NATIONAL HEALTH INSURANCE AUTHORITY

NATIONAL HEALTH INSURANCE FUND ALLOCATION FORMULA FOR 2013

March 26, 2013

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NATIONAL HEALTH INSURANCE AUTHORITY

NATIONAL HEALTH INSURANCE FUND
ALLOCATION FORMULA-2013

1.0 INTRODUCTION

The Government of Ghana through the Ghana Poverty Reduction Strategy (GPRS) has outlined its policy strategy of dealing with poverty in Ghana. A major component of the GPRS is the strategy to deliver accessible and affordable health care to all resident in Ghana especially the poor and vulnerable.

To achieve the object of this strategy, the Government introduced a district-wide mutual health insurance scheme, now unified into a National Health Insurance Scheme, to enable residents in Ghana to have access to basic healthcare services without having to pay cash at the point of service used.

One major underlying principle of the National Health Insurance Scheme is equity, and it is in line with the Health Sector's desired objective of bridging the equity gap in the health status across regions in the country. In particular, it seeks to provide protection for the poor, which is achieved by ensuring that the rich support the poor.

The National Health Insurance Authority (NHIA) was first established by the National Health Insurance Act, 2003 (Act 650). In 2012, the Act was repealed and replaced by a new law (Act 850). The object of the Authority under Act 850 is to attain universal health insurance coverage in relation to persons residents in Ghana, and non-residents visiting Ghana, and to provide access to healthcare services to the persons covered by the Scheme.

Section 39 of Act 852 established the National Health Insurance Fund (NHIF) and the object of the Fund is to pay for the health care services for members of the National Health Insurance Schemes (NHIS).

For the purpose of implementing the object of the Fund, section 40 (2) of Act 852 stipulates that the monies from the Fund shall be expended as follows:

- to pay for the healthcare costs of members of the National Health Insurance Scheme;
- to pay for approved administrative expenses in relation to the running of the National Health Insurance Scheme;
- to facilitate the provision of or access to healthcare services; and
- to invest in any other facilitating programmes to promote access to health services as may be determined by the Minister in consultation with the Board.

The sources of money to the NHIF are provided under section 41 of the Act as follows:

- the National Health Insurance Levy (NHIL);

- 2.5 percentage points of each person's contribution to the Basic National Social Security Scheme;
- such moneys that may be approved for the Fund by Parliament;
- moneys that accrues to the Fund from investments made by the Authority;
- grants, donations, gifts, and any other voluntary contribution made to the Fund;
- fees charged by the Authority in the performance of its functions;
- contributions made by members of the Scheme; and
- moneys accruing from the National Insurance Commission under section 198 of the Insurance Act 2006 (Act 724).

2.0 MAJOR PLANNED ACTIVITIES FOR 2013

Section 3 of the National Health Insurance Act 2012, (Act 852) enjoins the Authority to undertake programmes that further the sustainability of the National Health Insurance Scheme, and also ensures the efficiency and quality of services under the national and private health insurance schemes. In light of this, the National Health Insurance Authority has earmarked the following major plans for the year 2013. These proposed plans are key variables in the determination of the allocation formula and planned expenditure for 2013. Key activities planned for 2013 are;

1. Accelerating claims management within the context of e-claims and claims processing centres. The Authority shall establish additional claims processing centres in Tamale, Kumasi and Cape Coast to augment the work of the central claims processing centre in Accra. The year will also see the operation of the e-claim processing at all the claim processing centers.

2. The Authority plans to modernize and transit its ICT concept from one that places emphasis on infrastructure to a MIS which places premium on information generation. We shall also upgrade the ICT data center and also introduce biometric system for membership registration to enhance data integrity and subscriber authentication at point of access to health care. This is expected to ensure greater checks and control in the claims payment system. This is also expected to reduce provider shopping, subscriber abuse and fraud.

3. The Authority plans to operationalize the unification of the 155 District Mutual Health Schemes into a unitary National Scheme under the National Health Insurance Authority. The individual schemes will exist only as district offices of the NHIA. This means that the NHIA will take on the operational expenses of the various schemes; and this has been incorporated in the allocation for 2013.

4. Reform the ID card production and management system to ensure instant issuance of ID cards at the point of registration and also to intensify membership drive to increase active membership to 42% of the national population.

5. In the year 2013, the Authority will commence the expansion of the per capita payment mechanism across the country. This new payment system was started in Ashanti Region in 2012. We shall begin with enrollment of PPP across the country for the remaining nine regions.

6. The Authority will integrate and consolidate the clinical audit and quality assurance functions to leverage on their relatedness and develop synergy for improve value creation. We shall expand the clinical audit activities by undertaking more rigorous audit of claims from the service providers.

7. Establishment of Health Insurance Institute to train personnel.

8. To organize regular forum ("Health Insurance Dialogue") to address public and stakeholder concerns on health insurance.

3.0 COST CONTAINMENT STRATEGIES

Increased membership of the scheme over the years has impacted health care services utilization which is evident in the growth of outpatient utilization by over forty fold from 597,859 in 2005 to 25.5 million in the year 2011. This trend has had tremendous impact on the scheme's expenditure which continues to exceed income since from 2009; thereby threatening the sustainability of the Scheme.

In order to ensure that the scheme remains sustainable, the NHIA has initiated cost containment measures which will be intensified to ensure the sustainability of the Scheme. These measures include the following, among others;

Clinical Audits

To ensure quality care for NHIS subscribers and also minimize leakages and abuse as a result of fraudulent claims submitted for payment, the NHIA set up Clinical Audit Division in 2009, which conducts regular clinical audits in all accredited service providers to review/audit the authenticity of claims submitted by accredited providers. This initiative resulted in a total amount of GH¢ 21.6 million has been deducted from the claims of health providers as at December 2012.

Claims Processing Centre & E-Claims system

The significant growth in NHIS membership over the years has resulted in exponential growth in the volume of claims submitted by healthcare providers. To address the capacity gap at the scheme level for vetting claims, the NHIA established a state-of-the-art Claims Processing Center (CPC) in 2010 to handle claims emanating from all Tertiary and Regional Hospitals, claims from the Volta Region, and claims from selected facilities in the Ashanti Region. This initiative has reduced delays in claims vetting and payment as well as abuses and fraud in claims billing and vetting. Efficient and effective claims processing at CPC has resulted in a total deduction of GH¢ 17.3 million out of a total claims of GH¢ 131.9 million submitted to CPC for payment in 2010 and 2011, which hitherto would have been paid. This represents cost savings of over 13% of the total claims submitted to CPC. In 2012 a total amount of GH¢ 6.4 million representing 8.8% of claims submitted for payment was deducted.

The Authority is introducing electronic claims management in 2013 to achieve the goal of capturing and validating claims electronically. This system will further help to check fraud and abuses in subscriber utilization as well as facilitate claims processing.

Linking Diagnoses to treatment

Linking diagnoses to treatment to improve quality of care and also to improve efficiency in claims processing to ensure accurate and timely payments. This

would enable the Authority to contain cost and enhance the sustainability of the Scheme.

In 2010, clinical audits of healthcare facilities across the country uncovered startling information of rampant diagnoses and treatments mismatch not in agreement with the Standard Treatment Guidelines (STG) of Ministry of Health (MOH). Additionally, some facilities were prescribing medicines not allowed for their levels of care as stated in the Essential Medicines List (MOH). The consequences thereof leads to debasing the minimum standard and quality of care required of health facilities and cost implications for the Scheme as these tended to increase either utilization or quantity of services provided.

In view of this, a group of clinical consultants with specialty experience in their fields and in depth understanding of the NHIS benefit package were contracted to design standard protocols of diagnosis and treatment regimes that are in line with generally accepted standards and contemporary practices in clinical care It is expected that clinicians in NHIS accredited facilities would follow these protocols and this would form the basis for claims vetting.

Modified Procedures in Free Maternal Care program

The free maternal care policy of the NHIS was introduced as part of the measures to reduce maternal and infant mortality. The enrolment procedure was fraught with abuse, misrepresentation and misapplication with consequent cost implications to the NHIS. The NHIA has introduced operational and administrative changes in the Free Maternal Care Programme which require pregnant women to register, free of charge, with NHIS district schemes before accessing health care. The effect of the operational and administrative changes is intended to reduce abuse in the implementation, where "non-expectant" mothers are billed on the scheme for payment.

Consolidated Premium Account

Prior to 2010, the premiums collected and managed by the district offices schemes were not properly accounted, amidst fraud and misapplication. Management has therefore introduced a Consolidated Premium Account (CPA) system, where all premiums collected nationwide are deposited into the CPA and controlled by the Authority to minimize abuse. This measure has blocked the leakages and improved accountability and management of premiums collected by the schemes. The next step is to introduce a point of sale device for greater efficiency in premium collection.

Prescription Form

The NHIA collaborated with the MOH to introduce uniform prescription form as a result of the rising cost of medicines which was equally threatening the sustainability of the NHIS.

This unique prescription forms have been introduced and piloted in ten facilities in the Greater Accra Region, and would be implemented across the country soon. The overall goals of introducing the prescription forms are as follows; to contain escalating drug cost, to improve rational use of drugs, to improve quality of care; and to track prescribing and dispensing patterns of providers.

Enforcing Prescribing Levels

Enforcing prescribing levels as stipulated in the Essential Medicines List of the Ministry of Health with the aim of minimizing fraud and abuse. As a cost containment measure and to ensure rational prescribing, the prescribing levels of medicines developed by the Ministry of Health (MOH) were introduced for the first time unto the revised NHIS Medicines List (ML) in 2011.

The NHIA has collaborated with Ghana Health Service to put in place measures to enforce prescribing levels as stipulated in the Essential Medicines List of the Ministry of Health to ensure quality care for subscribers and minimize supply-side moral hazard.

Capitation

NHIA has introduced Per Capita Payment (Capitation) as a viable alternative payment mechanism in Ashanti Region. The pilot covers primary outpatient care in Ashanti Region whilst maintaining Ghana Diagnostic Related Groupings (G-DRG) as payment mechanism for inpatient care at District, Regional and Teaching Hospitals.

Capitation as a provider payment mechanism will help in containing cost by; sharing of financial risk between schemes, providers and subscribers; correcting some imbalances created by the G-DRG; promoting managed competition for providers and choice for patients, and Improving efficiency and effectiveness of the health service delivery.

Gatekeeper System

The NHIA is enforcing the Gatekeeper system within the health sector (referrals from primary to secondary then to tertiary levels).

Affordable Medicines Facility- Malaria (AMFm) programme

The NHIA liaised with the Global fund/ Malaria Control Programme office to benefit from the Affordable Medicines Facility- Malaria (AMFm) programme. This initiative has greatly reduced the prices of ACTs, which form the bulk of medications dispensed to NHIS members because of the endemic nature of malaria in Ghana. This initiative began in May 5, 2011 and savings from the AMFm is projected to be over 50% annually till 2014.

4.0 ANALYTICAL REVIEW OF FINANCIAL PERFORMANCE & POSITIONS

4.1 RECEIPTS & PAYMENTS FOR THE YEAR ENDING DECEMBER 31, 2012

Total amount of **GH¢749.16 million** was received from MOFEP during the year 2012. Of this amount, **GH¢229.44 million** relates to arrears for 2011, and **GH¢519.72 million** relates to NHIL receipts for the year 2012. Other receipts during the year amounted to **GH¢104.35 million**; giving total receipts for the year 2012 as **GH¢853.51 million**.

Total payments for the year ending 2012 was **GH¢863.52million.**

The net cash position of the Authority as at the end of the year 2012 declined by **GH¢ 10.01 million**.

	GH¢ million	GH¢' million
RECEIPTS		
MOFEP – Releases for 2011 arrears	229.44	
- Releases for 2012	519.72	
Premium	28.37	
Disinvestment	75.56	
Other Income	0.42	
		853.51
PAYMENTS		
Claims Subsidy – 2011 Arrears	120.67	
- - 2012 (up to Aug)	397.32	
Admin. Support & Logistic to Schemes	28.09	
Support to MOH-Health Sector Investment	52.48	
Support to MOH-Primary & Preventive care	13.54	
Support to District Health Project	22.65	
Authority Operations	33.70	
Nationwide ICT	11.43	
Loan Paid	109.53	
Investment	69.05	
Corporate Social responsibility	0.59	
Plant. Property & Equipment	4.47	
		863.52
Deficit/Surplus		
Change in Call & Cash Balance		**(10.01)**

4.2 REVIEW OF 2012 BUDGET ALLOCATION

Total expenditure for the period to December 31, 2012 was **GH¢ 799.14million** against annual budget of **GH¢ 927.77 million.** Reported variance for the period is **GH¢ 128.63 million** or 13.9% of the annual budget.

	2012 Budget	2012 Actual	Var.	Var
	¢'m	¢'m	¢'m	%
Subsidies & Claims	605.74	618.44	(12.7)	-2.1
Authority' Operations	36.50	34.83	1.67	4.6
Admin. & Logistical Support to Schemes	50.96	35.13	2.83	5.6
MOH – Public Health & Preventive Service	39.75	33.21	6.54	16.5
MOH - Health Service Investment	77.86	38.86	39.00	50.1
Support for District Health Projects	11.50	9.38	2.12	18.4
Support for Parliamentary M & E	1.15	1.12	0.03	2.6
Claims Processing Centers	3.63	-	3.63	100.0
Archival & Storage System	1.43	0.14	1.29	90.2
Biometric Registration & Authentication system	22.55	-	22.55	100.0
Nationwide ICT System	19.11	19.05	0.06	0.31
Per Capita Payment System	3.47	-	3.47	100.0
Call Center	2.00	2.00	-	-
Head Office Building Annex	4.25	-	4.25	100.0
Construction of Regional Offices	3.20	3.20	-	-
Construction of 50 no. District Offices	15.00	-	15.00	100.0
Construction of Health Centers	6.30	-	6.30	100.0
Support for Office Complex- Nurses & Midwives Council	2.00	-	2.00	100.0
Health related research	2.00	-	2.00	100.0
Corporate Social Responsibility	1.00	0.59	0.41	41.0
Contingency	18.37	3.19	15.18	82.6
	927.77	**799.14**	**128.63**	**13.9**

4.3 COMPARATIVE ANALYSIS OF NHIL/SSNIT COLLECTIONS & RECEIPT

The Authority budget for NHIL/SSNIT for 2012 was **GH¢682 million**. However collection reports received from the revenue agencies showed that a total amount of **GH¢ 713.48 million** has been collected for the year 2012. Of this collections, only **GH¢ 519.72 million** (72.8%) has been received by the Authority for the year as at 31st December 2012.

Annual Budget against Reported Collections (VAT & SSNIT)

Year	Budgeted Collection GH¢'m	Reported Collections GH¢'m	Variance GH¢'m	Variance
2010	480.90	401.85	(79.05)	(16.4%)
2011	477.67	557.58	79.91	16.7%
2012	682.21	713.48	31.27	4.6%

Reported Collection (VAT & SSNIT) Against Actual Releases from MOFEP

Year	Reported Collections GH¢'m	Releases GH¢'m	Variance GH¢'m	Variance per Reported Collection
2010	401.85	401.85	-	-
2011	557.58	557.58	-	-
2012	713.48	519.72[1]	193.76	27.15%

Annual Budget Against Actual Releases from MOFEP

Year	Budgeted Collection GH¢'m	Releases GH¢'m	Variance GH¢'m	Variance
2010	480.90	401.85	(79.05)	(16.4%)
2011	477.67	557.58	79.91	16.7%
2012	682.21	519.72[1]	162.49	23.8%)

[1]This excludes releases received in 2013 for 2012 amounted to 211.09 million.

4.4 COMPARATIVE ANALYSIS OF OTHER REVENUE

	Budget 2012 GH¢ million	Actual 2012 GH¢' million	% Execution
Premium	45.01	28.35	63%
Interest Income	14.00	28.30	202%
Other Income	0.50	0.42	84%
Total	**59.51**	**57.07**	**96%**

4.5 REVIEW OF INVESTMENT PERFORMANCE & POSITION IN 2012

The Authority's Investments are in fixed deposits with financial institutions, mostly banks. The principal value of the Investment funds as at January 1, 2012 was **GH¢163.22 million**. The balance rose to **GH¢184.36 million** as at the end of 2012.

The increase in the value of the investment portfolio was largely due to re-investment of investment income. During the year, additional investment of **GH¢69.05 million** was made against a total disinvestment of **GH¢75.56 million**.

The investment portfolio earned a total interest of **GH¢27.65 million** during the year 2012.

Acceptable international practice requires that for an insurance scheme to be sustainable, the scheme should have an investment cover of at least 18 months. But currently, the fund investment balance provides cover for only **3 months**. This situation poses serious threat to the sustainability of the National Health Insurance Scheme.

SUMMARY OF INVESTMENT POSITION IN 2012 (GHC' million)

Period	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
Opening Balance	163.22	168.03	178.40	175.39	**163.22**
Investments	10.00	23.65	35.40	-	**69.05**
Disinvestments	(10.12)	(19.39)	(46.02)	-	**(75.56)**
Interest Earned	4.93	6.11	7.61	8.97	**27.65**
Closing Balance	168.03	178.40	175.39	184.36	**184.36**

5.0 GENERAL PROJECTIONS UNDERLYING THE NHIF ALLOCATION FOR 2013

The following revenue projections underline the NHIF Allocation & Budget Allocation for 2013.

5.1 BUDGETED RECEIPT

The Authority expects to receive a total amount of **GH¢ 1,128.76 million** in 2013 from NHIL/SSNIT and other sources to be able to execute its mandate in 2013. The composition is as follows:

- **Levies from NHIL and SSNIT**

  On the basis of MOFEP Budget Statement for 2013, the National Health Insurance Fund is expected to realize an amount of **GH¢ 917.86 million** from NHIL and SSNIT contributions in the year 2013.

- **Premium from Informal Sector**

  The Premium from informal sector is budgeted at **GH¢43.15 million.** This represents an average premium of **GH¢13.56** per member for an active membership of **3,182,964** for the informal sector in 2013.

- **Interest Income from Investment**

  The Authority expects to earn total interest income of **Gh¢ 31.27 million** from its investment portfolio.

- **Processing Fees & Other Income**

  The Authority expects to earn a total amount of **GH¢18.23 million** on processing fees, provider credential fees, motor insurance fees, and sale of tender documents.

- **Government of Ghana Support**

  The funding gap is **GH¢118.26 million.** This is expected to be financed by government from its contingency vote for 2013.

Sources	**Amount Gh¢ million**	**%**
NHIL & SSNIT	917.86	81.3
Premium (Informal)	43.15	3.8
Income on Investment	31.27	2.8
Processing Fees & Other Income	18.23	1.6
Government of Ghana Support	118.26	10.5
Total	**1,128.76**	**100.00**

5.2 REGISTRATION COVERAGE

The population of Ghana in 2012 is estimated at **25.03 million**; and the projection for 2013 is **26.13 million**. Current registration figures indicate that 18.5 million of the total population of Ghana had been registered. Of this number, active membership was **8.64 million** (as at September 30, 2012). Currently, only about 34.5% of the total population constitutes active members of the NHIS.

The Authority plans to intensify efforts through massive membership campaigns and policy reforms to encourage enrolment and renewal of membership. We therefore estimate that **38%** of the population or **9.93 million** shall constitute the active membership of the NHIS in 2013. This constitutes about **14.9%** increase over the active membership base in 2012.

The allocation of the Fund is therefore based on the assumption that 9.93 million of the population in Ghana will access benefits under the scheme in 2013.

Distribution by Regions

	2012			2013 (projected)		
Region	**Population**	**Active Members**	**% Rate**	**Population**	**Target rate %**	**Active Members**
ASHANTI	4,843,172	1,536,855	31.7	5,067,202	36.5	1,849,529
BRONG AHAFO	2,531,771	1,005,583	39.7	2,449,641	42.0	1,028,849
CENTRAL	2,159,553	681,489	31.5	2,333,974	36.0	840,231
EASTERN	2,634,953	980,691	37.2	2,791,143	40.5	1,130,413
GT. ACCRA	4,007,508	1,185,047	29.5	4,250,657	33.5	1,423,970
NORTHERN	2,505,585	747,314	29.8	2,628,228	34.4	904,110
UPPER EAST	1,046,950	516,550	42.6	1,109,337	48.3	535,810
UPPER WEST	687,929	391,419	56.8	744,236	58.0	431,921
VOLTA	2,131,374	681,598	31.9	2,245,347	35.0	785,871
WESTERN	2,486,237	918,937	36.9	2,518,583	39.8	1,002,396
TOTAL(NATIONAL)	**25,035,033**	**8,645,483**	**34.5**	**26,138,348**	**38.0**	**9,933,100**

Distribution by Category

Category	2012 Active Members	2013 Target Population	2013 Active Members (target)	2013 Target rate %
Informal	2,747,945	10,159,369	3,182,964	31.33
SSNIT Contributors	408,972	1,168,315	528,329	45.22
SSNIT Pensioners	34,026	157,263	56,587	35.98
Indigents	124,177	948,329	344,514	36.33
Children (Under 18)	4,123,921	11,942,570	4,411,928	36.94
Aged (70 yrs +)	465,197	767,392	591,182	77.04
Pregnant women	742,279	995,110	817,596	82.16
	8,646,517	**26,138,348**	**9,933,100**	**38.00**

5.3 AVERAGE PREMIUM PER HEAD

Average premium rates per member (informal sector) in 2012 was **GH¢10.81**. In 2013, we plan to strengthen controls over the CPA system in order to improve premium collections and accountability, and also to reduce leakages. We expect the average premium per member to increase to **GH¢13.56.**

5.4 AVERAGE CLAIM PER HEAD

The average claim bill per active member in 2011 was **GH¢66.82**. In 2012 the cost rose by 10.9% to **GH¢74.12** per active member. The average encounter per member declined from 3.27 in 2011 to 3.1 in 2012. However, the average cost per encounter rose from **GH¢20.43** in 2011 to **GH¢23.91** in 2012.

In 2013, we anticipate a 25% increase in claims cost per encounter on account of the following factors;

- Expected inclusion of the following in the benefit package; family planning, mental health, prostate cancer, childhood cancer, physiotherapy, and the physically challenge.
- The effect of the recent increase in tariffs by 20.5%, and
- Expected increase in medicine prices by 22.5%.

In 2013, we expect growth in membership to occur evenly throughout the year. We also anticipate the encounter rate for existing members to be 3.1, whilst that of new members is expected to be proportionally to the time of joining the Scheme in 2013. Under these assumptions, we expect the average encounter rate per member in 2013 to be 2.95.

With the expected increase in claims cost by 25% in 2013, claims cost per encounter and claims cost per member are expected at **GH¢29.89** and **GH¢88.17** respectively.

6.0 ALLOCATION AND DISBURSEMENT FROM THE FUND

Section 42 (1) of Act 852 stipulates that the Authority shall allocate and disburse moneys from the Fund in order to achieve the object of the Fund. The Authority shall in the preparation of the formula and disbursement of moneys from the Fund ensures the sustainability of the Scheme.

6.1 DETERMINATION OF THE FORMULA

Allocation of funds for the provision of subsidy to cover the payment of claim is based on a risk equalization formula. Risk equalization mechanism was applied in the allocation formula to neutralize insurance risks confronting the National Scheme.

The formula is based on risk equalization from both the income and expenditure sides.

Income Side Risk Equalization

The income side risk equalization accounts for the financing gap arising from the non-payment of premium by the exempt group and the deviation of actual premium per each territorial district from the national average premium.

The following are the definition for the various notations used in the formula.

D_i^{prem} = total number of the premium paying active members for territorial district *i*,
N^{exempt} = total number of the premium exempted active members in the National Scheme,
C_i = total amount of premium received by territorial district *i*,
N^{prem} = total number of members paying premium across all territorial districts $(=\sum_i D_i^{prem})$
C = total amount of premium received by all territorial districts $(= \sum_i C_i)$
c_i = average premium received by territorial district *i*
c = average premium across all territorial districts.

The overall average premium across all territorial districts is given by:

$$c = \sum_i C_i / \sum_i D_i^{prem} \quad \text{.....(1)}$$

Subsidy, S^1 (to cater for premium for exempt members in the National Scheme) is given by:

$$S^1 = c * N^{exempt} \quad \text{.....(2)}$$

Subsidy, S_i^2, (for equalizing the average premium to the overall average premium for all territorial districts) is given by:

$$S_i^2 = (c - c_i) * D_i^{prem} \quad \text{.....(3)}$$

6.3 AGGREGATED SUBSIDY ALLOCATION FORMULA

The total Subsidy expected to accrue to the National Scheme in 2013 to cater for risk is given by:

$$\sum S_i = c * N^{exempt} + \sum_i (c - c_i) * D_i^{prem}) + (K - c) * N) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (10)$$

Where, $c * N^{exempt}$ - represents income side equalization subsidy (premium for exempt group)

$((K - c) * N)$ - represents expenditure side equalization subsidy (claims subsidy) and

$\sum((c - c_i) * D_i^{prem})$ - is applied to equalize average premium for territorial districts overall national average premium. The sum across all territorial districts is zero.

7.0 DETERMINATION OF ALLOCATION OF FUNDS

Based on the above allocation formula and the objectives of the fund, the following criteria for the allocation of the fund as described by Act 850 shall be applied;

7.1 SUBSIDY FOR PREMIUM FOR THE EXEMPT GROUP

For the purpose of implementing the object of the Fund, section 77 (2) of Act 650 stipulates the setting aside of some monies from the fund to provide for health care for the indigents, and by extension, the exempt group.

The law (Act 650) exempts the following groups from paying premium and thereby enjoins the Authority to make payment of the premium to the DMHIS on behalf of the exempt group to cover their health care cost. The exempt groups are;

a) Indigents
b) Under 18 years of age
c) Pensioners under the SSNIT Scheme
d) Aged (70 years of age and above)
e) SSNIT Contributors
f) Pregnant Women

INCOME SIDE/PREMIUM SUBSIDY DISTRUBUTION

Catergory	Active Members	Active Members Estimate for 2013	
	Number $=N_{2012}$	Number N_{2013}	Income Subsidy $=C*N^{exempt}$
Informal	2,747,945	3,182,964	-
SSNIT Contributors	408,972	528,329	7,164,141
SSNIT Pensioners	34,026	56,587	767,320
Indigents	124,177	344,514	4,671,610
Children (under 18 yrs)	4,123,921	4,411,928	59,825,744
Aged (over 70+)	465,197	591,182	8,016,428
Pregnant Women	742,279	817,596	11,086,602
	8,646,517	**9,933,100**	**91,531,845**

7.2 SUBSIDY FOR CLAIMS EQUALIZATION

The expenditure side risk equalization formula is given by:

$$(K - c) * N$$

- Given that;
  - estimated average claim cost per member in 2013, **K**, is = **GH¢88.17**
  - estimated average premium per member in 2013, **c** is **= GH¢13.56**
  - claims subsidy per member estimated for 2013 is therefore **= GH¢74.61**
  - estimated number of active member in 2013, **N**, is **=9,933,100**
- The amount payable to the National Scheme as claims subsidy for expenditure side equalization is **GH¢741,108,591.**

DISTRIBUTION OF CLAIMS SUBSIDY BY CATEGORY

Category	Active Members 2012	Active Members Estimated 2013	
	Number =N	Number =N	Claims Subsidy (K – c) * N)
Informal	2,747,945	3,182,964	237,480,944
SSNIT Contributors	408,972	528,329	39,418,627
SSNIT Pensioners	34,026	56,587	4,221,956
Indigents	124,177	344,514	25,704,190
Children (Under 18)	4,123,921	4,411,928	329,173,948
Aged (70 yrs +)	465,197	591,182	44,108,089
Pregnant Women	742,279	817,596	61,000,838
Total	**8,646,517**	**9,933,100**	**741,108,591**

7.3 REGIONAL DISTRIBUTION OF FUNDS ALLOCATION FOR CLAIMS PAYMENTS

	No. of Informal Members Expected 2013	No. of Formal Members Expected 2013	Total No. of Members Expected 2013	Premium Subsidy GH¢	Claim Subsidy GH¢	Total Subsidy GH¢
ASHANTI	614,044	1,235,485	1,849,529	16,753,182	137,993,359	**154,746,540**
BRONG AHAFO	339,520	689,329	1,028,849	9,347,299	76,762,424	**86,109,723**
CENTRAL	283,158	557,073	840,231	7,553,912	62,689,635	**70,243,5473**
EASTERN	351,558	778,855	1,130,413	10,561,268	84,340,114	**94,901,382**
GT. ACCRA	534,498	889,472	1,423,970	12,061,240	106,242,402	**118,303,642**
NORTHERN	305,589	598,521	904,110	8,115,942	67,455,647	**75,571,589**
UPPER EAST	140,918	349,892	535,810	5,354,735	39,976,784	**45,331,519**
UPPER WEST	116,187	315,734	431,921	4,281,356	32,225,626	**36,506,982**
VOLTA	220,830	565,041	785,871	9,840,963	58,633,835	**66,295,795**
WESTERN	276,661	725,735	1,002,396	11,311,766	74,788,766	**84,629,728**
TOTAL	**3,182,964**	**6,750,137**	**9,933,100**	**91,531,856**	**741,108,591**	**832,640,447**

MANDATORY AND ADMINISTRATIVE COMMITMENTS OF 2013 ALLOCATION TABLE

ITEM	AMOUNT Gh¢' million	% OF FUND	REMARKS	2013 GH ¢m	2012 GH ¢m
Authority's Operations	**107.97**	**9.57**	Compensation - Head Office	**20.70**	**15.89**
			- District Offices	**50.16**	**-**
			Goods & Services	**31.71**	**16.76**
			Assets	**5.40**	**3.85**
			Administrative Support to the Schemes	**-**	**39.59**
Support for Government & Parliamentary Programs	**24.68**	**2.19**	**Support to MOH- Public Health & Preventive Care**		
			1. Vaccinations	**3.00**	**5.50**
			2. Sanitation Program	**3.00**	**12.00**
			3. Malaria Control Program	**-**	**15.00**
			4. Sickle Cell Screening Program	**-**	**0.50**
			5. Screening for Cervical, Breast & Prostrate Cancer	**-**	**1.00**
			6. Support Family Planning	**-**	**0.50**
			7. Healthy Lifestyle & Nutrition	**-**	**0.25**
			8. Support for ARV	**1.00**	**-**
			9. Ambulance Service	**3.00**	**5.00**
			10. Nurses & Midwives/HFRA		**2.00**
			Support to MOH- Health Service Investment		
			1. KATH – Maternity & Children Block	**-**	**10.00**
			2. KBTH – Children Block	**-**	**2.00**
			3. KBTH – Theatre Equipment	**-**	**6.00**
			4. Tema General Hospital – Maternity Block	**-**	**2.00**
			5. Fomena Nurses Training Center Project	**-**	**3.00**
			6. Nurses School-Goaso, Cape Coast, Wa	**-**	**5.00**
			7. Rehab of Axim Hosiptal	**-**	**1.00**
			8. Cuba Medical Brigade	**-**	**20.00**
			9. NYEP/GYEEDA	**-**	**20.86**
			10. Construction of no. 1 District Hosp. (50%)	**6.30**	**6.30**
			Support to MPs – District Health Projects 275 projects @GH¢20,000	**5.50**	**11.50**
			Parliamentary M & E Activities 275 members @GH¢5,000	**1.38**	**1.15**
Provider Payment Capitation Rollout	**6.50**	**0.58**	Cost of implementing Capitation Payment module in the remaining 9 regions.	**6.50**	**3.47**

Claims Processing Center	**10.60**	**0.94**	**OFFICE EQUIPMENT** Office Furniture, Fixtures & Equipment 350 no. Computers Accessories **ICT EQUIPMENT & ACCESSORIES** 4 no. High Speed Scanners Severs/Screen monitors/ICT Solution Claims Digitization Archival & Storage Facility **ICT INFRASTRUCTURE & ENHANCEMENT**	 **1.45** **0.70** **2.00** **2.70** **0.75** **2.00** **1.00**	**3.63** **1.43**
Call Center	**1.50**	**0.13**	Call Center Operational cost	**1.50**	**2.00**
Support for Health Related Research	**0.50**	**0.04**	Provide support for health related research	**0.50**	**2.00**
Office Buildings, Regional Office and District Offices	**6.25**	**0.57**	Construction of Head Office Annex Completion of 3 remaining Regional Offices Construction of 15 no. District Offices	**-** **1.00** **5.25**	**4.25** **2.80** **15.00**
Nationwide ICT Solution	**38.22**	**3.39**	**ICT EQUIPMENT** Membership Magnetic ID Cards- 4m@¢3.00 Oracle ERP Application Upgrade & Licenses Applications – Database Data Center upgrade of core servers, batteries Bandwidth maintenance & upgrade Mobile & Electronic Premium Payment Platform Oracle Financial Module to regional Office Automation Accounting System @ District Disaster Recovery Site PABX upgrade Computers & accessories for Region & District 700 pcs **MAINTENANCE OF ICT EQUIPMENT & ACCESS** Maintenance of PCs, Printers etc. Infrastructure for implementing ITIL System Oracle, Microsoft, anti-virus renewal & license Application Development Tools Call Center/Extra Development for 3rd Parties Implement System Change request Maintenance & Support for Oracle ERP Renewable Stickers – 5 million	 **12.00** **4.80** **0.64** **4.50** **4.57** **-** **0.60** **0.80** **0.70** **0.25** **0.98** **0.80** **0.15** **2.40** **0.30** **0.24** **0.60** **3.54** **0.35**	**11.22** **-** **19.11** **0.15**

7.6 COMPARATIVE ANALYSIS OF FUNDS ALLOCATION FOR 2013 & 2012

ACTIVITY	2013 GH¢'m	(%)	2012 GH¢' m	(%)	CHANGE GH¢'m
Subsidy- Premium For Exempt Group	**91.53**	*8.11*	**124.88**	*13.46*	**(33.35)**
Subsidy – Claims	**741.10**	*65.66*	**425.79**	*45.89*	**315.31**
Reinsurance	**-**	-	**55.07**	*5.94*	**(55.07)**
Authority's Operations	**107.97**	*9.57*	**36.50**	*3.93*	**71.47**
Admin. & Logistical Support to Schemes	**-**	-	**50.96**	*5.49*	**(50.96)**
MOH-Public Health & Preventive Care	**11.50**	*1.02*	**39.75**	*4.28*	**(28.25)**
MOH -Health Service Investment	**6.30**	*0.56*	**69.86**	*7.53*	**(63.56)**
Support for District Health Projects	**5.50**	*0.48*	**11.50**	*1.24*	**(6.00)**
Support for Parliamentary M & E Activities	**1.38**	*0.12*	**1.15**	*0.12*	**0.23**
Claim Processing Centres	**10.60**	*0.94*	**5.06**	*0.55*	**5.54**
Biometric Registration & Authentication System	**53.71**	*4.76*	**22.55**	*2.43*	**31.16**
Nationwide ICT System	**38.22**	*3.39*	**19.11**	*2.06*	**19.11**
Call Centre	**1.50**	*0.13*	**2.00**	*0.22*	**(0.50)**
Rollout of Per Capital Payment system	**6.50**	*0.58*	**3.47**	*0.37*	**3.03**
Office Building-District Offices	**6.25**	*0.55*	**22.05**	*2.38*	**(15.80)**
Corporate Social Responsibility	**1.00**	*0.09*	**1.00**	*0.11*	**-**
Construction of Health Centres	**-**	-	**6.30**	*0.68*	**(6.30)**
Office Complex-Nurses & Midwives	**-**	-	**2.00**	*0.22*	**(2.00)**
Health-related research	**0.50**	*0.04*	**2.00**	*0.22*	**(1.50)**
Contingency	**45.20**	*4.00*	**26.77**	*2.89*	**18.43**
Total	**1,128.76**	**100.00**	**927.77**	**100.00**	**200.99**

8.0 EXPLANATORY NOTES

8.1 PREMIUM SUBSIDY

This represents subsidy payable by Government on behalf of the 6.75 million members of the exempt category of the NHIS. The total expected subsidy for 2013 is **GH91.53 million**. Details are as follows;

8.1.1 Indigents

Indigents as described by law are people who are very poor. The recently completed Ghana Standard Survey (GLSS-5) confirmed the joint World Bank and IMF report, showing that national poverty headcount was 28.5% by the end of 2006. It must be stated that most of those considered very poor cannot afford the annual subsidized premium. Without relevant statistical data certain assumptions were made in arriving at a proportion of the population who would be considered indigents. Ghana's estimated projected population estimates for 2013 is about 26.14 million.

To estimate the indigent population, there is the need to avoid double counting, considering the fact that certain population groups are already covered under the NHIS. Consequently, 767,392 people constituting the aged population and another 11.94 million representing the estimated population of those less than 18 years are subtracted from the total population. The remaining population will be 13.43 million.

It is assumed that 7.0% of the net population of 13.43 million or 3.6% of the total estimated population of 26.14 million would constitute the indigent population. Hence the indigent population in 2013 is estimated to be 948,329. It is estimated that 36.3% of indigents (i.e. 344,514 indigents) shall be covered under the scheme in 2013. An amount of GH¢13.56 is allocated as premium for each indigent and hence, a total amount of **GH¢4.67 million** will be required as premium subsidy for the indigents in 2013.

8.1.2 Children under 18 years

The law prescribes that those under 18 years be catered for by government. The active membership of children under 18 years is estimated to increase to 4.4 million. A provision of **GH¢59.82 million** has therefore been made to cover for the premium of this exempt group.

8.1.3 SSNIT Pensioners

The number of SSNIT pensioners is estimated in 2012 to be 150,625 in 2012.This number is expected to grow to 157,263 in 2013. It is estimated that 36.0% of this number (i.e.56, 587) will be covered under the scheme in 2013. An amount of **GH¢0.77 million** is allocated to cover the premium of SSNIT pensioners in 2013.

reduce both subscriber and provider induced fraud. This amount will cater for the cost of providing;

- Office furniture, fixtures and fittings
- 350 no. Computers and Accessories
- 4 no. High Speed Scanners
- Screen Monitors & Servers
- Claims Digitization
- Archival & Storing facility
- Support for the E-Claims software.

8.7 NATIONWIDE ICT SYSTEM – EQUIPMENT, MAINTENANCE & UPGRADE

The Nationwide ICT system facilitates the day to day operations of the Authority in the Head office, the Regional offices and in the District offices. The system ensures that:

- There is effective communication between the District offices, the Regional offices, the Head office and Service Providers for data collection and analysis, which is critical for meeting the objectives of the Scheme;
- There is financial and operational accountability on the part of the various offices of the Scheme.
- Managing risk, controlling fraud and ensuring financial and operational sustainability; and
- Addressing the portability requirement and claims management.

To achieve the above objectives, a total amount of **GH¢38.22 million** is allocated for the equipment, maintenance and upgrade of the Nationwide ICT system. This breakdown of the expenditure is as follows;

- A total amount of **GH¢4.14 million** for maintenance and upgrade of the nationwide ICT system (Integrated MIS Solution, IT Infrastructure, PABX (VOIP Solution etc) and to implement system change request.
- An amount of **GH¢5.55 million** to upgrade the Data Centre to accommodate increasing demand.
- An amount of **GH¢4.57 million** to upgrade the bandwidth of the ICT infrastructure to accommodate increasing traffic.
- An amount of **GH¢980,000** will be expended to procure and install 700 computers to replace old ones in the District and regional offices.
- An amount of **GH¢12.35 million** is earmarked for the production of 4 million magnetic ID cards and 5 million renewable stickers.

- an amount of **GH¢1.4 million** for the extension of the Oracle Finance system to the Regional offices and the District offices.

- An amount of **GH¢7.2 million** is for the upgrade of Oracle ERP Application and license renewal for Oracle, Microsoft, and Anti-virus

- An amount of **GH¢1.03 million** is for Application database, infrastructure for implementing ITIL system and call center software development.

- An amount of **GH¢700,000** to earmarked for the implementation of Disaster Recovery and Business continuity.

- An amount of **GH¢300,000** for application development tools & enhancement.

8.8 BIOMETRIC MEMBERSHIP REGISTRATION & AUTHENTICATION SYSTEM

The current database has a number of challenges and will required complete overhaul. In this regard, the Authority intends to overhaul the membership database by introducing a biometric membership registry and authentication. The system will enhance data integrity and subscriber authentication at point of access to health care. The introduction of this improved system will also ensure greater checks and control in the claims payment system. This is also expected to reduce provider shopping, subscriber abuse and fraud.

An amount of **GH¢53.71 million** is earmarked for the Biometric Registry Membership system to cover the cost of providing enrollment kits at the schemes, authentication kits at provider sites, Installation of Biometric Algorithm, Integration of the current database with the new system, cost of project management, training, rollout, and other professional services.

8.9 CALL CENTRE

The Authority proposes budget of **GH¢ 1.50 million** for the call center is operation in 2013.

8.10 ROLLOUT OF PER CAPITA (CAPITATION) PAYMENT MECHANISM

The Authority plans to roll out the per capita payment system across the remaining nine regions starting with PPP enrollment in 2013. An amount of **GH¢6.5 million** is set aside to meet the cost of implementation, publicity and software solution.

8.11 SUPPORT FOR DISTRICT HEALTH PROJECTS

The NHIA is financing a number of health related projects undertaken by Members of Parliament in their respective constituencies. These projects are aimed at improving the health service delivery in their respective constituencies.

The Authority will continue to support these projects in 2013 and therefore propose to allocate an amount of **GH¢20,000.00** for each MP's project. The total allocation for 2013 is therefore **GH¢5.50 million.**

8.12 PARLIAMENTARY MONITORING & EVALUATION

The Authority propose to allocate **GH¢1.38 million** for monitoring and evaluation activities of the 275 members of Parliament in their respective constituencies. Each member is allocated GH¢5,000.00. It is expected that these activities will contribute towards the improvement of health services in their respective constituencies.

8.13 OFFICE BUILDINGS - DISTRICT OFFICES

The Authority has allocated a total amount of **GH¢6.25 million** for the construction of twenty district offices plus an amount of **GH¢1.50 million** earmarked to complete the remaining three regional offices.

8.14 CORPORATE SOCIAL RESPONSIBILITY

The Authority plans to undertake a number of projects to fulfill its corporate social responsibility to the citizenry of Ghana. Some of these projects will include rehabilitation of wards of some selected public health facilities etc. A total amount of **GH¢ 1.00 million** is set aside for this purpose.

8.15 HEALTH RELATED RESEARCH

An amount of **GH¢0.50 million** is earmarked for health related research.

8.16 CONTINGENCY

For the purpose of meeting unexpected commitments of the Authority within the year, an allocation of **GH¢ 45.20 million** has been earmarked.