issues around immunization equity by identifying zero-dose and under-immunized children through the use of high-quality data collection.

AHBN is analyzing the role of the four state governments and each donor / implementing partner in promoting and supporting immunization. Also, the amount allocated in the state budget, amount released or disbursed and the timeliness of disbursement is of key interest in this exercise. This budget analysis is being done to understand the immunization financing landscape at the subnational level. This will help to identify the gaps on where and how targeted advocacy would be conducted towards correcting issues relating to zero doses in the states. The state governments will then invest more resources into immunization to conduct outreaches, health education, and create demand among other key activities

If there is adequate appropriation for the health sector at the subnational levels, the government will allocate more fund for PHC and automatically for immunization. This fund will be timely disbursed to support immunization activities such as cold chain maintenance, outreaches, community mobilization and supportive supervision. Improved immunization uptake/services is realistic if fund is made available timely to conduct planned activities. This will then impact on the reduction of zero dose children.

^{##} Health MoU on the collaboration for Strengthening the Primary Health Care System in Sokoto State

GOAL

The main goal is to assess, analyze and understand the funding mechanism and coordination as it pertains to government and partners' investment in Bauchi, Borno, Kano, and Sokoto as it relates to immunization with more focus on how to ensure equity to reach out to zero dose children and missed communities.

OBJECTIVE

1. To analyze the co-financing model (pooled fund for immunization between the government and partners) on health budget in the four selected ZDLH states focusing on immunization covering 2021,2022, 2023 allocations and disbursement.
2. To review coordination and partnership at the state level that promotes immunization and equity to reach zero dose children and missed communities
3. To proffer recommendations for advocacy that will ensure reaching zero dose children and missed communities.

This is not a costing analysis. However, the interest of this exercise is to analyze the allocations, releases, utilization and participation, including accountability processes of the relevant stakeholders in improving immunization. It is easier to get data from the most recent years for this to be achieved, thus the analysis of year 2021-2023. A quick analysis of available data would help guide advocacy process for improved immunization policy, programming, and funding to reduce the number of zero-dose children in Nigeria.

METHODOLOGY

AHBN reviewed the Gavi Accountability Framework, the NPHCDA and FMOH's Nigeria's Strategy for Immunization and PHC System Strengthening, and the Federal Health Budget Execution Report by the Federal Ministry of Health. These reviews have informed the thoughts in this analysis.

The approved budgets for the three years were collected from the Ministry of Finance, Budget, and Planning of the various states and analyzed. AHBN conducted content analysis on State MoU reports and annual performance reviews to understand various models of co-financing, programmatic implementation, and challenges. The performance of the four states in the MoU implementation was analyzed to support evidence generation, recommendations for advocacy, and action. A bi-variate analysis was conducted by comparing two variables to arrive at proportions. For example, analysis of the health budget as a proportion of the total state overall

budget and the SPHCMB budget as a proportion to the state total health budget. Thus, the following methodologies were adopted:

- Desk Review: Collation and review of the approved budgets of the four states of focus, Health MoUs with Donors, Annual Operating Plans of the State Primary Health Care Boards, and other relevant documents.
- Data Analysis: Analysis of approved state budgets, available co-financing documents from development partners and other documents, such as Operational Plan MoU.
- Key Informant Interviews (KII): For clearer insights into identified gaps during the analysis, key stakeholders from the four states were interviewed to provide more information. The interviews were not structured, questions were asked from partners, media, health professionals and state actors based on needs (for clarification or confirmation) in the states.
- Graphic representation of the budget analysis such as bar charts, pie charts, and tables.
- Development of policy briefs, advocacy briefs, fact sheets and summary sheets to support advocacy process.

GEOGRAPHIC TARGET

The budget analysis was conducted for the four ZDLH states below.

1. Bauchi
2. Borno
3. Sokoto
4. Kano

INDICATORS:

Some of the indicators used for this exercise were adapted from reviewed documents such as the NSIPSS and the revised Gavi accountability frameworks. Classification is according to Gavi Support (2018-2028) Accountability Framework Review 2022.

Table 1: Indicators used for the sub national budget analysis focusing on immunization

S/n	Classification	Indicators
1	Core	Timelines of Releases of MoU Fund by State Government & Partners
2		Proportion of PHCs benefiting from BHCPF.
3	Health Financing	Proportion of the annual health budget.
4		Proportion of Health Budget performances (release per year)
5		Proportion of the health budget allocated to the SPHCDA

6		Proportion of BHCPF fully disbursed by SPHCDA Gateway to PHC facilities
7		Percentage of state allocation to SPHCB released
8		MoU Donor Partners Support Fund to State.
9		Amount allocated and disbursed by donor partners for immunization.

FINDINGS

PROPORTION OF ANNUAL HEALTH BUDGET

The annual health budget for each state is the financial allocation specifically designated for health-related expenditure for that state. It comprises of capital and recurrent expenditure. It funds the delivery of healthcare services including hospitals, primary healthcare centers and other health facilities, payment of healthcare workforce, procurement of medicines and medical supplies, public health programs, emergency preparedness, research and development etc.

In 2001, the African Union member states adopted the Abuja Declaration in Nigeria, which states a commitment to allocate at least 15% of the annual budget to the health sector.

The approved budgets of the three-year period (2021 – 2023) under review for the four states generally exhibit an increase in fund allocation to health. Advocates have consistently targeted the 15 percent of total budget benchmark recommended for health during the Abuja Declaration 2001. The proportion of health budget to total state budget shows that close to 15 percent in some of the years. However, in a state like Kano state, the proportion kept reducing each year.

The overall budget of a state depends on several factor as follows:

1. Projected annual revenue to be provided by the Federal Government via the Federation Account Allocation Committee (FAAC).
2. Additional annual income to be mobilized from internally Generated Revenue (IGR)
3. Support from grants, loans and donations.

The above are not static, they fluctuate yearly, based on the economic situation of the country.

According to one of the Key Informants from Kano, *“It could be that government believed that more resources came into the state for health in 2022, it was the year that the 2nd MoU Addendum document was reviewed with additional funding from all stakeholders”* It was also inferred for Kano state and others that reduction in percentage of health to total budget may not actually mean reduction in absolute figures. There was increase in the absolute figures (health budget) in Kano – N 30,720,244,964 was allocated in 2021, In 2022, this figure increased to N 33,999,653,517 while there was another increase in 2023 to N 39,552,151,119. In Sokoto and

Borno, the absolute budget figure slightly increased in 2022 (N 29,617,906,608 and N 24,544,696,000) respectively, but dropped in the year 2023 to N 26,865,710,550 and N 20,050,410,000)

Comparison of the health fund allocated per capita in each of the ZDLH states gives a different view despite the variation in percentage of health budget. Using the 2022 population projection for Kano state (15,462,200)^{§§}, health budget per capita for the year is N 2,199. Allocated health budget per capital in Borno state however with population of 6,111,500 in 2022 was N4,846.

Table 2: Proportion of total state budget approved for health

		Year 2021	Year 2022	Year 2023
S/N	Focal State	Proportion of Budget Allocated to Health	Proportion of Budget Allocated to Health	Proportion of Budget Allocated to Health
1	Bauchi	11.2%	11.4%	15.0%
2	Borno	6.7%	9.3%	7.4%
3	Kano	17.3%	15.4%	14.7%
4	Sokoto	11.8%	15.7%	13.5%

PROPORTION OF HEALTH BUDGET PERFORMANCES (RELEASE PER YEAR)

Health Budget performance has significant influence on the strength of the healthcare system in any state or country. Health Budget releases and its timeliness are crucial in determining the quality and quantity of healthcare services that can be provided. The information on budget releases was available for all the states except for Sokoto state and only percentage of allocated budget released (no absolute figure) was made available in each of the states' Percentage release were however extracted from the 2022, End of the Year Technical Review developed by the state government and implementing partners.. These releases on health budgets were sometimes lower than 50 percent in some years as shown in the Figure 1:

Generally, the release of funds or performance in expenditure was always relatively lower than the amount in the approved budget. For example, in Bauchi state, in 2021 and 2022, budget allocation to the health sector did not meet the 15 percent Abuja Declaration agreement (Table 1). Despite this, the state's health budgetary release declined from 84 percent to 52 percent largely due to the dynamic fiscal realities in the state (Table 2).

§§ City Population – Statistics, Maps and Chart; Kano State & Borno State Nigeria

Thus, in 2022, health budget performance in the first three quarters of the year (September 2022), was about 38 percent in Kano state, 52 percent in Bauchi and 88 percent in Borno state.*** (Ref: 2022 End-Year Technical Review). Infrequent release of government funds for the implementation of government-only-funded activities as a result of bureaucracy in the system and poor political will is one of the challenges identified across the states.

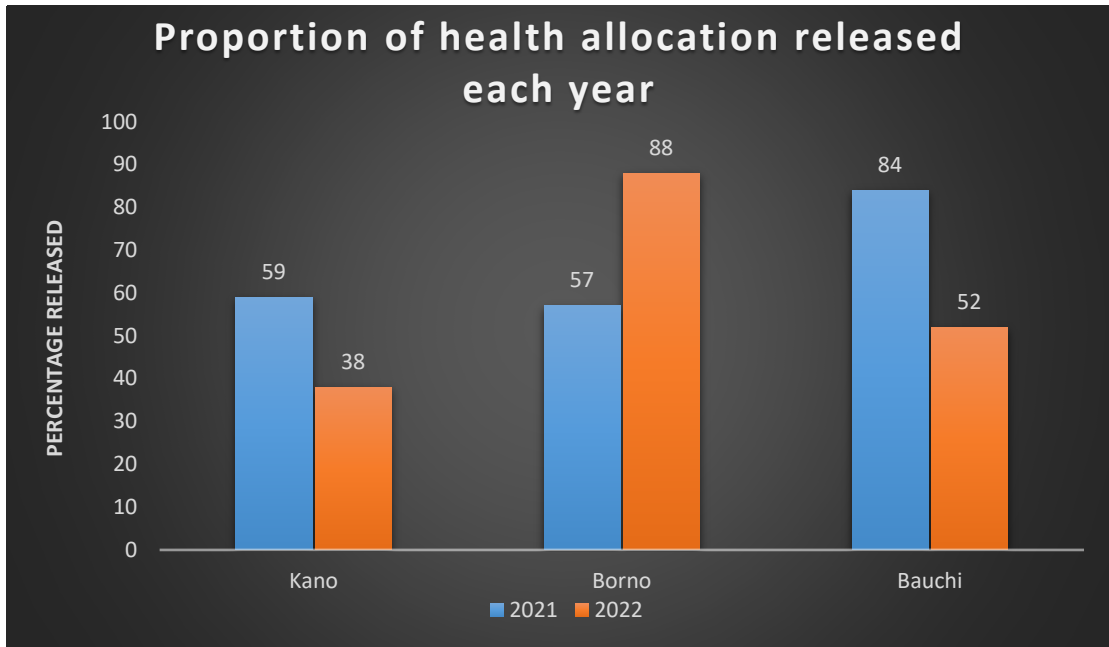


Figure 1: Approved state health budget released

PROPORTION OF THE TOTAL HEALTH BUDGET ALLOCATED BY STATE TO THE SPHCMB

The National Primary Health Care Development Agency (NPHCDA) Act of 1992 decentralized primary healthcare management to the state and local government levels; establishing the State Primary Health Care Boards (SPHCBs) who organizes and delivers primary healthcare services at the state level. Some states refer to the board as State Primary Health Care Development Agency while some refer to it as State Primary Health Care Management Board. It is of interest to know state government’s commitment to funding the activities of this board in delivering primary health care services, which is at the grassroots level.

Tables 2a to 2d below show the state health allocation specifically to the SPHCMB for all the four states. This result was extracted from the approved budget of the states for the years under review. There was no mention of immunization or related activities in the budget line as most are for personnel and other recurrent cost including cost for fixed assets.

*** 2022 End-Year Technical Review for Kano, Bauchi, Sokoto and Borno

In Bauchi state, of the sum total of over 30 billion naira (N 30,415,945,966) budgeted for health in 2023, ₦ 8,601,848,413.92 (28.3 percent) was specifically allocated to the PHC Management Board. This is an improvement on what was budgeted to the Board in 2022 (22.2 percent) and 20.5 percent in year 2021. The proportion of this amount used to support immunization in the state was, however, not specified). Also, in 2023, allocation to the SMOH (₦ 8,446,529,636.99) was specifically for recurrent and capital without mention of any line item relating to immunization. Other allocations under health were made to the Hospital Management Board (H.M.B) and training schools for medical practitioners – health/nursing/ midwifery schools and colleges of medicine etc. This was also the trend in the previous years. The breakdown of the health budget does not involve immunization as budget line. This gap was identified across the states. In other words, one of the gaps from the health budgets is that there is no robust information on immunization implementation in the states. Only the Tripartite agreement signed by the state governments, BMGF and ADF which are known to be specific for immunization.

Table 3a: Proportion of health budget allocated to the SPHCMB in Bauchi

	Year (Bauchi)	Total budget Allocation to Health (₦)	Allocation to SPHCMB (₦)	Percent
1	2021	23,926,327,459.81	4,907,307,257.00	20.5
2	2022	21,973,628,832.17	4,881,926,288.08	22.2
3	2023	30,415,945,966.20	8,601,848,413.92	28.3

In Kano, the proportion of state health budget allocated to the SPHCMB is relatively lower than that of Bauchi for the years reviewed. The predominant percentage of the health budget went to SMOH and Hospital Management Board (H.M.B) followed by the training schools for health and medical students. In 2021, for example, about 30% was allocated to the MoH and 40% allocated to the H.M.B. In 2023, similar trend was observed as only 11.1 percent was allocated to the PHC board, however 38% was allocated to the Kano state MoH and about 35% to the H.M.B.

Table 3b: Proportion of health budget allocated to the SPHCMB in Kano

	Year (Kano)	Total budget to Health (₦)	Allocation to SPHCMB (₦)	Percentage
1	2021	30,720,244,964.00	3,021,091,024	10.2%
2	2022	33,999,653,517.26	3,779,586,693	9.0%
3	2023	39,552,151,119.09	4,378,417,920	11.1%

In Sokoto state, the situation got worse with the amount budgeted for SPHCMB. Proportion of the state health budget allocated to the Primary Health Care Development Agency was 4.5 percent in year 2021. Whereas, over (₦)9.7 billion was allocated to the SMOH and about four billion naira was allocated to the Hospital services management board. In 2022, while only a small

fraction (3 percent) of the health budget was allocated to PHC, about 60% was budgeted for SMOH.

However, from the 2022 MoU Technical Review result, it was reported that 4.4 billion naira (16 percent) was allocated to PHC by the state government out of 28.8 billion naira. The figures do not agree with the approved state annual budget available for the year.

Table 3c: Proportion of health budget allocated to the SPHCMB in Sokoto

	Year (Sokoto)	Total budget to Health (₦)	Allocation to SPHCMB (₦)	Percentage
1	2021	20,826,832,913.39	934,473,225.66	4.5%
2	2022	29,617,906,608.45	795,094,736.00	3.0%
3	2023	26,865,710,550.50	710,094,736.00	3.0%

This proportions (budget allocations to PHC) were also low in Borno state especially for year 2021 and 2022. However, the amount budgeted for PHC activities is seen to have improved in 2023.

Table 3d: Proportion of health budget allocated to the SPHCMB in Borno

	Year (Borno)	Total budget to Health (₦)	Allocation to SPHCMB (₦)	Percentage
1	2021	16,564,347,000.	542,000,000.00	3.3%
2	2022	24,544,696,000	1,252,000,000	5.1%
3	2023	20,050,410,000	3,063,716,000	15.3%

PERCENTAGE OF STATE ALLOCATION TO SPHCMB RELEASED

This result is only available for two states. Despite the shortfall in the funds allocated to health budget, release to the SPHCMB by Bauchi state in 2021 was 88 percent, and this reduced to 78 percent in 2022. In Borno state, proportion of budgeted amount released to PHC in year 2021 and 2022 was seven percent and 52 percent respectively. According to the Key Informant, approval was not given to several memos developed for activities due to lack of fund in the states. This is not only a problem in the SMOH, but most MDAs also face similar problem of inadequate fund release despite budget approval.

PROPORTION OF BHCPF FULLY DISBURSED BY SPHCDA GATEWAY TO PHC FACILITIES.

The four ZDLH states have been accessing the BHCPF having met the stipulated conditions one of which is to contribute 25 percent counterpart fund of the amount paid by the national health agencies. Through BHCPF, health facilities at the subnational access this fund from both the NPHCDA and NHIA gateways (federal government agencies that pay and monitor planned activities and use of the fund at the state level). Practically, part of this money was disbursed for state utilization to develop Human Resource for Health (HRH) for PHC including CHIPS and for operations. The other part of the fund was disbursed directly to the implementing PHC facilities

to procure drugs and consumables, pay for utilities and maintenance of the facilities and other infrastructural development as the case may be.

In Bauchi State, the total amounts received as BHCPF in 2021 and 2022 were ₦ 477,162,635 (BHCPF per capita was ₦ 93.58 (\$ 0.21) and ₦ 330,328,802 (with 64.78 (\$ 0.15 per capita) respectively. However, in Borno State, the amount received as BHCPF in year 2022 was ₦ 376,800,000 with ₦ 2,387.2 (\$5.4) per capita far higher than that of Bauchi state.

Furthermore, Kano received over one billion naira each year as BHCPF (₦ 1,818,049,891 in 2021 and ₦ 1,608,049,182 in 2022). Despite this huge amount mainly because of the number of PHC and population density, fund received per capital was ₦ 153 (\$ 0.35) in 2021 and ₦ 131 (\$ 0.30 in 2022.

The result on the proportion of BHCPF fully disbursed by the Kano SPHCDA Gateway directly to BHCPF implementing PHC facilities shows that only a fraction (12.6 percent in 2021 and 7.1 percent (by November 2022) of the fund was disbursed directly. This proportions are higher in Bauchi State – 40.7 percent in 2021 and 55.4 percent in 2022. This result is not available for the two other states.

In Sokoto state, a total number of 244 facilities (one per Ward) were benefiting from the BHCPF disbursed from the national. In 2021, a total of 466,000,000 naira was disbursed to the state through the NPHCDA while in 2022 (quarter 2), it was 380,189,753 naira. This was reported to be 100 percent disbursement from NPHCDA.

Delay in the release of BHCPF from SPHCMB to the facilities was also identified as a challenge. This delay was usually caused by protracted health facility retirement finalization process since retirement submission to the state where collation is done and sent to the national is a prerequisite for fund disbursement. Sometimes, the delay may also be from the national level. This delay causes accumulation of unused fund sometimes at the state. However, the funds must be utilized in line with the BHCPF Annual Operational Plan (AOP).

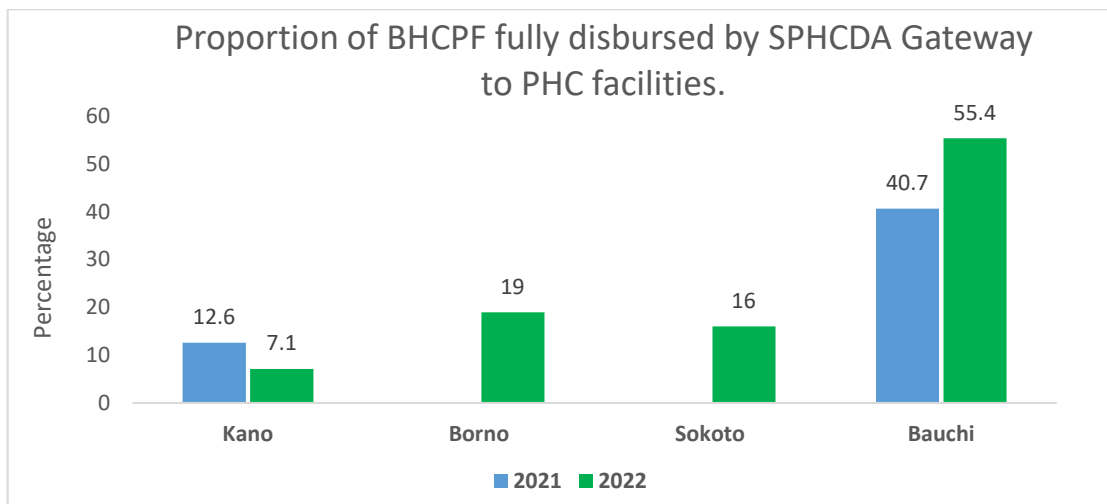


Figure 2: BHCPF disbursed directly to implementing PHC

PROPORTION OF WARD PHCS BENEFITING FROM BHCPF

Since 2019 when the first BHCPF was sent to the states through the Gateways, the fund has proven to bring about certain level of improvement to the health system especially at the PHC level^{†††}. Direct Facility Financing (DFF) which is N 300,000 per quarter is sent to each BHCPF facility through the NPHCDA gateway while capitation is paid through the NHIA gateway based on the number of enrollees under each facility (PHC and secondary). BHCPF implementation started with one PHC per Ward benefiting from the BHCPF across all state that complied with the guideline. The current administration is working to increase this to two PHC per Ward.

In Kano State, 389 PHC facilities (80%) of the expected 481 PHCs (one per Ward) were benefiting from the BHCPF as at year 2022.. In Bauchi state, the whole 323 Wards (100%) have a PHC facility being supported by the BHCPF based on the available report

Of the 211 PHC facilities (one per Ward) in Borno state, only 121 (57 percent) of them were benefiting from the BHCPF by the end of 2022. In Sokoto, the state had achieved 100% BHCPF PHC per Ward (244/244) by mid-2022. The chart below shows a graphical representation of PHCs benefiting from BHCPF in the four states.

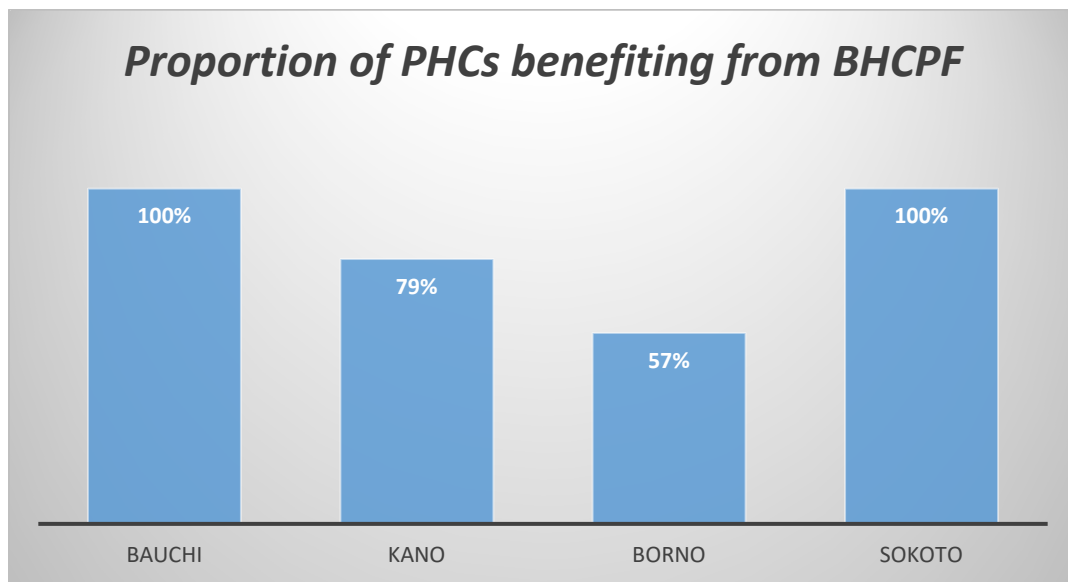


Figure 3: PHC facilities benefiting from BHCPF in each state

^{†††} BHCPF Ministerial Oversight Committee Newsletter; Quarter 4 Report, 2023

IMMUNIZATION CO-FINANCING MODEL IN THE FOUR TARGETED STATES - DONOR PARTNERS SUPPORT FUND TO THE STATES

Tables 3a below shows the amount allocated to health by donor partners in Bauchi State, but this may not be the exact amount of the donor partner funding as most of the partners do not have MoU with the states. As stated earlier, MoU was only signed by the state government, ADF, BMGF and UNICEF. However, other partners fund different activities in the state AOP. More information is needed to ascertain donor partners that primarily support immunization program for the years under review in Bauchi. It is difficult to actually ascertain the specific amount used for immunization if the objectives of the partners are not immunization specific.

Table 4a: Amount (Naira) allocated to health by Donor Partners in Bauchi

S/n	Partners / Projects (Foreign Aids)	2021 (₦)	2022 (₦)	2023 (₦)
1	BMGF/Dangote Foundation - Support to Routine Immunization	88,500,000	NA	338,834,926
2	UNICEF - Support to (Nutrition, CMAM, MNCH, Immunization, IMCI, FP and Soc. Mobilization)	20,127,495	10,000,000	82,200,000
3	WHO/APOC - Support to Neglected Tropical Diseases (NTD)	3,500,000	115,446,640	40,000,000
4	European Union – UNICEF	500,000,000	753,857,364	400,000,000
5	Break through Action Nigeria (BAN)	55,991,450	315,787,400	800,000,000
6	The Challenge Initiative (TCI)	127,600,350	NA	NA
7	Integrated Health Program (IHP USAID)	250,000,000	3,000,000	1,200,000,000
8	Innovative for Maternal and Child Health in Africa (IMCHA)	53,650,654	NA	NA
9	IMPACT Project	1,000,000,000	1,114,612,410	1,265,944,260
10	Video Edutaining to the Door Step Impact on Maternal Out.	20,000,000	NA	NA
11	Saving One Million Life Program for Result (SOML PforR)	NA	350,000,000	NA
12	Human Resource for Health Project Activities (HWMA USAID)	NA	50,000,000	21,000,000
13	UNICEF Project (Core Technical Committee)	NA	10,000,000	10,000,000
14	Advancing Nutrition (USAID)	NA	111,793,865	679,788,333
15	FHI Solution (BMGF)	NA	191,437,306	30,000,000
16	PLAN INT. Aspire Project in health (GAC)	NA	5,000,000	154,069,695
17	World Bank (Saving one million lives program)	NA	711,302,557	NA
	Sub-Total	2,119,369,948.50	3,742,237,542.07	5,021,837,214.79

In 2021, all the parties in Bauchi fully released the agreed fund. Only the state government paid in 2022 as the fund was not released by the partners by the end of November of that year mainly

due to late release by the government. However, other non-counterpart funding partners such as UNICEF and USAID released complete fund in 2021 and some percentage of promised fund in the year 2022. It is worthy of note that not all allocations in Table 3a were for immunization. UNICEF fund was used for several other interventions beyond immunization.

Table 4b: Amount allocated to health by Donor Partners in Kano

S/n	Partners / Projects (Foreign Aids)	2021	2022	2023
1	BMGF	NA	USD 650,000	USD 650,000
2	Aliko Dangote Foundation (ADF)	NA	₦ 182,929,697.79	₦ 182,929,697.79
3	UNICEF - Support to (Nutrition, CMAM, MNCH, Immunization, IMCI, FP and Soc. Mobilization)	NA	USD 300,000	USD 300,000

Borno state government, just like Kano and Bauchi, has sustained the actualization of its commitment to the PHC MoU and other health programs. Timely release of fund by the state government has however been an issue.

Table 4c: Amount (Naira) allocated to health by Donor Partners in Borno

S/n	Partners / Projects (Foreign Aids)	2021 (₦)	2022 (₦)	2023 (₦)
1	BMGF	205,000,000	205,000,000	205,000,000
2	Aliko Dangote Foundation (ADF)	205,000,000	205,000,000	205,000,000
3	USAID	1,034,542,413	974,230,733	974,230,733
4	UNICEF - Support to (Nutrition, CMAM, MNCH, Immunization, IMCI, FP and Soc. Mobilization)	381,200,000	381,200,000	381,200,000

In Sokoto state, the MoU Technical Review for 2022 only showed report for the first two quarters, unlike the other three states which was 2022 End Year Review reports. The amount donated by UNICEF in the four ZDLH states in Table 3a- 3d was not strictly for immunization.

Like with other states, Sokoto state government in partnership with BMGF and ADF signed a MoU to transform RI and sustainably improve immunization coverage in 2016. Also in 2021, UNICEF and USAID joined others in signing an expanded Integrated PHC MoU collaborating on strengthening policy, planning, coordination, participation and service delivery in PHC.

As at the time this report was gathered in June 2022, some partners were yet to pay their commitment in the MoU. This is due to the fact that the release of funds by partners is hinged on the release of funds by the state government in Sokoto and other states.

Table 4d: Amount (Naira) allocated to health by Donor Partners in Sokoto⁵

S/n	Partners / Projects (Foreign Aids)	2021	2022	2023
1	BMGF	USD 600,000	0	0
2	Aliko Dangote Foundation (ADF)	₦ 30,758,506	0	0
3	USAID	USD 22,198,238	USD 22,198,238	0
4	UNICEF - Support to (Nutrition, CMAM, MNCH, Immunization, IMCI, FP and Soc. Mobilization)	USD 200,000	USD 200,000	0

FOUR STATE ALLOCATIONS FOR IMMUNIZATION FROM 2021 – 2023

Below are tables showing specific financing for immunization from the state budgets, the MoU agreement with partners for the four states.

In Bauchi, the amount allocated in 2021 is higher than in the subsequent years. Some of the amount committed by partners like UNICEF and IHP USAID were provided as technical support and assistance to the states.

Table 4a: Bauchi State Approved Immunization Budget

Year	Naira	Approved Immunization budget
2021	1,395,600,350	BMGF & ADF (N77,000,000) Support to RI UNICEF (N36,000,000) CMAM, MNCH, Immunization, IMCI, FP & Soc Mob, EU & UNICEF (N10,000,000), BAN (N77,600,350), TCI (N20,000,000), IHP USAID (N175,000,000) and BHCPF contribution to SPHCDA
2022	260,000,000	BMGF & ADF
2023	338,834,926	BMGF & ADF (N338,834,926) Support to RI

For Borno state, the amount specific to immunization alone as allocated by MoU partners is shown in Table 4b. There was confirmation of LGA contribution to immunization services in 2021 state budget, but no budget line of such in 2022 and 2023. A more comprehensive government budget performance for RI is shown in Table 4c for 2023, it was at 89 percent performance.

Table 4b: Borno State Approved Immunization Budget

Year	Naira	Approved Immunization budget
------	-------	------------------------------

2021	710,000,000	LGA contribution (N300,000,000) for HRH BMGF (N 205,000,000) ADF (N 205,000,000)
2022	874,256,000	ADF (N127,656,000) MoU Grant UNICEF (N500,000,000) MoU Grant BMGF (N246,600,000) MoU Grant
2023	1,260,448,285	BMGF (N250,000,000) MoU Grant ADF (N127,650,000) MoU Grant Government (N882, 798, 285)

Table 4c: Borno State Approved Immunization Budget

Borno 2023 RI Budget Performance Analysis	
Total Amount Budgeted in 2023	882, 798, 285.00
Amount Spent in Q1 2023	223, 514, 400.00
Amount Spent in Q2 2023	179, 656, 456.00
Amount Spent in Q3 2023	162, 285, 509.00
Amount Spent in Q4 2023	218, 977, 445.00
Total Amount Spent in Year 2023	784, 433, 819.00
Amount Unspent in 2023	98, 364, 466.00
Expenditure Performance %	89%

For Kano state, specific allocations for immunization were made by the government and other MoU partners as shown in table 4d below.

Table 4d: Kano State Approved Immunization Budget

Year	Naira	Approved Immunization budget
2021	226,729,138	RI MoU (N107,312,147) RI MoU (N119,416,991)
2022	862,929,697	ADF (N 182,929,697) RI MoU (N430,000,000) LGA contribution (N200,000,000) BUA Foundation (N50,000,000) Grant for Polio & Malaria Eradication
2023	657,518,383	ADF (N 182,929,697) RI MoU (N274,588,686) LGA contribution (N200,000,000)

Table 4 shows the contributions of the government and MoU partners to immunization in Sokoto state. The amount for 2021 and 2023 is shown below.

Sokoto State (Table 4e)

Table 4e: Sokoto State Approved Immunization Budget

Year	Naira	Approved Immunization budget
2021	177,727,695	Government (N177,727,695)
2022	0	-
2023	570,000,000	EU (N550,000,000) Immunization Government (N10,000,000) IDP Immunization Government (N10,000,000) MoU Grant

Table 5. Immunization Budget of the four states from 2022- 2023 at a glance.

S/n	State governments	2021	2022	2023
1	Bauchi State	₦ 1,395,600,350	260,000,000	338,834,926
2	Kano State	226,729,138	862,929,697	657,518,383
3	Borno State	710,000,000	874,256,000	1,260,448,285
4	Sokoto State	₦ 177,727,695	0	570,000,000

Table 5 provides a summary of all four states for easy comparison and discussion.

It is worth noting that other non-financial partners at the state level support immunization and the primary health care architecture. Support such as technical assistance in form of capacity building, deployment of partner's staff to government agencies, policy development and analysis, joint program design and implementation etc. Some of which are AFENET, CHAI, CHAN, eHealth etc.

TIMELINES OF RELEASES OF MOU FUND BY STATE GOVERNMENT & PARTNERS

Within the MoU especially the one developed for the PHC basket (tripartite fund), it was agreed that all parties should make their contribution between March and September of that year. Some of the issues facing non-release of fund by the partners for some particular years included the inability of the state government to timely release her part. Within stipulated time. Thus, some moneys are brought forward to the subsequent year, since they were not spent in the previous years. For example, from a Key Informant in Kano, it was discovered that the money released by BMGF for 2022 remains unspent in a commercial bank by the third quarter of 2023. This was because the state government refused to release her counterpart fund accordingly as signed in the MoU.

In 2021, there was delay in the release of the pool fund by the Kano state government and the ADF. Only BMGF paid the tripartite fund timely. By the eleventh month of the year (November) in 2022, the state government, BMGF and ADF were yet to deposit their MoU contribution into

the MoU basket following the signing of the health MoU addendum III in August 2022. There was no timely release of the fund by Kano state and thus, this affected release by the development partners involved. However, specific counterpart fund for polio campaigns was reported to be paid fully and timely by the state government.^{†††}

From the data available for year 2021 and 2022, Borno state has sustained timely release of these funds to ensure the optimization of PHC in the state.

In Sokoto state, all the relevant Partners paid in their commitments timely, however, payment by the Sokoto state government was delayed. Moreover, as at June 2022, the three MoU partners including the state government were yet to release the tripartite fund commitment to immunization. Only UNICEF and USAID had released meant for PHC program^{§§§}.

It is worthy of note that timely release of the tripartite fund by the state government determines the timely release by other partners. For example, Bauchi completed 100% payment of its contribution in November 2022; per the MoU agreement BMGF and ADF would deposit their funds within 4 weeks of state payment.^{****}

Table 6: Timeliness of fund release by the state governments and Partners

	States & partners	2021	2022	2023
1	Bauchi state	No	No	NA
2	BMGF	Yes	No**	NA
3	ADF	Yes	No**	NA
4	UNICEF	Yes	No**	NA
5	USAID	No	No**	NA
1	Kano state	No	No**	NA
2	BMGF	Yes	No**	NA
3	ADF	No	No**	NA
4	UNICEF	NA	Yes	NA
1	Borno state	No	No	NA
2	BMGF	Yes	Yes	NA
3	ADF	Yes	No**	NA
4	UNICEF	Yes	Yes	NA
5	USAID	Yes	Yes	NA
1	Sokoto state	No	No**	NA

††† End Year Technical Review 2022 in Kano State

§§§ End Year Technical Review 2022 in Sokoto State

**** End Year Technical Review 2022 in Bauchi State

2	BMGF	Yes	No**	NA
3	ADF	Yes	No**	NA
4	UNICEF	Yes	Yes	NA
5	USAID	Yes	Yes	NA

Key: Yes = Fund Released Timely; No = Not Released Timely;
No** = Fund Not Released NA = Not Available

DISCUSSION

Generally, the increase and sustenance of the state annual budget allocation for health to around 15% or above has a way of positioning the states to achieve Universal Health Coverage (UHC). However, this can only be achieved if there is improvement in the release of fund by the state government. While the approved budget allocation to health in the ZDLH states are encouraging, the proportion of the health budget approved for PHC board is generally poor, most especially in Sokoto and Borno. However, in Borno, the proportion allocated to the PHC board is seen to be increasing over the three years. Effective operationalization of the PHC is believed to be the easiest pathway to achieve UHC. Services provided through PHC especially immunization have been reported to save millions of lives and can easily reach the poor and the most vulnerable if strategically planned and delivered. Taking Borno State, our analysis of 2023 routine immunization budget revealed total budgetary allocation as N882,798,285, total spent as N784,433,819, unspent amount as N98,364,466 with expenditure performance of 89%. This demonstrates effective budget utilization in Borno. The state's quarterly budget releases (Q1-Q4) indicate transparency, fostering accountability. A community survey carried out by the ZDLH in Nigeria, partially explains Borno's relatively low number of ZD children (16.3%, 13/80) relative to the other three states in the study.

However, delays in state government contributions (counterpart funding) pose a significant challenge. In Sokoto State, for instance, delayed payment of their 2022 quota until the last quarter caused a domino effect of delayed partner contribution of their MoU counterpart funding, disruptions in program execution, negative impact on immunization operations and ultimately hindering efforts to reach zero-dose children. This is evident in Sokoto having the highest number of ZD children (62%, 49/80) compared to Bauchi (16.3%, 13/80) and Kano (32.5%, 26/80). Our findings suggest a linear relationship between delayed funding and a higher prevalence of zero-dose children. Due to poor immunization budget performance, it is expected that there would be low coverage, poor outreach sessions, insufficient commodities, poor awareness, and demand creation.

The State government, MoU partners, and other development partners have tried to sustain the release of required funds to implement program interventions that continue to increase access to RI and PHC services. However, despite the MoU and support from partners, the release of the state government contribution was stalled in Bauchi and Kano in 2022. The reason for this is not known. Sokoto state was also characterized by untimely release of funds which delays the execution of the developed annual operation plan. As at the second quarter of 2022, the delayed payment for 2022 by the state government stalled the contributions by the other MoU parties (BMGF and ADF). Thus, In Bauchi, Kano and Sokoto, the state government's commitment to signed MoU for RI implementation in the state is questionable and discouraging. In the three states, it was reported that the weight of financial requirement and political bureaucracies surrounding fund release are responsible for the poor performance in timely release of fund. The fault of untimely release of MoU commitment therefore seems not to be from the partners.

CONCLUSION/RECOMMENDATIONS

- The Annual Operational Plan should be developed before the commencement of the state budget processes to promote alignment and ensure the immunization costing is incorporated adequately into the state budget.
- The government should ensure the timely release of agreed funds signed in the MoU to promote budget performance, which will positively impact zero-dose children.
- The state governments to continue to strengthen collaboration with partners and other stakeholders, the government should identify additional sources for funding to health and especially for immunization from the health care trust fund and not continue to depend mainly on partners.
- The stakeholders to establish Community of Practice (CoP) on budget tracking, accountability, and sustainability that promotes regular dialogues with government, CSOs and relevant stakeholders aimed at improving performance in immunization.
- The state governments to strengthen annual immunization performance report showing funding allocation, releases, and utilization with expanded stakeholders such as CSOs and the media.


LIST OF CONTRIBUTORS

Project Investigators

Dr. Patrick Nguku	Project Director/Regional Technical Coordinator, AFENET
Prof. Mohammed Yahaya	Project Coordinator, ZDLH, AFENET
Dr. Aminu Magashi Garba	AHBN Project Lead, Zero-Dose Learning Hub
Hon. Usman Mohammed	Advocacy and Accountability Learning Advisor, ZDLH
Dr. Opeyemi Aanuoluwapo	Immunization Tracking Specialist, ZDLH
Mrs. Oyeyemi Pitan	Knowledge Management Specialist, ZDLH
Ms. Amina Haladu Mohammed	Advocacy and Accountability Specialist, ZDLH
Mr. Sadiq Sani Malami	Budget Analysis/Infographic Lead, ZDLH
Hyelshilni Waziri	Training Lead, ZDLH, AFENET
Mr. Adam Attahiru	M & E Lead, ZDLH, AFENET
Mrs. Fiyidi Mikailu	M & E , ZDLH, AFENET
Dr. Garba Rufai	Director Disease Control and Immunization/Programme Manager, NPHCDA
Mr. Suleiman Etamesor	Monitoring and Evaluation Unit, Immunization Working Goup, NPHCDA
Dr. Garba Bello Bakunawa	PMO/GAVI Desc Officer, NERICC, NPHCDA
Dr. Ndadilnasiya Endie Waziri	National Coordinator, AFENET
Dr. Moreen Kamateeka	Senior Epidemiologist and Grants Manager, AFENET
Dr. Belinda Uba	Senior Field Coordinator and Routine Immunization Lead, AFENET
Margeret Wisdom	Instructional Designer, AFENET
Nancy Vollmer	JSI
Teemar Fisseha	JSI
Nassor Mohamed	JSI

Project Sponsors & Contributors

Dr. Heidi Reynolds	Global Alliance for Vaccine Initiative (GAVI)
Dr. Gustavo Caetano Corrêa	Global Alliance for Vaccine Initiative (GAVI)



AHBN Building
630 Ogwu James Onoja Crescent
Wuye District, Abuja
Nigeria