# The Provider Payment System of the National Health Insurance Scheme in Ghana

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## Abstract

The overriding concern of this paper is to examine opportunities and constraints of provider-payment system being used to manage health insurance in Ghana. Mindful of this objective, the study employed a survey approach to collect data, which involved the use of questionnaires, interviews and observation. Three out of the ten administrative regions were randomly selected to for the study. Thirty insurance schemes and 30 health service providers were randomly selected given that regions were our unit of analysis. Apart from these, 50 subscribers were purposively selected from Greater Accra; Central, Brong-Ahafo, and Ashanti regions were sampled for the study with a response rate of 97%. The results of the study show that inadequate funding characterised by delays in the release of subsidies result in the interruption of payment to service providers. Though the payment system is rated as satisfactory, it does not allow providers to achieve reasonable cash flow and as such it affects the value of health care provided to subscribers. The disruptions in re-imbursements can potentially undermine quality of health services provided to subscribers. It is therefore recommended that the national insurance authority devised mechanisms that will ensure prompt payment to providers as one of the several means of promoting quality healthcare.

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## INTRODUCTION

In 2003, the Ghanaian Parliament enacted the National Health Insurance Act, 2003, (Act 650) and its Regulation, (LI 1809) and subsequently launched by the then President, John Agyekum Kufour on March 18, 2004 with the intention of offering affordable medical care to all Ghanaians, especially the poor and vulnerable in the society. The scheme therefore supplanted the cost-recovery health delivery system (cash and carry) system since 1985. Thus the up-front payment system for health services at government clinics and hospitals.

Since the introduction of the health insurance scheme, records available show that many ordinary Ghanaians can access health care as and when needed. However, for the scheme to be a lasting one there is the need for suitable provider payment system to ensure accurate processing of claim and payment of claims. Though this is not the only ingredient for the success of the scheme, a reliable provider payment system and procedures rank among the top reasons for sustainability of health insurance schemes (Birenbaum & Speen, 2000).

One can therefore argue that with improved or regular subscriptions, the capacity of providers to deliver satisfactory services will be bolstered, especially when claims are paid regularly and transparent. Studies (example, Jacobs & Goddard, 2000) have shown that effectiveness in provision of health care depends on structures, expertise, and motivation. The successes of social health insurance schemes in some European countries are largely attributed to meeting particular objectives, particularly, in giving near universal access to care, services that are satisfactory to the public and a degree of unity. This is perhaps due in part to the enhanced transparency of financial flows and the acceptability of funding for health care (Jacobs & Goddard, 2000). Social health insurance systems have evolved and continue to exist in the developed countries due to transparency in their operations.

Recent studies conducted by Joint Development Partners Mission (AIDE MEMORE, 2007) indicate that the National Health Insurance Scheme Ghana faces a number of challenges. These challenges include lack of systems to conduct financial sustainability analysis at the operational level; shortage of staff to deal with claim management; and lack of effective and efficient claims processing management. Other recent public discussions about the scheme point to the inability of some health insurance scheme operators to pay health providers on time for the services provided. Furthermore, a Project Information Document (PID) of the Government of Ghana, Report number AB2581 (2006), has found that there are a number of important issues that require urgent attention to ensure sustainability of the scheme, which includes delays in issuing identification to registered patrons; difficulties in registering the informal sector; and increasing financial deficits in some districts.

Clearly, there are deficiencies in the provider payment system and procedures for the smooth running of the scheme in relation to disbursement of funds that guarantees constant funds availability. Nevertheless, a search through available literature shows virtually no empirical studies that have assessed the accounting systems of the scheme in Ghana. Besides, public entities in Ghana, have, over the years, have had to fold-up due poor and weak managerial (financial and operational). Although health insurance allows most people to make contributions towards future or present health financing, making sustainability issues fundamental to the current health financing system. This paper thus examines the provider payment system of the District Mutual Health Insurance Schemes and provides recommendations on how best the scheme can be sustained.

### THEORETICAL FRAMEWORK

The mainstream insurance business consists of an insurance entity (insurer) and the insured (individual). However, with social health insurance, aside the insurer and the insured, there is a third party; that is, the provider. In the case of social health insurance schemes, providers are the various health delivery facilities, which symbolises the expenditure spectrum. The number of services and products that are given or consumed and the prices decide the expenditure on health care. These issues are controlled by the provider payment system. Providers can decide the claim for their own services and products, when the patient takes the first initiative to contact health systems.

Consequently, the nature of relationship that prevails between insurance payment systems and service providers can influence the number of treatments, attract patients, be selective in types of patients to treat and can also resort to the use of unnecessarily expensive equipment in order to amortise their cost. Provider payment systems should permit the providers to attain a reasonable income, so as to promote good quality services to patients (Normand & Weber, 1994). In the health insurance industry, billing involves the process by which health care providers charge, code, and submit their bills (in the form of a claim) to the health insurance company.

There are many diverse methods for paying providers and each method has an effect on the value of health care services, cost containment and administration (Normand & Weber, 1994). Provider payments may be classified as either prospective or retrospective (Barnum, Kutzin, & Saxenian 1995).

Among some of popular provider payment systems are fee for service is a retrospective payment. Generally, it is known as a fee-for-service payment; this is where services are rendered before payment is made (Partners for Health Reformplus Project, 2005). The fee or prices could be uncontrolled; meaning that the provider can charge the rate the market will pay. Another dimension of the fee for service is to set compulsory rates that may represent the upper or lower limit of the prices that could be charged. In Germany for example, physicians who would want to treat social health insurance patients are required to stick to a schedule of fees and that charges must not exceed or be lower than what is in the fee schedule. Under a fee-forservice system, physicians can raise their net income by offering more services if the tariff is set above marginal cost (Kwon, 1997).

Capitation is another method of provider payment system, which is flat monthly fee that a health plan pays to a provider to take care of patients' needs. According to Jacobs and Goddard (2007), capitation is where a fixed amount per person, is paid to the health maintenance organisation. Capitation is a fixed sum per person paid in advance of the coverage period to a healthcare entity in consideration of its providing, or arranging to provide, contracted healthcare services to the eligible person for the specified period. For instance, a provider could be given a capitation premium of a specific amount for each month for every member of a particular health plan. In return for this capitation, the hospital accepts to give hospital services to all members of that health plan, despite the actual price for the services (Bourdon *et al.*, p. 104).

The case payment system is based on single cases rather than single treatment act. Each diagnosis the

physician treats attracts payment of a fee. Two genres of case payment systems are case based payment on a single flat rate per case, despite diagnosis while the second is based on schedule of diagnoses.

Daily charge is also known as the per diem fee. According to Norman & Weber (1994), daily charge fees are used to pay providers who take care of patient for long periods. The fees cover all services and expenses per patient per day. The payment is always the same, regardless of the treatment required.

Finally, some payments under health insurance schemes could also be through bonuses. A bonus payment is made to providers as incentives to accomplish specific goals. It could be toward attaining an economic goal or due to a country's health policy goals. For instance, if the economic goal is to lower national drugs bill, then incentives could be given to physicians who prescribe fewer drugs but maintain quality prescriptions leading to cost reduction.

# GHANA IN CONTEXT: PROVIDER-PAYMENT SYSTEM

Presently, in Ghana, the National Health Insurance Council sets tariffs for provider payments. According to the Health Insurance Regulations, LI 1809, payment for health care services rendered by providers may be made by any of the following systems: capitation, fee-forservice or any other payment system that the Council may determine.

The National Health Insurance Act, 2003, Act 650 (Section 71:1), states "tariffs payable to healthcare providers shall be paid within four weeks by schemes to the healthcare providers". It is required that service providers provide correct and sufficient information for claims; and also comply with any provision in the Act and Regulations before payment can be made (Section 71:3). The LI1809, Sec. 37, states that for a fee-for-service payment the health care facility and the attending health care personnel should file the claim on a claim form (Form 4, i.e. In-Patient Treatment Costing Sheet) provided in Schedule I of the Health Insurance Regulations.

It is also required that hospitals attach Forms 4, 5 (i.e. Health Facility Attendance Card), and 6 (i.e. Diagnostic Card) to the clinical records of a patient upon admission. In the case of admission, the patient should be discharged only when the attending medical officer and the patient sign or thumbprint the Form 4. A claim for payment of health care services provided under a scheme licensed under Act 650 should be filed within sixty calendar days from the date of the discharge of the patient or the rendering of the service. Except in the case of an emergency, a claim for payment not made within the stipulated period is barred upon the expiry of the period stated. All claims should be paid directly to the health care

facility and under no circumstances should direct payment be made to a patient. A claim for payment of health care service rendered which is submitted to a scheme should, unless there is any legal impediment, be paid by the scheme within four weeks after the receipt of the claim from the health care facility.

# **METHODS OF STUDY**

An exploratory survey approach was considered the most appropriate for achieving the objective of this study because it allows for the collection of standardised data from sizeable respondents in a highly economic way. It was also exploratory given that literature on provider payment system under Ghana's health insurance scheme is limited.

The population of the study comprised National Health Insurance Schemes (NHIS) in Ghana, thus, hundred and forty-five District Mutual Health Insurance Schemes. According to the National Health Insurance Act, 2003 (Act 650), the schemes that may be established in Ghana are the Private Commercial Health Insurance, Private Mutual Health Insurance Scheme and District Mutual Health Insurance Scheme. At the time of the study, District Mutual Health Insurance Schemes were the predominant types in the country. The District Mutual Health Insurance Schemes therefore constitutes the primary unit of analysis in this paper.

Mainly, two stages of contacts were undertaken in this study. The first was pilot discussions with some scheme managers and officers from the National Health Insurance Commission to obtain experts' advice, firsthand information and general understanding of issues concerning the accounting systems of the schemes in Ghana. The aim of this was to get the necessary input for designing questionnaires. Again, a pilot study was conducted to pre-test the instrument, which contributed to reshaping the instruments. The second phase was the administration of the questionnaires to some unit heads in the selected schemes, service providers and subscribers of the scheme. Questions on the instrument were mainly captured through a five-point likert scale (strongly agree, agree, neutral, disagree and strongly disagree). Cronbach alpha was used to test for reliability and yielded a positive reliability index of 0.76 and 0. 67 for schemes and subscribers instruments respectively. This phase also included structured interviews with some officers in the accounting and operations departments of the National Health Insurance Authority (NHIA).

Purposive and convenience sampling techniques were used for the study. The purposive technique allowed for objective judgmental selection of cases, which best suited the objectives of the study. As a result, schemes were selected from the Greater Accra, Central, Ashanti and the Brong-Ahafo regions. These regions were chosen based on preliminary discussions at the headquarters of NHIS secretariat, which suggested that schemes in the Brong-Ahafo and Ashanti regions were relatively performing better while the schemes in Greater Accra and Central regions were reporting some abysmal performances. Again, given that Greater Accra is the administrative capital of Ghana, more qualified personnel will handle schemes in the region. At the regional level, cluster sampling was used to select representatives from the districts; that is, the four regions were clustered into southern and northern sectors and at least six (6) districts were selected from each sector. All the schemes in Greater Accra Region were selected as part of the sample. In

Table 1 Sampled Schemes

addition to the districts, the National Health Insurance Authority, being the apex regulatory body of the schemes was selected to enquire into the operational requirements of the schemes. In each of the selected schemes, three employees were selected. These three persons were the Scheme Manager, Accountant, and Claim Officer. In all, seventy officers at the district schemes and thirty service providers were used as sample for the study. At the level of the NHIA, two accountants and two other workers from the operational department were selected for interviews. Table 1 shows the schemes selected for the study.

Brong-Ahafo	Ashanti	Greater Accra	Central
Nkoranza	Asokwa	Okaikoi	Mfantseman
Techiman	Subin Sub-Metro	Ablekuma	Awutu-Effutu Senya
Tano North	Manhyia Sub-Metro	Ashiedu Keteke Sub-Metro	Oguaa Mansin
Tano South	Bantama Sub-Metro	Osu Klottey Sub-Metro	Komenda-Edina Eguafo Abirem
Sunyani	Amansie Central	Tema Metropolitant	Abura-Asebu-Kwamankese
Kintampo	Amansie East	Kpeshie Sub-Metro	Agona
Wenchi		Ga-Dangme West	-
Jaman South		-	

Source: Compile by authors, 2009

All elementary ethical issues such as anonymity, confidentiality and voluntary participation were ensured. Data was edited, coded and entered into Statistical Package and Service Solution version 16. During the data analysis, agree and strongly agree were merged while strongly disagree and agree were also merged since they measured similar indicators (support or oppose). Mainly descriptive results are presented in the paper. These descriptive results have, however, been presented a prose because our analysis often yielded a dichotomous outcomes as a result of merging disagree/strongly disagree and agree/strongly disagree.

#### RESULTS

Among the myriad of issues the study sought to investigate was the extent to which the various schemes achieved reasonable cash flow and in turn serves as a motivation to continue to provide services to subscribers. In all, the majority of schemes (66.7%) do not achieve reasonable cash flow and the remaining 33.3 percent are able to achieve a reasonable cash flow. This is worsened by poor payment from the schemes to service providers, confirmed by 86 percent of respondents. Motivation among service providers on the other hand appeared weak. Approximately 52 percent of providers were discontent with the current synergy of motivation between service providers and the scheme managers. However, almost all (94%) of respondent agreed that a well-designed provider payment system could prevent waste and unnecessary service provision. Similar high proportions (79%) of respondents confided that the choice of provider payment system (PPS) affects the value of health care, cost containment and administration of the scheme.

Again, the results point out that 48 percent of the providers believe that the PPS affects the value of service they provide to subscribers. This is quite significant because providers' deal with human life so it is important to choose a PPS that will ensure that quality health care is provided for subscribers. It is managerially prudent for organisations to exercise maximum controls over their expenditure levels. Hence, it was relevant to find out whether expenditure accounts of the various schemes were entered in the necessary ledgers. Out of the 62 respondents, 48 representing 77 percent were of the view that such proper procedures were followed. It is also instructive to note that the majority of schemes (89%) required their employees to seek necessary authorisations before payments and appropriate personnel executed this task in most cases (98%).

Another issue the study explored was diligent practices that scheme operators complied with in payment to providers. Documentation therefore becomes a relevant persuasion. Supporting documents are extremely important as far as payment of expenditure is concerned. Thus, the survey asked about the types of documents used for making claims. As shown in Table 2, the predominant means of claims verification is the claims forms revealed that 29 percent (97% of cases) of the schemes required service providers to provide claim forms for before payment, 20.5 (68%) percent require providers to complete prescription cards; 20 (65%) percent called for health facility attendance card. The remaining figures are presented in Table 2. Similar, responses were also observed among service providers. For instance, 23 percent (78%) of service providers indicated that claim forms were the obligatory verification documents required from the service providers.

 Table 2

 Required Documents for Claims Indicated by NMHI

 Schemes Personnel

Required document	N	Per cent	Multiple responses (%)
Treatment Costing Sheet	25	12.2	40.3
Health Facility Attendance card	40	19.5	64.5
Diagnostic card	38	18.5	61.3
Prescription card	42	20.5	67.7
Claims form	60	29.3	96.8
Total	205	100.0	330.6

Source: Field Survey, May 2009: Multiple responses exist

In order to ensure that service providers complied with required procedures in providing health care and making claims, a question as to whether claims can be refused was put to the scheme operators, providers and NHIA officials interviewed. All the results indicated that claims can be refused by the scheme operators. All respondents from both health providers and scheme operators affirmed that claims could be refused.

Some of the conditions can necessitate claims are falsely or incorrectly declared, failure to comply with agreement, over-servicing of patients, irrational medication and prescriptions, provision of services beyond the authorised capability, unnecessary diagnostic and therapeutic procedures and use of fake, adulterated or substandard pharmaceuticals. Reasons given among service providers also includes excess billing, unapproved drugs, computational errors, drugs costing more than stated price, expired before submission to the schemes' offices, improper claims preparation, incomplete documentation, over charging and over prescription. Others are treatment of diseases not covered by the scheme, presentation of claims without diagnosis, drugs not included on claims sheet and wrong documentation. Late submission of claims was, however, not observed to be sufficient (22%) condition for claims refusal.

It is expected that claims are properly vetted to ensure that the above-mentioned reasons for refusing claims are identified. We also sought to find out whether claims were vetted before payments. Seventy-four percent of scheme operators attested to vetting of claims before payment. An interview with one of the scheme personnel suggested that after vetting, the percentage difference is paid to providers and if there is the need to reduce the claims, it is then taken out of the remaining unpaid amount. Averagely, it took two weeks to one month before for claims to be appropriated. In an interview with an NHIA official, it emerged that scheme operators are required to make claims within 60 days after provision of service, which were to be responded in payment within 40 days, a responsibility that is imposed by Act 650 of the NHIS law. In terms of intermittent delays in claims reimbursement, there was general consensus between service providers (100%) and scheme operators (95%).

Some hindrances that usurped the aptitude of scheme operators to swiftly reimburse service providers were inadequate funding (43%) lack of staff to process claims (25%), awkward (21%) claims processing and inadequate information (12%). Service providers also confirmed some of the reasons for delays in claims payment offered by the scheme operators. Weak consistency in funding, which ranked predominant, according scheme operators was also accounted for by irregular release of subsidies, accounting for 57 percent of the total responses. The second major reason was irregular payment of contributions (25%). The study revealed that subsidies and contributions are the major sources of funds for the health scheme. Interviews with some of the respondents revealed that the schemes depend heavily on subsidies because premium contributions are a very small part of the scheme's total funding. Collection of revenue from the informal sector is quite a difficult task, because most of them will only want to part with funds when they will realise direct benefits.

Satisfaction of payment systems of the scheme was also assessed from the operators' perspective. The results showed that the majority of operators (94%) assessed the payment system as satisfactory while the remaining six percent expressed dissatisfaction with the schemes' payment systems. Similar results were found among service providers. Service providers were found to be satisfied with prevailing levels of motivation provided received from scheme operators. Thus, 79 of the respondents indicated that the level of motivation of providers is satisfactory whereas 21 percent of respondents were not satisfied. Appreciable levels of satisfaction of motivators provided by scheme operators are also seen among service providers.

### DISCUSSIONS

This study was partly prompted by the growing worldwide demand for quality information for sound decision making and sound management of public funds, particularly, health. In the case of Ghana, this demand becomes more apparent given that all Ghanaians pay a consumption tax of 2.5 percent as National Health Insurance Levy, both subscribers and non-subscribers have a stake in it and are interested in the reliability of the scheme.

The results specify that majority of the respondents from the health schemes strongly agree or agree that the payment system must allow providers to achieve a reasonable cash flow, in order to motivate them. They also believe and that the choice of provider payment system affects the value of health care services cost containment and administration of the scheme. The survey revealed that 67 percent of respondents from the service providers feel that the payment system of the health scheme does not allow them to achieve reasonable cash flow while 33 percent perceive otherwise. Furthermore, think that the payment system does not motivate them to continue providing services for subscribers. However, 52 percent of the service providers think that the payment system does not affect the value of services they provide to the subscribers.

Most respondents strongly agree that adequate controls must be made over payments in terms of keeping proper records of expenditures, authorizations, and using the right ledgers in recording expenditures. The major documents used for making claims are claims forms, prescription card, health facility attendance card, diagnostic card and treatment costing sheet. Majority of the respondents (75.8%) from the scheme indicated that providers are able to follow the required procedure for making claims. It also came to light that, from time to time, the health scheme operators meet the service providers to train them on the best ways claims can be filed. Service providers, who failed to comply with the claim filing procedures, may either have their claims reduced or rejected. All claims are vetted before full payments are made, but because vetting procedures are cumbersome, some schemes pay part of the claims before completing the vetting.

All service providers (100%), majority of scheme operators (95.2%) and the NHIA agreed that payment of claims sometimes delays. Majority of the respondents indicated that the reasons for the delays are lack of funds, lack of staff, and cumbersome claim processing procedures. The scheme operators indicated they do not always have funds for the settlement of claims; the main reason for the lack of funds is irregular payment of subsidies. The results indicate that the delay in the payment of claims is not due to accounting system error. The assessments of the provider payment system by respondents from the health scheme, providers and NHIA officials indicated that generally the provider payment system of the scheme is satisfactory. Majority of the providers also indicated that their level of motivation to provide services for the subscribers is satisfactory.

## CONCLUSIONS

The study established that providers represent the spending side of the health scheme. Case based payment (diagnostic related), and fee-for-service payment techniques, are used for payment of claims. Generally, there are delays in the payment of claims because subsidies released are not sufficient for the payment of claims and also they are not released on time. Though schemes can apply for reinsurance, the process for claiming it is cumbersome. Therefore, it appears from the results that delay in payment of claims is due both to accounting system errors (i.e. cumbersome procedures in claiming reinsurance) and accounting system failure (i.e. lack of funds, lack of staff for processing, and inadequate information). Though the payment system is rated as satisfactory, it does not allow providers to achieve reasonable cash flow and as such it affects the value of health care provided to subscribers.

### RECOMMENDATIONS

The manual vetting of claims should be changed to a computerized one. The number of documents used for making claims should also be standardized into one form, so that providers will not need to fill many forms for making claims. This will in the end reduce the vetting process. The number of core staff employed for schemes by the NHIA should be increased to ensure that a certain minimum number of employees are in each department. The current system where there is only one person for each department does not encourage effectiveness of internal control. The schemes should also do well to employ other supporting staff. Health insurance is often associated with high costs; hence it is fundamental for the schemes to contain costs. Since the moral hazard is on the part of both providers and patients, varied sets of tools can be used to reach this goal. According to Hsiao & Shaw (2007), copayment and coinsurance are measures that can be used to reduce the risk of moral hazard. Gottret & Scheiber (2006) also indicated that the tools that can be used to reduce moral hazards are performance-related provider payment systems, expenditure caps, risk adjusted capitation arrangements, well-designed contractual agreements between providers and health insurance schemes, and good monitoring of the system. It is important to note that cost containment is a vital element for the success or failure of health schemes; thus, adequate measures should be put in place to ensure sustainability. To ensure financial sustainability, subscribers and service providers must be educated to know the implications of putting too much pressure on the health fund.

#### REFERENCES

- Aide, Memoire (2007). *Ghana National Health Insurance Scheme*. Retrieved on October 2, 2008 from www.mohghana.org/moh/docs/NHISissue
- Barnum, H., Kutzin, J., & Saxenian, H. (1995). Incentives and Provider Payment Methods. *International Journal of Health Planning and Management*, 10(1), 23-34.
- Birenbaum, J. F., & Speen (n.d.). Accounting Systems, Computer Consulting and Recordkeeping. Retrieved on September 23, 2008 from www.jfbpc.com
- Bourdon, T. W., Passwater, K., & Riven, M. (1997). An Introduction to Capitation and Health Care Provider

Excess Insurance. Health Care Issues for Property/Casualty Insurers, Casualty Actuarial Society Discussion Paper Program, 1997, pp. 97-139.

- Jacobs, R. & Goddard, M. (2000). Social Health Insurance Systems in European Countries. The Role of the Insurer in the Health Care System: A Comparative Study of Four European Countries. The University of York Centre for Health Economics.
- Kwon, S. (1997). Payment Systems for Providers in Health Insurance Markets. *The Journal of Risk and Insurance*,

64(1), 155-173.

- Normand, C., & Weber (1994). Using Social Health Insurance to Meet Policy Goals. *Social Science and Medicine*, 48, 865–69.
- Government of Ghana. (2003). *The National Health Insurance Act* (Act 650).
- Government of Ghana. (2004). *Health Insurance Regulations*, (LI 1809).
- The National Health Insurance Scheme (NHIS). *The Real Issues*. Retrieved on September 23, 2008 from www.ghanaweb.com