Lessons learned from Implementing Performance-Based Financing (PBF) in Nigeria in Compared with Experiences of Other Sub- Saharan Countries.

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Lessons learned from Implementing Performance-Based Financing (PBF) in Nigeria in Comparison to Experiences in other sub- Saharan Countries.

A thesis submitted in partial fulfilment of the requirement for the degree of Master of Science in Public Health

By

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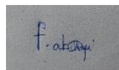
Signature: 

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LIST OF ABBREVIATIONS	
Contract Management and Verification Agencies	CMVA
Complementary Package of Activities	CPA
District Health Information Software 2	DHIS2
Decentralized Facility Financing	DFF
Disbursement-Linked Indicators	DLIs
Federal Ministry of Health	FMOH
Formal Sector Social Health Insurance Programme	FSSHIP
Global Financing Facility	GFF
Gross Domestic Product	GDP
General Hospitals	GHs
Health Facilities	HFs
Health Management Information System	HMIS
Health Results Innovation Trust Fund	HRITF
Health System Development Projects	HSDP
Independent Verification Agencies	IVA
Key Informant Interviews	KIIs
Key Informants	KIs
Local Governments Areas	LGA
Local Government Primary Healthcare Authorities	LGA-PHCs
Lots-Quality Assurance Survey	LQAS
Low- and Middle-Income Countries	LMICs
Millennium Development Goals	MDGs
Ministry of Health	MOH
Minimum Package of Activities	MPA
National Demographic Health Survey	NDHS
National Health Management Information System	NHMIS
National Primary Healthcare Development Agency	NPHCDA
Nigeria State Health Investment Project	NSHIP
Out-Patient Department	OPD
Performance-Based Financing	PBF
PHC-Under-One-Roof	PHCUOR
Project Implementation Unit	PIU
Results-Based Financing	RBF
RBF-Technical Adviser	RBF-TA.
Secondary Health Care	SHC
State Hospital Management Boards	SHMBs
State Ministry of Health	SMOH
State Project Financial Monetary Unit	SPFMU
Technical Assistance	TA
Universal Health Coverage	UHC
Ward Development Committees	WDC
World Bank Performance-Based Financing	WB-PBF
World Health Organization	WHO

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ABSTRACT
Despite the resources spent, the Nigerian health system has underperformed in key health indicators. To address this a PBF intervention funded by the World Bank was piloted in 3 States in Nigeria. Studies have examined the impact of PBF in Nigeria, however no study has looked at the design and implementation of PBF in Nigeria, even as these are key factors for the success of such schemes in other countries in the region. This study aims to explore the design and implementation of PBF in Nigeria including its strengths and challenges. It also examines these factors drawing on experiences from other countries in the Sub-Saharan region.

A desk review was conducted by reviewing relevant literature and project documents including three key informant interviews. The World Bank-PBF framework was used as the theoretical framework to analyse the research objectives.

Key findings revealed similarities in the region in terms of design and support for autonomy through PBF schemes, and differences in the region were mostly observed due to different systems of governance. PBF led to improvement in data reporting at health facilities, promoted transparency and accountability of HFs to communities and government, and increased community involvement. Poor management of resources at operational levels, fragmented data reporting at health facilities and lack of clarity in the division of responsibilities were some of the key challenges of the project.

Despite the challenges encountered, PBF has been instrumental in improving the health system in the pilot States. Incorporating the lessons learnt for subsequent scale-up and considerations of existing structures, policies and country context could lead to improved health sector performance in Nigeria and other countries.

Key words: Performance-Based Financing, Nigeria, implementation process lessons learnt, design

Word Count: 12,971

INTRODUCTION

In the last 6 years, I have worked in the Project Implementation Unit as a Verifier and Program Officer on the Performance Based Financing (PBF) Project in Ondo State Nigeria. In my different positions, I was posted to several Local Governments (LGA) to provide technical support to Administrative entities and Health Facilities on the implementation of PBF.

While working as a verifier, I attended a 4 months training to integrate myself with the basic principles of PBF and how it was adapted to the Nigerian context. I attended several other trainings for PBF implementers at the State and Federal level and stepped-down the knowledge to PBF implementers at the LGA level.

I conducted verification and supervised counter verifications of several health facilities. During my time on the field, I was intrigued to see how the different LGAs understood and implemented PBF differently despite using the same operational manuals. I was also interested in the modifications to the project design and how it affected the performance of health workers. More importantly, I saw the role of politics and power play between policy and decision makers which affected the implementation of the project at all levels. This informed my desire to examine the lessons learnt from Nigeria and to see if it was like the experience of other countries. I think this will serve as a guide to policy makers in States contemplating introducing PBF to improve the health status of their citizens

In recent years, more Low- and Middle-Income Countries have begun to shift from Input-based financing to PBF. PBF was introduced in Nigeria to address the poor health status of the country thus prompting the need to ensure quality healthcare is delivered to her people. It aimed at improving accountability and governance mechanisms in the health system.

Therefore, this study will look at how PBF was adopted in Nigeria and critically review lessons learned from implementing the project in comparison to experiences of other Sub-Saharan Countries.

CHAPTER I

1. BACKGROUND OF NIGERIA

1.1. Geography and Administrative Structure of Nigeria

Nigeria is one of the West African countries and shares a border with Benin to the West, Chad and, Cameroon to the East, and Niger to the North(1). It is the most densely populated African country with an area of 923,768 square kilometres(1,2). See figure 1 showing a detailed map of Nigeria

Figure 1: Map of Nigeria

Source:(3)

Administratively, Nigeria has thirty-six States, six geo-political zones namely, North-West, North-East, North-Central, South-South, South-East, and South-Western and 774 local governments (LGAs)(2). Nigeria operates a federal system of governance where each of the thirty-six states, including the Federal Capital Territory are autonomous in governance and management of resources(2,4).

1.2. Socio-Demography of Nigeria

With a projected population of almost 201 million in 2019 and an annual growth rate of 2.6%, Nigeria is the most populated country in Africa(5). Nigeria is also multi-ethnic with, over 300 different ethnic groups(6). The average age of the general population is 18 years, while the proportion of females to males is 49% to 51%(7). Life expectancy is 54 years while literacy level remains at 71% in men and 53% in women(6,7). The total fertility rate slightly declined to 5.3 children in 2018 from 5.5 in 2013(7).

1.3. Socio-Economic Situation in Nigeria

As a lower-middle-income country, the Gross Domestic Product (GDP) of Nigeria was $448.12 billion in 2019 lower than the average of lower-middle-income countries at $6.34 trillion(6). The country's annual GDP growth rate was 2.2% in 2019 and is expected to fall to -3.4% in 2020 because of the Coronavirus pandemic(6).

The country is Africa's largest exporter of crude oil, amongst other natural resources(4). However, the oil sector contributes only 10% to the country's GDP(6). About 40.1% of

the Nigerian population are reportedly poor(8). The unemployment rates in Nigeria as of 2018 was 23%(9).

The northern part of Nigeria is disproportionately affected by poverty with limited access to essential services. Economic developments in this region particularly, in Adamawa and Borno States, have been affected by the Boko Haram insurgence(4).

1.4. Overview of the Nigeria Health System

The Nigerian public health system is divided into the primary, secondary, and tertiary level and coordinated by the ministries of health at the LGAs, state government and federal government, respectively(2). The private sector complements the public sector in the delivery of health services(10).

The Federal Ministry of Health (FMOH) provides policy guidance, oversees all health-related activities in the country and provides health care services through the tertiary health institutions such as the teaching hospitals, Federal medical centres and specialist hospitals(11,12). The State Ministry of health (SMOH) regulates policies and coordinates the provision of health services at the State level through the Secondary health facilities and the regulation of Primary Health Care (PHC) activities at the LGA(11,13). The LGA health department is responsible for the operations of the Primary health facilities (11,14,15). Delivery of health services at the PHC level is further divided into three levels, health posts, Primary Health Clinics and Primary Health Care Centres. The health care provided depends on the material and human resources available at these facilities(15).

At the Federal level, there is the National Primary Health Care Development Agency (NPHCDA) a parastatal under the FMOH which is responsible for providing technical support to states and LGAs across the country in relation to PHC services(13,16). While at the state level there is the State Primary Health Care Development Agency (SPHCDA) a parastatal of the SMOH which coordinates all PHC activities and resources in the State(17).

Despite the PHC being the pillar of the Nigerian health system, it remains the least funded(18). There is also a large disparity in accessibility, availability, and quality of health services between the rural and urban areas and regions(14,18). The deplorable state of PHC facilities has also increased the workload on the secondary and tertiary healthcare facilities(19).

The Nigerian health system's challenges include but is not limited to the poor implementation of health policies, skewed distribution of Health Facilities (HFs) and human resources across the country, underfunding and weak infrastructures in health institutions and poorly motivated health workers(14,18,20). Many of the policies poorly implemented are linked to poor coordination and lack of continuity resulting from changes in government(20).

1.4.1. Health System Performance and Key Health Indicators

Nigeria is experiencing a double burden of diseases; in 2018, non-communicable diseases accounted for 29% of mortality while communicable diseases accounted for 63%(21). The National demographic health survey (NDHS) 2018 shows that malaria, diarrhoeal diseases, pneumonia, and malnutrition remain the leading causes of morbidity in children(7). Maternal mortality ratio has slightly declined from 576 to 512 per 100,000 live births, yet the figure remains high(2,7): under- mortality increased from 128 to 132 per 1000 live births; and contraceptive prevalence ratio remains low at 17%(7). The presence of skilled b Skilled birth attendance remains low at 43%; Antenatal care coverage is at 67%;institutional deliveries and skilled birth attendance remain low at

39% and 43% respectively(7). Table one shows a summary of the key health indicators in Nigeria

Table 1: Key Health Indicators

Indicators	Values
Maternal Mortality ratio per 100,000 live births	512
Under-5 mortality rate per 1000 live births	132
Neonatal mortality rate per 1000 live births	39
Contraceptive prevalence rate for any method	17%
Total fertility rate	5.3
Malaria prevalence in Children	23%
Prevalence of Stunting	32%
HIV prevalence rate	1.5%

Source: (5,7)

1.4.2. Human Resources for Health

The major categories of workforce in the Nigerian health sector includes the doctors, nurses, midwives, and community health workers. Nigeria has one of the highest human resources for health in Africa, yet it still struggles to provide quality health service delivery(22). The health workforce is concentrated in urban areas, thus leaving the people in rural areas with limited access to skilled health care(22). This is worsened by the emigration of health workers to other countries because of poor working conditions such as delay in payment of salaries, high workload, insecurity, and poor health infrastructures in hospitals(23). The discrepancy in salaries of health workers from the same cadre across the three levels of health care also compounds the challenges(23).

1.4.3. Health Financing in Nigeria

Health care in Nigeria is financed through different mechanisms; out-of-pocket spending, donor funds, insurance and public funding through general tax revenues(24). Nigeria is faced with low public funding of the health system(14). In 2017, the government's expenditure on health was less than 4% of the country's GDP while out of pockets spending constituted about 77% of the Total Health expenditure in Nigeria causing catastrophic expenses for poor families(5).

1.5. Strategies to Improve Health

Several health policies reforms have been introduced to address the challenges of the health system. Some of the reforms included the Midwives Service Scheme (MSS) where retired and newly trained midwives were recruited to work at PHC facilities in disadvantaged communities across the country(14). Another health policy is the Primary Heath Care Under One Roof Policy (PHCUOR) policy.

1.5.1. Primary Health Care Under One Roof (PHCUOR)

One of the challenges of the PHC system is Nigeria is attributed to the fragmentation in the administration and delivery of PHC services(13,17). To address this challenge and improve the implementation of PHC, the PHCUOR policy reform was introduced as a strategy from the National Health Act of 2014. The reform aims to integrate all PHC activities and resources under one authority which is the SPHCDA(17). The PHCUOR policy's benefits are increasing efficiency in the use of resources and improving the quality of service delivery, accountability, and transparency(17).

CHAPTER II

2. PROBLEM STATEMENT AND STUDY OBJECTIVES

2.1. Problem Statement

Prior to the initiation of Performance-Based Financing, the health status of Nigeria and the performance of the health system was poor. Important health indicators such as maternal mortality rates remained as high as 545 per 100,000 live births, under-5 mortality at 157 per 1000 live births (1). Contraceptive prevalence rates (13%), vaccination coverage (23%), institutional deliveries (35%), skilled birth attendance (38.9%) and antenatal care coverage amongst other key interventions also remained poor even when compared to Sub-Saharan region average(1,25). Quality of health services provided in HFs also remained poor while the health system was unable to cater to the health needs of its rapidly growing population particularly the poor(25). The government prioritized spending for health on capital projects and recurrent costs such as salaries for health workers and curative services, thus neglecting preventive health services which are more efficient(26). There was reportedly poor governance at the three levels of government, lack of transparency and accountability in the use of resources and data for decision making and lack of accountability to service users(26). Women and children who really needed the health services were often neglected by government projects(26)

To address the challenges in the health system, there was a need for a health reform or intervention that would focus on strengthening the institution and improving health outcomes hence the introduction of the Nigeria State Health Investment Project (NSHIP). NSHIP is a model and innovation to health system in Nigeria hence learning and building on real time experience is a key component of this project.

It was a drastic approach aimed at increasing access to quality of health services, particularly women and children in selected pilot states. It offered the opportunity to test alternative financing strategies for the health sector, namely Performance-based financing (PBF), as against the usual input-based financing (27).

PBF in Nigeria sought to enhance health outcomes by offering autonomy to HFs, making them accountable and transparent in reporting data through verification and motivated for positive results(28). It proposed to strengthen accountability and ensure transparency at all levels of health system governance. It was also an opportunity to give users of health services a voice in decision making regarding service delivery by ensuring community commitment in the delivery of health services(25). Health system challenges that the project sought to address includes but are not limited to poor HF infrastructures, poor worker motivation, poor record keeping, administrative bottlenecks.

PBF is based on the concept that institutions are more likely to perform better if they are motivated by incentives and given autonomy to manage their resources(29). There are other basic features of PBF programs which are also quite common in Sub-Saharan countries. They include separation of functions between regulation, purchaser, fundholding, verification and service delivery, contracting health institutions to provide a package of health services based on pre-determined fees, linking payment to results conditional on quality of care, targeting financial incentives to healthcare providers, putting accountability mechanisms for monitoring, community involvement and equity(29).

The popularity of its adoption as a tool of health reform particularly in Low- and Middle-Income Countries (LMICs) is constantly increasing(30). Over the last decade, external funding sources from development agencies and governments have been committed to

support PBF projects and are expected to increase with more countries adopting the intervention (30–32). As the number of implementing countries increase, implementing partners have continued to draw from experiences of countries to develop new ways to design and implement PBF within the context of countries for desired health outcomes to which Nigeria is not an exception.

Although the general aim of PBF is to increase access to quality health services for the population particularly women and children, the design and implementation process differs per context(33). Furthermore, project evaluation reports often highlight discrepancies in design and implementation resulting from assumptions and risks that were overlooked in the project design.

The body of data on diversities in the design and implementation in several countries as well as evaluations of the impact of the intervention on health systems is growing. However, studies on the interactions between PBF and health systems, the processes of implementation and experiences remain limited particularly in LMICs. As PBF continues to evolve, there is a need to document experiences and lessons learnt from countries implementing PBF. This can serve as guidelines that can be adapted to the needs of countries and organizations planning to design and implement PBF interventions. There is also a need to document success stories and challenges which will provide other countries the opportunity to learn from best practices, optimize outcomes and conduct further research to solve identified challenges.

Furthermore, there is also a dearth of research conducted to describe and analyse the design and implementation of PBF in Nigeria. The PBF pilot project in Nigeria started in 2011 with three Local government areas (LGAs) in three states and was scaled up in 2014 to other LGAs in the selected states which has been running for over eight years. As the pilot project rounds up in Nigeria, there is a possibility of scaling up to other states in the country, hence this research is equally important to feed the experiences of the pilot states in Nigeria into the discussions on how best to scale-up PBF to other States in the country.

Consequently, this research aims to critically analyse the design and implementation, strengths and challenges encountered in implementing PBF in Nigeria in comparison to other countries in Sub-Saharan region to facilitate cross-country learning. Lastly, this research will provide insights into areas where more research is needed to answer these and related questions on PBF.

2.2. Study Objectives and Specific objectives

2.2.1. General Objective

To critically examine how Performance-Based Financing was operationalized and implemented in Nigeria to identify gaps, best practices, and make recommendations for policy makers to consider for improvement in the future.

2.2.2. Specific Objectives

1. To describe the history and design of PBF in Nigeria.
2. To examine the implementation processes, the strengths, and challenges of implementing PBF in Nigeria.
3. To review the experiences of Sub-Saharan countries in designing and implementing PBF.
4. To formulate recommendations for stakeholders based on findings from the Nigeria pilot for improvement strategies for future implementation of PBF in Nigeria.

CHAPTER III

3. Methodology

The study design for this research is a descriptive desk review. Data was collected through a review of relevant literature on PBF in Nigeria and selected Sub-Saharan countries. Additionally, key informant interviews (KIIs) were conducted in Nigeria because of paucity of literature on the implementation of PBF in the country. A total of five KIIs were conducted with the aim to get comprehensive information to fill the gap in information and provide more insight into the design, implementation, strengths, and weaknesses of PBF in Nigeria from key actors. The KIIs were also used to validate findings from the study in the Nigerian context.

3.1. Methods of data collection

3.1.1. Literature and documents review

A literature search of available materials using a systematic search strategy was done to retrieve published and unpublished documents for the desk review. The literature review incorporated articles, studies, and reports of different PBF designs and implementation in Nigeria and other sub-Saharan countries.

In selecting literature for this study, preference was given to literature related to Results-based financing (RBF) interventions in healthcare settings with a focus on supply-side financing, because the concept of payment for performance is not limited to the health sector.

The search strategy for the literature review is described below.

3.1.1.1. Search Strategy

To address objectives of the study an online literature search was conducted between March and August 2020 using google and google scholar search engines and databases such as PubMed, Science Direct. And Data was retrieved from databases such as PubMed, Science Direct. Other data sources include grey literature such as evaluation reports, toolkits, project implementation manuals and lists of references from relevant literature were also consulted.

The keywords and phrases used to retrieve eligible literature include but are not limited to "performance-based financing", "results-based financing", "pay for performance" which were combined with Nigeria and some Sub-Saharan countries while Boolean operators were combined with keywords to control the search results. Inclusion and exclusion criteria

All literature selected included those published in English language since the author is familiar with the English language and were limited to literature published within the last 15 years because of paucity of literature on the implementation of PBF in Nigeria. Reports from baseline, mid-term and impact assessments conducted in Nigeria and Sub-Saharan countries were also retrieved for the study. **See table 2** for the search strategy.

Table 2: Search Strategy

<table>
<tr><td rowspan="3">Database/source</td><td>Objective 1</td><td>Objective 2</td><td>Objective 3</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td colspan="3">Keywords/phrases used</td></tr>
<tr><td>PubMed, Science direct, Wiley online, pilot reports, project manual, evaluation reports, WHO report, World bank policy papers
WHO, USAID, World bank website, SINA health website</td><td>“performance-based financing” OR, “results-based financing”, “pay for performance”, “performance-based funding for health”, “performance-based incentives”</td><td>“performance-based financing”, “results-based financing”, “pay for performance”, “performance-based funding for health”,
“performance-based incentives”</td><td>“performance-based financing”, “results-based financing”, “pay for performance”, “performance-based funding for health”
“performance-based incentives”</td></tr>
<tr><td colspan="2">Inclusion criteria</td><td colspan="2">Exclusion criteria</td></tr>
<tr><td colspan="2">PBF pilot schemes and national implementation schemes</td><td colspan="2">Literature on other forms of results-based financing interventions that are not related to supply-side incentives.</td></tr>
<tr><td colspan="2">All literature published between 2005-2020</td><td colspan="2">Literature published before 2005</td></tr>
<tr><td colspan="2">All literatures published in English language</td><td colspan="2">Literature not published in English language</td></tr>
<tr><td colspan="2">All study types</td><td colspan="2"></td></tr>
<tr><td colspan="2">Literature from descriptive briefs and reports by multilateral organizations such as WHO, World Bank and PBF implementers</td><td colspan="2"></td></tr>
<tr><td colspan="2">Performance based financing schemes in the health sector</td><td colspan="2"></td></tr>
</table>

3.1.2. Key Informants Interviews

An initial literature review of PBF experiences and challenges of implementation from countries including Nigeria was done to inform the development of a topic guide for the KIIs with input from experts and stakeholders (**see annex 1 and 2 for topic guide and consent form**). The topic guide focused on objective one and two. Key informants (KIs) were selected purposively by selecting stakeholders from the three pilot states in Nigeria that participated directly or indirectly in the design and implementation of PBF in Nigeria. Two KIs each were selected among the implementers at the federal and state level and one RBF-Technical Adviser (RBF-TA).

An ethical waiver was obtained for the KIIs from the ethics review board of Royal Tropical Institute, Netherlands.

3.2. Data Quality and Analysis

3.2.1. Data Analysis from literature Review

The study objectives were analysed using the seven elements of designing and implementing a PBF program at the different system levels outlined in the selected analytical framework. The political economy factors that informed the adoption of the PBF model in Nigeria was also examined.

3.2.2. Data Analysis of KIIs

KIIs were audio-recorded and the researcher took notes during each interview session which were used for data analysis. The recordings were transcribed verbatim and compared with the notes taken during the interviews to ensure consistency in information and transcription. Data analysis and interpretation was done manually by the researcher because of the small number of interviews conducted. An inductive approach where data is coded thematically based on pre-determined groupings developed from the analytical framework was used for the analysis(34) and new emerging themes were included. The analysis was presented along with the findings from the literature review in the results section.

3.2.3. Data Quality

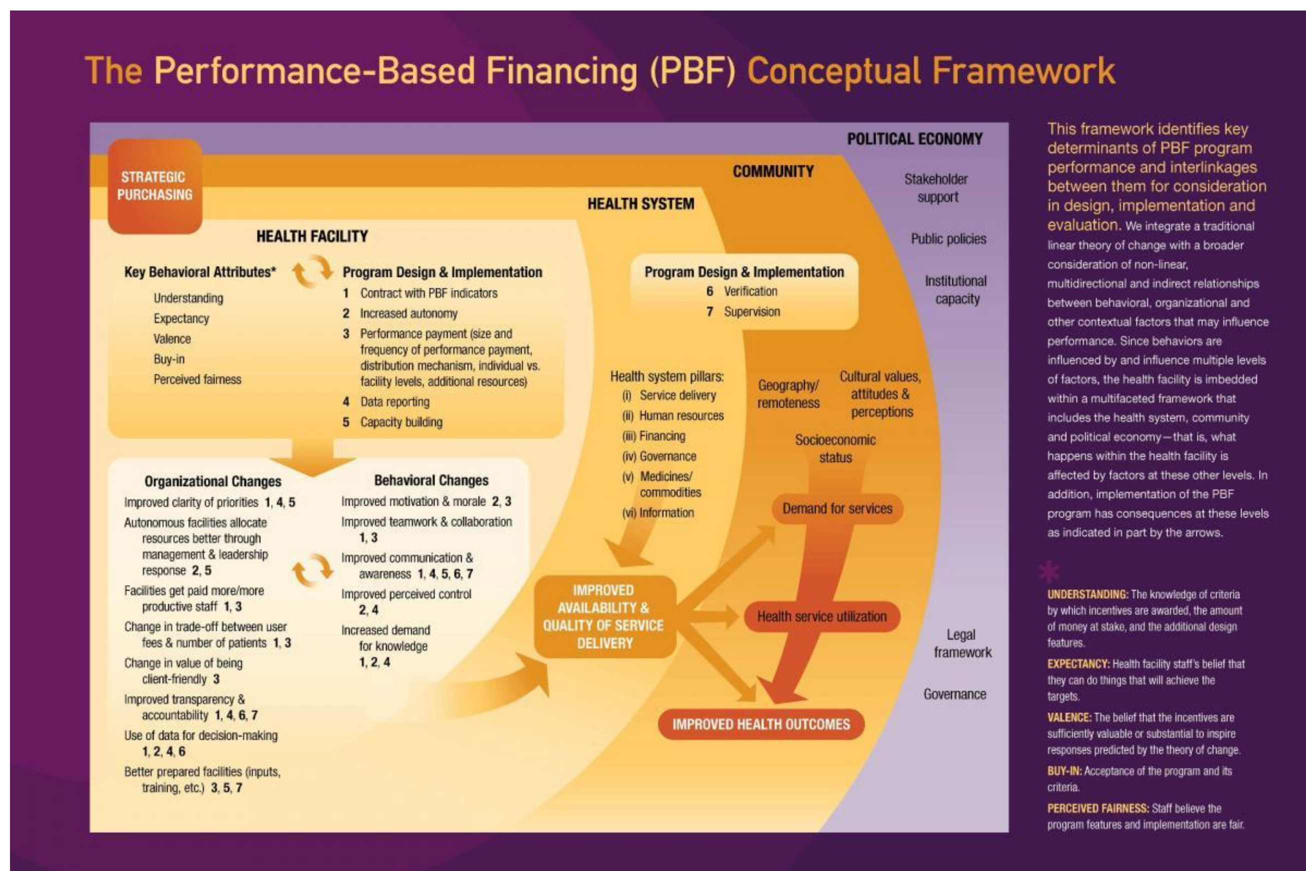
The literature retrieval process and screening were done in a systematic manner. A preliminary screening of the titles of literature was done followed by screening of the abstracts to determine if they met the inclusion criteria. The quality of literature retrieved was scrutinized by reading the articles, thereafter information regarding the type of literature, authors study designs, study areas and key findings was summarized.

3.3. Analytical Framework

Several frameworks have been used to explore PBF programs and were considered for this research. Witter et al (2013) developed a framework for reviewing the interaction between PBF and the health system focusing on five domains of "context, development process, design, implementation, and effects" which are linked to one another(29). This framework was not used because it does explain the core features to be considered in the design and implementation process of a PBF intervention

Another framework published by Health Results Innovation Trust Fund (HRITF) known as the World Bank Performance-based Financing (WB-PBF) framework has also been used by several PBF researchers to analyze the level of implementation fidelity, discuss lessons learnt and in evaluation of several PBF projects (34). The framework assumes that organizational and behavioural changes will occur if these elements are considered in the design and implementation of any PBF intervention which will ultimately affect health outcomes(34). (**See figure 2).**

Figure 2: The Performance-Based financing Analytical Framework



Source: World Bank (2013)(34)

This framework was adapted for the purpose of this study because it incorporates the core features to be considered in the design and implementation of PBF programs at the health facility, health system and community level and the expected organizational and behavioural changes at these levels. The framework also takes into account political economic factors that influence the adoption of PBF in a country (35,36).
Only a section of the framework was used for the study because of the scope of the study and the need to present my findings in a more in-depth way. The focus of this study will be on the seven elements with regards to how PBF programs were designed and implemented at the different system levels, and to assess the strengths and weaknesses of the interventions in Nigeria and other Sub-Saharan countries.

The analysis of the Nigerian context focused on the three initial pilot States namely Adamawa, Nasarawa and Ondo States. The history of PBF in Nigeria as well as the institutional frameworks were discussed as part of the Nigerian background. In addition, the design and implementation of PBF in the context of other Sub-Saharan countries were also analysed systematically using the framework.

The analysis did not focus on the organizational and behavioural changes and results expected to occur due to interactions of the core features as this is useful for measuring the effectiveness of the program which is beyond the objectives of the study.

CHAPTER IV

4. PRESENTATION OF FINDINGS

Presentation of findings are done according to the study objectives.

4.1. History and Design of PBF in Nigeria

4.1.1. History of PBF in Nigeria

Over the years, the Nigerian government had undertaken series of health reform projects to improve the failing health system particularly PHC which had overtime been affected by poor funding, insufficient human resources and lack of accountability(37). Despite the investment in human and financial resources in the health system, the health status of Nigeria remained poor which was a challenge at that time in attaining the 2015 health related Millennium development goals (MDGs)(25). According to a KIs *"A lot of resources had gone to maternal and child health programs we also had the MSS which is the Midwives Service Scheme and different family planning programs".*

One of the major reforms undertaken was the World Bank funded Health System Development Projects (HSDP I&II) designed to strengthen the health system and enhance provision of quality PHC services in Nigeria. However, this project and other health system interventions failed to bring about targeted health reforms that ensured the efficient use of common resources to provide quality health services to the people(25). According to one of the KIs, *"Before the PBF project, Nigeria had already implemented two rounds of HSDP which was an input financing mechanism. The results did not show any attributable improvement in the health status of Nigeria".*

The HSDP outcomes had proven that the traditional input financing did not necessarily improve service delivery, nor ensure health outcomes were achieved, neither did it improve accountability and transparency of healthcare providers to patients(25)(25)(25)(25)(25)(25)(25)(23)(13).

Meanwhile, there were success stories of the role of PBF in improved service delivery, improved quality of care and accountability of healthcare providers in African countries like Rwanda and Cameroon(33,38,39). Stakeholders recognized that increased funding alone was not sufficient enough to attainment of desired health outcomes and that this necessitated a shift in the financing strategies from the traditional input financing for the health sector(25). Hence with the assistance of the World Bank, the Government of Nigeria built on the lessons learnt from the HSDP project by proposing a PBF intervention within the Nigeria State Health Investment Project (NSHIP) (25).

4.1.2. Overview of NSHIP

The rationale for NSHIP was to determine the best way to enhance quality delivery of health services in Nigeria either through regular provision of operational funds to health facilities (HFs) or financial incentives to health workers. According to a KIs,
"The question then was would PBF be a better option than input-based financing? Policy questions led us to the design of PBF LGAs, Decentralized Facility Financing (DFF) LGAs and control states. So that the impact evaluation will tell us if it was the incentives or regular provision of operational funds that improved service delivery".

The NSHIP design had two major components namely Results-Based Financing (RBF) and Technical Assistance (TA). The RBF component further focused on strengthening service delivery at the primary and secondary level of care and strengthening institutional capacity at the State and LGA levels(25,37,40).
To strengthen service delivery, PBF and DFF interventions were applied to health facilities (HFs), Local Government Primary Healthcare Authorities (LGA-PHCs) and State Hospital Management Boards (SHMBs)(25). The project applied the mechanisms of DFF in comparison to that of PBF(37,41) (**See annex 3 for a detailed difference between**

PBF and DFF). While to strengthen institutional capacity, Disbursement-Linked Indicators (DLIs) was applied at the LGA-PHCs Authorities, SHMBs and the State Ministry of Health (SMOH)(25).

The TA component focused on supporting the implementation of the RBF component through capacity building, data collection and impact evaluation researches(25).

The project measured the effectiveness of all the components in comparison to "control states" which did not benefit from any of the above payment schemes(40).

This study only focuses on the PBF component.

4.1.3. PBF Project Objectives and Beneficiaries

The objectives under this pilot PBF project were to "increase the delivery and use of high-impact maternal and child interventions, to improve quality of care at selected health facilities in participating states, and to strengthen institutions involved in the delivery and administration of PHC services" **page 9;**(41). About 8million people in the pilot states were targeted to be beneficiaries of the intervention while direct beneficiaries were 3.8 million women and children who are the most affected population by preventable mortality and morbidity(25). Reaching this population was necessary to reduce the disease burdens(26).

4.1.4. Project Funding

In 2011, the Nigerian Government secured a World Bank loan of USD $150million to pilot PBF in selected Nigerian States in a five-year program (2013-2018)(33). An additional $20million grant was provided by the then Health Results Innovation Trust Fund (HRITF) now known as Global Financing Facility (GFF) and $1M was provided for research to conduct an impact evaluation of the project (25,33).

4.1.5. Selection of Pilot States and Health Facilities

4.1.5.1. Selection of Pilot States

Since PBF was a new concept, only a few states were selected. According to some KIs, the selection of pilot states was based on three specific criteria (i) good financial management systems, (ii) the willingness of states to accept the project, and that, (iii) that the states had done a public expenditure review.

"…they had to have good financial management system and done some specific assessment in terms of public expenditure review and performance management survey done and the state must be willing to abide with the norms and terms of the project".

The States selected include Adamawa located in the North-East, Nasarawa in the North-Central and Ondo State in the South-West(37).

In accordance with the quasi-experimental design used for the project, each pilot State was assigned a control State for comparison during the impact evaluation(25).

4.1.5.2. Selection of Health facilities

KIs reported that LGAs were selected in the state using random sampling technique. KIs also reported that the ward health system in Nigeria was given consideration in the selection of PHC facilities (15). Each LGA in Nigeria is divided into wards and each ward has three levels of Primary Health Care centres (PHCCs)(15). One PHC facility was selected per ward of the PBF LGAs (25). According to a KIs,

"...because of the type of funds to be shared in the health facilities, we felt it was best to focus on the PHCCs which is the apex facilities at the ward level. So, we selected only PHCCs, health clinics, and health posts from each ward in the selected PBF LGAs".

Also, at the level of Secondary Health Care (SHC), the General Hospitals (GHs) in each LGA were selected as referral centres to the implementing PHC facilities. According to a KIs, it was important to include the referral centres to manage complicated cases referred from PHCCs.

4.1.5.3. Equity

KIs reported that while the project was not restricted to urban or rural areas, an equity component was included to cater to the poorest population.

"HFs could classify not more than 5% of the patients treated per month as indigent patients and would be remunerated for it".

4.1.5.4. Selection of Services and Unit fees

In selecting indicators and service packages key stakeholders comprising of representatives of the World Bank on the project, technical consultants from Rwanda and policy makers from the developed a checklist based on the PBF design in Rwanda(27). This was then adapted to the Nigerian context and guidelines, piloted in two states and reviewed based on finding from the pilot(33,42).

Two separate health service packages were selected to be provided by the contracted HFs namely Minimum Package of Activities (MPA) for PHC facilities and Complementary Package of Activities (CPA) for GHs **(see annex 4)** (33). The package was designed to address the pressing health issues of citizens and was based on the disease burden in the country, delivery of cost-effective services and the achievement of health related MDGs(13,33).

"the project design covered about 24 services at PHC level with indicators for measurement and about 20-22 services at the GHs with a specific focus on Maternal and Child Services".

There was also a quality component which was tailored to measure the quality of services provided in HFs which were reviewed over time. The quality checklist for HFs assessed 14 service areas relevant to their level of care(33,42). Many of the indicators were focused on structural components of quality of care and MNCH services and were regularly reviewed(41–43). Table 3 and 4 shows the services areas in the quality checklist for PHC facilities and General hospitals.

Table 3: Service areas for PHC facilities Quality Checklist

S/N	Service areas	Weightings
1	General Management	24
2	Business Plan	18
3	Finance	23
4	Hygiene	57
5	Out-patient department (OPD)	100
6	Family Planning	17
7	Laboratory	16
8	In-patient wards	7.5
9	Essential drug management	20
10	Tracer drugs	22.5
11	Maternity	25

12	Expanded program on Immunization (EPI)	19
13	Antenatal care	11
14	HIV/Tuberculosis	8
	Total points obtainable	**368 (100%)**

Source: (41)

Table 4: Service areas for GHs Quality Checklist

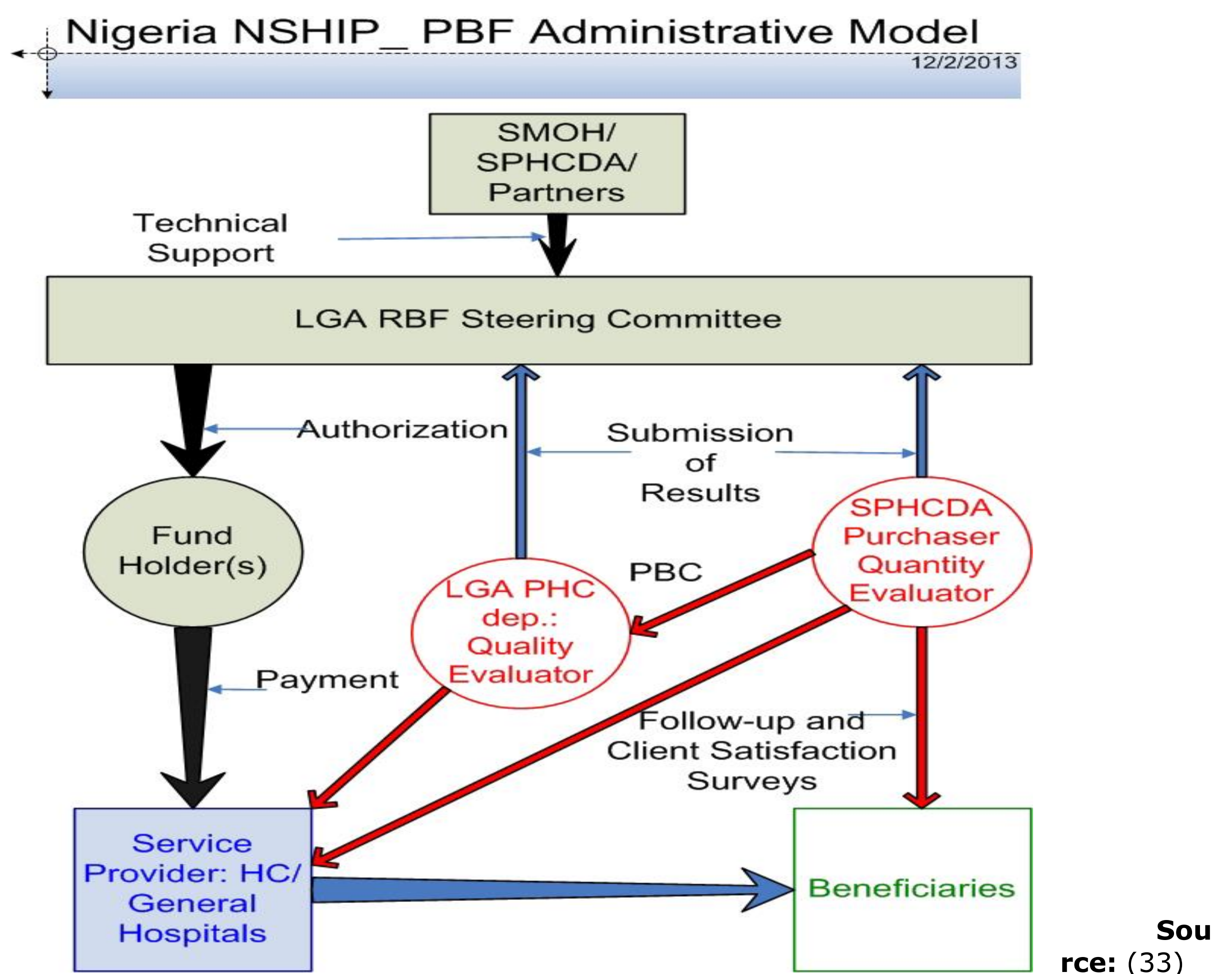
S/N	**Service areas**	**Weightings**
1	General Management	36
2	Business Plan	18
3	Finance	46
4	Hygiene& medical waste disposal	57
5	Out-patient department (OPD)	102
6	Family Planning	28
7	Laboratory	14.5
8	In-patient wards	140
9	Essential drug management	20
10	Tracer drugs	32.5
11	Maternity	25
12	Antenatal care	6.5
13	HIV/Tuberculosis	8
14	Surgery	52
	Total points obtainable	**600.5 (100%)**

Source: (41)

4.1.6. Institutional Framework for PBF Project

Specific roles and responsibilities were assigned to different institutions to ensure that statutory rules were adhered to in the implementation of PBF. The responsibilities of the main stakeholders are summarized below. Figure 3 shows the administrative structure of PBF at the State level.

Figure 3:Nigerian PBF Institutional Framework at State level



Source: (33)

PBF Stakeholders at State and LGA level

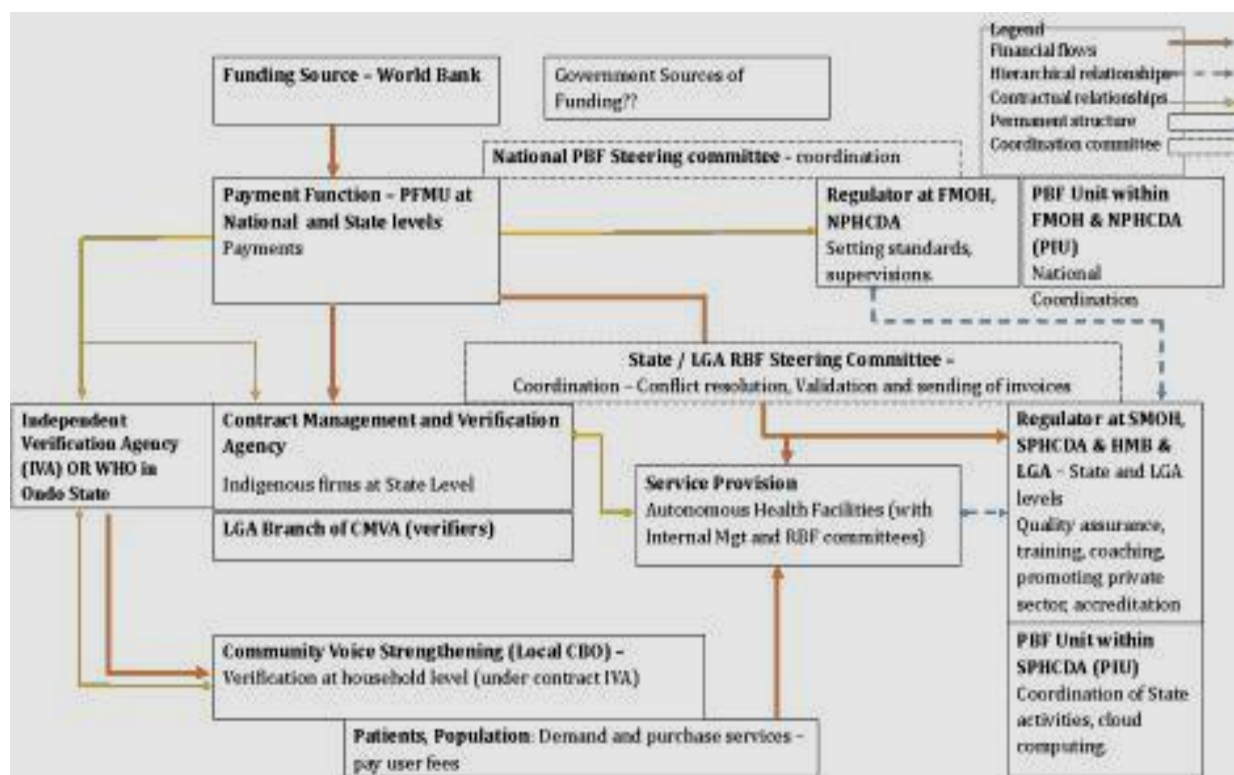
- **Purchaser:** the purchasing agents were the State Primary Health Care Development Agencies(SPHCDAs) which are parastatal agencies of the State Ministry of Health (SMOH)(25). The SPHCDA acted as the purchaser of services, verification agency and negotiated contracts with HFs and local health authorities(33). This did not fulfil the principle of split of roles of the purchaser from the verification agency which is a typical in PBF programs.
  The Purchaser also authorised the fund holders to pay performance subsidies after validation(25,33). A technical support State project implementation unit (PIU) was created within the SPHCDA to act as a focal point to coordinate the project on behalf of the SPHCDA(25).

- **Regulator**: the State Ministry of Health (SMOH) was the regulator at the State level and was expected to provide oversight and administration for the project(25). According to KIs *"SMOH had the responsibility to regulate the implementation of the project through provision of policies, regulations, and approvals…."*
- **Fund Holders**: for each state, funds management and disbursement were handled by the State Project Financial Monetary Unit (SPFMU) located in the Office of the Accountant General under the Ministry of Finance(33,41).

- **LGA-PHC Authority/SHMB**: also known as the local health authorities, they were contracted to carry out evaluation of the quality component of the project in participating HFs(33). They were also responsible for regular supervision of service delivery and regular support and training of HFs in their LGAs(25).
- **Provider**: also referred to as the main contract holders were the health providers from public and private HFs contracted by the SPHCDA to provide health services(44).
- **Steering Committees**: the LGA-RBF Steering Committee was fundamental to the PBF institutional framework at the LGA level as it provided oversight for the implementation of the project(33,41,45). It was also responsible for the review and approval of verified quantity and quality results for payments of subsidies(26,45). The Federal and State Steering Committees ensured timely implementation of the project implementation and to promptly address crucial issues that could affect the implementation of the project (33).
- **HF/GH-RBF Committees**: These committees were closely linked to the Ward Development Committees (WDC) which were already existing in accordance with the Ward Health System of Nigeria(15). The committees monitored all PBF activities at the HF level, supervised the performance of the HFs in terms of service delivery and ensured that communities were satisfied with the services provided in the HF(26).

The Institutional framework was later expanded to accommodate actors from the private sector particularly indigenous NGOs(41). In the new framework, Contract Management and Verification Agencies (CMVAs) and Independent Verification Agencies (IVAs) were contracted to take over the verification role of the SPHCDAs(41). This was done to enforce separation of functions between the purchaser and verifier(41).
Figure 4 shows the new NSHIP institutional framework including the additional actors.

Figure 4:: New NSHIP/Additional Financing Institutional Framework



Source:(41)

4.1.7. PBF Pre-Pilot

In December 2011, Nigeria tested PBF pre-pilot schemes in three LGAs; one LGA in each of the project states. A review of the pre-pilot phase showed variations in challenges encountered and performance in all the pre-pilot LGAs(33). Despite the challenges encountered, the pre-pilot scheme yielded significant positive results, and proved that the concept of PBF would work in Nigeria(33). After reviewing the pre-pilot project, and lessons learnt were incorporated in the scale-up of PBF(25).

In 2014, PBF was successfully scaled up to 27 LGAs in the three states; seven LGAs in Nasarawa, nine in Ondo and eleven in Adamawa state, while the remaining LGAs implemented DFF(41). Later in 2016, an additional financing of $125 million was secured from the World Bank to expand PBF to Bauchi, Borno, Gombe, Taraba and Yobe States(41).

4.2. Design and Implementation of PBF in Nigeria

4.2.1. Contracts with PBF Indicators

Contracts containing terms of engagement, rules, and regulations were established between stakeholders within the PBF context(44). One of such was the Purchase contract between health providers and the SPHCDA for the provision of health service packages (MPA and CPA) at an agreed unit price(33). This was subject to a conditional yearly renewal upon agreement on the business plan by both parties and adherence to project guidelines(33).The business plan was an essential component of the purchase contract as it contained a detailed description of strategies and resources the HF will use to improve service delivery and quality of care(33,41).

Other PBF contracts include the performance contract, motivation contracts, contracts between verification agencies and the NPHCDA. Each contract was linked to technical documents for evaluation(41).

Table 5:Showing PBF Contracts and Tools Used to Measure Performance

S/N	Contract type	Client	Contractor	Technical documents
1	Purchase contract	SPHCDA	Health provider	Business plan
2	Performance contract for quarterly quality evaluation of HFs	SPHCDA	LGA-PHC Authority OR SHMB	Performance framework, Quality checklist
3	Performance-based contract for verification	NPHCDA	CMVA	Performance framework
4	Performance-based contract for counter verification	NPHCDA	IVA	Performance framework
5	Motivation contact	HF	Individual health worker	Individual performance framework
6	Multilateral contact	LGA Chairman	LGA-RBF Steering Committee	
7	Sub-contracts	Health provider	Secondary health provider	

Source:(33,41)

According to the KIs, the performance-based contracts with the CMVA and IVA were introduced towards the end of the project while the sub-contracts were cancelled.

Private facilities were also contracted to provide MPA services in urban areas with the aim of increasing access to healthcare(41).

4.2.2. Increased Autonomy

In the project design, all implementing institutions including the HFs were autonomous in the management of their resources and made decisions within the guidelines of the project(33). This prevented inefficiencies due to administrative procedures and strengthened accountability and transparency(13,25,37). Institutions also had direct access to their performance subsidies through designated HF PBF accounts and had the freedom to decide the percentage of the earnings to be shared as incentives(25). HFs could hire additional staff from their performance earnings when needed and sanction or even fire the contracted staff(32,33). Using the business plan, HFs developed strategies to improve the quantity and quality of services provided to patients(45).
Though institutions had the managerial flexibility to manage their resources they were dully monitored and audited by the HF-RBF committees and local health authorities(45). To ensure accountability and transparency in the use of resources, tools introduced include the indice tool, individual performance evaluation framework, and other financial management tools which were audited during the quality verification(32,33).

4.2.3. Performance Payments

According the project design, HFs were paid using fee-for-service method on a quarterly basis. Payments were required to be done within sixty days after the quarter in which the money was earned (34). Payments to HFs were conditional on the outcome of the quantity of services provided in addition to obtained quality scores and the remoteness of the HF(46). Before funds are released, validation is done by the LGA-RBF steering committee then payment is made by the SPFMU to HF accounts(33,42). However, because of the insecurity situation in Adamawa State, payments were often done without verification and cash payments were sometimes made to HFs in the absence of banking institutions(47).

HFs were required to submit monthly invoices containing the services provided to get subsidies for quantity. They should have scored at least 50% in quarterly quality evaluation to be eligible for the subsidies for quality of care(25). For example, if a HF reports 100 institutional deliveries in a quarter at a unit fee of 6,000 naira per delivery, such HF receives 600,000 Naira for that service. The total money earned will be adjusted for by the score obtained from quality assessment(46) **(see annex 5 for consolidated invoice)**. It is important to note that performance subsidies were not intended to replace government's spending on the health system, rather it was intended as additional resources for the health system/facilities(46).

Payments to HFs were also adjusted for equity based on the travel distance to the LGA secretariat, the availability of human resources and structural capacity of the HFs (rural hardship)(33).
At least 50% of the PBF subsidies was earmarked for activities and purchases to improve quantity and quality of service delivery(33,46). The remaining 50% could be used as incentives for health workers and this was calculated using the indice tool and individual performance evaluation framework (33,46). The health facility PBF committee supervised the allocation of the performance budgets and ensured that the results of the performance evaluations were applied.

For the local health authorities (LGA-PHC Authorities and SHMBs) performance subsidies were linked to their score in an evaluation done by the SPHCDA using the performance evaluation framework. Their performance earnings were equivalent to the subsidies received(33).

However, the changes in verification processes in Ondo state led to a modification in the conditions for payment of performance subsidies to HFs. Payments were now done bi-annually and the performance subsidies received were dependent on the performance of LGAs in a Lots-Quality Assurance Survey (LQAS)(48). Despite the modifications, health workers were still entitled to performance bonuses(41).

4.2.4. Data Reporting

To address the challenge of poor data reporting and utilization, instruments for data collection such as service protocol guides, MPA and CPA provisory invoices, quality checklists were developed for use by the HFs (33). HFs were required to use the data generated to make informed decisions that would improve the volume and quality of service delivery(33). Data for the project was recorded in separate registers(33).

Secondly, a web enabled PBF portal was set up to manage and report project data. According to KIs;*"At the start of the project, HMIS was not very functional, but because PBF thrives on data we needed to set up a system that would ensure regular collection of data, so we set-up our own cloud-based database that will allow us have verifiers that will go to the field to collect data, input it into the cloud without having to go through the bureaucracy of data reporting".*

Initially, the PBF service indicators were different from the National Health Management Information System (NHMIS) indicators for data reporting making comparison of some key indicators for difficult(41).

However, in 2018, the PBF data collection tools and its portal were merged with the National District Health Information Software (DHIS2) portal to harmonize data collection(41).

4.2.5. Capacity Building

On the importance capacity building, KIs reported.
"Stakeholder had to be oriented in terms of how to operate output-based projects as compared to input-based projects. The communities needed to be made aware of their new roles and responsibilities and that they now had a voice in how the health facilities are run.".

The project incorporated periodic trainings, supportive supervision, coaching and mentoring of key players on the project. All stakeholders including community representatives received trainings on basic principles of PBF and how to operate an output-based financing system(45). PBF User manuals, service protocols, standard treatment guidelines were distributed to institutions(45). HFs received take-off funds to improve the conditions of the HFs in order to participate in the project(45).

Periodic refreshers trainings were conducted at the HF level, so also were specific trainings on financial management, data management, essential drug procurement and management(45). Supervisors also received regular trainings on management principles. Technical groupings of informed persons who understood the principles of PBF were also formed to offer guidance to others(41). This was referred to as **"extended team approach"** and was adopted as success stories from the implementation of PBF in Rwanda and Burundi(41). RBF-TAs were also contracted to the implementing States to strengthen institutional capacity at all levels of implementation(33).

4.2.6. Verification

Initially, verification of the quantity of services produced by HFs was designed to be conducted monthly by the SPHCDA(25). Verifiers were recruited by the SPHCDAs to conduct verification using the standard service protocols(33). The LGA-PHC Authorities conducted the quarterly quality evaluation of PHC facilities while the SHMB was responsible for quarterly quality evaluation in the GHs(33,45). A major condition for

purchase of services from HFs was the inclusion of contact details of patients in the registers for contact-tracing of patients in the community during counter verification(33).

The SPHCDA also supervised the quarterly quantity and quality counter verification. They contracted and trained CBOs to conduct the quantity counter verification using Community Client Satisfaction Surveys (CCSS)(33). In addition to the CCSS, Nasarawa state introduced the use of short message service (SMS) to collect feedbacks from patients(42). Disciplinary measures were put in place for discrepancies in data reported from the counter verification(27,42).

To reduce the possibilities of manipulation of reports, paper-based quality checklists were later replaced with a mobile application. According to KIs,
"…the GPS would record where they are, which will tell us whether they went to the Health facility and they had a timeline to send the results, thus reducing the possibility of manipulations".

Furthermore, towards the end of the project, modifications were made to the verification processes(41). Indigenous Contract Management and Verification Agencies (CMVAs) and Independent Verification Agencies (IVAs) were contracted to take over these roles from the SPHCDA except for Ondo state where quantity verification was completely cancelled because of cases of overreporting and collusion for fraud(41,48). However, the LGA-PHC Authorities and SHMB continued to conduct the quarterly quality verification using the mobile applications(41,48).

CCSS in Ondo State was replaced with LQAS, a household-based survey to assess key PBF indicators(41). This was conducted by World health Organization (WHO) while the NPHCDA conducted the quality counter verification(41).

4.2.7. Supervision

HF-RBF committees held monthly meetings to review performance and discuss areas of improvement(33,49). At the HFs, HF-RBF committees were involved in decision making processes. Some of which included the development of the HF's business plan, supervision of the implementation of approved activities, referral of patients to health facilities, and in collaboration with the HF management team, decision on the unit fees for treatment and sale of drugs(30). They also represented the interest of the community and communicated their needs to the health workers.

HFs also received regular supportive supervision from the LGA-PHC Authorities on the use of PBF tools and to ensure they adhered to the principles of the project (27,45).

4.3. Political Economy

Key informants reported that external actors like the World Bank were key players in the initiation of the PBF project in Nigeria. They were able to influence policy makers at the FMOH who also saw PBF as an opportunity to strengthen existing government reforms in health(31). Nevertheless, the project needed to be adapted to complement the Nigerian context and decentralized system of governance(47).

According to KIs, the concept of PBF in Nigeria was generally trailed by mixed reactions as policy and decision makers were divided on adopting the concept.
"Senior Policymakers, decision makers did not see the feasibility of the project because of the kind of financing and the issue of sustainability. They also did not see the rationale for incentivizing health workers after paying wages or devolving resource control as well as financial autonomy to the HFs".

However their perception reportedly changed when they saw the advantages of the project which was beyond improvement in service delivery(46). For implementers at the HF and community level, it was a welcomed idea as it signaled the end of unnecessary

bureaucracies and poor working conditions. Community leaders were also supportive because it meant that their voices would be heard through the project.
The project was designed to take into consideration the three levels of governance and ensure synergy among them(13,45). New institutions like the Steering Committees that were set up, was done at all levels of government to provide oversight for the project(45).
According to KIs, considerations were also given to the existing government policies and ongoing health reforms in the health sector. A major one was the Primary Health Care Under One Roof (PHCUOR) policy to integrate all PHC structures, financing, and activities under one authority(13,50).With the introduction of PBF, the policy was promoted as all implementing States had a functional SPHCDA that supervised the project(13).

Other government policies were also considered and integrated into the design of the PBF project. According to KIs, "*parallel systems were not set up, rather the project was designed to suit existing government policies like the National Health policy of 2004, the Ward health system (2007), Health Care Waste Management Policy and the M&E framework of the country".*

To build institutional capacity, key informants reported that several consultation meetings, preparatory workshops, trainings and study visits were undertaken to help implementers understand the mechanism of PBF and prepare them for the project (51).
"Policymakers and some top decision makers at the national as well as the sub-national level were trained in Mombasa, Kenya. Those of us who ended up implementing the project at the state level were also trained".

"… we had study visits to Rwanda where we interfaced with those who had succeeded in implementing PBF".

Technical consultants on RBF were also recruited and posted to the selected states to provide on the job trainings(26).

CHAPTER V

5. The Strengths and Challenges of Implementing PBF in Nigeria

This section presents the findings on the strengths and challenges of implementing PBF in Nigeria.

5.1. The Strengths of Implementing PBF in Nigeria

5.1.1. Increased Autonomy

One of the advantages of autonomy is that it increases accountability and managerial skills in health workers(52). The autonomy to manage HF resources made health workers accountable and improved staff attitude to work(42,51). Health workers and communities had the flexibility to introduce advanced strategies in the business plans tailored to their context to enhance quality service delivery without interference from administrators(27). KIs also reported that health workers provided outreach services to communities that were far from the health facility to increase the volume of services provided. In some states, health workers gave incentives to patients to motivate them to continue using the HF and to attract new patients(27).

"…some HFs were able to undertake significant quality projects...., some expanded the structure without government support within weeks and months. This would not have been possible or would have been slow and uncoordinated if it had to conducted from the Ministry of Health".

Health workers were reportedly inspired by the changes in their HFs and the recognition and respect accorded them in the community(27,45).HF managers hired contract staff to improved efficiency and performance(45).

5.1.2. Performance Payment

This was mostly done within the required time which is a major accomplishment compared to the experiences of other countries(45). It was attributed to the decentralization of payments to the SPFMU(45).

5.1.3. Data reporting

PBF implementation in Nigeria led to the improvement in the timeliness and completeness of data reported and the use of data in decision making at all levels of implementation(45). Quality improvement plans were introduced based on the performance of HFs in the quality evaluations to help HFs strategize for better performance(41).

"We had good data which was a good reflection of what was happening in the state and the data was used to make decisions even at the health facility levels".

5.1.4. Capacity building

HF managers developed business plans and other management plans to ensure improvement in performance of the HFs, thus building entrepreneurial capacity of health workers and significantly motivating health workers(30). This increased transparency and accountability between health workers, the government, and communities.

"There was a lot of capacity building leading to better human resource management and innovations. Health workers were trained on financial management of resources."

Local health authorities also reported that they had improved in their managerial and clinical skills(45).

5.1.5. Verification

One of the goals of the PBF project is to build a solid relationship between the community and the healthcare providers through CCSS. According to KIs, beneficiaries of health services in communities where PBF was implemented gave feedbacks on both the quality and affordability of the service they have received. This was used by HFs to improve service delivery. Verification also led to improvement in the quality of data reporting(45).

5.1.6. Supervision

Key to the improvement of quality service delivery was the regular supervision at the HFs (27,51). Community members took responsibility for the health facilities.

"…. there were situations were communities wrote petitions against health workers that were performing poorly".

Additionally, PBF improved the quality of supervision done at intermediate levels. Supervisors had additional resources and incentives for conducting supervision to HFs(45). PBF has strengthened the accountability link between the NPHCDA and SPHCDAs(53).

"There were improvements in supportive supervision, mentoring and coaching for HFs experiencing challenges in implementing the project monthly. This led to early response to challenges both at the level of service providers and policy makers".

5.1.7. Increased Community Participation

Through the HF-RBF committees communities had the opportunity to make decisions regarding the quality of care provided in the HFs which increased community participation and ownership (28). It also built trust between the HFs and the community.

"During one of our visits to one of the remote facilities, the people from the community had gathered to find out what we came to do. They told us that on no condition must me touch the health workers. The communities supported the health workers because of their work and were ready to deal with us if we played mago-mago with the staff".

5.1.8. Political Economy

According to KIs the LGA-RBF Steering Committees brought together stakeholders from the HFs, LGA, State and Private sector which strengthened the relationship between the different institutions down to the HF level.

5.2. Challenges of Implementing PBF in Nigeria

5.2.1. Contract with PBF indicators

According to KIs, quality of services was traded for the quantity of services provided in a bid to meet set targets despite limited resources in HFs. In a qualitative study conducted by Thinkwell Global on the quality of care in performance-based incentives programs in Nigeria, the researchers reported that HFs focused on services that attracted more financial incentives(42).

5.2.2. Increased Autonomy

KIs reported the poor management of resources in HFs. Facility managers undertook projects which were not beneficial or sustainable to the system. Some facility managers lacked managerial skills which affected the performance of their HFs and their relationship with the community.

"..the distribution of incentives was a challenge, because the incentives for health workers was supposed to be a maximum of 50% of the performance bonus of the HF, but we found out that a lot of health workers stuck to that 50%. They work very hard, make a lot money, and share the "big money".

".... The internal satisfaction of attending to patients almost disappeared because it was masked by these incentives. Even those who ordinarily will have worked without the extrinsic motivation were coerced to be motivated by the incentives".

5.2.3. Performance Payment

Despite the compliments the project received regarding prompt payment of performance subsidies compared to other countries, there were situations where payments were delayed without appropriate communication to HFs(27,42). According to KIs.

"towards the end of the project, you will be in quarter four and see that quarter one performance subsidies had not been paid. This affected their productivity and they could not pay their contract staff. It made planning for activities difficult".
Delay in payments led to postponement of activities like outreaches and lack of medical supplies inadvertently affecting the output of HFs(27,42).

The performance subsidies intended as additional resources for HFs, became the primary source of funding for PBF-facilities as government's spending on the health system and routine health activities became lower than the subsidies provided by the PBF project(51).

5.2.4. Data Reporting

Data of HFs uploaded on the PBF portal could not be compared with what was available on the DHIS2 because the indicators used were different. According to KI

"...one PBF indicator was first ANC consultation before 16weeks, while on the DHIS2 platform, it was first ANC visit at 20 weeks....".

A qualitative study on the effects of PBF on workers and their working environment, showed that health workers criticized increased workload in data reporting which was confirmed by the KIs(27).HFs reportedly maintained PBF registers and NHMIS registers because they had different reporting requirements.

"we discovered that some health facilities maintained 2 different registers in trying to meet the demands of both parties": one for NHMIS and other partner agencies and the other for PBF,

Cases of fraud were reported which is a major challenge in any PBF project because of the financial incentives attached to it(41,48). According to KI.

"There were reports of LGA supervisors who will "sit under the tree to fill supervision forms instead of going to the HFs to conduct the supervision".
"We began to see workers trying to inflate data statistics. This was because they knew that if they made like 2 million Naira, they would share 1 million Naira as incentives".

5.2.5. Verification

There was reportedly a lack of uniformity in the understanding of quantity and quality verification tools by verifiers and local supervisors. Verifiers and supervisors often had different standards of evaluation and conducted verification differently causing HFs to lose out on services purchased which resulted in conflicts(42,45). Supervisors complained about complicated quality checklists and the length of time it took to complete the quality assessment in HFs(42).

5.2.6. Supervision

In some states during the implementation phase of the project, the oversight responsibility of the SMOH was riddled with challenges due to overlap of functions. KIs reported that the SMOH in Ondo State became observers of the project instead of regulators as stated in the project design.

5.2.7. Political Economy

At the Federal level of government, strong ownership of the project was reportedly absent (51). While at the State level, the location of the PIU in the SPHCDA instead of the SMOH limited the involvement and ownership of the project by the State government(51).

The existing free health policy for pregnant women and children in Ondo state also posed a challenge because the state government did not back this policy with financing leading to stock- out of essential drugs and consumables (45).

KIs also reported the lack of coordination of all vertical projects being implemented.

"There were other vertical programs that were running parallel PBF that were not in line with the principles of PBF...."

The political instability and insecurity in Adamawa State posed a major challenge in the implementation of PBF in the state(31,45).

5.2.8. Separation of functions

The separation of functions was not clear and properly enforced in the implementation of the project in some states. This was evident during implementation as the purchaser was also responsible for verification processes which led to clash of responsibilities and conflict of interests(48).

CHAPTER VI

6. Experiences of Sub-Saharan Countries in designing and implementation of PBF

6.1. Contract with PBF Indicators

In Zambia, contracting-in model where the project was implemented by the Ministry of Health was adopted(54). The aim was to build on existing public institutions abandoned from the previously implemented performance-based contracting in the country (54). While in Cameroon, independent Performance Purchasing Agencies (PPAs) were contracted at regional level by the Government of Cameroon to oversee the administrative and technical aspects of the PBF program. The PPAs signed and managed performance contracts with HFs and negotiated targets for HFs through the business plan(39). HFs were able to increase community participation by also sub-contracting Community Health Workers (CHWs) to conduct community outreaches to increase the utilization of health services in the community(55).

In Benin, an alternative approach was applied where PBF management and coordination was granted to a Steering committee(39). The purchasing function was assigned to city councils which were to take decisions and sign PBF contracts with providers(39).

6.2. Increased Autonomy

In Zambia, the principle of autonomy was employed as health workers had the freedom to hire contract staff, use a percentage their performance subsidies as incentives and introduce strategies to increase the quantity and quality of service delivery (56). This was reportedly one of the motivating factors for work satisfaction among health workers(51,54). In Cameroon, the PPAs were also autonomous and were the only body responsible and authorized by the government to oversee the program(39). However, the application of financial autonomy at HFs was a challenge in Cameroon, as health workers still required approval for the Ministry of Public Health to utilize their financial resources(57). In Zimbabwe, although health workers were motivated by concept of autonomy health workers, they were reportedly dissatisfied with the poor management skills of some of the facility managers(56).

6.3. Performance payments

Cameroon relied on the on validated data that came from the field to pay incentives(57). Health workers could use up to 50% of the performance subsidies for incentives(39). Equity bonuses were also introduced to improve the status of HFs that faced serious structural problems in delivering healthcare services to the people(39). However, there were delays in payment of subsidies because the PIU had insufficient staff. This resulted in demotivation among health workers and affected their performance(51).

In Uganda, incentives were reportedly too little; about 11% of the project base, compared to the government salary which increased by 49% during the same period(58). This was reportedly one of the failures of the pilot project(58).

In Zambia, health workers could use 60% of the performance subsidies as incentives, however, from the impact evaluation report, these incentives did not necessarily motivate performance even among health workers in rural areas that received higher incentives(54).

6.4. Data Reporting and Verification

In countries like Cameroon where RBF has been scaled up to national level, the need to sustain the reform and reduce the cost of verification, prompted them to use local organizations to carry out verification(39,51). Data reporting and verification was overseen by the fund holding agency (39). A PBF portal was also set up to manage and

report project data(39).

Other countries like Benin chose a peer review method of data verification where a team of peers at all levels was strengthened by independent stakeholders as a way of encouraging independence(59). While in Liberia, counter verification was conducted by the Ministry of Health which was also the regulator(60).

6.5. Capacity Building

From the impact evaluation in Cameroon, PBF enhanced opportunities for health workers to use their entrepreneurial skills(51). Many countries also contracted PBF technical advisers to support the implementation of the project at all levels and to strengthen the capacity of the health system. To ensure technical sustainability in Liberia, PBF advisors were contracted to coach and provide on the job trainings for the newly created PBF unit to build their managerial and organizational skills(60).

6.6. Supervision

Supervision serves to ensure that pre-determined targets in a PBF scheme are met and serves as platform for determination of improvement measures upon the condition that it is done in a structured and supportive manner(61,62). At the pilot phase of PBF in Cameroon, supervisory roles were carried out by international NGOs. However, with the national-scale supervisory roles were transferred to the districts and regions and verification & contract management to PPAs to ensure sustainability(51).

In Zimbabwe, although health workers were reportedly motivated by supervisory visits from the District Health Teams (DHTs), the quality of the supervision was reportedly poor(56). Health workers equally reported dissatisfaction with the irregularities in these visits and lack of formal feedbacks from the supervisors(56).

6.7. Political Economy

The introduction of PBF in many Sub-Saharan countries like Benin, Cameroon and Zimbabwe was driven by external actors and followed the same process of engaging stakeholders through workshops and study visits to Rwanda(35,59,63). This resulted from the poor performance of these countries in key health indicators despite the resources invested in their health systems(59,60,63). External actors also proposed PBF to countries whose health systems had been riddled by crises as was seen in Zimbabwe, and Sierra-Leone(35,64).

One of the challenges in Sierra-Leone was that PBF was not on the political agenda of the country, rather it was driven by the donors and policy makers(64). The government was more interested in providing social health insurance than PBF(64). While in Zimbabwe and Benin national stakeholders were opposed to the idea of the project hence the initial lack of national ownership (35,59). The integration of the RBF project in Zimbabwe into the health system was useful in redressing the situation(35).

CHAPTER VII

7. Discussion

7.1. Outcomes of the Study

The findings in this study confirm that the context in which PBF was introduced in Nigeria is like that of many Sub-Saharan African countries. These contextual factors are key challenges to the health system, measured as poor performance in key health indicators and the desire of governments to reform their health sector. The intiation and engagment of policy makers by World Bank actors to adopt PBF approaches is a process that seems to be common to many Sub-Saharan countries. However, such donor-driven projects are sometimes abandoned by the recipient country stakeholders as was seen in Benin where the project was initially believed to be owned by the World Bank with little commitment or ownership from the government.

Several similarities were reported in the design of PBF in Nigeria compared to other Sub-Saharan countries. Components such as increased autonomy, data reporting, verification processes, and the use of state and non-state actors for purchasing of services and project management were similar across different countries(41). However, the institutional framework and separation of the roles of purchaser, fund holders and verification agency were markedly differently in Nigeria compared to other countries.

A separation of the role of verification and purchasing agency is a more efficient and sustainable use of resources as was reported in Cameroon(51). This was not the case in Nigeria where the lack of clear separation of the responsibility of the purchaser from the verifier allowed for possible collusion for fraud between the provider and the verification agency. This was a situation where an exam is set, supervised, and marked by the same person. Such a scenario makes it difficult to trust the results of such process.

A separation of the role of purchaser from fundholder was also seen in Nigeria which was different in countries like Cameroon where the purchaser was also the fundholder which sometimes resulted in delayed payment of performance subsidies. Some of these variations can be attributed to the difference in systems of governance and levels of decision making in different Sub-Saharan countries. Most African countries like Rwanda, Cameroon, run a unitary system of government unlike Nigeria that runs a federal system where each tier of government is independent in administration. Hence the need to replicate institutions at the different levels which is done centrally in the other countries.

7.2. Lessons Learnt from Implementing PBF in Nigeria

PBF programs should be built on existing governance structures and policies to ensure project sustainability. This was a strength for Nigeria as PBF was also a platform to champion the government of Nigeria's commitment to revitalising PHC through the introduction of the PHCUOR policy(47,49). The use of state actors and existing institutions at all levels of implementation was also a distinct advantage that strengthened these institutions and built capacities as was seen in Zambia and Zimbabwe.

According to WHO, one key lesson in implementing PBF programs is that it should be considered as a component of the health system and not an isolated project(65). In Nigeria, though the project was designed to be implemented within existing structures in the health system, it was implemented parallel to other ongoing programs and policies like the free health policy in Ondo State.

The introduction of PBF indicators was good for monitoring project performance but because the indicators were not integrated with the HMIS indicators, it was difficult to align results from the two data sources in the same HF. This resulted in increased burnout among health workers, gave opportunities for data falsifications and made monitoring difficult because of the different lines of reporting. This is one of the challenges of implementing vertical programs as it can lead to wastage of resources. Although the PBF data portal was eventually integrated with the DHIS 2, there should not have been parallel systems for data collection from the same HFs.

The findings from this study suggest that proper placement of the PBF Unit is vital to the success of a PBF scheme as was seen in Cameroon and Zimbabwe. The location of the PIU in the SPHCDA a parastatal of the SMOH equally made it difficult for the SMOH to regulate the activities of the unit can be a major reason for the conflict between both institutions and the limited State ownership of the project. This also suggests a challenge for ensuring sustainability of the project. Additionally, the separation of purchasing agent from fund holders enables prompt payment of subsidies and promotes intersectoral collaboration of line ministries.

Another major requirement for the success of any PBF program identified in literature is dependent on the types of contracts introduced and clarity of roles among implementers(54,66). The introduction of CMVAs and IVAs was a modification from the project design where verification processes were conducted by the purchasing agent. This was a good addition, but it was a challenge that could have been avoided had these been introduced from the start of the project.

A common component of PBF designs are the introduction of sanctions as preventive measures and penalties for fraud. However, the modification of verification and performance payment processes in Ondo State because of overreporting of data and collusion for fraud was a deviation from the generic verification, payment process and sanctions in PBF. The advantage of this process over the regular data audit process is left to be seen.

The modification of performance payments and verification processes in Adamawa State also suggests that some elements of PBF can be adapted to suit different contexts. This is an important lesson learned for other countries.

Data falsification is a major risk for any PBF project because of the financial incentives attached to data reporting(67). The probability that results that never occurred or are subject to inflation and manipulation may be reported is high as was seen in Nigeria(66). The failure of some State governments to provide sufficient resources for running HFs, the delay in payment of staff salaries, and the pressure on health workers to meet set targets further increased the risk of fraud(45). Governments should be aware that performance subsidies are additional resources for the HFs and should not replace the government's spending on health.

Financial incentives do not automatically encourage health workers to perform better as observed in Zambia. This may be because incentives are little compared to staff salaries or because of the informal bottlenecks in getting approval to share the incentives as observed in Cameroon. Studies have shown that improved working conditions, increased autonomy and capacity building motivates health workers to perform better (45,49,68).

Financial incentives also tend to serve as dissatisfiers and are not sustainable on the long run(67). Moreover, the fact that PBF involves financial incentives reveals further the need

for effective supervisory and accountability mechanisms. There is a need for further research if financial incentives are necessary to improve performance of health workers.

While autonomy for HFs is one of the best practices in PBF with positive results from different countries, this study indicates that autonomy must come with accountability to avoid inefficiencies in the health system. The mismanagement of resources by HFs can be linked to poor supervision and inappropriate use of accountability and audits tools.

The introduction of HF-RBF committees at HF level and the use of CBOs for CCSS was an opportunity to strengthen the relationship between the HFs and communities. This was also seen in other thus increasing community participation and ownership in the delivery of health services. It also made the health system more accountable to service users.

Exploring a broader outlook, it will be interesting to explore other sections of the analytical framework such as the impact of the seven components on the utilization of health services and overall health outcomes in Nigeria.

Lastly, from policy formulation to ensuring stability for the success of health programs, the government plays a central role. It is important that decision makers are sensitized on PBF principles like autonomy so that they understand that such projects are not meant to undermine government authority.

7.2.1. Usefulness of the Analytical framework

The framework was useful in structuring the analysis of the PBF design and implementation in the Nigerian context. However, it did not contain core elements of a PBF design like the element of separation of functions. Secondly, findings from this study including the KIIs conducted suggest that the political economy factor in the framework can be considered as connected to all other factors. This could be favourably amended in the framework.

7.3. Conclusion

The implementation of PBF in Nigeria was a gradual process that built on lessons learnt from the pre-pilot phase and subsequent events that occurred after the project was scaled-up. There was a lot of learning by doing which informed some modifications in the project design. The modifications to the project design in Nigeria show that there can be some flexibility in designing or implementing PBF, because the elements serve as guidelines for implementers and should be adapted to the context of each country. They equally reveal the importance of periodic project evaluation to ensure the objectives of the project are being met.

A review of project documents and KIIs conducted as part of this study suggest that the project has positively impacted the performance of the health system of the pilot States by building institutional capacity and improving transparency and accountability to the people and government.

It is important that recipient countries see the project as their own and claim ownership down to the community level as this is important for a successful implementation. Autonomy should be accompanied with measures of accountability to ensure efficient use of resources. Further, early engagement of stakeholders at different levels of government is a necessity for effective institutional capacity building for PBF. Patient involvement in health affairs means that a health system becomes more responsive and proactive to patient needs. As such policy makers in Nigeria can endeavour to improve the already incorporated culture of patient involvement.

Despite the challenges encountered, I think PBF has been instrumental in improving the health system in the pilot States. Incorporating the lessons learnt for subsequent scale-up including considerations for existing government policies, structures, institutions, and country context could lead to improved health sector performance in Nigeria and other countries.

7.4. Limitations of the study

There are several limitations to this study, and it is important to critically examine these and be aware of them. First, literature searches yielded a limited number of peer reviewed articles on the design of PBF in Nigeria. To this end, and due to the author's involvement in PBF in Nigeria, unpublished literature and reports were also included in the study to expand the evidence base and obtain relevant information. My search also yielded limited literature on the role of political economy on PBF interventions in Nigeria, which led me to expand the search to other Sub-Saharan countries. A similar issue was observed in other Sub-Saharan African countries, which posed limitations to the triangulation of findings from several sources and countries.

Secondly, the use of literature only published in English Language may have resulted in the exclusion of important literature especially from other Sub-Saharan countries.

Another key limitation of this study is that due to logistical and time constraints, the researcher could not capture the views of health workers that implemented the project to validate the findings because of the limited time for the study. The validity of this study would greatly improve if these key stakeholders were included in this study.

There was also Recall bias among some of the KIs which was adjusted for using relevant literature. Lastly, the researcher only focused on the PBF component of the NSHIP project because of the limited time for the study. Lastly, the objectivity of the study may have been biased by the researcher's role in the project, however triangulation of findings was done with the KIIs and project documents.

7.5. Recommendations

From the findings of this study, the researcher recommends the following for improvement of implementation processes if PBF will be scaled up to other parts of Nigeria.

7.5.1. Recommendations for Policy and Decision makers (Federal and State Ministry of Health, World Bank)

1. A split in functions should be enforced by separating the role of the purchasing agent from verification agency and from the role of the regulator. This can be ensured if policy Indigenous independent CMVAs are hired to manage all verification processes.
2. Considerations should be given to system of governance in Nigeria and projects should be designed to suit he local context of each state while respecting hierarchies to prevent conflict among implementing partners.
3. PBF-PIU units should be positioned within the State and Federal MOHs for better proximity to funding sources and decision makers.
4. National HMIS data and indicators should be used for data reporting and verification to limit prevent fragmentation and duplication of tasks in data generated from HFs.
5. Donor agencies should require the government of Nigeria or participating states to provide counterpart funding for such programs to encourage government commitment and ownership.
6. There should be intersectoral collaboration between the MOH and Ministry of Finance to develop accountability and auditing tools to ensure efficient use of resources.

7.5.2. Recommendations for further research

8. A qualitative research should be conducted to understand the role of political economic factors in the adoption of PBF in Nigeria and Sub-Saharan region.

9. An expansion of the current study to include health workers' perspective.
10. A qualitative research should be done to compare the impact of PBF and DFF on the Nigerian health system.

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ANNEX 1: Topic guide for Key Informant Interview (KIIs)

Section A: Participants' Information

1. Participant's code:
2. Gender of the participant:
3. Organization of the participant: (Federal/State/TA)
4. Department/unit of participant:
5. Position/title of the participants
6. What role did you play in the design/implementation of PBF in Nigeria?
7. How long were you involved on the project?

Section B: Questions on the knowledge and experience of Key informants on the design and implementation of Performance-based financing in Nigeria.

S/N	Specific Objective	Issues to be discussed	Data collection method	Participants
1	To describe the history and design of PBF in Nigeria.	• History of PBF in Nigeria (how did it emerge on the agenda? what brought about PBF, WHEN? and WHY? criteria for selecting pilot states, types of facilities designed to cover) • PBF in the context of Nigeria • Institutional framework of PBF • How was it designed in terms of the core principles? (what are the key features?) • Stakeholders involved in the design • In your knowledge, in comparison to other sub-Saharan African countries, how is Nigerian PBF same / different	• Interview with key informants	• Donor representatives, • Policy makers (FMOH, SMOH • PBF implementers (PIU, TAs)
2	To examine the implementation, the strengths, and weaknesses of implementing PBF in Nigeria.	• Levels of implementation/Who implemented? Was it implemented according to design/modified? If yes to modified, why? How? Factors responsible for modification. Which principles were modified? Actors involved in modification. • What aspects of PBF are different from other (health financing) programs implemented in the health sector? • In your own opinion, which things went well, and which things could have been done better? • What factors that have supported or hindered the implementation of PBF? • Unintended effects of implementation of PBF (positive/negative) • Political economy (leadership	• Interview with key informants	• Donor representatives, • Policy makers (FMOH, SMOH PBF implementers (PIU, TAs)

		commitment and collaboration, stakeholders support, public policies)		

ANNEX 2: INFORMED CONSENT FORM

Introduction/Aim of research:

My Name is Foyinsola Akinyanmi, a master's student at Royal Tropical Institute. I am conducting my thesis master on Performance based financing project with a focus on how performance based financing (PBF) is operationalized and implemented in Nigeria in comparison to other countries in sub-Saharan Africa in order to identify gaps, best practices and make recommendations for policy makers to consider for improvement or to address challenges.

Interview procedures:

If you agree to be interviewed, the interview will take approximately 1 hour and will be conducted privately to ensure your privacy and confidentiality. I am already in a private place and as a participant you can choose a convenient place to stay for the interview.
I would like to explore the initiation, design, implementation of PBF in Nigeria including challenges and opportunities from implementing the project in Nigeria. The interview will be recorded by taking notes, zoom recording or using a voice recorder for the other interview platforms that do not support recordings like WhatsApp. As a participant, you will be assigned codes to ensure your privacy. The recordings and notes from the interview will be accessible to only the researcher. This data will be stored on a password protected computer and will be destroyed after one year of conducting the research.

Rights, risks, and benefits:

As a participant, you will only be interviewed in your professional capacity and you will only share your professional experience in designing or implementing the PBF project in Nigeria. However, if you at any point in time during the interview, you do not want to respond or disclose or discuss any of the issues raised, you have the right to refuse to answer or to withdraw without giving any justification for refusal. This will have no effect on your reputation, or any other negative consequences.

You may not benefit directly from this research, but your participation will help the government to better implement and integrate PBF if the approach is scaled up to the other states in the country. It will also provide insights into areas where more research is needed to answer these and related questions on PBF and RBF.

Results:

Results will be share with you at the end of research.
Do you have any further question?
Do you need any further clarification?
Do you agree to proceed with the interview? □ Yes □ No

As a participant, you are required to give your verbal consent and to sign the consent form, scan, and send to the researcher by email.

Consent

Statement of person giving consent:

I have read the description and purpose of the research and I understand that my participation is voluntary. Based on the information about the research, I have decided to participate in the study. I understand that I may freely stop being a part of this study at any time and it will have no negative consequences.

DATE: __________ SIGNATURE: _________________

ANNEX 3: DETAILED DIFFERENCE BETWEEN PBF AND DFF

Key Elements	*Characteristic*	*PBF*	*DFF*	*Comment*
Financing	*Maximum amount of funds provided to Health Facility per capita*	*$2*	*$1*	• *PBF: PBF facilities receive maximum **$2 per capita** based on its performance. Of it, $1 would be used for individual bonuses to health workers while the remaining $1 would be for the operational costs.* • *DFF: DFF facilities will receive maximum $1 **per capita** constantly for operational costs regardless of their performance.*
	Funds can be used to provide staff bonuses	*Yes*	*No*	*DFF facilities will not be allowed to use their funds to pay their staff.*
Decentralized governance	*Health Facility RBF Committee*	*Yes*	*No*	• *PBF facilities will have the committees to review the performance of health facilities and advise for improvement and sign checks for expenditures.* • *DFF facilities will not form RBF Facility Committees. They will use the **WDC** as the oversight structure.*
	Autonomy of the Health Facility	*Yes*	*Yes*	*Same amount of autonomy in use of funds, HR function etc. except for bonuses to staff.*
	Bank accounts managed by facility committee	*Yes*	*Yes*	*PBF and DFF facilities will have bank accounts. RBF Facility Committee will cosignatory on the PBF Facility Account. Two signatories from the DFF facility will sign on accounts.*
Planning at health facility	*Development and implementation of business plan*	*Yes*	*No*	• *PBF: **Develop a detailed business plan** (Annex 4(2)) that includes targets, analysis of barriers, and strategies to overcome barriers. Copies of this will be sent to SPHCDA and LGA PHC Department.* • *DFF: Develop a simplified **activity plan** (Annex 4 (2)) that specifies the use of money received (simple input-based table). Copies of this will be sent to SPHCDA and LGA PHC Department.*
	Other PBF tools	*Yes*	*No*	*Only PBF facilities use indice tool (Annex 5) and individual performance evaluation form to enhance individual performance evaluation form to enhance individual motivation and manage finance.*
Recording and Reporting	*Use of standard HMIS forms*	*Yes*	*Yes*	*Required for both PBF and DFF facilities. Same government format will be used*
	Quarterly invoice	*Yes*	*No*	• *PBF: Required **for PBF facilities** (Condition of payment).* • *Data will be extracted from HMIS and recorded every 3 months and*

				*reported to SPHCDA **by LGA** PHC Department through supervisory checklist.*
Verification and Supervision	*Monthly quantity verification by SPHCDA*	*Yes*	*Yes (but lighter)*	• *PBF: TA firm and SPHCDA visit all health facilities monthly to verify quantity of services and provide detailed coaching on performance improvement.* • *DFF: Only SPHCDA visits sampled facilities every 6 months to verify quantity reported by LGA PHC Department.*
	Quarterly quality supervision by LGA PHC Department	*Yes*	*Yes*	*LGA staff will receive bonuses by conducting quality assessment for both RBF and DFF facilities.* *PBF-specific items will be replaced from the checklist for DFF facilities (e.g., business plan, indice tool, RBF committee).*
	3rd party verification of quantity	*Yes*	*No*	• *PBF: TA firm will hire CSO to visit households to verify existence of patients for both PBF and DFF facilities to avoid over-reporting.* • *DFF: SPHCDA will check the existence for patients randomly selected patients every 6 months.*
	3rd party verification of quantity	*Yes*	*No*	• *TA firm ensures conduct of independent quality assessments (e.g., use of mobile survey) for RBF facilities only.*
Technical Assistance	*1) Use of PBF process and tools* *2) Problem solving to improve service uptake and quality* *3) FM, waste management, drug management, reporting*	*Yes*	*No (Yes only for 3)*	• *TA firm will help PBF facilities use business plan, indice tool and health worker performance framework effectively. It will also advise on FM, waste management, drug management, reporting, HF RBF committee* • *DFF facilities will not receive PBF related TA summarized in 1) and 2). The can receive general TA summarized in 3).*

Source: (25)

ANNEX 4: MONTHLY PROVISORY INVOICE

Provisory Monthly Invoice for MPA Services

LGA: **Month:**
Health Center: **Year:**

Service		Quantity Produced	Quantity Verified	Unit Fee	Sub-Total Naira
1	New outpatient consultation			126.08	
2	New outpatient consultation for an indigent patient			1,260.84	
3	Minor Surgery			1,260.84	
4	Referred patient arrived at the Cottage Hospital			1,260.84	
5	Completely vaccinated Child			1,891.26	
6	Growth monitoring visit Child			189.13	
7	2-5 Tetanus Vaccination of Pregnant Women			252.17	
8	Postnatal consultation			504.34	
9	First ANC visit before 4 months pregnancy			630.42	
10	ANC standard visit (2-4)			378.25	
11	Second dose of SP provided to a pregnant woman			630.42	
12	Institutional delivery			6,304.20	
13	FP: total of new and existing users of modern FP methods			1,260.84	
14	FP: implants and IUDs			1,891.26	
15	VCT/PMTCT/PIT test			126.08	
16	PMTCT: HIV+ mothers and children born to are treated according protocol			5,043.36	
17	STD treated			1,260.84	
18	New AFB+PTB patient			9,456.30	
19	PTB patient completed treatment and cured			25,216.80	
20	Household visit per protocol			378.25	
	Grand Total for the month				

The current invoice for the month of ……………..of ………………………………………. Health Centre is totalled at [……………………………………………………………….] Naira.

Date ……………………………….

Health Centre RBF Committee Members: The HC in charge:

1. ………………………………………………
2. ………………………………………………
3. ………………………………………………
4. ……………………………………………… The Verifier:

Source:(33)

Provisory Monthly Invoice for CPA Services

LGA: **Month:**
HOSPITAL: **Year:**

	Service	**Quantity Produced**	**Quantity Verified**	**Unit Fee**	**Sub-Total Naira**
1	New Curative Consultation by a Doctor			632	
2	New outpatient consultation by a Doctor of an indigent			3,160	
3	Counter-referral slip arrived at the Health Centre			1,264	
4	Minor Surgery			2,528	
5	Major Surgery (ex CS)			15,800	
6	Institutional Delivery (Normal)			5,056	
7	Institutional Delivery (Assisted)			8,216	
8	CS			11,376	
9	Inpatient Day			1,896	
10	Postnatal consultation			1,264	
11	First ANC consultation before 4 months pregnancy			1,896	
12	ANC standard visit (2-4)			1,264	
13	FP: total of new and existing users of modern FP methods			1,264	
14	FP: implants and IUDs			4,424	
15	FP: vasectomy and bilateral tuba ligation			5,056	
16	VCT/PMTCT/PIT test			632	
17	PMTCT: HIV+ pregnant mothers and children born to are treated according to protocol			6,320	
18	STD treated			1,264	
19	New Client put under ARV treatment			3,160	
20	New AAFB+ PTB patient			9,480	
21	PTB patient completed treatment and cured			25,280	
	Grand Total for the month				

The current invoice for the month of …………… of ………………………..hospital is totaled at […………………] Naira

Date………….

Names of the members of the Hospital Governing Board

The MO in charge:

1………………………………………….
2………………………………………….
3………………………………………….
4………………………………………….
5………………………………………….

The Verifier:

Source:(33)

ANNEX 5: SAMPLE OF CONSOLIDATED INVOICE

FEDERAL REPUBLIC OF NIGERIA

SPHCDA/NPHCDA

CONSOLIDATED QUARTERLY INVOICE

LGA: Gombe

Period: Quarter III

YEAR: 2018

S/N	Health Facility	July	August	September	Quarterly Total	LGA Quality score	Due amount	Quality Counter Verification score (IVA)	% Point difference	% Retention	Amount retained	Quantity Counter Verification (CCSS by IVA): % Untraceable Clients	% Retention	Amount retained	Net Total Amount to be paid
1	Bolari PHCC	2,626,077	2,841,587	2,665,160	8,132,824	78.8%	6,410,165	80.4%	1.6%	0%	0	0.0%	0%	0	**6,410,165**
2	Doma Hospital	1,158,416	547,462	705,035	2,410,913	74.5%	1,796,026					5.0%	0%	0	**1,796,026**
3	Family Support Clinic	3,223,556	3,149,253	3,052,472	9,425,281	52.9%	4,984,262	50.0%	-2.9%	0%	0	25.0%	50%	2,492,131	**2,492,131**
4	Gabukka PHC	977,290	828,880	1,199,829	3,005,999	59.8%	1,797,587	69.0%	9.2%	0%	0	0.0%	0%	0	**1,797,587**
5	Herwagana PHCC	1,357,172	1,707,206	1,283,552	4,347,930	48.7%	2,117,580					2.5%	0%	0	**2,117,580**
6	Kagarawal PHC	974,048	935,937	1,181,691	3,091,676	60.4%	1,866,588					5.0%	0%	0	**1,866,588**
7	Kasuwan Mata PHC	1,450,272	1,361,343	1,133,389	3,945,004	67.6%	2,666,004	74.5%	6.9%	0%	0	0.0%	0%	0	**2,666,004**
8	Kumbiya-Kumbiya PHCC	2,689,066	3,301,808	3,187,901	9,178,775	74.4%	6,829,009					0.0%	0%	0	**6,829,009**
9	London Mai Dorawa PHC	1,223,278	1,697,990	1,283,551	4,204,819	78.4%	3,295,996					0.0%	0%	0	**3,295,996**
10	Madaki PHCC	2,966,535	2,587,863	3,338,719	8,893,117	69.7%	6,202,116					2.5%	0%	0	**6,202,116**
11	Malam Inna PHC	949,428	1,118,022	1,055,187	3,122,637	60.4%	1,885,281					0.0%	0%	0	**1,885,281**
12	Metro Consultant HC	83,268	0	231324	314,592	43.4%	136,444					0.0%	0%	0	**136,444**
13	Musaba Hospital	667,467	493,390	666,332	1,827,189	32.7%	597,654					37.5%	50%	298,827	**298,827**
14	Nasarawo PHCC	2,157,880	3,496,678	3,430,465	9,085,023	63.8%	5,799,229	70.5%	6.6%	0%	0	0.0%	0%	0	**5,799,229**
15	Pantami PHCC	5,495,934	6,297,122	6,804,450	18,597,506	72.6%	13,505,970	78.4%	5.8%	0%	0	0.0%	0%	0	**13,505,970**
16	Sabana Specialist Hospital	1,618,748	1,484,869	1,552,110	4,655,727	75.5%	3,515,275	76.7%	1.2%	0%	0	5.0%	0%	0	**3,515,275**
17	Sunnah Hospital	1,086,423	1,115,267	1,639,279	3,840,969	57.9%	2,223,921	54.0%	-3.9%	0%	0	2.5%	0%	0	**2,223,921**
18	Town Maternity Clinic	5,093,476	5,693,768	4,661,852	15,449,096	86.6%	13,378,828	89.2%	2.6%	0%	0	2.5%	0%	0	**13,378,828**
19	Tudun Wada PHCC	3,088,076	3,929,002	3,043,924	10,061,002	76.1%	7,654,480	82.4%	6.3%	0%	0	5.0%	0%	0	**7,654,480**
20	Yarma Memorial Hospital	0	0	0	0	0.0	0					0.0%	0%	0	**0**
21	State Specialist Hospital	992,159	3,039,738	7,217,186	11,249,083	64.2%	7,223,725	56.9%	-7.4%	0%	0	22.5%	50%	3,611,862	**3,611,862**
	TOTAL/AVERAGE	**39,878,569**	**45,627,185**	**49,333,408**	**134,839,162**		**93,886,141**				**0**			**6,402,821**	**87,483,321**

Total amount in letters: Eighty seven million, four hundred and eighty three thousand, three hundred and twenty one Naira.

....

Name: **Name:**

Chairman PBF Steering Committee **SPHCDA Verifier**

Source: (41)