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An Assessment of the Kwabre District Mutual Health Insurance Scheme in Ghana

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Abstract: The National Health Insurance Scheme (NHIS) in Ghana has been in operation since 2005 as a nationwide health financing option in the form of District Mutual Health Insurance Schemes. With the Kwabre District Mutual Health Insurance Scheme as a case study the study sought to assess; households level of satisfaction, challenges affecting the scheme, the scheme's sustainability prospects and make recommendations to inform policy. Primary data were obtained through a household sample of 203, which was distributed through a proportionate stratified sampling technique. Interview guides were used to obtain information from 12 accredited health service providers and the scheme management. Secondary data were also acquired from the Kwabre East District Health Directorate (DHD) and the scheme's management office. Data analysis indicated that, the scheme is substantially dependent on tax funding (93.5%). Everybody pays for the scheme through taxation (NHIL) but unfortunately the scheme excludes over 72.1% of the population it covers. There is a low internal fund generation as a factor of excessive disenrollment resulting from membership non-renewal. Based on this premise, the scheme may not be sustainable in the long run as a Mutual Health Insurance Scheme since the schemes are dependent on the collective pool of resources. It is recommended that Government should boldly implement the one-time premium on a progressive and reasonable premium affordable to all. Conscious efforts should thus be geared towards improving revenue collection from premiums through education, enforcement of subscription renewal and introduction of co-payment.

Keywords: Mutual health insurance schemes, premiums, renewal, risk pooling, sustainability

INTRODUCTION

Health risks pose the greatest threat to the lives and livelihoods of individuals in poor households. A health shock adds health expenditures to the burden of the poor precisely at the time when they can least afford it the least (Jutting, 2003). Accessing health services either preventive or curative can exert undue pressure on proportions of the individual's available income and hence they either give up health services and suffer ill health or are pushed into states of vulnerability and poverty (Cohen and Sebstad, 2003; Tabor, 2005).

In Ghana, successive governments have attempted to solve the problem of financing health care delivery. Several types of health financing strategies, ranging from fully subsidized medical care, partial cost recovery to complete cost recovery have been practiced in Ghana. These efforts have been plagued by inability to access health care services by the poor and inefficient service delivery. The increasing public concerns about the inequalities inherent in the cost recovery system known as the cash and carry necessitated the need for an alternative funding to realize the health needs of the people.

Fiscal access to health or health security in the form of health insurance has emerged as part of the reform drive to improve the health status and livelihood of the people in many countries including Ghana. According to Holzmann and Jorgensen (2000), health insurance is increasingly being recognized as integral to any poverty reduction strategy because of the growing appreciation of the role risk plays in the lives of the poor. Its mode of operation varies from country to country. In the case of Uganda, it is a Community Based Health Financing (CBHF) which empowers communities to meet their health financing needs through the pooling of resources. It is an alternative option to a national insurance plan, favoring the local management of health financing and the development of a coverage adjusted to the needs and resources of each community (Microcare, 2010). In Taiwan, Simon (2007) expounds that there is compulsory and comprehensive social health insurance coverage for the whole population of Taiwan where mandatory contributions are made by the insured, employers and the government to the National Health Insurance.

In Ghana, the National Health Insurance Scheme (NHIS) was established by the National Health Insurance Act, 2003 (Act 650) to ensure universal

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access to quality basic health care services that adequately covers against the need to pay out-of-pocket at the point of service use, in order to obtain access to a defined package of acceptable quality health services to all residents of Ghana. Since its inception in 2005 in Ghana health facility utilization has been increasing (from 626,765 in 2005 to 4,952,049 and 17,603,216 in 2007 and 2009, respectively an increase of 2,708% from 2005 to 2009). This is a positive development, but, the implication of the increased utilization of services is worrying as total disbursements (subsidies and reinsurance) for claims payment increased from GH¢ 7.60 million in 2005 to GH¢35.48 million in 2006 showing an increase of 367%. The payments increased from GH¢79.26 million in 2007 to GH¢ 198.11 million in 2008 and further increased to GH¢308.15 in 2009 whiles insurance premiums dropped from 5% in 2008 to 3.8% in 2010 (National Health Insurance Authority, 2010). In the face of budget constraints and limited financing options, the financial sustainability of the scheme may be at risk. To help ameliorate this challenge, the Government of Ghana (2003) intends to implement concurrently the yearly renewal policy with the option of voluntary participation in one-time premium payment for the NHIS in order to accelerate the achievement of universal health coverage (Ministry of Finance and Economic Planning, 2011) as well as enhance the financial capacities of the mutual schemes. Capitation is also a recent intervention being piloted in the Ashanti region, of Ghana to ensure prior allocation of funds to service providers to cover estimated cost of facility utilization by the insured.

Nonetheless, there is still a growing concern on the sustainability prospects of the District Mutual Health Insurance Scheme (DMHIS) which has recently and frequently been the debate of all in the media, policy circles, among technocrats and politicians. Concerns have been raised following administrative defies, consumer dissatisfaction, providers complaints, actual membership coverage and presently the conversion of the scheme to a one time premium. Despite this fact, few studies have specifically focused on assessing the sustainability prospects of the NHIS. This case study assesses the implementation of Kwabre Mutual Health Insurance Scheme as an attempt to fill this gap in literature. The specific objectives include assessing; households' level of satisfaction, challenges affecting the scheme, the scheme's sustainability prospects and recommendations to inform policy.

DATA SOURCES AND METHODS OF COLLECTION

The Kwabre East District is one of the newly created districts in 2008. It is located almost in the central portion of the Ashanti Region in Ghana. It was part of the former Kwabre District, which was carved out of the former Kwabre Sekyere District in 1988. The district shares boundaries with Afigya Sekyere District to the North, Kumasi Metropolitan Area to the south, Ejisu Juaben District to the south-east, Afigya Kwabre to the west and Offinso District to the north-west. The Kwabre East district was used as a case study because the researchers had carried out previous studies there and were familiar with the terrain. As a current policy of the National Health Insurance Commission, the setting up of new schemes for the newly created districts is not allowed therefore secondary data on the membership enrolment and sources of funds from 2008 to 2010 covered the Kwabre District Mutual Health Insurance Scheme (previously joint Kwabre East and Afigya Kwabre (formally Kwabre District)). Additional secondary data were obtained from Kwabre East District health directorate, journals, periodicals, the World Wide Web, magazines, newspapers, national and other documents relevant to the research. Primary data on satisfaction of members of the scheme and health care providers were obtained from the Kwabre East District through a mix of institutional and household surveys using interview guides, structured and unstructured questionnaires.

Table 1: Sample distribution for top twenty communities

Status	No. of communities	No. of households 2010	Questionnaire distribution
Urban	9	14163	126
Rural	11	11175	77
Total	20	25338	203

Authors' construct with data from Ghana Statistical Service (2005)

Slovin's sampling method (Guilford and Fruchter, 1973); $n = N/ [1+N (\alpha)^2]$ (where n = sample size; N = sample frame; α = confidence level); was used in determining the sample size. With the focus on the top 20 communities based on population sizes in the Kwabre East District, a sample frame of 16,160 households recorded in the 2000 population and housing census was adopted (Ghana Statistical Service, 2005) and projected for the year 2010 (25,338 projected number of households for the year 2010). Using a margin of error of 7% (due to limited financial resources) a sample size of 203 households was obtained. Sample distribution was done through a proportional stratified sampling technique based on rural (a community with a population of less than 5,000) -urban (a community with a population of more than 5000) stratification (Table 1). Fourteen and seven questionnaires were administered in each of the urban communities (9) and rural communities (11), respectively. After numbering the houses in each of the

communities the head of households (predetermined stratified sample) were administered with questionnaires.

Out of the 14 health facilities within the District, 12 have been accredited to run the District Mutual Health Insurance Scheme. Interview guides were used to obtain information from the heads of these 12 accredited health service providers, which included; one hospital, four health centres, three clinics and four maternity homes. In addition to the District Health Directorate (DHD), information was obtained from the scheme manager, head of the Accounts Department, Management Information System (MIS) Department and the Claims Department at the Kwabre Mutual Health Insurance Scheme.

In terms of data analysis, both qualitative and quantitative techniques were used. Statistical Package for Social Sciences version 16 (SPSS) software was used for processing the quantitative data. Data collected were presented using illustrative presentation tools such as tables and charts. Qualitatively, description and interpretation of issues under the study was done based on the information gathered from interview and observations.

RESULTS AND DISCUSSION

Characteristics of heads of households: The survey covered 70.4 males and 29.6% females. Out of the number, 78.8% were registered members of the National Health Insurance Scheme. The mean age for male respondents were 35 years with 89% employed and earning an average monthly income of GH¢133.3 which was 21% higher than female respondent's average monthly income of GH¢105.2. Mean age for female respondents (36 years) was one year higher than the males. Also, female respondent's unemployment rate was lower (5%) as compared to male unemployment rate of 11% (Table 2).

Household characteristics: From 203 households, there was a total coverage of 862 persons with a sex composition of 51.2% females against 48.8% males. The mean age recorded was 25.9 years and this depicts a youthful population. The active age group (18-69) as per the National Health Insurance Act, Act 650, 2003 constitutes 62.8% of the household members covered. These are individuals who pay premiums directly through yearly renewal or by virtue of they being Social Security and National Insurance Trust (SSNIT) contributors. About 35.4 and 1.8% of members of households were within the inactive or the health insurance exempt category of 0-17 years and 70 years plus, respectively.

The survey revealed that 12.8% of the labour forces in the Kwabre East District were unemployed. The informal sector of the District also employs 68.1 and contributes 58.1% to district income while the formal sector employs 31.9% (Table 3) of the labour force and contributes 41.9% to the districts income.

As indicated in Table 3, there is a large (68.1%) informal sector whose subscription to the scheme is by premium payment. Their understanding and subsequent buy-in to the scheme is vital to its sustainability. About 70.2% of the head of households in the informal sector had completed the Junior High School (JHS) as their highest level of education. The questionnaire had to be translated and communicated from English, to local language, Twi since they were more comfortable with the local language. Thus their low level of education is characterized by their low abilities to read and write, this may have a potential to negatively affect the scheme. Since low level of education may affect mode of collection of premiums, renewals and most importantly membership understanding of how the scheme works. This may affect community buy-in which is a major hindrance to subscription and utilization of insurance (McCord, 2001). According to Derriennic *et al*. (2005), members of the dissolved scheme at Byogerere (Uganda) had difficulty grasping the concept of contributing to a common resource pool. When members had not accessed health services in a quarter, many expected to have their premiums returned. This misunderstanding lessened community buy-in and contributed to the eventual collapse of the scheme. This observation has critical implication for health insurance management as community by-in is critical to the Scheme's funding and health care coverage for the poor and vulnerable.

Conferring with the case in Byogerere (Uganda), a head of household in an interview bitterly complained of being charged for renewal fees even though he had made no use of the card since he registered.

"I don't understand why I should pay another money while I did not use my card the whole of last year. I am not going to pay anything. They have to carry forward what I paid last year."

From the study, all heads of households were aware of the availability of a Mutual Health Insurance

Table 2: Characteristics of heads of household

Respondent	Number	Sex (%)	Mean age	Employed (%)	Unemployed (%)	Mean monthly income GH¢
Male	143	70.4%	35	89	11	133.3
Female	60	29.6%	36	95	5	105.2

Field Survey, January (2011)

Table 3: Sector of employment and contribution to income

Sector of Employment	Employed		Contribution to revenue
	Frequenc	Proportion	
Formal sector	117	31.9%	41.9%
Informal sector	300	68.1%	58.1%

Field Survey, January (2011)

Table 4: Status of registration of heads of household

Status	Frequency	(%)
Registered	160	78.8
Not registered	43	21.2
Total	203	100.0

Field Survey, January (2011)

Table 5: Cardholder utilization at Kwabre East district from 2008-2010

Indicator	2008	2009	2010
Outpatient	56,499	82,153	102,109
Inpatient	91	496	559
Total	56,590	82,649	102,668

Kwabre East district health directorate; January (2011)

Scheme in the District. However, 77.1% of heads of households had poor level of awareness of the benefit package and modalities of the Scheme; especially with respect to basic knowledge on how the National Health Insurance scheme functions and the issue of yearly renewal of the five year national card.

Disparity in income was also observed considering a maximum monthly income of GH¢500 and a minimum of GH¢10. About 94% of the households earned below the average monthly income of GH¢167 and the gini concentration (0.71) which is closer to one than zero confirms the wide disparity in household income.

Household health care utilization: The survey revealed that 78.8% of heads of households had registered with the scheme (Table 4). The facility frequently visited was the hospital (65.2%) basically due to the type and level of services provided. The average number of visits in a year was four times per household with a range of 1-17 times. Affordability as a factor for health facility utilization was however not an issue as it recorded the least (14.7%) of choice for patronizing a particular facility in Kwabre East District. This is due to the fact that the advent of the MHIS implies no cost incurred at the point of service.

The purpose of the scheme to improve access to health care without payment at the point of service has therefore, by far been fulfilled. Out of the 78.8% of heads of household who had registered for NHIS, 89.3% could not recall spending any amount on health mostly as a result of utilizing accredited health facilities as cardholders of the MHIS. This benefit of the scheme has also been documented by several studies in Ghana. For instance, a before-after study of the NHIS by Durairaj *et al*. (2010) pointed out that, there has been a rise in the use of formal care among the insured members. There has also been a modest decline in the share of out-of-pocket spending in private health spending after the introduction of the NHIS.

Statistics from Kwabre East District Health Directorate indicated an increase in cardholder utilization of health care services over the years (Table 5). Attendance by the insured has increased by 81.4% from 2008 to 2010. This is partially attributed to consumer's level of satisfaction with the scheme which has been a catalyst for new subscriptions evident in the total registration of 19,231 new members within the period of January 2010 to December 2010.

Heads of household satisfaction with the scheme: In assessing consumer's satisfaction as a vital factor for sustainability, four issues that impede member's satisfaction were identified. These were; premium paid, mode of collection, service provided (benefit package) and behaviour of health personnel to cardholders (Table 6).

Satisfaction with premiums paid: According to the NHIA, premium set is at a minimum of GH¢7.2 and a maximum of GH¢48. This varies directly with the income status of the operating district. However, as a result of the difficulty in assessing the income situation of the District, the Kwabre Mutual Health Insurance Scheme has set premium fixed at GH¢17. This applies to all adult members (18 to 69 years) working in the informal sector. The premium (GH¢17) was not the major challenge to satisfaction. As indicated from the survey in Table 6, 77.8% expressed satisfaction with the premium paid. However, from Fig. 1**,** the major issue arising from non-renewal of NHIS was financial challenge (52%). This goes to validate the beneficiary affordability arguments against the one-time premium payments as poverty continues to be a deterrent to access health care in the District. The other reasons (15%) in Fig. 1 include card expiration without usage and card holder not usually falling sick. In a citizens' assessment of the National Health Insurance Scheme by the National Development Planning Commission (2008) to ascertain from the citizens whether the NHIS is providing an affordable health care financing arrangement as envisaged under the Growth and Poverty Reduction Strategy, about 33% have not renewed their registration, because they did not fall sick to benefit from the previous registration. From the survey it was realized that cardholder preferred renewing at the point of illness and as witnessed from the scheme office, they complain about the speed in

Table 6: Level of satisfaction among heads of households

	Premium paid		Mode of collection		Service provided		Behavior of health personnel	
Level of satisfaction	No	%	No	%	No	%	No	%
Very satisfied	52	31.7	35	22.2	55	33.3	69	41.1
Satisfied	78	46.1	84	49.4	89	41.1	69	41.1
Indifferent	23	15.6	32	20.6	25	16.7	6	6.1
Not satisfied	7	6.7	9	7.8	11	8.9	16	11.7
Total	160	100	160	100	160	100	160	100

Field survey, January, 2011

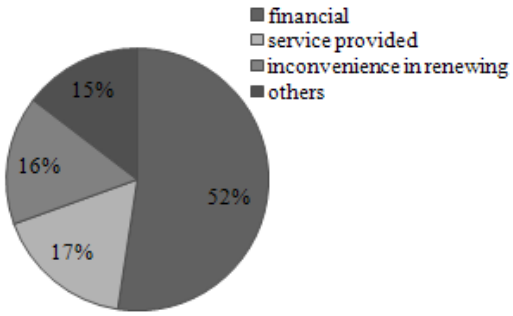

Fig. 1: Reasons for non-renewal source: Field survey, January (2011)

processing only because they needed the renewed card expeditiously to seek health care. This defeats the risk pooling element in the insurance scheme and resulted in the decreasing Internally Generated Fund from 19.4% in 2008 to 6.5% in 2010. The misconception lessens community buy-in and as experienced in Bygyegore (Uganda) it can negatively affect the sustainability of the scheme (Derriennic *et al*., 2005).

Satisfaction with mode of collection: On receiving the 5 year NHIS card, a member is expected to renew subscription every year to continue enjoying the scheme benefits. Payments are made at the scheme office located at the District capital (Mamponteng) where both new registrations and renewals are undertaken. The study revealed that 71.6% of household heads were satisfied with the mode of collection; however, 16% (Fig. 1) of heads of households who had not renewed their NHIS had not done so because of long waiting period and travelling involved in yearly renewal.

Service provided (benefit package): Members are assured of a set benefit package at the time of illness without payment at the point of service. Services provided include, Out-Patient Services, In-Patient Services, Oral Health Services, Eye Care services, Maternity Care, pharmaceutical and emergency services. Drugs covered by the scheme are provided to patients at a zero cost. About 16.7 and 8.9% of heads of households were indifferent and not satisfied with the services provided under the scheme respectively. Those dissatisfied described the service provided (benefit package) as inadequate with emphasis on the type (inferior) of drugs usually prescribed at the health facility.

Table 7: Membership satisfaction with the scheme based on all four factors

Satisfaction	(%)
Very satisfied	31.5
Satisfied	43.2
Indifferent	12.5
Not satisfied	12.8

Field survey, January (2011)

Behaviour of health personnel to cardholders: At the point of service, health personnel attention and attitude shown towards card holders affects the value the community/members place on the health insurance scheme. About 82.2% of household heads confirmed their satisfaction (Table 6) with the behavior of health personnel whiles 11.7% were not satisfied because of long waiting hours (average of 3 h) and unpleasant behavior of nurses in particular when they access health facilities with the NHIS card. In some instances, household heads indicated a combination of the factors that affected their satisfaction. Table 7 indicates the response tabulation covering the four issues (premium paid, mode of collection, service provided (benefit package) and behavior of health personnel to cardholders). From this, 12.8% of responses indicated dissatisfaction with the scheme. Irrespective of the setback, the scheme possesses a potential considering increased facility coverage, education and consistent request of insurance cards by health care providers. This has resulted in 50.4% of the displeased members, indicating their willingness to continue with the scheme even though they expressed dissatisfaction. Having a 74.7% expression of satisfaction to the scheme is promising to the schemes sustainability prospects which according to Thompson *et al*. (2009) go beyond just imbalances in accounting terms to include community satisfaction to sustain and improve enrolment to enhance risk pooling.

Membership Enrolment: The implementation of the Kwabre Mutual Health Insurance Scheme started in 2005 with 23,675 members. There are 183,958

Table 8: Membership enrolment of Kwabre MHIS and Ghana, in percentages

	Infomal	SSNIT contributors	SSNIT pensioners	Under 18	Aged	Indigent	Pregnant women
Kwabre (2010)	33.2	4.2	0.4	47.7	5.5	0.5	8.5
Ghana (2010)	29.3	5.8	0.5	48.3	6.3	2.1	7.7

Authors' construct with data from Kwabre MHIS Office (2010) and National Development Planning Commission (2010)

Table 9: Facility utilization by the insured and uninsured in Kwabre East district 2008-2010

	2008 n = 117,920		2009 n = 165,241		2010 n = 162,601	
Indicator (%)	Insured	Uninsured	Insured	Uninsured	Insured	Uninsured
Outpatient	56,499 (47.9)	61,273 (52.0)	82,153 (49.7)	82,158 (49.7)	102,109 (62.8)	59,530 (36.6)
Inpatient	91 (0.08)	57 (0.05)	496 (0.3)	434 (0.3)	559 (0.3)	403 (0.2)
Total	56,590 (48.0)	61,330 (52.0)	82,649 (50.0)	82,592 (50)	102,668 (63.2)	59,933 (36.8)

Authors' construct with data from Kwabre East District Health Directorate January (2011)

members registered to the scheme in 2010 representing an increase of 677%. About 47.7% of members fall under 18 years followed by 33.2% from the informal sector with the SSNIT pensioners accounting for the least of (0.4%) enrolment. From Table 8, the proportions are consistent with the national outlook in 2010.

Provider's satisfaction and challenges with the mutual health insurance scheme: Health care services in terms of quality delivery largely depend on the providers' (accredited) satisfaction with the inflow of funds through reimbursement by scheme management. These services whether acceptable or unacceptable to the households will determine their willingness to subscribe or renew subscription to the scheme. Health care providers thus play a vital role in determining the sustainability or otherwise of the Mutual Health Insurance Scheme (Jutting, 2003).

Delay in claims submission and reimbursement: The period between submission and honouring of claims took an average of 3 months for processing before reimbursement. This affects accredited service providers and results in delays in payment of medical supplies, procurement of basic facilities and payment of staff salaries by private health providers. However with assurance of reimbursement health service provider operate on credit basis.

Pressure on health personnel from upsurge in facility utilization in the Kwabre East district: Table 9 shows that total utilization (out-patient and in-patient) of health facilities increased by 37.9% from 117,920 in 2008 to 162,601 in 2010 in the district. whilst utilization by the insured increased 81.4% from 56,590 in 2008 to 102,668 in 2010 that of the uninsured decreased by 2.3% within the same period. Thus the advent of the National Health Insurance Scheme has resulted in an upsurge in health facility utilization in the Kwabre East District. This has also contributed to the increasing pressure on personnel in view of a deteriorating doctor patient ratio of 1: 11,318 in 2008 to 1: 20,534 in 2010, compared to the Regional situation in 2008 (1:9,861) and 2010 (1:8,886) (National Development Planning Commission, 2009; National Development Planning Commission, 2010).

Non exiting systems to minimize moral hazards: According to the service providers some cardholders abuse the scheme by assessing different health facilities for similar uncomplicated diagnosis. Others also use their card to seek diagnoses and prescriptions for their relations who are not cardholders by describing symptoms which they are not suffering from. In an instance at the Joy Maternity Home in Mamponteng, a family of five requested for medical attention for the reason that they have not utilized the card for the year.

Scheme management challenges: The scheme management plays the focal role in determining the financial sustainability prospects of the Mutual Health Insurance Scheme. The scheme's sustainability depends on management success in achieving an overtime balance between revenue and expenditure on reimbursement of claims submitted within an accounting period. Financial balance will result if and when the total of actual expenses incurred (in any accounting period) in paying the benefits of the enrolled group is no more than the total of the enrolled group's contributions plus other fund inflows (Fairbank, 2003).

Non-existing database on the district socio-economic groups: Disparity in income was also realized considering a maximum monthly income of GH¢500, a minimum of GH¢10 and a mean monthly income of GH¢167. Ninety four percent of the heads of households contacted earned below the average

Table 10: Kwabre district mutual health insurance scheme inflows and outflows from 2008 to 2010

	Collection at scheme level (GH¢)		Total amounts received from NHIA (GH¢)				
Year	IGF	(%)	Subsidy/reinsurance	(%)	Total inflow (GH¢)	Total outflows (Expenditure on claims)	Deficit/surplus
2008	459,630.11	19.4	1,909,377.47	80.6	2,369,007.58	2,872,502.72	503,495.14 (D)
2009	420,469.24	13.0	2,812,374.74	87.0	3,232,843.98	4,170,793.81	937,949.83 (D)
2010	374,484.97	6.5	5,420,442.74	93.5	5,794,927.71	3,762,386.62	2,032,541.09 (S)

Authors' construct with data from Kwabre district mutual health insurance office; January (2011)

Table 11: Kwabre district mutual health insurance membership renewal

Membership	Cumulated membership	Renewal (2010)	New registration (2010)	Beneficiaries (2010)
Informal sector	61150	11447	4847	16294
SSNIT contributors	7731	5601	1102	6703
SSNIT pensioners	773	1964	369	2333
Indigents	842	40	15	55
Under 18 year	87658	19854	7253	27107
70 years and above	10121	6335	1355	7690
Pregnant women	15683	1012	4290	5302
Total	183958	46253	19231	65484

Kwabre district mutual health insurance office; January (2011)

monthly income. The survey also revealed a wide disparity in income with a gini co-efficient of 0.71. Consequently, setting of premiums should have been based on evidence from such social groupings to be identified by the District Health Insurance Committee (DHIC). However in the absence of a data base for the social and economic groupings, a flat premium payment of GH¢ 17/annum is charged in the KDMHIS as a matter of the difficulty in categorizing people into different socio-economic groups. Thus identifying those in need of exemption from premium payments becomes strenuous which may lead to poor access to health care for the very venerable and poor.

Low revenue generation: As indicated in Table 10, funds generated at the scheme level represent the least proportion in the total revenue generated (19.4, 13.0 and 6.5% in 2008, 2009 and 2010, respectively). Calculable amount allocated to the Kwabre District Mutual Health Insurance Scheme for payment of services utilization was never enough for reimbursement from 2008 to 2010 hence scheme management file in for reinsurance. With increasing utilization of health services by the insured, expenditure on claims also increased by 45% in 2009 but decreased by 9.8% in 2010 (Table 10). The deficits recorded in 2008 (17.5%) and 2009 (22.5%) were a threat to the schemes sustainability. However, the surplus inflow (GH¢2,032,541.09) recorded in 2010 restores a near balance between inflows and outflow deficits recorded in the previous years. This causes the undue delays in reimbursement. Though a surplus was recorded in 2010, the extra inflow is not considered as a surplus for the accounting year because it resulted from the servicing of indebtedness in the previous years. Deducing from Table 11, out of a possible 183,958 membership renewal in 2010, only 46,253 (25%) were successfully renewed. In addition to new registration of 19,231 people, an actual beneficiary of the scheme for 2010 was 65,484 people. This represents 35.6% of total membership and implies that 49,703 registered informal members did not renew in 2010. The scheme therefore was denied GH¢ 844,951 (49,703 * GH¢ 17) addition to IGF. Beside low revenue generation, there is an imbalance between inflow and outflow. The schemes continuity lies in its ability to ensure a regular honoring of submitted claims to retain the confidence of service providers and cardholders. However, the scheme management has recorded a deficit from 2008 to 2009. The major source of revenue for the scheme's continuity is from the National Health Insurance Fund administered by the National Health Insurance Authority (Fig. 2). It contributed as much as 93.5% of the schemes total fund inflow in 2010 as subsidies and reinsurance for the operation of the scheme. The major factor resulting in the low revenue generation is the cost of the premiums, which have been set at a generous level deemed affordable rather than on a 'technically sound' actuarial basis (WIEGO, 2009; Gyapong *et al*., 2007; Rajkotia, 2007). The Kwabre Mutual Health Insurance scheme has 183,958 members registered. This represents 78.4% of the projected population (234,703) under the scheme for 2010. Out of this registered members, only 35.6% (65,484) were actual beneficiaries to the scheme based on new registration (19,231) and renewal (46,253) for 2010.

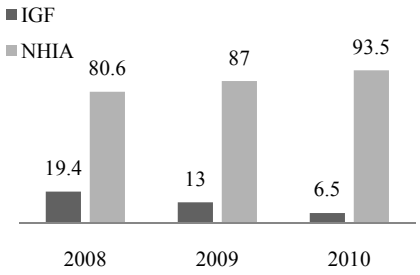

Fig. 2: Sources of funds for Kwabre mutual health insurance scheme 2008-2010

Expressing actual benefactors (65,484) as a percentage of the population (234,703) the scheme covers, it is estimated that only 27.9% actually subscribed or renewed to benefit from the scheme in 2010. Notwithstanding the fact that the value of money contributed by the 27.9% is worthwhile, it represents a low (6.72%) total inflow to the schemes operation in 2010, with National Health Insurance Authority contributing 93.5%. There is therefore the possibility of government absorbing all public health bills. This will however require efforts to generate more revenue from the external sources, possibly a further increase in health budgetary allocation and the National Health Insurance Levy. The current debate on one time premium becomes critical for health care financing in Ghana. Currently two schools of thoughts have emerged on the subject relating to those for and against the one-time premium payments under the NHIS. Those for this new policy argue of cheaper collection of premium and payment administrative costs over the lifetime of the beneficiary, earning of interest spreads on the invested one-time premiums would defray the cost of running the NHIS and reduction and elimination of the issue of policy non-renewal. In addition, proponents argue that only about 3.8% of inflows come from premiums paid to policy holders from the informal sector. The remaining are funded through budgetary allocation system of 'ring-fencing'; 2.5% national health insurance levy; 2.5% Social security contribution; Ministry of Finance and Economic Planning resources for exempted persons; investment returns; Parliament allocations; and voluntary contributions such as grants, donations and gifts (Durairaj *et al*., 2010). All these demonstrate the low significance of premium payments to the scheme which can be overshadowed by increase government commitments and funding while strengthening internal efficiency and effectiveness.

Contrary to these, opponents of the policy argue that a one-time premium payment would not be feasible on the basis that few people have the financial capability to make a one-time premium payment. The challenge of pricing as cost of treatment increases as time evolves, has the potential of rendering the scheme vulnerable to severe debt and possible collapse due to undervaluation of diseases. In the first place, arguments are made in connection of policy renewals for beneficiary as the scheme continues to be challenged by this issue. Reasons mostly attributed to poverty have been related to this and it has been identified that in some cases, an International Labor Organization programme and some NGOs stepped in to pay the premium on their behalf of beneficiaries (Durairaj *et al*., 2010). Comparing the current rates averaging between GH¢150-270/year to the National Health Insurance Authority proposal of a one-time premium of between GH¢100 and GH¢200 (Arthur, 2011), adoption may challenge lots of people from accessing the scheme to finance health care in Ghana especially when this is greater than the monthly minimum wage of workers in Ghana averaging GH¢78.33 or GH¢3.73/day. In effect the objective of the financing scheme may seize to be pro-poor as it was intended.

OXFAM (2011) has also indicated that the NHIS is heavy reliant on tax funding defeating it been accurately described as social health insurance. It is more like a tax funded national health care system, but one that excludes over 80% of the population. Every citizen pays for the NHIS but only some get to join. Based on this OXFAM recommended that efforts should therefore be geared towards commitment to a clear plan to remove the requirement of regular premium payments, abolish fees in the parallel, "cash and carry" system and make health care free at the point of delivery for all by 2015.

Management measures to address challenges: To keep the scheme running, the scheme management has put measures in place to resolve some of the challenges. Some of these measures include:

- **Capitation:** This is been implemented on pilot basis in Ashanti Region to ensure prior allocation of funds to service providers to cover estimated cost of facility utilization within a month. It is a mechanism to check and control the outflow of funds from the National Health Insurance Fund by making the scheme financially sustainable over time.
- **Increased publicity:** Publicity now, is not limited to community outreaches. The marketing office is tasked with education and mobilization within the District. There is now a whole budgetary allocation for publication on the radio as a means of educating existing members on the schemes

operation and benefits whiles attracting new members. Currently, the Government of Ghana (2004) intends to implement concurrently the yearly renewal policy with the option of voluntary participation in one-time premium payment for the NHIS in order to accelerate the achievement of universal health coverage (Ministry Finance and Economic Planning, 2011).

Sustainability prospects of the scheme: On the supply side (scheme management and service provision), there is an increase in the utilization of health service by the insured but the scheme is not able to generate enough resources internally. This has caused over reliance on external funds sourced from taxation and in turn results in delayed processing and reimbursement. On the side of demand (membership satisfaction), cardholders expressed satisfaction with the scheme and its benefits, however, there has been excessive disenrollment to the scheme as a result of non-renewals. The interplay of demand and supply of insurance based on the survey shows that membership enrolment is dropping, resource mobilization is low, risk pooling is low and the likeliest way out is an increase in premium. Further increases in premium will however, decrease existing demand and coupled with decreasing trend in internally generated funds, the scheme will all other things been equal fade out in to a tax based health financing system. Hence, the scheme in the Kwabre District may not be sustainable as a Mutual Health Insurance Scheme. However, with government commitment to taxation (NHIL), transfer of workers' contributions from SSNIT, Parliament fund allocations and funds from investments, grants, donations, gifts and other voluntary contributions sustained, the scheme will be sustainable in the long run.

CONCLUSION AND RECOMMENDATIONS

An assessment of the Kwabre District Mutual Health Insurance Scheme revealed the following major findings:

- The NHIS is a generous health financing option in Ghana and as revealed by the survey the scheme in the Kwabre District is substantially dependent on tax funding (93.5%) but excludes over 72.1% of the population under the scheme.
- Accredited service providers after submitting their claims had to wait for an average of 3 months for processing before reimbursement. This normally results in delays in payment of medical supplies, procurement of basic facilities and payment of staff salaries by private health providers.
- There is congestion in accredited health facilities because of 44.8% increase in both in-patient and out-patient attendance from 2008 to 2010.
- In the absence of a data base for the social groupings, a flat premium payment of GH¢ 17/annum is charged in the KDMHIS because of the difficulty in categorizing people into different socio-economic groups.
- The major source of revenue for the scheme's continuity is from the National Health Insurance Fund which contributed as much as 93.5% of the schemes total fund inflow in 2010 as subsidies and reinsurance for the operation of the scheme.

Government's policies should therefore be geared towards addressing identified challenges to the sustainability of the Mutual Health Insurance Scheme, as much more is required for the scheme to realize its vision to be a model of a sustainable and equitable social health insurance scheme. It is therefore recommended that there should be:

Increased efforts towards improving community understanding of how the scheme works: To ensure financial viability and sustainability the scheme management should embark on an intensive outreach through radio and other forms of advertisement to frequently educate and draw the attention of its members on renewing and insuring themselves against health shocks at the time where they are healthy. The education should be geared towards making members understand how the whole insurance scheme works. Also, members should be made to understand the intervals between renewals and when exactly to renew when their subscription expires:

- **A household income database:** The District Health Insurance Committee should develop a comprehensive income profile of the district to serve as a basis to increase, maintain or reduce premiums for the NHIS social groupings.
- **Enforcing subscription renewal:** The DHIC should come out with legal measures to enforce card renewals. Once subscription has been made to the scheme, renewal should be mandatory and the cost of not renewing in a previous year should be charged before accepting renewal for a current year. In order for this not be a deterrent for joining the scheme, the grace period for renewal should be increased and the ability of individuals to pay the premiums enhanced through economic empowerment interventions.

- **Co-payment introduction:** To discourage unnecessary visits and reduce moral hazards, the NHIA should adopt the practice in Taiwan where patients make a co-payment (a system where the insured pays a specific amount of his/her cost of treatment) for health care services they consume. This will discourage the over utilization of services that occurs when health care is free at point of service. In other to avoid deterring patients from seeking necessary health care services, there should be a co-payment ceilings for hospital care and exemptions from co-payments for certain groups (e.g., low-income families).
- **One-time premium or a tax based health financing system:** The government policy to concurrently run the yearly renewal policy with the option of voluntary participation in one-time premium payment for the NHIS should be implemented provided it is on a reasonable premium affordable to all and there are well laid down structures to continually generate income for the schemes operations. As it stands, though the IGF is low, its total elimination will exert an extra undue pressure on the government amidst increasing utilization of the few beneficiaries. Efforts should therefore be geared towards generating more revenue from taxation; maintaining the regular premium payments with due consideration to the social groupings; introducing co-payments, enforcing subscription renewal and improving community understanding of how the scheme works through education.

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