Strategic Health Purchasing Progress Mapping: A Spotlight on Ghana’s National Health Insurance Scheme

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ABSTRACT

Ghana is a lower-middle-income economy that has made significant efforts to improve its health system, in order to achieve universal health coverage. Ghana has adopted strategic health purchasing as an important tool for efficient utilization of resources. This paper focuses on Ghana’s National Health Insurance Scheme (NHIS) analyzing its governance arrangements and purchasing functions; and providing recommendations for improvement. The study applied the Strategic Health Purchasing Progress Tracking Framework co-created by the Strategic Purchasing Africa Resource Center (SPARC) and its partners to collect data from secondary and primary sources between September 2019 and June 2020. A descriptive and narrative approach was used to synthesize information on the NHIS governance arrangements and purchasing functions based on the framework. Benchmarks were used to describe the NHIS on the continuum from passive to strategic purchasing and to identify steps to make purchasing more strategic. Strengths and weaknesses were found in governance and purchasing functions. Progress was seen in how the NHIS selects the services in the benefit package, regularly reviewing the package to respond to the health needs of the population, and in how it selectively contracts with providers, particularly private providers, to ensure that standards for quality of care are met. However, challenges remain in performance monitoring, due to claims being mostly processed manually, and provider payment, due to frequent unbundling and upcoding of services Ghana has made significant strides toward the achievement of universal health coverage, but there is room for improvement in provider payment and performance monitoring.

Background

The goal of Ghana’s health system is to improve the health status of people living in Ghana through the government’s vision of universal health coverage (UHC) and a healthy population. The introduction of the National Health Insurance Scheme (NHIS) in 2003 provided financial risk protection to the enrolled population and became the main pathway for pursuing UHC in Ghana. The NHIS now covers about 40% of the population and has contributed significantly to improving health service utilization and decreasing out-of-pocket payments and catastrophic health expenditures. The NHIS has the potential to further improve access to care, financial protection, and service quality, by making continued progress on strategic purchasing by the National Health Insurance Authority (NHIA), the purchasing agency of the NHIS.

Health purchasing refers to decisions about how to transfer pooled funds to the providers of health services, including which services and medicines to purchase on behalf of the covered population, from which providers to purchase them, and how and how much to pay the providers. Strategic purchasing uses evidence and information about population health needs and health provider performance to make resource allocation decisions and create incentives to improve access to covered health services at an acceptable cost and level of quality.

Over time, NHIS membership has grown and Ghana has made improvements to advance strategic purchasing, particularly in defining the benefit package to match the burden of disease in the country, contracting with both public and private health care providers to deliver the package, introducing output-based provider payment, and monitoring performance at both the provider and system levels.

Ghana has many lessons to share with other African countries in these areas, but it must do more to use strategic purchasing to progress toward UHC. For example, NHIS membership has remained...
stagnant, at about 40% of the population, for a number of years, and growth in claims has outstripped revenue collected, partly due to the provider payment system, which threatens the financial viability of the scheme.\textsuperscript{14,15}

Although NHIS performance in various areas has been studied extensively and has received a lot of attention in the literature, no study to date has provided a comprehensive look at purchasing practices in the NHIS and what may be enabling or inhibiting progress toward more strategic purchasing. The objective of this study is to provide a baseline mapping of purchasing arrangements in Ghana’s NHIS and examine their alignment with strategic purchasing.\textsuperscript{16} Such a study will be useful for policy makers in Ghana and other countries who aim to improve strategic purchasing and make better use of scarce resources to advance UHC goals.\textsuperscript{17,18}

**Box 1. Ghana’s Key Economic and Health Spending Indicators.**

- Population (2018): 29.8 million
- GDP per capita (2018): 2,194 USD
- Total health expenditure (THE) as % of GDP (2019): 3.4%
- THE per capita (2019): 75.3 USD
- Public expenditure as % of THE (2019): 40.2%
- NHIA expenditure as % of THE (2019): 11.6%
- Out-of-pocket payments as % of THE (2019): 36.2%
- Donor expenditure as % of THE (2019): 11.3%

Sources: World Health Organization (WHO) Global Health Expenditure Database (2022); World Bank World Development Indicators (2020); World Data Atlas (2020)

**Health System Context in Ghana**

Box 1 summarizes Ghana’s key economic and health spending indicators. Public expenditure makes up 40.2% of total health expenditure (THE), but only 11.6% of THE flows through the NHIS.

The NHIS obtains its revenues from a National Health Insurance Levy (NHIL), which is a 2.5% earmarked portion of the value added tax (72% of NHIS revenue), legally mandated transfers of 2.5% of workers’ social security contributions (20% of NHIS revenue), contributions paid by members in the nonexempt group (3% to 5% of NHIS revenue), and 1% from all other sources.\textsuperscript{19} The NHIS uses a combination of premium exemptions and general budget transfers to subsidize coverage for target and priority populations. Groups that are exempted from paying contributions are people over age 70 and under 18, beneficiaries of the Livelihood Empowerment Program Against Poverty (LEAP), pregnant women, and indigents; they pay only the registration processing fee. Even with these exemptions, however, the poorest and most vulnerable households experience less financial protection than wealthier households once they are enrolled in the NHIS.\textsuperscript{20}

In addition to the NHIS, investments have also been made on the supply side to make services accessible in both urban and rural areas in Ghana. However, while most of the Ghanaian population has access to a primary health care (PHC) service delivery point, there is tremendous variation in the capacity of PHC providers to deliver the full package of care.\textsuperscript{21,22} More strategic purchasing has the potential to help address these persistent health equity issues.\textsuperscript{23–25}

**Methodology**

The study used a qualitative descriptive approach, applying the Strategic Health Purchasing Progress Tracking Framework (Figure 1) developed by the Strategic Purchasing Africa Resource Center (SPARC).\textsuperscript{16} The study focused on compiling descriptive information about the budget financing through the Ministry of Health (MOH), the NHIS, and private insurance: (1) the purchasing functions—benefits specification, contracting arrangements, provider payment, and performance monitoring—and their execution through the NHIS; and (2) external factors and governance arrangements and how they are linked to strategic purchasing.

**Data Collection**

A Microsoft Excel-based data collection tool designed by SPARC was used to collect and collate information describing the purchasing arrangements in Ghana’s three health financing schemes: budget financing through the Ministry of Health (MOH), the NHIS, and private insurance. A purposive sample of published literature, reports and policy documents from the year 2000, from the MOH, NHIS, and Ghana Health Service (GHS), was complemented by six in-depth phone interviews with staff of the NHIA, MOH and the CEO of a private health insurance company. Interviewers cross-checked their notes to ensure consistent and accurate reporting and the data entered in the Excel-based data collection tool. Informed consent was provided and confidentiality of interviewees was maintained. Data were collected between September 2019 and June 2020.

**Data Analysis**

Data analysis focused on describing health purchasing arrangements in the government budget, NHIS, and private insurance to identify strengths and
weaknesses based on the framework; and a set of benchmarks to describe the schemes on the continuum from passive to strategic purchasing and to identify steps to make purchasing more strategic. A descriptive and narrative approach was used to synthesize information and present the current policies and processes used to carry out the health purchasing functions (benefit specification, contracting arrangements, provider payment, performance monitoring), and the governance arrangements.

Data extraction criteria were reviewed collectively by all authors to ensure a shared understanding. The authors worked together to ensure consistency in the extraction process for NHIS data and then extracted data in parallel for the remaining schemes. The first author and SPARC checked for consistency of the process by double-checking data extraction on a number of randomly selected documents. The results on purchasing arrangements for all three purchasers are reported in Table 1, while the rest of the paper focuses on the NHIS.

Results

Table 1 summarizes the purchasing arrangements in Ghana’s health financing schemes.

Descriptive findings are presented in this paper for the NHIS.

Governance Arrangements

Institutional Responsibilities and Capacity

The NHIS started in 2004 as an amalgamation of District Mutual Health Insurance Schemes (DMHISs), which mostly evolved from community-based health insurance (CBHI) schemes. The DMHISs operated as independent schemes with their own governance and management structures and directly collected premiums. By 2008, there were 145 DMHISs, one in every district, regulated and supervised by the NHIA in accordance with the NHIS Act of 2003 (Act 650). Supervising such a large number of schemes was complicated for the NHIA, and the fragmentation weakened risk pooling and increased administrative costs. The introduction of the NHIS Act 852 in 2012 (Act 852), which replaced Act 650, led to significant governance reforms, including the integration of all DMHISs into a unified NHIS governed directly by the NHIA, thus bringing the DMHISs to an end.

The NHIA is now the main purchasing agency for the NHIS and has the mandate to purchase services included in the legislated benefit package on behalf of NHIS beneficiaries, in accordance with Act 852. The NHIA reports to the MOH through a board whose members are appointed by the President of Ghana according to Act 852. The board includes representation
### Table 1. Purchasing Arrangements in Ghana's Health Financing Schemes.

| % of Total Health Expenditure (2019)* | National Health Insurance Scheme (NHIS) | Government Budget Financing | Private Insurance |
|---------------------------------------|------------------------------------------|-----------------------------|-------------------|
| Main Purchaser(s)                     | National Health Insurance Authority (NHIA) | Ministry of Health (MOH) | Private insurance companies |
| Governance                            | MOH provides policy direction, and the Ghana Health Service (GHS) is responsible for public health facilities. The Health Facility Regulatory Agency (HEFRA) provides governance for service quality and is responsible for licensing and inspecting all providers. MOH allocates resources to MOH, national medical stores, and local governments. Public facilities receive budgets for operations and maintenance. Public facilities have limited financial autonomy over budget funds. | | |
| Expenditure Management                | The annual budget appropriation process is led by MOF and is based on the Medium Term Expenditure Framework (MTEF) and historical allocations. Budget overruns occur and are financed through supplementary budgets. | Budgets are set by management based on membership and projected revenue. Budget overruns occur when claims exceed premiums collected; they are declared as losses and may be covered by profits from the insurance company's other lines of business. | |
| Benefits Specification                | The government offers some program-specific packages for preventive, promotive, and curative health services, such as the Community-based Health Planning and Services (CHPS) program, Newborn Care Program, Reproductive Health Program, and Adolescent Health and Development Program. MOH also has an explicit essential medicines list. | Explicit benefit packages vary by insurance plan and typically include primary and hospital care, with exclusions. | |
| Contracting Arrangements              | HEFRA licensing is a prerequisite for NHIA credentialing and contracting with health facilities. All public facilities are included. NHIA does selective contracting with private providers. GHS signs contracts on behalf of public facilities. Christian Health Association of Ghana (CHAG) signs contracts on behalf of faith-based health facilities. Other private providers, including for-profit providers, sign contracts directly with NHIA when they are credentialed. | Loose agreements are in place for input financing of public facilities. A memorandum of understanding with CHAG governs input-based financing of faith-based health facilities. | HEFRA licensing is a prerequisite for contracting with health facilities. Companies use selective contracting with public and private facilities. |
| Provider Payment                      | Ghana Diagnosis-Related Group (G-DRG) payment for most outpatient and inpatient services and fee-for-service payment for medicines and unbundled services | Input-based budgets for salaries and other line items | Fee-for-service |
| Performance Monitoring                | MOH quality framework is used for joint MOH-NHIA monitoring of service provision. HEFRA licensing and annual credentialing by NHIA apply. NHIA conducts ad hoc clinical audits. "Mystery client" surveys and client feedback forms are also used. | Monthly facility activity reporting on DHIS2; MOH quality framework is used for joint MOH-NHIA monitoring of service provision. | Clinical audits of claims data are used. |

* 2021 WHO Global Health Expenditure Database
from a wide range of institutions, including the MOH, the GHS, the attorney general’s department, organized labor, the accountancy profession, and the Pharmacy Council.30 The current NHIS governance arrangements rely on a close partnership between the NHIA and other ministries and agencies, including the MOH, Ministry of Finance (MOF), GHS (as the executive agency responsible for public provider institutions), and the Health Facility Regulatory Agency (HEFRA).

Although information systems are still fragmented across Ghana’s different health agencies, the information systems for governing and carrying out purchasing functions have been improving in the NHIA. For example, the NHIA piloted electronic claims processing in 2013 and is moving to fully migrate its claims processing to an electronic platform. A mobile phone membership system introduced in 2018 allows members to renew their membership through a mobile phone and pay premiums through any mobile money platforms.31 The mobile membership system has not only simplified membership renewal, but also provides information to individuals about their coverage and involves members in validating services delivered by providers.32

**Expenditure Management**

Budgets are set by NHIA management based on membership and projected revenue. Overruns occur when claims exceed revenues or when MOF transfers to NHIA are delayed. Overruns are covered from previous surpluses or supplemental allocations by the MOF when the reserve fund has been depleted. The NHIS has recorded deficits since 2012 and has run out of surplus to meet budget overruns through the reserve fund.33

**Health Provider Autonomy**

The healthcare providers who work in collaboration with the NHIA are categorized as public, faith-based, or private, according to their ownership. Public health facilities are grouped into teaching hospitals and all other public health facilities, which are governed by the GHS. Teaching hospitals are autonomous in generating their own funds, including NHIS revenue, and they have a high degree of autonomy in how they use NHIS revenue and funds received from the central government budget.34 They can directly hire and dismiss some categories of health workers and are accountable to the MOF through the MOH.34 All other GHS health facilities have limited control over recurrent expenditure. Hiring and firing of health workers in those facilities is managed by the GHS with clearance from the MOF.34 Faith-based health facilities and health training institutions form a network, governed by the Christian Health Association of Ghana (CHAG). CHAG operates within the policies and guidelines of the MOH, but it has the autonomy to promote the interests of its member health facilities and its target beneficiaries.35 Private health facilities operate independently but in accordance with MOH regulations. These facilities also form a network, Private Health Facilities Association of Ghana, that seeks to advance the interests of its members.

**Purchasing Functions**

**Benefits Specification**

The NHIS benefit package defined in Act 852, accounts for the population characteristics and disease prevalence, and anecdotally covers 95% of disease conditions in Ghana.30 It includes some preventive care but mostly curative care at primary, secondary, and tertiary facilities. The MOH defines the approved medicines list and standard treatment guidelines. Modifications to the benefit package are made through legislative instruments brought before Parliament by the MOH following consultations with experts and multi-stakeholder groups. Act 852 requires assessment of the benefit package twice a year, but in practice the package has been assessed every other year. The latest amendment announced in 2021 added family planning and childhood cancers to the package.37,38 Ghana is planning to roll out a health technology assessment tool to continue to improve the process of reviewing the NHIS benefit package.39

**Contracting Arrangements**

The NHIA enters into contracts with teaching hospitals, the GHS, and CHAG, as well as private facilities. The NHIS contracts with all public providers and selectively with private providers based on accreditation criteria and defined quality standards. All providers contracted by the NHIS must be licensed by HEFRA and credentialed by the NHIA. Health care providers contracted by the NHIS are required to adhere to Ghana’s National Service Delivery Standards and Treatment Guidelines. The NHIS negotiates contracts with providers through their provider associations and networks.

Provider contracts define the services to be covered and their tariffs, medicine tariffs, payment methods, and how to submit claims. Adverse provider actions and sanctions associated with non-adherence to contract terms, are also defined in the contracts. Providers that fall short of prescribed regulatory and quality standards based on a clinical audit may lose their contracts and credentialing status. The contracts define the process for resolving disputes that may arise in the performance of the contracts. Public providers
that deviate from the regulations may not lose their accreditation, however and may instead be referred to the GHS for disciplinary action.

**Provider Payment**

Provider payment methods used by the NHIA are the Ghana-Diagnosis Related Groupings (G-DRGs) and fee-for-service for medicines and unbundled services. The NHIS uses differential tariffs for different providers. Public health workers salaries are paid by the MOH through the government budget, as part of the civil service. Therefore public facilities’ tariffs are lower than those of private facilities to take into account the subsidies through the government budget financing. The NHIS payment systems are open-ended, which means that providers can continue to bill the NHIA without limit. The NHIA has introduced some measures to manage costs while ensuring the quality of services. For example, treatment or readmission for the same condition within three days is not reimbursed.

The G-DRG payment system in the NHIS includes a set of about 600 tariffs for outpatient and inpatient services bundled by diagnosis category. The tariffs for each G-DRG were set through a combination of a costing exercise and negotiation with providers. For inpatient services payment is based on the average length of stay. The payment for outpatient services is a bundled payment based on the average cost of services per visit. If the provider is unable to provide a certain service such as a diagnostic test, the patient is referred to another facility and the service is unbundled. The referring facility is paid a consultation only G-DRG tariff, and the receiving facility is paid for the services rendered on a fee-for-service basis. All medicines are paid for separately using fee-for-service.

Providers submit claims for services within one month of delivery for vetting and payment by the NHIA. By law, payment should be made to providers within 90 days, but in practice payment can be significantly delayed, with some recorded cases exceeding one year. The NHIA has been working to improve the payment turnaround time for providers through analyses of claims processing bottlenecks and a gradual shift to electronic claims processing.

In 2012, capitation payment for PHC was piloted in the Ashanti Region, but this was suspended in 2017 following persistent agitation by the providers. Providers initially resisted capitation because of perceptions that their revenue would decrease. There were also political challenges with the region for the pilot, which was a stronghold of the opposition party at the time. The pilot became politicized, with the pilot period extending to five years, prompting stakeholders to question the motive behind the policy and claiming that it was discriminatory. When the opposition party came to power in 2017, the pilot was suspended. Nonetheless, the capitation pilot yielded some positive results, such as more stable and timely revenue for providers, reduced administrative burden, and positive response from beneficiaries about having a choice of PHC provider and more continuity in the provider-client relationship. Political challenges aside, the experience with the capitation pilot was mixed and the payment method continues to remain under discussion.

**Performance Monitoring**

The NHIA monitors provider performance through its credentialing process, service delivery standards and treatment guidelines, claims vetting, and ad hoc clinical audits. Vetting includes ensuring that treatment guidelines are followed and accounting procedures are followed, which includes identifying outliers and verifying randomly selected provider claims in unannounced visits to the facilities. Electronic claims processing has allowed for more rigorous vetting, which is estimated to have saved the NHIS as much as 5 million GHS (943,396 USD) in 2019.

The MOH quality framework is used for joint MoH-NHIA monitoring of service provision. The framework provides overall direction for monitoring and evaluation of health providers, using specified indicators to assess whether sector-wide objectives are achieved, quality of service is improved, and resources are efficiently allocated. The NHIA also uses “mystery client” surveys and client feedback forms to monitor provider performance. The NHIA has set up a call center to increase engagement with members and allow them to report negative experiences such as unauthorized fees or sub-standard service quality. It is not clear how widely this tool is used by members, however, or how the NHIA responds to reported incidents.

For system-wide monitoring, the research community is contracted by the MOH or NHIA to undertake clinical, social and economic evaluations to inform specific NHIA and MOH policies and decisions. There is now a robust body of literature on the performance of the NHIS as a whole and specific purchasing functions and approaches in particular.

**Discussion**

**Governance Arrangements**

The purchasing power of the NHIA to influence resource allocation, provide incentives to providers for good quality services, and improve accountability, is limited as only 11.6% of THE flows through the NHIS.
Harmonizing funding flows through the NHIS and reducing fragmentation with the government budget is required for NHIA to provide the right incentives through the system.

The governance of the NHIS is strong in terms of institutional arrangements and capacity of the main purchasing agency, the NHIA. The governance arrangements of the NHIS for revenue collection also affect both the financial sustainability of the scheme and the effectiveness of the purchasing functions. Allocating responsibility for NHIL collection to the MOF is good for efficiency because it uses existing administrative structures and does not add new costs for revenue collection. However, the release of funds to the NHIA is often delayed. The delays then impede NHIA’s ability to pay providers on time, which weakens payment incentives and threatens access to services and the financial sustainability of the scheme. Delays in releases have been a persistent problem that has sometimes led provider associations to threaten refusal of services to NHIS members. The delays have negative consequences for access to care because providers use them to justify levying unapproved and unregulated payments, which in turn deter enrollment and re-enrollment in the scheme.\(^5\)\(^6\)\(^5\)

**Benefits Specification**

The benefits specification function in the NHIS aligns with the benchmarks for strategic purchasing. The package is well specified and reflects Ghana’s health priorities. It is periodically revised through a transparent process, and it is aligned with purchasing mechanisms as G-DRG payment categories and tariffs are linked directly to the services and medicines in the package. The comprehensive benefit package with no payments required at the time of accessing services is considered to be a key reason the NHIS has succeeded in increasing service utilization and improving financial protection.\(^5\)\(^3\) Coverage of malaria services and medicines by the NHIS, for example, was associated with a 65.5 percentage point increase in the likelihood of formal medical treatment being sought for children with suspected malaria and an almost 72 percentage point increase in the likelihood of their receiving malaria medication.\(^5\)\(^4\) The NHIA further specifies the benefits by defining service delivery standards in line with national service delivery policies and clinical protocols, and these service delivery standards are enforced through the contracts with providers. The periodic review of the NHIS benefit package helps to ensure that the package remains aligned with population health needs and makes most cost-effective use of available resources. The adoption of a health technology assessment tool could strengthen strategic purchasing in the NHIS by more systematically incorporating changing population health needs into the benefit package, especially since financial sustainability concerns continue to be a challenge for the scheme.

**Contracting Arrangements**

The contracting arrangements in the NHIS are also well aligned with the benchmarks for strategic purchasing. Formal contracts are in place with both public and private providers, and providers must meet accreditation standards before entering into contracts with the NHIA. The NHIA uses the contract to specify service delivery standards and other requirements that providers and the NHIA are obligated to meet. The use of service delivery standards for malaria in NHIS contracts, for example, has led to better compliance with national treatment guidelines. Although MOH and GHS efforts to encourage adherence to treatment guidelines for malaria have limited leverage, the NHIA is able to enforce treatment guidelines through its contracts with providers, conduct clinical audits to identify quality gaps, and impose financial consequences for non-adherence.\(^5\)^\(^5\)

Human resources for health are concentrated in urban areas in Ghana, which limits the effectiveness of strategic purchasing and has been cited as one reason the capitation pilot could not be implemented as planned.\(^5\)\(^6\) To help close PHC capacity gaps, the MOH is forming PHC networks that bring together district-level providers to deliver a more comprehensive package of PHC services, provide more clinical quality assurance, and use resources more efficiently. The networks form joint accounts and serve as the contracting unit for the NHIA. In districts where the PHC networks have been scaled up, NHIS members select a PHC network as their dedicated source of primary care; this is meant to improve continuity and reduce provider shopping on the part of NHIS members. Monitoring reports for the PHC network scale-up indicate improvements in service delivery, including more clinical support internally across network facilities, more coordinated referral processes, better community engagement, and more joint planning and resource sharing to improve efficiency.\(^5\)\(^7\)

**Provider Payment**

Although the NHIA has been working to reform provider payment systems over more than 15 years, the NHIS has made only partial progress on making provider payment more strategic according to the benchmarks. Even though the use of G-DRG payment has improved
the NHIA’s ability to manage claims expenditures compared to the original fee-for-service, G-DRG payment is still an open-ended payment system and NHIA expenditures continue to rise.\textsuperscript{12,58} G-DRGs do not bundle services adequately, resulting in a long list of services and tariffs that are cumbersome to manage and are nearly equivalent to fee-for-service payment. A better balance is needed between the level of bundling (to create better incentives for efficiency and quality through a payment system that is easier to manage at the health facility and NHIA levels) and minimizing the burden of auditing and verification of claims. There is also the problem of upcoding, providers using higher fee codes for claims, when the actual services provided are of a lower fee code. Capitation payment has been piloted in Ghana, with mixed results, and the reintroduction of capitation is under discussion.\textsuperscript{25,59,60,61} Ghana may consider blended payment methods to minimize the unintended incentives and consequences of individual payment mechanisms and achieve the objectives of incentivizing quality and access while improving efficiency in service delivery and expenditure management to ensure the financial sustainability of the NHIS. Finally, while progress is being made to transition to electronic claims processing, about 70\% of the claims volume is still submitted and vetted manually.\textsuperscript{16} The NHIS should continue to make progress on migrating all claims processing to the electronic platform to improve the efficiency and accuracy of claims vetting and the timeliness of payments to providers.

**Performance Monitoring**

Although the NHIA uses multiple tools for monitoring provider performance, and of the scheme as a whole, this function in the NHIS can be considered to be only partially strategic according to the benchmarks. The performance monitoring approaches are not well systematized, are fragmented, and continue to be largely manual. The existing regulatory framework for monitoring providers lacks clarity because Act 852 mandates the NHIA to monitor providers, while HeFRA is also supposed to inspect providers. Such overlaps cause inefficiency in the use of resources for monitoring.

Furthermore, the progress on provider performance monitoring by the NHIA has not completely reduced opportunities for gaming and fraud by providers. Despite the transparency of the benefit package and medicines list that members are entitled to, periodic audits, and availability of the call center to report violations, providers are still able to charge unapproved and unauthorized fees to members for some services in the benefit package.\textsuperscript{62} The NHIA audits often do not reveal these unauthorized fees, and stakeholder interviews suggest that beneficiaries may be reluctant to report these experiences because they fear retaliation, perceive that the NHIA is unlikely to investigate, or assume the investigation process will be burdensome.

Accelerating the transition to electronic claims processing will not only increase the efficiency of the process and reduce payment delays, but it will also make more targeted clinical audits possible and create an analyzable data set that will allow more timely routine monitoring of individual provider performance as well as higher-level scheme analysis for timely course correction.\textsuperscript{63} The NHIA also needs to continue to build trust with beneficiaries and engage them as partners in enforcing the commitments and entitlements of the NHIS.

**Conclusions**

Ghana is confronted with an increasing population and an evolving double burden of disease with an accompanying increase in demand for healthcare. At the same time, inadequate public financial allocations for health persist. In 2019, total health expenditure was only 3.4\% of GDP and the government health budget was only 6.5\% of total government spending.\textsuperscript{64} In the midst of these increasing demands and scarce resources, it is critical that strategic purchasing be used effectively to deliver as much quality and effective health care to the population as possible within available resources. The NHIS is the main vehicle for UHC in Ghana, and the NHIA has made important progress in increasing access to essential services for the population and providing financial protection. However, membership has stagnated at 40\% of the population, the benefits of the scheme are not reaching all population groups equitably, and the financial sustainability of the scheme is under chronic threat. Strategic purchasing alone cannot solve all of these challenges, but strategic purchasing can certainly be better used in the NHIS to strengthen the scheme and reach more of Ghana’s population with good-quality services and better financial protection. This study identified several areas where Ghana can increase effectiveness of strategic purchasing to advance the country’s UHC goals.

Timely release of funds to the NHIA is essential to ensure the smooth operation of the scheme and timely payment to providers to ensure high-quality services to members and reduce the practice of demanding unauthorized payments from members. This will also build trust in the NHIS among the population and increase people’s willingness to enroll or re-enroll.
The mix of methods used to pay providers to deliver services under the NHIS is not creating the right incentives for health providers, and open-ended payment poses a threat to the financial sustainability of the NHIS. Additional measures are needed to ensure the G-DRG payment system includes efficiency incentives and some levers for cost management, such as reducing the opportunities to unbUNDLE services for additional payment or moving toward global budgets for providers. As the NHIA considers capitation, there is a need to learn from the pilot in the Ashanti region and retain the parts of the payment system that worked well, such as the reduced administrative burden and the strengthened provider-client relationships, and addressed implementation challenges, such as cost-shifting through increased referrals.

The movement to electronic claims processing is critical for improving the efficiency of NHIA operations and generating analyzable data for more timely performance monitoring to address specific provider performance issues and gain routine intelligence on the performance of the scheme as a whole.

The NHIS is an important part of the social contract in Ghana, and members should have a greater role in ensuring that decision making by the NHIA, as the purchaser, reflects their needs and values, and that providers are held accountable for their use of resources and delivery of high-quality health services. The NHIA should make it easier and more worthwhile for members to report inappropriate provider behavior, especially related to the quality of care and inappropriate fees. Members’ views and values should also be considered by including members on purchasing committees and boards through explicit members’ rights and patients’ rights legislation or charters. This is essential for the long term sustainability of the NHIS and its role in meeting the government’s commitment to ensure access to essential health services to the entire population without financial hardship.

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Author Contributions

EA led the drafting of the manuscript and AE, PAB, JN, and EA reviewed the drafts and added critical inputs.

Ethical Approval

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Informed Consent From Participants

Informed consent was provided by all key informants.

Data Availability Statement for Basic Data Sharing Policy

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

Disclosure of Potential Conflicts of Interest

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