Strategic Health Purchasing in Nigeria: Investigating Governance and Institutional Capacities within Federal Tax-Funded Health Schemes and the Formal Sector Social Health Insurance Programme

Uchenna Ezenwaka, Agnes Gatome-Munyu, Chikezie Nwankwo, Nkechi Olalere, Nneka Orji, Uchenna Ewelike, Benjamin Uzochukwu, and Obinna Onwujeke

*Health Policy Research Group, College of Medicine, University of Nigeria Enugu Campus, Enugu, Nigeria; †Department of Health Administration and Management, Faculty of Health Sciences and Technology, University of Nigeria Enugu Campus, Nigeria; ‡Department of Health Portfolio, Results for Development, Kenya; §Department of Planning Research and Statistics, Federal Ministry of Health, Abuja, Nigeria; ‡Department of Informal Sector, National Health Insurance Scheme (NHIS), Abuja, Nigeria

ABSTRACT
For Nigeria to make progress on its commitment to universal health coverage, additional public funding will be required. But more resources alone will not be enough. Government health spending must be more efficient and effective, through more strategic purchasing—a critical policy tool. Studies on health purchasing in Nigeria’s health financing schemes are limited, however. This study examines the purchasing arrangements in schemes funded by the federal budget and in the Formal Sector Social Health Insurance Programme (FSSHIP) within the National Health Insurance Scheme. We adopted a qualitative, descriptive case-study approach and collected data through document reviews and key informant interviews based on the Strategic Health Purchasing Progress Tracking Framework. Our analysis used a thematic framework approach. Our findings reveal that legal frameworks and governance structures for strategic purchasing are in place for both schemes. Steps toward strategic purchasing are more advanced in FSSHIP, particularly in the design of benefit packages, accreditation and monitoring of health maintenance organizations (HMOs) and providers, and provider payment mechanisms. The limited share of health funding flowing through these mechanisms, and further fragmentation of that funding, impede strategic purchasing. Strategic purchasing is also hampered by weak regulation and monitoring of providers and purchasers, delays in provider payment, and corrupt practices by HMOs. Improving strategic purchasing in Nigeria will require a concerted effort to reduce fragmentation of health spending, significant investment in human resources, technical know-how, and information systems of purchasing institutions, and actions to improve the accountability of all actors in the system.

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Introduction
The government of Nigeria has committed to ensuring access to affordable health services for the entire population through its health legislation and policies. The 2014 National Health Act, which asserts the right of citizens to a basic minimum package of health services, established the legislative framework for universal health coverage (UHC). The act also guarantees federal funding for health through the Basic Healthcare Provision Fund (BHCPF) and places responsibility for financing and delivering primary health care (PHC) on state governments.

A series of health financing policies call for achieving more value for money by purchasing high-impact, cost-effective services that are essential for achieving the health-related Sustainable Development Goals (SDGs) and national priorities. Nonetheless, government spending on health remains low in Nigeria, making up only 16% of current health expenditure and 0.5% of the country’s gross domestic product (GDP). Out-of-pocket spending constitutes 71% of current health expenditure, while only 29% of current health expenditure is pooled—in a set of highly fragmented health financing schemes. For Nigeria to make progress toward UHC, additional public funding will be required. But more resources alone will not be enough. Government health spending must become more efficient and effective, by making better use of strategic health purchasing—a critical policy tool.

Purchasing of health services—the transferring of pooled funds to health providers—is one health financing function of health systems. It involves making
decisions on behalf of the population on which services to purchase, from whom, and how, and it is a key aspect of making progress toward UHC.\textsuperscript{7,8} To achieve the goals of UHC, the World Health Organization (WHO) in 2000 recommended adopting strategic health purchasing as a tool for improving health system performance and service delivery quality, ensuring fairness in the allocation of funds, expanding access to health care services, and increasing health system responsiveness.\textsuperscript{4,8} Strategic purchasing is a goal-driven, evidence-based process of allocating funds to providers for high-quality and responsive health services delivered equitably and efficiently.\textsuperscript{4,9,10}

More strategic purchasing of health services is crucial if countries are to make significant progress toward UHC,\textsuperscript{8} and many countries aim to make progress in this area.\textsuperscript{11} Over the past 20 years, several countries have made progress toward UHC through more strategic health purchasing,\textsuperscript{6} including Thailand, the Philippines, Argentina, Turkey, and Ghana.\textsuperscript{12-16} In Nigeria, however, as in many other low- and middle-income countries, progress in implementing strategic purchasing has been limited by governance, institutional capacity, health system, and political challenges, along with other technical factors that affect purchasing functions.\textsuperscript{17}

Information on the purchasing function within Nigeria’s health financing schemes is limited. A better understanding of the purchasing arrangements and the governance and institutional capacities of the schemes can inform policies that help make more effective use of strategic purchasing. This study examines how governance and institutional capacity influence purchasing functions within two of Nigeria’s health financing arrangements: financing through tax-funded annual federal government budgets and through the Formal Sector Social Health Insurance Programme (FSSHIP) within the National Health Insurance Scheme (NHIS). Our study also highlights gaps in the implementation of purchasing functions that impede more strategic purchasing and progress toward UHC.

**Nigeria’s Health Financing Context**

In Nigeria, health financing is low per capita and is highly fragmented, with less than 15% of total health spending pooled in the numerous public health financing schemes at the national and state levels.\textsuperscript{18} The two key financing mechanisms at the national level are federal government budget financing and FSSHIP. The government allocates health budgets annually through the Federal Ministry of Health (FMOH), Federal Ministry of Finance (FMOP), and agencies that support the purchasing of services. An annual indicative envelope is sent by the Ministry of Budget and Economic Planning (MOBEP) through the budget department to the FMOH. The FMOH then distributes this budget to its departments, agencies, and parastatals (DAPs) and carries out monitoring of all the entities involved in purchasing services. The DAPs include the National Agency for Food and Drug Administration and Control, the Nigeria Center for Disease Control, and the National Agency for the Control of AIDS.

Government budget funding at the national level is mainly channeled through the BHCPF, which was established by the 2014 National Health Act and specifies an earmark of 1% of consolidated federal revenue for PHC. Half of the fund is directed to NHIS, and 45% is disbursed by the National Primary Health Care Development Agency for essential drugs, maintenance of PHC facilities, equipment and transportation, and strengthening of human resource capacity. The final 5% is for the FMOH to respond to health emergencies and epidemics.\textsuperscript{19} State and local governments also contribute general revenue to finance the delivery of health services.

FSSHIP was established in 2005 to provide health insurance coverage for formal-sector employees.\textsuperscript{20} Employers contribute the equivalent of 10% of the employee’s basic monthly consolidated salary, and employees have 5% deducted from their earnings. Beneficiaries include all public-sector employees and their dependents (a spouse and up to four children under age 18), who automatically qualify to access health care services in NHIS-accredited facilities.\textsuperscript{21}

**Methods**

**Conceptual Framework**

This study uses the Strategic Health Purchasing Progress Tracking Framework created by the Strategic Purchasing Africa Resource Center (SPARC) and its technical partners to understand the health purchasing arrangements for federal budget financing and FSSHIP (Figure 1). The framework identifies purchasing functions—benefits specification, contracting arrangements, provider payment, and performance monitoring—that are supported by governance arrangements and institutional capacity. External factors such as the share of the population covered, market structure of providers, and public financial management rules enhance or limit the capacity of the purchaser to be strategic. When purchasing functions are well designed and implemented, the purchaser can create levers that improve resource allocation, provider incentives, and accountability, leading to improvements in health system results and progress toward UHC. The framework is explained in detail by Cashin et al.\textsuperscript{22}
**Study Design and Setting**

The study adopted a qualitative, descriptive case-study approach, combining document reviews and key informant interviews to gain a comprehensive understanding of core areas of health purchasing under the two main health financing arrangements in Nigeria. The study was undertaken in Abuja, the capital of Nigeria and the country’s administrative and political center, where most federal-level health financing decisions and coordination occur.

**Data Collection**

Data were collected by a team of health systems researchers between October 2019 and June 2020, through a review of relevant documents (gray and peer-reviewed journal articles) and key informant interviews. The document review extracted information on the status of the two main health financing mechanisms—federal government budget financing and FSSHIP—and their contributions to achieving health system goals in Nigeria. The document review consisted of a scoping review of scientific literature because of the paucity of analytical reviews of health purchasing in Nigeria. Our review was based on the York methodology, which includes five stages: identifying the research question; identifying relevant studies; selecting the studies for review; charting the data; and collating, summarizing, and reporting results (1).

We searched the main health and medical databases—Scopus, MEDLINE, Science Citation Index, Directory of Open Access Journals, Supplementary Index, and ScienceDirect—for peer-reviewed articles published in English between 2010 and 2020, using the following Boolean search terms: health purchasing, strategic health purchasing, formal sector social health insurance scheme, government tax health funding, capacity for SHP, service delivery, governance, health systems performance, and Nigeria. We included only studies that focused on purchasing arrangements in financing schemes in Nigeria. The exclusion criteria included duplicate studies, articles not related to Nigeria, and articles whose themes were not pertinent to either or both financing mechanisms. (See Figure 2.)

The eligibility of gray literature for inclusion was determined by a quick scan of the titles, summaries/abstracts, and lead paragraphs to discern their relevance to strategic purchasing, including coordination and monitoring of the federal government budget financing and FSSHIP schemes. The gray literature included documents sourced from the National Health Insurance Agency and the FMOH, such as reports on program and review meetings,
implementation/operational guidelines, budget and expenditure reports, expenditure frameworks, and the National Strategic Health Development Plan.

Data from the document review were extracted by a researcher, and extraction forms were double-checked by another researcher. Discrepancies in inclusions and/or data extraction were resolved by consensus. A total of 20 documents (five eligible peer-reviewed articles and 15 gray) were reviewed and included in the study.

The study team selected key informants (n = 6) from relevant organizations based on their roles in day-to-day policy or decision making and their experience across levels of health care, government, and health financing in Nigeria. These informants included NHIS directors and zonal coordinators, the director of planning research and statistics and the health financing officer in the FMOH, and HMOs.

The team used a standardized Microsoft Excel–based template for document review developed by SPARC in English to extract information from the relevant documents and the key informants. The four key domains of the framework/template include: (1) External factors and governance arrangements that directly or indirectly influence purchasing organizational arrangements—including the regulatory environment, the purchasing market, and management systems; (2) Purchasing functions executed through the purchasing arrangements—the benefit package and service delivery standards, the contracting process, provider payment, and provider monitoring; (3) Other institutional capacities that support the purchasing functions and other health system building blocks, including the health management information system; and (4) Results and intermediate outcomes affected by the purchasing organizational arrangements, including the effectiveness of resource allocation, the appropriateness of incentives, provider accountability, and progress on service delivery results and health system outcomes such as equity, access, quality, financial protection, and financial sustainability.

However, as a descriptive study, this study focused primarily on the first three domains of the framework.

The template was sent via e-mail to the key informants to populate (given the limitations imposed by the COVID-19 pandemic and resulting travel restrictions). The key informants populated the template and returned it via e-mail. Both the document review template and the key informant template reflect the themes and topics in the Strategic Health Purchasing Progress Tracking Framework. The data extraction template is included as supplementary material to this article (Appendix A).

Data Analysis

We collated, summarized, and synthesized the extracted data using a manual thematic framework analysis approach,23 which allowed for systematic organization and analysis. We used both deductive and inductive coding strategies. We deductively developed the main themes and aligned them with the domains of the SPARC framework. We generated inductive codes to reflect the governance arrangements and purchasing functions of the two financing arrangements, given our familiarity with the data, and assigned codes to the themes. The data were coded by two independent researchers, who resolved inconsistencies by consensus. The main coding themes

Figure 2. Flowchart showing the process of article selection.
were 1) governance arrangements, including the mandate and autonomy of purchasers and public financial management, and 2) purchasing functions—the benefit package, contracting arrangements, provider payment, and performance monitoring.

**Results**

The results of the study are organized by the domains laid out in the Strategic Health Purchasing Progress Tracking Framework and are summarized in **Table 1**.

**Governance Arrangements**

**Federal Government Budget Financing**

The 2014 National Health Act granted the minister of health strategic leadership and stewardship over the health system, with support from top ministry leaders and DAPs. It also established the National Council on Health as the highest policy-making body.\(^{24}\) The FMOH is responsible for developing policies, strategies, guidelines, plans, and programs that provide overall direction for the national health care delivery system. The FMOH and MOBEP play a large role in budgeting, provider payment, and monitoring and accountability functions. The annual Appropriation Act of the National Assembly approves the health sector budget.\(^{24}\) Each level of government (national, state, and municipal) regulates and coordinates health services at that level.

The schemes funded by the federal budget use a combination of administrative, economic, and program-based budgeting. Despite the existence of Nigeria’s Medium-Term Sector Strategy, Medium-Term Expenditure Framework, and National Strategic Health Development Plan, health sector and subsector targets are based on historical expenditure. Public procurement laws limit provider payment to input-based payment, which does not give providers incentive to improve productivity or quality of care.\(^{25}\)

Upon budget approval, the FMOH transfers resources to its DAPs based on historical expenditure. This can lead to budget deficits and the need for supplementary budgets.

The FMOH, through its DAPs, directly or indirectly carries out purchasing, benefits specification, provider payment, and monitoring functions. The schemes funded by the federal budget are expected to cover service provision (based on the defined benefit package) for the whole population, but what is meant by effective coverage of services is not specified.\(^{8}\)

Schemes funded by the federal budget have multiple purchasers at the national, state, and municipal levels due to decentralized governance and complexities within the health system. States have autonomy to define their benefit packages and provider payment systems based on their local epidemiological situation and fiscal space. The same government institutions purchase and provide services at the local level, so there is no purchaser-provider split, and roles and responsibilities are not clearly defined. Capacity and human resources for evidence-based budgeting and purchasing are also lacking.\(^{6}\)

The high degree of decentralization of health financing leads to duplication in purchasing functions. Reform efforts such as the BHCPF aim to stem duplication and improve technical and allocative efficiency in health purchasing.\(^{b}\) Nevertheless, a high degree of fragmentation and duplication in purchasing functions persists, as discussed in detail in the upcoming sections.

**FSSHIP**

FSSHIP is one of several schemes managed by NHIS. The government of Nigeria, under Act 35, established NHIS in 1999 as a corporate body to provide affordable health care to Nigerians.\(^{21,24}\) NHIS was established by the 2014 National Health Act and the National Health Insurance Scheme Operational Guidelines (2012). NHIS is governed by a governing council, which includes statutory members, including the executive secretary, who leads the NHIS management team. NHIS reports to the FMOH through its governing council and has autonomy to liaise with the FMOH and the Budget Office on issues of budgets and appropriations. NHIS contracts with HMOs, who as intermediaries carry out several purchasing functions, including contracting with and paying providers to deliver covered services.

The lines of accountability are clear: NHIS holds periodic meetings of state insurance stakeholders, health care providers and HMOs send feedback to NHIS quarterly, and beneficiaries provide feedback to NHIS or HMOs through enrollee satisfaction surveys and/or enrollee forums and patient surveys. A grievance resolution mechanism is available to resolve complaints from stakeholders.\(^{19,a}\) A structure is in place for annual financial reporting to the FMOH.

Under FSSHIP, NHIS has the mandate to regulate the activities of HMOs (as third-party administrators and as a purchaser) and providers, set guidelines and standards, set premium and provider rates, accredit HMOs and providers, determine benefit packages, and monitor performance and quality. HMOs contract with and pay providers.\(^{19}\)

However, NHIS faces governance challenges that hinder effective purchasing, including a high level of political interference that results in frequent changes in
management (including the executive secretary) and government interference with agency funds and decision-making powers.\(^a\)

NHIS has expanded its operational capacity over the years, but it continues to have capacity gaps that affect purchasing, including limited oversight over HMOs, weak provider monitoring, and lack of information systems for evidence-based decision making.\(^b\)\(^c\)\(^d\) There are gaps in health insurance expertise and insufficient human resources due to staff attrition from transfers and retirements. Furthermore, NHIS and HMOs have conflicts of interest because HMOs must be represented on the governing council as prescribed in the NHIS Act.\(^26\) HMOs are also regarded in some cases as a source of corruption; some HMO staff have colluded with providers to defraud the system for personal enrichment, among other unhealthy practices.\(^26\)\(^27\)

According to the key informants, the annual NHIS budget for FSSHIP is based on the number of people covered and administrative fees.\(^a\) Providers have some autonomy in managing funds they receive from the scheme. Private facilities have more autonomy than public facilities, which need to seek approval to use FSSHIP revenue. However, public tertiary hospitals have more autonomy than lower-level facilities; they can recruit staff and make decisions on how to use their funds (because of professional specializations, unionism, and the high level of health worker autonomy).\(^b\)

### Table 1. Purchasing functions in Nigeria’s main health financing arrangements.

| Function                              | Federal Government Budget Financing | Formal Sector Social Health Insurance Programme (FSSHIP) |
|---------------------------------------|-------------------------------------|-------------------------------------------------------|
| **Main Purchaser(s)**                 | Federal Ministry of Health (FMOH)  | National Health Insurance Scheme (NHIS), through intermediary health maintenance organizations (HMOs) |
| **Governance**                        | National Primary Health Care Development Agency (NPHCDA) | NHIS, established in 1999 by an act of parliament, has a governing council that oversees NHIS management, which is led by the chief executive officer, NHIS has authority over purchasing functions. HMOs contract with and pay providers on behalf of NHIS. Private facilities have financial autonomy. Public facilities have some financial autonomy over the use of NHIS funds, according to FMOF guidelines on the use of public funds. Budgets are set by NHIS management based on membership and projected revenue. Overruns occur, and additional budget must be approved by the NHIS governing council. |
| **Financial Management**              | The Federal Ministry of Finance (FMOF) and Ministry of Budget and Economic Planning (MOBEP) allocate resources to FMOH and its departments and agencies, NPHCDA, and states and local governments. FMOH is responsible for policy direction and federal-level facilities. NPHCDA is responsible for PHC service delivery. Health facilities have limited financial autonomy over the use of these funds, according to FMOF guidelines on the use of public funds. | MOBEP provides a budgetary envelope for planning and budgeting to FMOH, which then allocates the budgets to respective departments based on the budget envelope and the Medium-Term Expenditure Framework. Budgets are approved by the National Assembly. Budget overruns occur and may be corrected using supplementary budgets approved by the National Assembly. An explicit, costed benefit package includes approved services and drug tariffs for primary, secondary, and tertiary care. NHIS defines the cost-sharing policy for health services and medicines for beneficiaries. |
| **Benefits Specification**            | No explicit benefit package except for disease-control programs and donor-funded programs, which have explicit benefit packages. | An explicit, costed benefit package includes approved services and drug tariffs for primary, secondary, and tertiary care. NHIS defines the cost-sharing policy for health services and medicines for beneficiaries. |
| **Contracting Arrangements**          | Schemes mostly have loose agreements with public providers and selective contracting with private providers. | NHIS accredits health facilities. HMOs contract selectively with providers on behalf of NHIS. |
| **Provider Payment**                  | Input-based line-item budgets | Capitation and fee-for-service Accreditation processes (NHIS) and supervision visits (NHIS and HMOs) |
| **Performance Monitoring**            | Monthly facility activity reporting on DHIS2; ad hoc supervision visits | |

* 2017 National Health Accounts

### Purchasing Functions

### Benefits Specification

### Federal Government Budget Financing

The FMOH defines all the minimum packages of health care services; the national drug list provided by the Department of Food and Drugs Services in the FMOH sets standards for the drugs to be purchased.\(^21\)\(^24\)\(^28\)\(^29\) However, the packages differ in the diseases or patient groups covered, and there is no systematic process for reviewing the minimum service packages, resulting in fragmented and inadequate service coverage. Furthermore, the packages do not specify any cost-sharing arrangements or limits, so providers charge user fees for services.

### FSSHIP

FSSHIP has an explicit benefit package with gatekeeping and well-defined referral systems.\(^21\)\(^24\) NHIS has mechanisms in place to determine members’ health needs, using quantitative and qualitative needs assessment, as well as measures to raise awareness of benefit entitlements and allow choice of provider. NHIS further specifies the benefit package through treatment protocols for providers,
including a generic drug list that is periodically reviewed by the NHIS drug committee. Cost-sharing policies for medications are also well defined.\textsuperscript{21}

The process for reviewing the benefit package and the data or evidence that informs this process are not well defined, however.\textsuperscript{9} Constraints on implementing the FSSHIP benefit package include poor member engagement practices among HMOs. An increasing rate of denial of referrals by HMOs and resulting complaints from members pushed NHIS to mandate that HMOs notify both providers and NHIS of all denied referrals, to prevent unnecessary denials.\textsuperscript{30} Furthermore, despite the drug list, some providers still dispense branded drugs,\textsuperscript{b} and essential drugs may be out of stock in public hospitals due to poor monitoring and weak or nonexistent enforcement of guidelines.\textsuperscript{36}

\textbf{Contracting Arrangements}

\textbf{Federal Government Budget Financing}

These schemes lack explicit contracting arrangements and accreditation guidelines, although the FMOH Department of Medical Services sets minimum requirements for establishing public and private facilities. There is evidence of geographic (rural-urban) and socioeconomic disparities in the distribution, number, mix, and level of qualified health staff, particularly at public facilities, as well as stockouts of drugs and higher user fees,\textsuperscript{19, a} which hamper service coverage and access.

\textbf{FSSHIP}

NHIS contracts with public and private providers (through HMOs) that meet specific criteria for different levels of care. The assessment process includes applications and screening, accreditation visits by an NHIS team, two-year provisional accreditation, and two compulsory quality assurance visits within the provisional accreditation period. Full accreditation is given to facilities that meet quality standards. After a provider is accredited, HMOs can negotiate service agreements with the provider on behalf of their members.\textsuperscript{21, b}

Providers that do not meet personnel and facility requirements are denied a contract. Contracts are terminated if gross violations occur, such as discrimination or refusal to treat members and their dependents after capitation prepayment is received from the HMO. Other violations may include demanding payment of informal charges, not maintaining operating times as set out in the contract, or not following NHIS operational guidelines.\textsuperscript{21} NHIS struggles to supervise and monitor all HMOs and providers because many cases of denial of service still happen, as do some corrupt practices,\textsuperscript{c} and some private providers are unable to retain the appropriate number and level of qualified health staff.\textsuperscript{b}

\textbf{Provider Payment}

\textbf{Federal Government Budget Financing}

The FMOH allocates and transfers funds to public providers through input-based budgets. The recurrent budget covers salaries, overhead, consumables, and medical supplies.\textsuperscript{31} Patients are charged user fees for services and medicines, which provides supplemental revenue for public providers. Budget approval and release is often delayed, which can lead to delays in funds reaching providers. Other challenges with budget funding include low political will to sustain free services, poor governance, embezzlement of funds, and other corrupt practices.\textsuperscript{30, a}

\textbf{FSSHIP}

NHIS determines provider payment methods and rates through actuarial studies based on the benefit package and the NHIS contribution rate.\textsuperscript{21, b} The most recent actuarial study was done more than a decade ago and is outdated. The payment methods used are capitation for primary care services and fee-for-service for specialized care. Capitation is prepaid to providers monthly, while fee-for-service is paid based on the volume of services after they are delivered. Medicines are included in the capitation payment, but some medicines are paid through fee-for-service, as defined in the medicines list,\textsuperscript{21} and there is cost sharing for medicines. Hospitals are paid a per diem rate for each inpatient stay.

Claims processing is mainly paper based and is laborious and fraught with delays. Some HMOs have started deploying real-time electronic payment to reduce the administrative burden.\textsuperscript{b} Most providers are not satisfied with the payment rates, which they believe do not cover the costs of care, and this negatively affects the quality of services offered to members.\textsuperscript{30} This can lead to under provision of services with capitation payment because providers are generally reluctant to offer services that may exceed the capitation amount, even if those services are judged to be in the best interest of members.\textsuperscript{3} Meanwhile, the resources from FSSHIP under NHIS have led to some improvements in providers’ physical infrastructure and staffing.\textsuperscript{12}

\textbf{Performance Monitoring}

\textbf{Federal Government Budget Financing}

A coordinated process for performance monitoring is lacking in the schemes funded through the federal budget, and each level of government has its own mechanism for monitoring. For example, the FMOH has a monitoring team
under its Department of Hospital Services, and its Department of Planning Research and Statistics conducts hospital visits. Each hospital also has internal monitoring mechanisms. But no formal structures are in place to support decision making or actions based on performance monitoring.

**FSSHIP**

Monitoring of provider and system performance has received the least attention from NHIS of any of the purchasing functions. NHIS and HMOs monitor provider performance through quarterly onsite inspection of facilities. A report is sent to the NHIS head office for analysis and for decision making regarding allocation of members, quality assurance, and provider payment. Secondary performance assessments are done by HMOs using both qualitative and quantitative methods at the facility level. Other routine facility-level monitoring activities include rapid-response inspection of facilities for quality assurance if irregularities are reported and reaccreditation visits for providers and HMOs.

Despite these routine performance monitoring activities, NHIS lacks well-defined and systematic approaches to carrying out performance monitoring and using performance information for decision making. NHIS uses quarterly meetings with providers, HMOs, and members to understand system performance issues, but it is unclear how consistently these quarterly meetings are held and whether they lead to action. Furthermore, performance information is not linked to payment decisions. Leakages also occur in the system, revealing lack of accountability and possible misconduct among HMOs. A clear hindrance to effective monitoring is the lack of automated data and information systems for purchasers to systematically track performance.

**Discussion**

This study has revealed that the schemes funded through the federal budget and FSSHIP have relatively clear governance arrangements and a mandate for strategic purchasing of services. Steps toward strategic purchasing are more advanced in FSSHIP, with more strategic approaches to designing benefit packages, accrediting and monitoring HMOs and providers, and defining provider payment mechanisms. However, several factors undermine the effective implementation of strategic health purchasing in Nigeria and limit its impact in advancing UHC goals. Several of these challenges have been reported elsewhere.

The main challenge is the very limited share of health funding that flows through government financing mechanisms, along with further fragmentation of that funding within government health financing arrangements. The fragmentation of benefit packages across various programs also limits strategic purchasing and contributes to inefficiencies in resource allocation and service utilization. The multiple funding flows to providers and provider payment systems can lead to cost shifting, in which providers favor schemes whose payment mechanisms are most advantageous to them. Provider payment with clear incentives should be aligned across all schemes, with the goal of improving the efficiency and quality of health services. Our findings align with a previous study that called for coherent incentives to providers that encourage optimal performance and efficiency.

The failure of HMOs and providers to comply with all contractual agreements leads to poor service quality. Evidence shows that delays in approval and payment of vetted claims to providers by HMOs result in irregularities in provider behavior, such as the shifting of patients from one provider to another. Line-item budget payment under federal budget financing is reportedly highly inefficient and does not lead to adequate service coverage or quality of care. Furthermore, the incentives embedded in fee-for-service payment could encourage high-intensity care that is not necessarily of high quality, while capitation payment may encourage service rationing and patient shifting. The input-based budgeting in federal government budget schemes provides even less incentive to providers to improve performance or quality of care.

Weak or nonexistent monitoring of purchasing activities and service provision further inhibit strategic purchasing under both financing arrangements, which do not link provider performance to payment or other health care purchasing decisions. Our findings highlight poor use of data from information systems for purchasing decisions under both financing arrangements, which leads to inefficient allocation of resources and waste. This aligns with a previous study that found that data and evidence from research are not often used for decision making in the Nigerian health sector, and another study that found that monitoring seemed to receive the least attention among all pillars of the health sector.

On the positive side, the resources received from FSSHIP under NHIS has led to improvements in providers’ physical infrastructure and staffing, which will ultimately improve delivery of the services in the benefit package, the quality of services, and patient satisfaction. Studies have shown a high rate of patient satisfaction with FSSHIP.
services, at 80.5% for ease of accessing care, wait times, and hospital facilities/environment and 80% for promptness of getting referral services. 30,33,35

Limitations of the Study

Our study provides a detailed description of purchasing arrangements in the schemes funded through the federal budget and FSSHIP based on an examination of key policy documents and key informant interviews. One major limitation of this study is its heavy reliance on document review as the primary method of data collection, which may have yielded an incomplete picture of the implementation of purchasing functions and thus the real-life challenges of governance and institutional purchasing capacity.

Conclusions

Although the legal mandate and governance arrangements for implementing strategic purchasing are in place in schemes funded through the federal budget and FSSHIP, strategic purchasing is not well entrenched in these schemes. Several factors undermine the effective implementation of strategic health purchasing in Nigeria and limit its impact in support of UHC goals.

Our findings confirm that a clear statutory mandate and well-defined objectives for the purchasing agency, particularly accountability, are key pillars of effective governance. 37,38 The findings align with the WHO recommendation that purchasing agencies be given sufficient autonomy and decision-making space, backed by legal provisions. 39 Our findings also confirm, however, that a strong legal and governance framework is not enough to ensure that strategic purchasing can be used effectively in support of UHC.

The high degree of fragmentation in government financing for health in Nigeria greatly limits the power of any one public purchaser to influence resource allocation, provider incentives, or accountability. The recent decentralization of social health insurance to the subnational level is expected to reduce fragmentation of services at that level, which could contribute to improved strategic purchasing in Nigeria’s states.

Finally, the purchasing institutions in Nigeria need significant investment in capacity—human resources, technical know-how, and information systems—if they are to design and implement strategic purchasing functions and policies and carry out continuous monitoring and evaluation.

For Nigeria to deliver on its UHC commitment, a significant increase in public resources allocated to the health sector is needed. Much more can be done, however, to make better use of existing resources through less fragmented spending and more effective implementation of strategic purchasing to direct funds to priority populations and services, create better incentives for providers, and improve accountability to reduce the significant leakages in the system.

Notes

a. Arksey H & O’Malley L. Scoping studies: towards a methodological framework. International Journal of Social Research Methodology. 2005;8:1(19-32) DOI: 10.1080/1364557032000119616
b. Key informant interview #1.
c. Key informant interview #2.
d. Key informant interview #3.
e. Key informant interview #4.

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Author Contributions

U Ezenwaka, C Nwankwor, and U Ewelike led the data collection and populated the Strategic Health Purchasing Progress Tracking Framework. U Ezenwaka led the drafting of the manuscript. All authors reviewed the draft and approved the final version of the manuscript before submission.

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No potential conflict of interest was reported by the author(s).

Ethical Approval

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Informed Consent From Participants

All participants provided written informed consent. Both verbal and written permission to audio-record interviews was also obtained from respondents. Participation was voluntary, and confidentiality was assured.

Data Availability Statement

The authors confirm that the data supporting the findings of this study are available within its supplementary materials.

ORCID

Uchenna Ezenwaka http://orcid.org/0000-0002-6792-2814
Agnes Gatome-Munyua http://orcid.org/0000-0001-8910-4989
Obinna Onwujekwe http://orcid.org/0000-0002-1214-4285

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## Appendix A.
### Strategic_Health_Purchasing_in_Nigeria_Data_Extraction_Tool

| Name of scheme or revenue source: | Indicator or purchasing function | National health insurance scheme | Other coverage scheme(s) | Supply-side/budget system |
|----------------------------------|----------------------------------|---------------------------------|-------------------------|---------------------------|
| **I. Background**               | **I.a. Background**              |                                 |                         |                           |
|                                  | I.a.(1)                          | What are the sources of revenue (% of each) |                         |                           |
|                                  | I.a.(2)                          | Total expenditure per beneficiary/year (local currency and US$) |                         |                           |
|                                  | I.a.(3)                          | Describe the requirements of entitlement for coverage and the steps people have to take to enroll |                         |                           |
|                                  | I.a.(4)                          | Does this scheme or funding source target any specific population groups? |                         |                           |
|                                  | I.a.(5)                          | If yes: How are the groups targeted and what additional benefits, subsidies, exemptions, etc. are they entitled to? |                         |                           |
| **II. Governance arrangements** | **II.a. Mandate and autonomy of the purchaser** |                                 |                         |                           |
|                                  | II.a.(1)                         | Is there a designated purchasing agency responsible for the purchasing function under the scheme? |                         |                           |
|                                  |                                 | If not: Is there a designated department within the MOH or other agency responsible for purchasing? |                         |                           |
|                                  | II.a.(2)                         | What is the mandate of the purchaser(s)—what specifically is the agency accountable for achieving? |                         |                           |
|                                  | II.a.(3)                         | Which decisions/functions does the purchasing agency have autonomy to carry out? |                         |                           |
|                                  | II.a.(4)                         | How is the purchaser’s budget set each year? What is the basis for the budget? |                         |                           |
|                                  | II.a.(5)                         | Are budget over-runs/deficits allowed? |                         |                           |
|                                  | II.a.(6)                         | If yes: What happens when there are budget over-runs/deficits? |                         |                           |
|                                  | II.a.(7)                         | Does the purchasing agency have sufficient capacity and skills to operate as a strategic purchaser? |                         |                           |
|                                  | II.a.(8)                         | If no: What are the main gaps? |                         |                           |
|                                  | II.b.(1)                         | What are the key laws and regulations governing the revenue source or scheme? |                         |                           |
|                                  | II.b.(2)                         | Are there any national laws that conflict with the purchasing agency’s ability to function effectively? (for example national decentralization laws). |                         |                           |
|                                  | II.b.(3)                         | If yes: What steps are being taken to improve coherence of the legal/regulatory framework? |                         |                           |
|                                  | II.c.(1)                         | What governance structures are in place and how do they operate? |                         |                           |
|                                  | II.c.(2)                         | Which stakeholder groups are engaged? |                         |                           |
|                                  | II.c.(3)                         | Are lines of accountability clear? |                         |                           |
|                                  | II.c.(4)                         | Are the mechanisms effective? |                         |                           |
|                                  | II.c.(5)                         | Does the purchasing agency produce an annual report? |                         |                           |
|                                  | II.c.(6)                         | Are there beneficiaries/patient appeal mechanisms in place? |                         |                           |

(Continued)
### III. Other factors

| Name of scheme or revenue source | Indicator or purchasing function | National health insurance scheme | Other coverage scheme(s) | Supply-side/budget system |
|---------------------------------|-----------------------------------|---------------------------------|--------------------------|--------------------------|
| **III.a. Purchasing power of the purchasing agency** | | | | |
| III.a.(1) % of total population covered | | | | |
| III.a.(2) % of total health expenditure flowing through the purchasing agency | | | | |
| III.a.(3) % of government health expenditure flowing through the purchasing agency | | | | |
| III.a.(4) Are there multiple purchasers within a scheme? | | | | |
| III.a.(5) If yes: How do they relate to each other? Competition, assigned populations, etc.? | | | | |
| III.a.(6) What is the power and market structure of providers? | | | | |
| III.a.(7) What is the share of public and private providers? | | | | |
| III.a.(8) Are they well organized? E.g. do they strike? | | | | |
| III.a.(9) Do providers have any autonomy over decision-making and resource allocation to respond to provider payment incentives? | | | | |
| III.a. If yes: Describe which internal financing and management decisions public health facilities have authority to make. | | | | |
| **III.b. Public Financial Management Rules** | III.b.(1) What is the national budget classification system based on? | | | |
| Implementing institutions (administrative), inputs-based line items (economic), programmes, or a combination. | | | | |
| III.b.(2) Is there separate budgeting for vertical programs? | | | | |
| III.b.(3) If there is program-based budgeting: How are budget programmes and subprogrammes structured? What are the programmes and subprogrammes for health? | | | | |
| III.b.(4) What information or criteria are used to set targets or ceilings? | | | | |
| III.b.(5) Are parts of the health budget (such as health worker salaries) determined outside of the budget allocation process? | | | | |
| III.b.(6) Which health budget execution decisions are made at the national level? Subnational level? Service provider level? | | | | |
| III.b.(7) Do any public procurement laws affect the ability of the purchaser(s) to be strategic? | | | | |
| **I.c. Service readiness** | III.c.(1) Describe briefly the readiness of the service delivery system–any key gaps in the ability to deliver the guaranteed services | | | |

**“The purchaser” and “purchasing agency” refers to any entity responsible for purchasing services on behalf of a population, including the MOH in a supply-side budget system, a designated department within the MOH, a national health insurance agency, etc.**