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COUNTRY EXPERIENCES IMPLEMENTING OBJECTIVE-ORIENTED REFORMS

Assessing Root Causes and Solutions to Address Cross-Programmatic Inefficiencies in a Subnational Health System: A Case Study of Anambra State, Nigeria

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ABSTRACT

Cross-programmatic inefficiencies are duplications or misalignments that arise from undue fragmentation of health systems by vertical health programs. Identifying and addressing the root causes of cross-programmatic inefficiencies in a health system can ensure more efficient use of resources to make progress toward Universal Health Coverage. This paper examines the root causes of cross-programmatic inefficiencies related to governance and financing in the state health system of Anambra in southeast Nigeria. Data were collected from 38 in-depth interviews and four focus group discussions and analyzed thematically. The governance- and finance-related cross-programmatic inefficiencies identified were duplicative and misaligned roles within and between state and federal agencies, functions, and activities within and across health programs; misaligned donor priorities with that of the state; and poor formulation and implementation of the approved annual state health budget. The root causes of governance and financing cross-programmatic inefficiencies included weak policy development, communication, and enforcement; excessive influence of external donors and the federal government; weak accountability mechanisms affecting program coordination and service delivery; and a disharmony between state priorities and objectives with planning, budgeting, and execution of the budget. Addressing the root causes of cross-programmatic inefficiencies has the potential to significantly improve the overall efficiency and performance of the health system to contribute to improved health outcomes in Anambra state. This approach can serve as a model for other states and regions facing similar challenges.

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Introduction

Nigeria's health policies and strategies show the country's commitment to achieving universal health coverage (UHC) and improving health for all Nigerians.[1,2] However, poor health outcomes persist in the country, underpinned by an under-performing health governance and financing system. Nigeria has the third-highest maternal mortality ratio (1,047 per 100,000 live births) and the fifth-highest under-five mortality rate (117 per 1,000 live births) globally.[3–5] External funding contributed 8% of current health expenditure (CHE) in 2021, the majority of which was directed to programs for HIV, tuberculosis, and malaria. Meanwhile, out-of-pocket spending (OOP) represented over 76.2% of CHE in 2021. The UHC service coverage index for Nigeria is under 50%, putting about 45% of the country's households at risk of impoverishment due to health care spending.[6–8] High OOP spending is partly attributable to the low proportion of the government budget allocated to public financing for health—this figure dropped from 7.3% to 3.8% between 2006 and 2018.[6] Given this low proportion allocated to health, the country needs to ensure that it is using the resources that they have more efficiently and effectively.

Inefficiencies in Nigeria's health system are driven by low public funding, insufficient and unevenly distributed health workers, weak supply chain management, and poor health governance arrangements across the federal and state governments.[9] To improve health outcomes and progress toward UHC, it is therefore

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essential to identify where potential efficiency gains can be made using existing resources.[10]

As an entry point, efficiency gains could be made through the improved organization, governance, and financing of health programs in the country.[7,11] Health programs in Nigeria are primarily structured around specific priority diseases (such as HIV, tuberculosis, and malaria) and services (such as immunization and family planning). These health programs often have parallel processes in governance, funding, procurement, human resource management, and health management information systems (HMIS). Consequently, lack of coordination has resulted in unnecessary duplications and misalignments in core health system functions (governance, financing, inputs, and service delivery) within and across health programs.[11,12] These duplications and misalignments are referred to as "cross-programmatic inefficiencies." Cross-programmatic inefficiencies constrain the system's efforts to sustain and improve coverage of priority health services.[12]

Several policy initiatives demonstrate that Nigeria recognizes the need for more efficient central coordination and subnational-led priority setting for health services and programs.[13,14] However, the multiple levels of government and fragmentation across programs and schemes in the country make improving coordination challenging.[15,16]

Health programs in Nigeria, as in other countries, also rely extensively on donor assistance, given the low prioritization of the health sector and the absence of political will to adequately fund health programs. In 2018, for example, Nigeria received the highest total amount of Official Development Assistance (ODA) for health in sub-Saharan Africa: 951 USD million.[17] More recently, the Global Fund announced a three-year 1 billion USD commitment to Nigeria's health sector.[18] Despite the relatively high funding commitments, donors expect Nigeria to reduce the dependency of its health programs on external funding. Inefficiencies, if left unaddressed, will undermine all investment in health and hinder the country's efforts toward UHC and other global health targets.

In 2018, the Cross-Programmatic Efficiency Analysis (CPEA) diagnostic approach was introduced in Nigeria to inform health financing strategy development processes. The CPEA was conducted at the Federal level and with three states—Anambra, Imo and Sokoto—to examine federal-state government interactions, and variations across states.[11] The analysis revealed common issues across the three states, including fragmented financing and planning arrangements, overly-segmented information systems, misalignment between frontline needs and top-level allocation and management, and lack of coordination arrangements across governance systems.[11]

In 2023, a follow-up CPEA was conducted in Anambra state to further investigate the issues identified during the initial study. The state-level in-depth analysis aimed to identify root causes and effective solutions to cross-programmatic inefficiencies. The focus was on providing evidence-based and action-oriented recommendations for policy dialogs on addressing these issues in Anambra state.

This paper presents findings from the 2023 study in two thematic areas: governance and health financing and is part of a special issue on "objective-oriented health systems reform" that describes the use of the CPEA diagnostic as a tool for system-wide analysis to inform policy design and implementation of health programs. The insights may guide decision-makers in designing and implementing reforms to optimize resource use and make progress toward UHC.

Methods

The CPEA diagnostic was used to develop data collection tools for root cause analysis (RCA) of programmatic inefficiencies that were identified in the 2018/19 study.[11] RCA is a process of iteratively "asking why and how" to sort problems from their root causes.[19,20] The qualitative study was undertaken in Anambra state, southeast Nigeria, in 2023.

Stakeholder Engagement and Data Collection

The RCA was undertaken as follows. First, in April 2023, a two-day federal-level evidence synthesis workshop was held in Abuja. The purpose of the workshop was to increase awareness of CPEA and to validate and prioritize the state-level cross-programmatic inefficiencies identified in the 2018/19 CPEA. A total of 31 participants were purposively selected (based on their roles in coordination, management, and support for health priority programs, and their influence in decision-making) from both federal and state health sectors.

Second, a two-day state-level stakeholders' engagement workshop was convened in Anambra state. The goals of this workshop were to increase awareness about CPEA and to establish a framework for conducting an in-depth RCA on the validated programmatic inefficiencies. The workshop included 38 participants from key state-level actors and health donors. During this workshop, participants prioritized the programmatic inefficiencies for RCA and co-developed interview guides.

Third, between June and October 2023, the research team collected qualitative data by conducting in-depth interviews (IDIs) and focus group discussions (FGDs). The 38 interviewees were purposively selected, including: policymakers from relevant ministries (health, economic planning and budgeting, and finance) ($n = 17$); managers of priority health programs (HIV, malaria, immunization, tuberculosis, and reproductive health) ($n = 5$); heads of departments/desk officers from the health sector ($n = 7$); health providers ($n = 3$); and representatives of implementing partner and civil society organizations (CSOs) ($n = 6$).

The research team also conducted four FGDs (with six to eight persons per group) with health service users living for at least five years in three senatorial zones in the state. The FGD participants were recruited with the assistance of the Ward Development Committee chairpersons in the study communities. The FGDs were conducted in the local language and transcripts were then translated into English. The interviews and FGDs generated in-depth information on the root causes of the prioritized inefficiencies in the Anambra health sector, focusing specifically on governance and health financing. In addition, the interviews sought to identify possible policy interventions to address the root causes of the inefficiencies.

Finally, a two-day state-level workshop was held to validate the RCA findings and prioritize possible solutions identified.

Data Analysis

All interview and FGD sessions were recorded, transcribed, and analyzed thematically based on the research questions and adapted RCA framework. Notes taken during the interviews were compared against the transcripts to ensure completeness and accuracy of information. All transcripts were anonymized with pseudonyms. Inductive and deductive analysis of transcripts was conducted using a rigorous process: familiarization with the transcripts to identify recurrent themes; creation of an initial codebook based on the research objectives, topic guide questions, and recurrent themes; testing of the initial codebook; revision of the codebook; and finally, application of the final codebook to the transcripts. Coding was done in pairs for quality assurance and two reviewers checked the codebook output to identify patterns, explanations, and merge similar outputs. A final review was conducted by the senior researcher.

Guided by the RCA framework, this paper focused on the root causes of, and potential solutions to, governance and health financing inefficiencies. The prioritized solutions are included as supplementary materials for this paper.

Findings

Table 1 summarizes the root causes of cross-programmatic inefficiencies in governance and financing. Undue influence by donors, due to the state's dependence on them for program financing, was the most frequently mentioned root cause of cross-programmatic inefficiencies in both governance and health financing.

For analytical purposes, the codes presented in Table 1 are separated by health financing and governance. However, once the analysis was completed, and given the impact that financing flows have on governance arrangements, the inefficiencies under these two functions were combined and are presented together in the following section. This is then followed by a section on the results of the RCA for both functions. The illustrative quotes that support the findings are taken directly from the interview transcripts.

Prioritized Governance- and Health Financing-Related Cross-Programmatic Inefficiencies

Three cross-programmatic inefficiencies were prioritized in relation to governance and health financing.

Table 1. Coding of root causes of cross-programmatic inefficiencies in governance and financing.

	Governance		Health financing	
Root causes	*Codes*	*Frequency in codebook (n)*	*Codes*	*Frequency in codebook (n)*
	Weak policy communication and enforcement	34	Disharmony between planning, budgeting and execution of budget	31
	Undue influence by program donors	37	Donor dependence	35
	Undue federal-level influence	28	Federal-level influence	29
	Weak accountability mechanisms	30	Weak accountability mechanisms	25

Duplicated and Misaligned Roles, Functions, and Activities Within and Across Health Programs

In Anambra state, governance of the health system and health programs is characterized by unnecessary duplication and overlap in implementation of activities and allocation of roles and resources. In addition to the state government, several donors are active in the state's health sector, including local and international organizations (including WHO, USAID, Society for Family Health, and others). Respondents highlighted instances when similar activities were implemented by different donors, sometimes at the same time and in the same location, without sufficient coordination.

> The issue of COVID-19 vaccinations . . . where we have multiple donors—about six donors—supporting one program, supporting same COVID-19 vaccination. And when I went through the records, I found that they're supporting the same thing (activity), but they got funds from different organizations. (IDI-16, Policymaker)

Duplication also manifested in the creation of offices with similar responsibilities in various agencies, such as the State Ministry of Health (SMOH) and the State Primary Health Care Development Agency (SPHCDA). The two report separately to their respective agencies without collaborating.

> For example: in the SMOH, you have a nutrition desk officer in the Department of Public Health. And then in the primary health care government agency, there is a state nutrition officer. . . . The SMOH will report nutrition activities. The primary health care agency is asking the same nutrition officer who is at the primary health care development agency to report on the same set of indicators . . . .They will go differently to facilities to do the same job. (IDI-01, Policymaker)

Duplication and overlap of similar roles and functions were observed across programs in the health sector. For instance, the SMOH and SPHCDA both have health educators, whose responsibilities and activities overlap. One health educator was supposed to focus on reproductive health, immunization, and nutrition, while the other covers programs such as TB, HIV, non-communicable diseases, and malaria, but this is not happening in practice.

> When I joined the Ministry, the only health promotion activity I knew was handled by the health educator and that designation is domiciled in SPHCDA. But after a while, the public health department (SMOH) created a health promotion office, which is basically the same activity across programs. (IDI-02, Program Manager)

The problem of redundancy extends to supervision. No effective central supervisory mechanism for the health system and operational health programs exists at either state or federal level. Supervision was performed independently by various health programs, which respondents felt was chaotic, costly, and counterproductive. Although the federal government has aimed to harmonize supportive supervision systems, the existence of multiple tools for data collection and analysis continues to drive this fragmentation.[21]

> There is fragmentation . . . e.g., when immunization team goes for their supportive supervision differently, only looking out for immunization data alone. Likewise, HIV. And some of these programs with support, like UNICEF, supports HIV during data quality assurance, I think they do it quarterly, they only go out there looking for only HIV data. They do not look out for other health services that are being carried out using the same transport and time. (IDI-03, Policymaker)

Responding to data requests from multiple supervision teams creates additional work for frontline health workers trying to provide services. Overall, these inefficiencies create conflicts and redundancies for health programs, wasting resources that could otherwise be used to expand coverage or fill gaps in other services.

Donor Priorities are Not Aligned with State Priorities

Respondents in Anambra state generally perceived that donors act independently, rather than in collaboration with each other or the state government, especially when determining priorities for intervention. Donors often partner with the federal health authorities to implement health programs or activities at state levels, but most times they introduce health programs to states without first developing a thorough understanding of the local context or seeking sub-national input when conceptualizing, designing, and evaluating health programs.

> When donors or some agencies or some organizations bring in funding for activities, you find out that they don't really align the programs to suit the situation as it appears to be in the state. Maybe if you are bringing a program, let us say HIV [. . .] you find out that when these donors come to run programs, they already have a generic plan for all the states. And when they come here, when you try to tell them—or maybe coordinate them—and maybe tell them to bring their work plans to align with the problems in the states, they will tell you it has been programmed up there and most of these programs are coming from Abuja and the Federal Ministry of Health. (IDI-27, Program Manager)

The misalignment of state and donor priorities is evident in the misalignment of budgets and funding flows. Anambra has its own health sector programs and budgets for implementation of its Annual Operational Plan (AOP), but the funds are insufficient to cover all priorities. Donors sometime propose budgets and programs that do not align with the state's AOP. Programs that were not included in the state AOP may still be implemented if they have federal approval.

When external stakeholders do not align their programs and funding with local priorities, they risk wasting resources on ineffective approaches. They also undermine the authority and effectiveness of local government agencies.

Poor Formulation and Implementation of Approved Annual State Health Budget

Interviewees reported numerous challenges with the implementation of Anambra's approved annual state health budget, including budget formulation, execution, and linking budgeting with government planning functions. Thus, Anambra's health sector is inadequately funded and its budgeted funds are poorly implemented. In 2021, for example, health constituted just 4.4% of the Anambra state budget. Furthermore, the health budget execution rate was only 56.4%, compared to 83.3% overall budget execution in the same year.[22]

> The funding, they will tell you it is not there. They will say that it is not only health we will fund, as we have other things. But then again, are we really applying up to 90% of what we are given? If you wanted one million naira, and you are given six-hundred thousand naira, did you invest up to four hundred thousand? So, this is not an efficient way to fund the system. (IDI-28, Policymaker)

Poor implementation of the approved budget for health contributes to the low budget execution which is an inefficiency and a wasted opportunity when unspent funds are returned to the treasury at the end of the financial year. Poor budget implementation may also lead to misaligned priorities when funds are allocated to non-essential activities, causing gaps in service delivery and poor coordination. This hinders the state's ability to achieve its health targets.

Root Causes of Governance- and Health Financing-Related Cross-Programmatic Inefficiencies

The respondents identified four main root causes for the three prioritized cross-programmatic inefficiencies in governance and health financing.

Weak Policy Development, Communication, and Enforcement

The distinct roles of the federal and state health ministries, agencies, and departments are not fully delineated in Anambra's state-level policy documents. Furthermore, most available policies reportedly were neither reviewed by policymakers nor communicated to health sector stakeholders. As a result, existing policies, such as the State Health Development Plan (SHDP) and AOP, are underutilized. Although these and other policies were intended to serve as roadmaps for the SMOH and health programs, in reality they have been largely ignored.

> The most important thing to take away from this is that even that SHDP and AOP, nobody does anything with it. The moment we finish with it at the hotel, that's the end of it. At times, it's not even printed. Nobody sees it again. (IDI-05, Policymaker)

The gap in policy implementation leads directly to inefficiencies. For example, without clear policies on harmonized supervision, ineffective coordination of supervision and unnecessary duplication of teams and resources become the norm.

> Now, to bring it out, clearly, you have, for example, the policies saying that each of these agencies and the Ministry should supervise. What of having a policy that centralizes supervision, such that everything flows from that responsible and funded central authority? So, you see, it is a policy problem here. Yet we complain that we do not have money and staff and what we have cannot be managed because of unnecessary fragmentation. (IDI- 01, Policymaker)

Excessive Influence of External Donors and the Federal Government

The saying "the one who pays the piper dictates the tune" is relevant to the situation in Anambra state. Due to the insufficient financial commitment from the state and federal governments, addressing state health priorities requires external donors to fund priority health programs and activities. In this situation, health concerns that do not align with donors' agendas are neglected.

> The way AOP works is that we sit down with donors, because we know that the Anambra government is not committed in providing those funds. Mostly the activities that the donors do are what we put in our AOP. Once they bring their activities, any that makes sense, we just add it and say that is Anambra state workplan. Most times, it is not what we want to do but what the donors want to do, because if we end up putting what

> we want to do, we will not get funds for it. (IDI-34, Program Manager)

Some state government actors did express willingness to coordinate the activities of donors, but felt they were constrained by the state's limited funds.

> The truth of the matter is that the state has no, I would not like to use the word "control" but the state has no, let me say, coordination of the donors. So, donors are just doing what they want . . . .Government alone is not capable to take care of the health sector or health or medical needs of the masses. (IDI-15, Policymaker)

External donors are not the only funders whose priorities may not align with the state's. The federal government can cascade programs to the states with little consideration for the state's funding capacity or interest. When federal approval of projects is provided directly to donors and implementing organizations, it is difficult for the state government to compel other donors to account for resources delivered or to align their work with the state's priorities. These external funding flows often leave financing gaps that the state then must try to fill.

> But there is need, just like I told you, for us, the agency, and the key players to know where the money of the donors is being channeled to and what it is meant for in the states, so we can holistically plan and know who the money is meant for, and areas that need more money. But when you ask questions, they will forward it to [the federal capital] Abuja, to confirm whether they should give you an answer to anything you ask about. And because the center is involved, you become very careful with how you push these things. So, there's this gap. (IDI-27, Program Manager)

Weak Accountability Mechanisms Affecting Program Coordination and Service Delivery

According to respondents, the lack of accountability mechanisms on the part of the government, including its inability to levy sanctions, enables donors to ignore coordination structures and other state-level processes and strategies.

> Most times they don't really account for the programs they do for the state, so no one has a clear sense of their investments and outcomes. It is so because we do not have any sanction in place that will compel them to provide us with this information within definite period of time. (IDI-21, Policymaker)

This problem affects program planning and service delivery. Respondents pointed out that there are no performance management systems in place in the health sector to effectively monitor health workers, such that there is rarely recognition for either achievements or sanctions for wrongdoing.

> Who was sanctioned? It must start with somebody. People are not sanctioned. You do as you like . . . People are not sanctioned. And also, we need a motivator. Those that are doing well, we applaud them. It is very important. When you applaud somebody that is doing well, it is motivating. (IDI-09, Policymaker)

Disharmony Between State Priorities and Objectives with Planning, Budgeting, and Execution of Budget

Nigeria has a National Chart of Accounts which uses an administrative classification as an integrated budgeting and accounting classification. This is adopted at the state level to develop the state level Chart of Accounts (CoA). In Anambra, the CoA is not regularly updated to include new state priorities and objectives for the health sector.

Respondents noted that the planning and budgeting processes for health in Anambra state were not driven by evidence to determine which areas should be prioritized and funded. They also reported that the CoA used to guide budgeting was outdated and did not reflect the current situation in the state (including defined program objectives and targets). These gaps contribute to poor budgetary allocation because programs that are not aligned with the CoA cannot receive state funds. They also undermine programmatic sustainability because the state government cannot fund programs if donors withdraw their support.

> Unfortunately, nutrition is not among the stated objectives for the health sector [and therefore not included in the COA] and we cannot budget for it. (IDI-30, Policymaker)

> The health objectives should guide our spending because we will be spending on the priorities of the state. But the health objectives are not reviewed, even the CoA. If things are done properly, we expect the health ministry to make submission of what should be spent, based on data analysis and their findings around the stated health objectives for the state, and present them during our budget bilateral discussions. They should say: "this is the issue on ground, and because of this, we want this amount devoted for HIV" and the same way for other concerns . . . and by the time they finish the discussion, the budget committee will be convinced that these people really need money to solve the problem. And that's how they would approve the budget and it will work very well. And we can track the progress by the next budget cycle. (IDI-30, Policymaker)

A final concern presented by respondents was late or incomplete release of budgeted funds, which prevents state actors from engaging in certain programs and activities or forces them to use limited state resources to complete interventions.

Discussion

This study identified governance and financing cross-programmatic inefficiencies that have limited the Anambra state health system's performance and explored their root causes. The evidence on RCA was generated from a wide range of stakeholders, which produced several important and actionable findings.

The participatory approach to data collection (through workshops, in-depth interviews, focus group discussions, and stakeholder engagement meetings) enabled the collection of a significant amount of data. Equally importantly, these activities engaged key stakeholders, raised their awareness of the widespread implications of maintaining an inefficient system, and encouraged them to consider the potential impact of implementing their proposed solutions. This discussion delves into four proposed solutions to address the cross-programmatic efficiencies identified in this study.

1. **Strengthen state leadership and provide effective oversight** by strengthening existing coordination platforms (such as the Health Donors Coordination Platform) to better align donors with the state plans and priorities.

Governance-related cross-programmatic inefficiencies, such as poorly coordinated donor programs, make it difficult to integrate standalone programs with broader service delivery and other health system functions. Improving coordination and accountability processes and structures could mitigate these inefficiencies, in turn maximizing resource use across health programs.

The findings in this area are similar to those reported by an exploration of the root causes of ineffective and inefficient health care management in the Republic of Benin's public health sector. That study reported a lack of clear guidelines and communication of policies, inadequate funding, donor dependency, and poor coordination among state and non-state stakeholders.[23]

This study also found that state-level accountability mechanisms for health programs were weak, making it difficult to hold actors in the system accountable for program and health outcomes. This echoes a similar study, which found that weak accountability mechanisms lead to limited coordination and undermine trust in programs.[24]

The findings from Anambra state highlight that addressing the cross-programmatic inefficiencies created by the existence of multiple donor-funded activities in the state requires sustainable policy action(s) to improve coordination for the effectiveness and efficiency of programs. Several other studies have documented the strong influence health donors can have on priority setting and policy implementation for health programs and the health system at large.[25,26] Fragmentation (of programs and resources) occurs at both the federal and sub-national levels because of vertical programs. Fragmentation contributes to systemic weaknesses and crowds out state-level financial responsibility and program ownership.

States should be empowered to make decisions that align with their strategic plans, irrespective of the federal government's agreements with donors and development partners. Strengthening state coordination and planning platforms could provide mechanisms to reduce fragmentation and better align available resources across programs and with state priorities. The state coordination platform could also hold donors accountable for delivery of program activities. Lessons on strengthening donor coordination and pooling external funds with government resources may be gleaned from Rwanda and Ethiopia.[27,28]

2. **Regularize cost-effective and integrated supervisory models and incentives** for all priority health programs to reduce the burden on health workers, limit distractions from service delivery, and provide harmonized results for decision making.

Cross-programmatic inefficiencies—including undue influence and misalignment of federal and donor priorities with sub-national priorities, planning and budgeting cycles, and priority programs—are especially evident when considering how they generate multiple supervision visits. Ideally, an integrated supportive supervision system would focus on improving management functions and quality of care delivered by enforcing implementation of government policy and guidelines, ensuring adherence to standards, and improving coordination among health actors.[29]

The existence of multiple supportive supervision tools for data collection and analysis and multiple teams conducting supervisory visits ultimately distracts staff at facilities from their core frontline service delivery responsibilities. Anambra State could harness the benefits of improved quality of health services, while reducing waste and/or duplication of resources, if it coordinated supportive supervision across programs and agencies. When well-designed and coordinated, support supervision has been demonstrated to have

positive impacts on health service delivery.[30–32] This can be accomplished by harmonizing supportive supervision processes and leveraging digital technology.[33,34]

3. **Update and consistently use the state's CoA** for budgeting and tracking budget performance against health objectives to improve accountability in resource use and achievement of state health objectives.

The CoA exists to guide government planning and budgeting processes. Nigeria has a well-defined CoA for government ministries, departments and agencies to use in planning, budgeting, accounting, and reporting of program-based budgets. The CoA is cascaded from the federal to state level, along with guidance on adaptation.[35] However, Anambra state has been slow to update the CoA over time to reflect changes in its health priorities and programs. As a result, new priorities are left out of government funding.

Further, the CoA can be used as a tool to track budget performance. Thus an updated CoA could help Anambra state to identify the causes of its low (56.4% in 2021) health budget execution rate for health and, in consultation with donors, determining how it could be improved. As a commitment to and demonstration of ownership of the state health agenda, Anambra state could then allocate domestic resources to co-funding existing and new programs in the CoA.

4. Encourage donors to pool resources "on-budget" to improve coordination of funding along state priorities.

Overreliance on donors for certain health programs constrains the ability of the state health system to effectively allocate resources to prioritized needs. Moreover, inefficiencies abound when the state health budget operates in parallel with donor budgets, resulting in wastage of scarce resources, and compromising both local ownership and sustainability of key health programs. Poor budgetary allocation is a major contributing factor to inefficiency in the Nigerian health sector.[1]

Additionally, overreliance on external funds for programs leads to misalignment between the needs of the population and available services. This is particularly worrisome in Nigeria, which has persistent low government funding for health. The mismatch undermines progress toward UHC and contributes to the high OOP expenditure on health care and inequitable distribution of available resources that exist in Anambra. Achieving UHC will require tapping all pools of resources and aligning them with federal and state priorities and budgets. Platforms such as the Health Donors Coordination Platform could be used to better engage donors and capture more off-budget resources on-budget.

These four solutions offer important signposts to improve cross-programmatic efficiency in Anambra state's health system. However, this study did not directly address the complex political economy of their potential feasibility or implementation dynamics. Further stakeholder engagement is required to develop strategies for enactment. Each of the identified root causes has clear connections with the underlying political economy of the health system and its financing mechanisms. The RCA can be used in conjunction with other political economy analysis methods to identify power dynamics among external, domestic, federal, and state-level actors and suggest strategies for shifting them to move forward on the proposed solutions.

Conclusion

This study identified numerous cross-programmatic inefficiencies and their root causes. Addressing them requires finding feasible policy options to ameliorate the situation. Although the stakeholders who participated in the study expressed optimism on proffered solutions, successful reform efforts to improve health and achieve UHC would require a stronger and more coordinated health system.[36]

Nevertheless, this system-wide analysis provided important details to consider when designing policies to address cross-programmatic inefficiencies. While this study focused on governance and financing, other cross-programmatic inefficiencies exist related to human resources, supply chain, and HMIS. Regardless of which dimension of the health system is under consideration, the root causes of cross-programmatic inefficiencies involve a wide range of actors at various levels and in multiple sectors. Therefore, addressing these inefficiencies requires holistic consideration and concerted efforts by various stakeholders.

Finally, implementing the proposed policy actions to eliminate cross-programmatic inefficiencies will require both technical capacity and political skill. Building consensus among different actors to coordinate strategic activities and timeframes is a highly complex and political process. Key elements that will foster successful reforms to address cross-programmatic efficiencies include locally driven approaches that emphasize sustainable strategies, and ongoing efforts to build collaboration among donors, and capacities for improved performance.

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Data Availability Statement

The authors confirm that the data supporting the findings of this study are available from the corresponding author on reasonable request.

Ethical Approval

Ethical approval to conduct the study was obtained from the Ethical Review Committee of the University of Nigeria Teaching Hospital, Enugu, Nigeria. In addition, approval to carry out the study was obtained from the State Ministry of Health (SMoH), Anambra State.

Informed Consent from Participants

Written and verbal informed consent to conduct and record the discussions were obtained from each respondent and the participants of the focus group discussions. Participation was voluntary, and confidentiality was assured.

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