

Dangme West Health Insurance Scheme  
(Dangme Hewaminami Kpee)

Annual Report of the 2<sup>nd</sup> Insurance Year  
(1<sup>st</sup> October 2001 – 30<sup>th</sup> September 2002)

© Dangme West District Health Insurance Scheme 2003

**TO CITE THIS DOCUMENT, PLEASE REFERENCE AS:**

DWHIS (2003). Dangme West Health Insurance Scheme (Dangme Hewaminami Kpee)  
Annual Report of the 2<sup>nd</sup> Insurance Year (2001/2002)

For further information please contact:

The District Chief Executive  
Dangme West District Assembly  
P.O. Box 38  
Dodowa

OR

The District Planning Officer  
Dangme West District Assembly  
P.O. Box 38  
Dodowa

OR

The District Director of Health Services  
P.O. Box 1  
Dodowa

## **ACKNOWLEDGEMENTS**

The publication of this report was made possible by special funding from the MOH/GHS HQ through the donor pooled fund. We especially thank Dr. Sam Adjei, Deputy Director General, Ghana Health Service and Mr. Patrick Nomo, Financial Controller Ministry of Health for their interest in and support for this program. The support of the Greater Accra regional health administration and especially the regional director of health services, Dr. K.O. Adadey has been invaluable. We also thank all the donors who have through their contributions to the donor pooled fund and support for the SWAp made this publication possible.

Funding agencies /Development partners who have provided support during the second implementation year are:

- Ministry of Health through the Donor Pooled Fund
- Danida

The members of the insurance management team and the elected community representatives of the scheme who have worked tirelessly throughout the year to keep the scheme alive are listed below.

Members of the HIMT for 2001/2002

(In alphabetical order)

---

Francis Abofra	District Planning Officer, District Assembly
Irene Agyepong Amarteyfio	District Director of Health Services, DHMT
Evelyn Ansah	Senior Medical Officer, DHMT
Ali Amadu	District Planning Officer, District Assembly
Daniel Ato Ashon	Diseases Control Officer, DHMT
Ebenezer Asiamah	Nutrition Officer, DHMT
Sabina Asiamah	Biostatistics Officer, DHMT
Kingsley Biantey	Insurance Office /Research Centre
Edward Bruce	Insurance Office /Research Centre
Margaret Gyapong	Senior Research Officer, DWHRC
Nashiru Issaka	Accountant, DHMT
Richard Nagai	Insurance Office /Research Centre
Solomon Narh-Bana	Insurance Office /Research Centre
Christiana Narh-Dometey	Principal Nursing Officer, DHMT
Ekow Weah (Tony Williams)	IT

---

Elected Area Council Committees (Executive)

**Area Council Committees (Executive)**

▪ **Dodowa Area Council**

Mrs. Gladys Kpabitey  
Mr. Ben Kingsley Tetteh  
Mrs. Stella Quaynor  
Abraham T. Apperkon  
Ms. Grace Ot u  
Mr. Christopher Ayebo  
Mrs. Amanda Ashon-Dennis  
Mr. Emmanuel Lomotey

▪ **Ayikuma Area Council**

Mr. John Kofi Amuzu  
Mr. Jonathan Amenyo  
Mr. George Atiogbe Ofori  
Mr. E. O. Mensah  
Ms. Grace Osei  
Mr. Isaac Adamtey  
Ms. Mathilda Teye

Ms. Florence Fiadjogbe  
Mr. MacBright Godson

▪ **Prampram Area Council**

Mr. Daniel Martey  
Mr. S. N. Awuley  
Mr. Andrews Kudor  
Mr. Seth Martey  
Mr. Kpakpo Addoquaye  
Mr. John K. Akumeni  
Mrs. Doris Annie  
Mr. Wisdom Narh-Tetteh  
Mr. Abraham Narh

▪ **Dawa Area Council**

Ms. Felicia Larkotey  
Mr. Richard Dorho-Addo  
Mr. Bright Obodai  
Mr. Philip Tetteh  
Mr. Edmund K. Duamor  
Ms. Esther Yeyo Addo

▪ **Ningo Area Council**

Mr. Sa Rhack Nartey  
Ms. Rose K. Amanor  
Mr. Ebenezer Teye Narh  
Ms. Rosina Adjewuda  
Mr. Emmanuel Amanor Tetteh

▪ **Osuwem Area Council**

Mr. James N. Akunarh  
Ms. Doris Aslevi  
Mr. Thomas L. Egblie  
Ms. Mary Agbeko  
Ms. Francisca Animley  
Ms. Stella Appiah  
Mr. Samuel Tetteh Kudjoe  
Mr. Julius Narteh  
Mr. Maxwell Odzor

▪ **Asutsuare Area Council**

Mr. Wisdom Agbovi  
Ms. Rosemond Ayertey  
Mr. Benjamin Nyavor  
Mr. Ibrahim anyigbor  
Ms. Victoria Buernor

Mr. George Adai  
Mr. Thomas Ayetey  
Ms. Millicent Gador  
Mr. James Korwuvi  
Mr. James S. Narh

## PREFACE

It has been our privilege in the Dangme West district to be at the forefront of work on health insurance in Ghana. At the time that the planning towards the implementation of the Dangme West health insurance scheme started in 1996, Nkoranza was the only existing health insurance scheme for the non-formal sector in Ghana. It provided insurance for inpatient care only. There was no district wide scheme or a scheme that tried to cover outpatient as well as inpatient care.

Despite its proximity to the Accra Metropolis, the Dangme West district is typical of the kind of poor rural district that makes up 60% or more of Ghana. Poverty is widespread and most residents are engaged in subsistence agriculture or fishing. Primary health care is available from health centres, community clinics, two private midwives and a private clinic within the district. There are no hospitals and residents have to rely on hospitals surrounding the district for referral care.

The lessons that are being learned in this district therefore about how health insurance could be effectively organized and administered in a rural district are very relevant to most of Ghana.

A year ago we shared our experiences in the first year of implementation with the rest of the country in the form of an annual report. It is our pleasure once again to share some part of our experience in the second year of implementation and what we have learned by doing with the rest of the country. It is our hope that in doing so, we are adding to the growing experience in health insurance in Ghana. This way, we will as a district provide our contribution to helping the nation as we take very important policy decisions as to how best to move forward to improve access to and quality of health services in Ghana.

Honorable J.T. Agban  
District Chief Executive, Dangme West District  
February 2003

## EXECUTIVE SUMMARY

The Dangme West district health insurance scheme, known locally as the Dangme Hewaminami Kpee started operating in October 2000 with premium collection for the first insurance year and provision of services to registered clients. A long planning and consultation phase of about 4 years preceded the start of the scheme.

Each insurance year covers a 12 month period from 1<sup>st</sup> October of that year to 30<sup>th</sup> September of the following year. The scheme provides both inpatient and outpatient cover for registered clients. To avoid adverse selection, registration is by household. In the first insurance year under review, 775 households with a total of 3,081 individuals registered in the scheme. In the second year, the numbers increased to 2126 households with a total of 7690 individuals.

This report provides detail about enrolment of clients and use of services as well as administrative and other costs and experiences over the two years that this scheme has been running.

The objective in providing such a detailed annual report of the scheme is to inform the registered member of the scheme as well as the Dangme West community and the rest of Ghana about experiences and lessons learned. It is believed that this will provide valuable information to help others who are also implementing or planning to implement health insurance in Ghana. It will also provide information for the current policy debates and planning on how best to implement health insurance in Ghana such that the formal and informal sectors are all adequately covered.



## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS</b>	<b>3</b>
<b>LIST OF TABLES AND LIST OF FIGURES</b>	<b>11</b>
<b>1. INTRODUCTION</b>	<b>12</b>
<b>1.1 The Dangme West District</b>	<b>12</b>
<b>1.2 Summary of the Background of the scheme</b>	<b>13</b>
<b>1.3 Description of the Dangme West Health Insurance scheme</b>	<b>14</b>
1.3.1 General Description	14
1.3.2 The Benefit package	15
1.3.4 Premiums	15
1.3.5 Long term vision	16
1.3.6 Organization and Administrative structure	16
1.3.7 Arrangements for democratic representation of members	19
<b>2. IMPLEMENTATION AND RESEARCH OBJECTIVES</b>	<b>22</b>
<b>2.1 General Objective</b>	<b>22</b>
<b>2.2 Specific Objectives</b>	<b>22</b>
<b>3. ENROLMENT AND SERVICE UTILIZATION</b>	<b>23</b>
<b>3.1 Enrolment of clients</b>	<b>23</b>
<b>3.2 Service utilization</b>	<b>25</b>
3.2.1 Primary care services	25
3.2.2 Hospital services	26
<b>4. OTHER ACTIVITIES</b>	<b>27</b>
<b>4.1 Social Mobilization and awareness raising</b>	<b>27</b>
<b>4.2 Ensuring active stakeholder involvement and participation</b>	<b>27</b>
<b>4.3 The Challenging task of service delivery</b>	<b>27</b>
<b>5. PREMIUM INCOME AND EXPENDITURE</b>	<b>28</b>

<b>5.1 Insurance Premiums Income</b>	<b>28</b>
<b>5.2 Insurance Premiums Expenditure</b>	<b>29</b>
<b>6. SOURCES OF AND COST OF FINANCING FOR ADMINISTRATION AND SCHEME DESIGN MONITORING AND EVALUATION</b>	<b>30</b>
<b>6.1 Development Partner Support for 2001/2002</b>	<b>30</b>
<b>6.2 Support from DHA regular budget (GOG &amp; DPF)</b>	<b>30</b>
<b>6.3 Special support from the Ministry of Health through the DPF</b>	<b>30</b>
<b>6.4 Analysis of administrative cost of running the scheme</b>	<b>30</b>
<b>7. CONSTRAINTS /CHALLENGES AND THE WAY FORWARD</b>	<b>32</b>
<b>7.1 General Constraints /Challenges</b>	<b>32</b>
<b>7.2 Attempts to resolve constraints /challenges</b>	<b>33</b>
<b>7.3 Lessons Learnt and Implications for the Way Forward</b>	<b>33</b>
7.3.1 Quality of Care	33
7.3.2 Linkages with providers	34
7.3.3 Communication of messages	34
6.1.8 Management and Administration	36
<b>7.4 The way forward</b>	<b>37</b>
<b>APPENDIX 1 – DETAILED TABLES</b>	<b>38</b>
<b>DODOWA</b>	<b>42</b>
<b>PRAMPAM</b>	<b>42</b>
<b>NINGO</b>	<b>42</b>
<b>OSUDOKU</b>	<b>42</b>
<b>HOSPITAL</b>	<b>42</b>

## **LIST OF TABLES AND LIST OF FIGURES**

## 1. INTRODUCTION

### 1.1 The Dangme West District

The Dangme West district is one of the two purely rural districts in the Greater Accra region. Its location within the region and within Ghana is shown in figure 1. It has an estimated 2000 midyear population of 96,015 based on the results of the 2000 census.

The population is engaged predominantly in subsistence agriculture and fishing. Poverty is widespread. In a study of household incomes in general as well as health expenditure in one sub-district, Arhin 1995<sup>1</sup>, found that total annual household incomes after subtracting production costs ranged from negative C 1.8 million (\$ 2500)<sup>2</sup> i.e. the household was in debt to C 3.0 million (\$ 4167) for 98.5% of households. The mean household income was C 369,800 (US\$ 513.61) and the median was C 300,200 (US\$ 416.94). About half of the households had annual incomes after production costs of less than C 1.0 million (\$ 1389). As many as 28% of households were in debt after subtracting production costs.

Household expenditures on health ranged from C 100 – C 63,000 (US\$ 0.14 – 87.50) for treatment actions that did not involve admission into hospital. Costs were skewed towards the lower side with 95% of households spending US\$ 0.28 or less for treatment actions that did not involve admission. Transport costs accounted for about 30% of the total expenditure related to non admitted actions. For treatment actions that involved admission to hospital, costs ranged from C 1000 – C 103,000 (US\$ 1.39 – 143.05).

Health services are provided in the public sector by four rural health centres and six community clinics. Their location is shown in figure 2. In the private sector services are provided by a private clinic located in Prampram, a private maternity home in Prampram and a private maternity home in Dodowa. Recently a private clinic has also been established in Dawhenya. There are several Chemical shops<sup>3</sup> located in the larger communities in the district. There are no private pharmacies.

In addition to these there are numerous untrained, unlicensed and unregistered providers of biomedical care. This includes in almost every village people who sell biomedical drugs in the market and on tabletops in front of their homes, as well as drug peddlers, injectionsists and other varieties of quacks. In the traditional sector there are Traditional Birth attendants, traditional healers and wansams.

The district has no hospital and people who need to use a hospital travel outside the district to one of several hospitals in the surrounding districts. This includes the Battor Catholic hospital in the Volta region, the Agomanya Catholic hospital and the Atua

---

<sup>1</sup> Arhin D.C. (1995) Rural Health Insurance: A Viable Alternative to User Fees? A Review and Evidence from three countries. London School of Hygiene and Tropical Medicine. PHP Departmental Publication No. 19. Series Editor: Tamsin Kelk

<sup>2</sup> At the time of the study 1 British pound was approximately equivalent to C 1,000 and US\$ 1 = C 720.

<sup>3</sup> Drug shops run by lay persons who have been licensed to sell over the counter drugs and pharmaceutical products.

Government hospital in the Eastern region, the Akuse government hospital also in the Eastern region; the Tema General hospital and Ridge hospitals in the Greater Accra region.

## **1.2 Summary of the Background of the scheme**

Ghana, with a per capita income of about US\$ 400 has struggled over the years with the problem of how to adequately finance public sector health care delivery in the face of severe resource constraints.

Pre-independence, user charges were in place in health facilities. Following independence, health services were made free at all levels. However over time there were increasing problems with adequate financing of the health services to maintain quality as well as availability of adequate quantities of essential drugs and supplies.

In 1985, the Ghana Ministry of Health introduced significant client out of pocket co-payments at point of service use in the public sector. The aim was to recover at least 15% of recurrent operating costs. Though out of pockets payments at point of service use in the public sector by clients had existed before this time, the amounts paid were minimal and more of a token. The aim of recovery of at least 15% of recurrent costs was met. However, utilization studies also showed a significant reduction in use of health services especially in the rural areas.

In the late 1980s the MOH began to consider the feasibility of health insurance as an alternative to out of pocket payments at point of service use.

In 1996 the process of designing a health insurance scheme for the non formal sector began in the Dangme West district. A lot of work was put into thinking through the design of the scheme, consulting with community members and the district assembly as well as providers. The EU provided some financial support for this phase of the work through the London School of Hygiene and Tropical Medicine. Some of the activities carried out in this preparatory and planning phase included:

- ❑ Census of households
- ❑ Awareness Raising and Consensus Building
- ❑ Health Worker Consultation and Orientation
- ❑ Quality of Care
- ❑ Design Of Registration System
- ❑ Linking Up With The Referral Hospitals
- ❑ Development of an IT system
- ❑ Setting of premiums

Also built into the design of the scheme was a process of monitoring and evaluation so that the experiences gained and lessons learned in the Dangme West district could inform policy makers, health managers and other implementers at large as well as civil society

on the feasibility as well as best approaches for implementing health insurance in a low income developing country like Ghana.

Scheme implementation actually started in October 2000 with the first insurance year running from 1<sup>st</sup> October 2000 to 30<sup>th</sup> September 2001.

### 1.3 Description of the Dangme West Health Insurance scheme

#### **1.3.1 General Description**

Health insurance involves the sharing of the risks of incurring health care costs by a group of individuals. Individuals who belong to a health insurance plan or fund contribute money regularly to the fund regardless of whether they are sick or not. This contribution is referred to as a premium. Any time they are sick, money is taken from the fund to which they have contributed to take care of their health care costs. The Dangme West community health insurance scheme is one such arrangement. It is open to all residents of the Dangme West district and any residents of areas surrounding the district who are interested in joining. As already mentioned, many of the target population of this scheme are in non-formal employment or self employed and living at or near the poverty line.

The scheme is non-profit making and has democratic accountability to the members. It is publicly administered on behalf of the members by a District Health Insurance Management team. This is a purely technical team and it is considered as acting technically on behalf of the members of the scheme rather than as owning the scheme.

Currently, the scheme's benefits cover only the use of health services in the public sector. Government, who bears about 80% of the costs, subsidizes these services. The users however have to pay the remaining 20% or so of costs out of pocket at point of service use under the cash and carry system. Payment of health care costs out of pocket at point of service use is proving a significant barrier to access to services especially for the poorest of the generally poor population of this district. The Dangme West community health insurance scheme is trying to replace the need to pay out of pocket at point of service use with insurance. Thus it is only the out of pocket payments that are being insured and not the entire costs of care. Government has been and remains committed to continuing to provide the 80% of costs from general tax revenue and the Donor Pooled Account or Fund<sup>4</sup>. Insurance thus represents a form of pre-payment for out of pocket at point of service use costs. However it is a form of prepayment in which the whole group involved is showing solidarity by cross subsidizing each other.

---

<sup>4</sup> Under what is known as the Sector wide approach, development partners or donors in the health sector put some or all of their funds into a common account. The money is then used as budget support for the approved plans and priorities of the MOH /GHS. The development partners who contribute to this fund take part in the development and review of the health sector program of work they are supporting through the sector wide approach.

The issue of how to cover the use of health services in the legal private biomedical sector is however still being explored. Since these services are not subsidized by government, to cover their use will involve charging higher premiums and studies have to be carried out to determine what kind of premiums would appropriately cover such services, as well as the ability of the population to pay such premiums.

Membership is voluntary, and all residents of Dangme West are encouraged to join. Residents of other districts are also welcome to join provided they are willing to abide by the clause that requests them to use one of the primary care clinics in the district as their first point of service use.

### **1.3.2 The Benefit package**

Currently, the services the scheme covers are:

- All Primary Outpatient Clinical Care
- Basic laboratory tests requested as part of primary outpatient clinical care namely, Hb, sickling, full blood count, stool R/E, urine R/E, widal test and blood grouping
- Antenatal care
- Delivery and postnatal care
- Family planning
- Child welfare and immunization. This is in theory free currently, but in practice in most clinics mothers pay a “voluntary contribution” to cover the costs such as transportation for the nurses, cotton wool etc
- Referral to a participating hospital provided the patient consulted a primary outpatient clinical care providing facility first and was referred by the prescriber there. Clients who self refer to hospital will not be reimbursed. This system of gate keeping is necessary to prevent the administrative and financial complications that are likely to be associated with allowing patients to self refer to hospitals outside the district.
- In the first and second years of operation, if a client was referred, all fees were paid up to a maximum of two hundred thousand cedis (C 200,000). This was reviewed with the elected representatives of the members of the scheme in 2001. For the third insurance year, the ceiling paid for referral care has been raised to four hundred thousand cedis (C 400,000) per referral episode, after which the client has to pay any fee over and above this amount.

### **1.3.4 Premiums**

The premium for the first insurance year was C 12,000 (US\$ 2) per adult and C 6,000 (US\$ 1) per child or elderly person (70 years and above) per annum if the whole family registered as required by the scheme. Thus the average family of about 5 to 6 persons was paying around US\$ 10 per annum.

These premiums were arrived at using the information from the 1993 study already mentioned (Arhin 1995) as well as consultation and discussion with the community and observation as to what would be a reasonable place to draw the line between a financially realistic premium and the ability of people in the district to pay.

In the second year of operation, the premium was raised to C 15,000 for those aged 5 – 69 years. The premium for small children and the elderly remained unchanged. The raise in premium was to try and raise more revenue to improve the range and quality of the benefit package.

### **1.3.5 Long term vision**

If the scheme proves successful, it is hoped that over time a way will be worked out to ensure that everybody resident in the district is covered since ultimately the scheme aims for Universality. Universality is defined as making sure every resident in the geographic area of coverage of the scheme is insured one way or the other. Health insurance schemes that achieve universality or near universality are much better at promoting equity. Equity is an important consideration in health care for a nation that believes that all its citizens should be entitled to equal care for equal need and unequal care for unequal need regardless of their status.

In addition to universality, the scheme aims at achieving portability. This means that people enrolled in the scheme can be taken care of within any participating facility. Initially, this will be any participating facility within the district. However, once again it is hoped that if the scheme proves successful, a way will be worked out over time to ensure that people enrolled in the scheme within the district could still be taken care of under the scheme if they fall suddenly and unexpectedly ill while outside the district.

Comprehensiveness – An agreed upon package of essential health services will be covered under the scheme. It is important to note however that comprehensiveness does not mean that any and every type of care will be covered. It is doubtful if there is any country in the world that can fully afford to provide all the health care every single one of its citizens thinks they need regardless of cost.

### **1.3.6 Organization and Administrative structure**

The main actors in the scheme are:

- a) **Registered households** who collectively form the *Dangme Hewanminami Kpee (DHK)* or Dangme Good Health Group or District Health Maintenance Association. They are entitled to health care under the scheme in accordance with its regulations. They are represented by Area Council Executives who they themselves elect. The detailed description of the arrangement for ensuring good community representation is described in the next section. The members of the DHK are considered as the actual owners of the scheme rather than the administrators of the scheme.
- b) The health facilities that provide care to registered members using funds received from the members of the *Dangme Hewanminami Kpee*. Participating facilities are collectively referred to as the **Providers**.



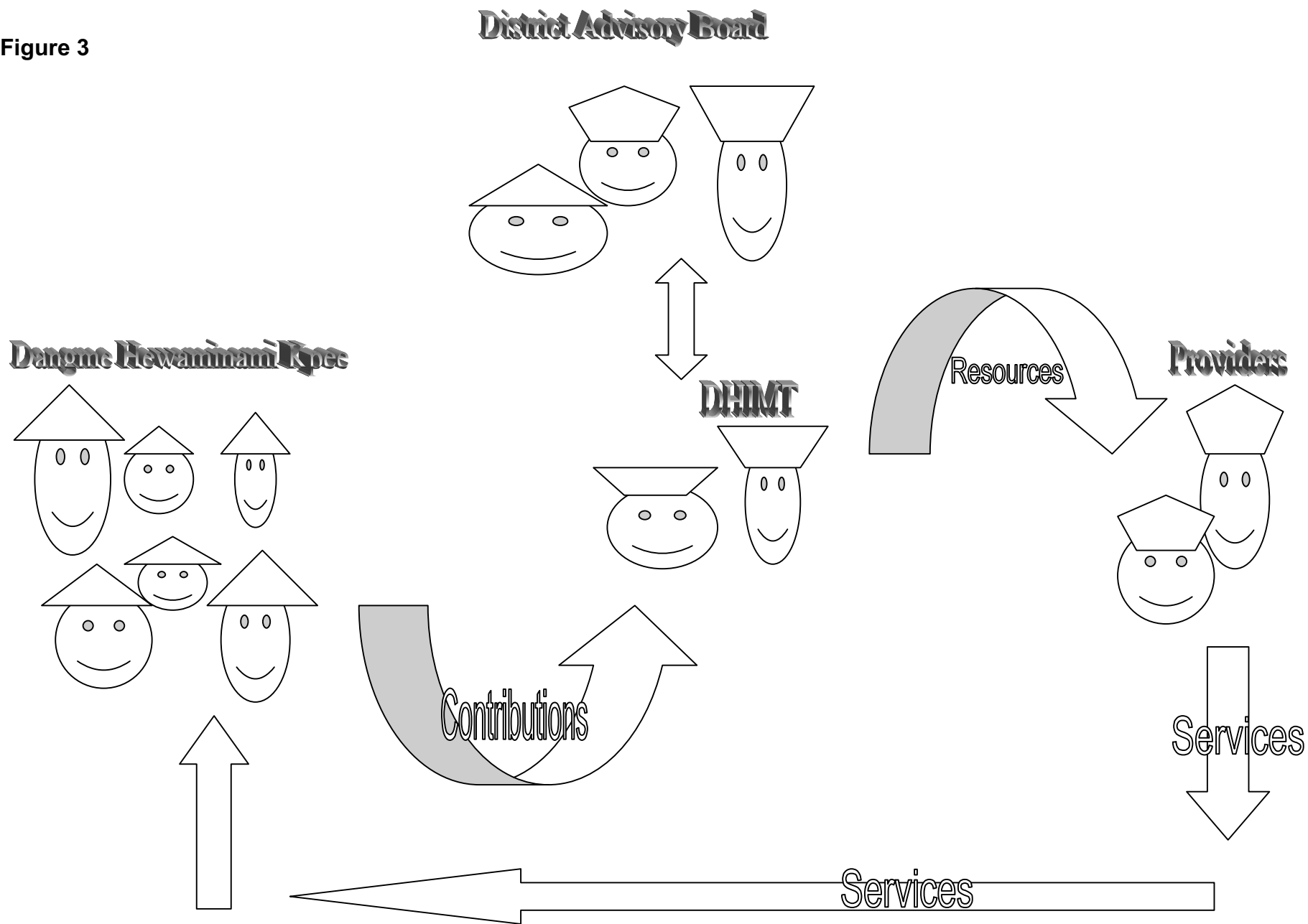
- c) ***The District Health Insurance Management Team (DHIMT)***, has representation from the district assembly in the persons of the District Planning Coordinating Officer and one other member of staff from the District Planning and Coordination office of the District Assembly<sup>5</sup>. In addition, members of the District Health Management Team (DHMT) and some other staff from the office of the District Director of Health Services (DDHS) are part of this team. The DHIMT is responsible for financial and administrative matters including reimbursements to health centres and hospitals using an approved formula /agreed rates and monitoring of performance to ensure that paid up members of the association will have access to good quality health care at hospitals and clinics without paying fees. It is also responsible for the compilation and analysis of routine health management information system data related to the scheme. The DHIMT is not the owner of the scheme. It is only providing the needed technical support to the DHK who are the owners of the scheme.
- d) ***A District Advisory Board (DAB)*** made up of traditional, political, religious and administrative leaders in the community and district, and regional health leaders (MOH, NGO) and other persons considered as having expertise as well as the interest in the welfare of the scheme. The board is expected to meet twice a year and provide advice in policy related areas such as contribution schedules, exemptions, credit facilities, assuring equity and disciplinary matters.
- e) ***Central government.*** As already mentioned, central government through the Ministry of Health provides about 80% of the funding of the public sector health service. Currently it is also bearing the cost of care for exempt categories of patients (under fives, over 70 and antenatal clients). Some of this money is from tax revenue and others are from donor funds through the donor pooled fund or account. However for convenience, it will all be referred to as the Central government provision. Thus indirectly central government is an important player in this scheme since it is vital that it keeps up its share of the financing of the health system. Moreover, it is necessary to keep this awareness alive since people are sometimes afraid that the introduction of insurance means that central government is going to pass on all its responsibility for ensuring the financing of the health care system directly to individuals and households. Central government has moreover provided and continues to provide support funding needed to set up and adequately develop the scheme.

The district organization of the scheme is summarized in figure 3.

---

<sup>5</sup> The district assembly is the local government governing and administrative body in Ghana.

Figure 3



### **1.3.7 Arrangements for democratic representation of members**

Members of the scheme are represented at the district, area council and community (locality) levels by their elected representatives as described below. The different committees or executives that represent the registered members and the way they function are described below.

#### **□ District level executive or committee**

The district executive is an eleven (11)-member body. Each of the 7 area council committees sends their chairman to represent them at the district level. In addition, 4 other members are selected by consensus among the area council representatives. To ensure that the representation of women is adequate, if the majority of chairpersons are male the four remaining members must be selected such that there are at least four women on the district executive.

The district committee serves a two-year term after which fresh members are to be elected. If for any reason a member of the committee has to leave office or resigns before the two-year term is up, the area council he/she represents will provide a replacement.

Officers who have already served a term can be re-elected provided this is done democratically and there are no unresolved complaints pending against them. The district committee will elect one member as its chairman and one member as its secretary.

#### Functions

- (1) Contribute to policy and planning decisions concerning the direction in which the scheme should go, premiums, quality of care etc
- (2) Working with the DHIMT in awareness raising and social mobilization
- (3) Ensuring that collection of premiums and management of finances of the association is done in a fair, transparent and equitable manner
- (4) Review of annual audit reports of the finances of the scheme
- (5) Review of the general annual report of the scheme
- (6) Presentation of the views of members of the association on all issues of concern to the District Advisory Board and the Health Insurance Management team and where necessary, through them to the providers

#### **□ Area Council executive**

Each of the 7 area councils in the district elects a minimum of 8-10 and a maximum of 15 representatives from among the registered families in the area council to represent the interest of all the registered families. Election of representatives is done democratically by nomination and voting every 2 years at a joint meeting of all heads /representatives of registered families in the area council. Only members of households registered in the scheme are eligible for membership of the area council committee. The functions of the area council executives or committees are as below.

#### Functions

- (1) Problem identification for members in the scheme

- (2) Advocacy for members of the scheme in all areas considered relevant e.g. level of premiums, quality of care, client entitlements etc
- (3) Provide the link between the community level and the district level
- (4) Social mobilization and awareness raising
- (5) Organization of annual members meeting in the area council. These annual meetings will be a kind of stakeholders meeting to brief members on progress in the past insurance year and discuss the upcoming insurance year
- (6) Focal persons for organization of collection of premiums within the community
- (7) Oversight role:
  - a. Which families enrolled
  - b. How much collected
  - c. Financial status of the scheme
  - d. Welfare issues e.g. Families that genuinely need financial assistance to enrol in the scheme and what can be done for them

To enable the area council executive perform its functions effectively, the area council executive is expected to organize regular meetings to discuss issues relevant to their work. The secretary must keep minutes of the proceedings at such meetings. The area council also needs to plan and agree on how to keep in contact with registered members of the scheme.

In relation to item 7(d), there is a line item in the GHS budget to cater for paupers. However the amount is very small and there has been a problem in identifying people who are genuinely destitute (e.g. an old woman living by herself without any family and any financial means of support) so that they can be assisted with this fund. The area and community /locality committees are in the best position to know who in their area is desperately poor and in need of financial assistance. In relation to the definition of desperately poor, it is acknowledged that most people in rural districts such as Dangme West are very poor. However the fund cannot cater for everybody. It is for the few people who are exceptionally poor beyond the ordinary state of everybody else around. The suggestions related to identifying and helping the desperately poor enrol in the scheme include:

1. Have a limited number of poor people who can be catered for in each area council based on the funds available
2. The area committee will have the role of identifying and bringing up desperately poor people who need support
3. The genuineness of each case will be verified by the DHIMT working with the social services department
4. The line item for paupers will be used to provide insurance cover for these people

The area committee should divide up the area council among themselves so that each member covers/is responsible for a defined set of communities.

□ **Locality committees**

This will be made up of families living within walking distance neighbourhoods who are enrolled in the scheme. The communities in each area council are grouped together into reasonable clusters and members organized into community or locality committees.

The function of the community level groups is to provide:

- (1) Problem identification and Advocacy for members
- (2) Linkage between individual members and the area committees
- (3) Mobilization and awareness raising
- (4) No direct involvement in money collection, but oversight /audit role:
  - a. Which families are enrolled
  - b. Is financial management of the scheme transparent and efficient and fair

## **2. IMPLEMENTATION AND RESEARCH OBJECTIVES**

The Dangme West community health insurance scheme as can be seen from its background described earlier can be strictly said to have originated from the Ministry of Health as Intervention research to provide some answers to questions in the area of health care financing for which very few precedents were available to learn from in Ghana. In relation to this, there were objectives in initiating and supporting the setting up of the scheme from the perspective of the Ministry of health. These are what are described below.

It has been mentioned earlier that one of the foundational principles of the scheme despite the role of the Ministry of health and technical experts in setting it up has been that the ownership of the scheme should actually be with the members rather than the Ministry of Health. This cannot be repeated too often since an erroneous impression is sometimes expressed that because the scheme was initiated by the MOH, it is not possible that there can be any real community ownership.

### **2.1 General Objective**

To implement and evaluate the feasibility and sustainability of a district wide community health insurance scheme as a means of effectively improving financial access to and quality of health services for residents of Ghana whether they are in formal or non-formal employment, in an equitable manner.

### **2.2 Specific Objectives**

- (a) To increase financial access to health services for residents of the Dangme West district by implementing a health insurance scheme as a health-financing alternative that will remove the financial barrier created by out of pocket payments at point of service use.
- (b) To generate revenue for maintenance of health services and improvement of the quality of care available to residents of the Dangme West district using community health insurance
- (c) To evaluate and describe the ability of the health insurance scheme to achieve the objectives of improved financial access and quality of care in an equitable manner
- (d) To evaluate and describe the feasibility and most suitable approach to implementing district wide community health insurance schemes that cover the informal sector as well as the formal sector in Ghana.
- (e) To discover how best to ensure that health insurance is implemented such that ownership resides with the members and the community rather than technical experts who support the technical development and running of the scheme
- (f) To disseminate the findings and lessons learned as widely as possible so that they may inform policy making and implementation related to health insurance in Ghana

### 3. ENROLMENT AND SERVICE UTILIZATION

#### 3.1 Enrolment of clients

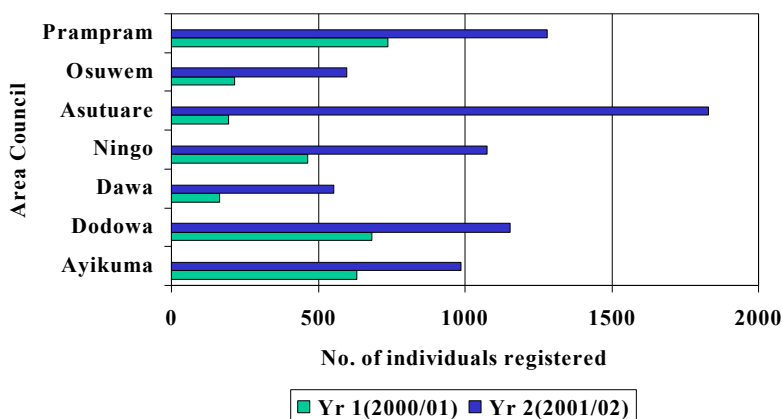
Registration of clients for the second insurance year started district wide in August 2001. This was to enable families who wanted to be fully registered before the New Year started to do so. The area council representatives did all registration and collection of premiums. Each area council representative has a serially number counterfoil receipt book and issues receipts for all monies collected. The duplicate with the same serial number as the receipt issued remains in the receipt book. In addition they have a notebook in which they record all monies collected.

The DHIMT role is to collect and check the monies weekly against the receipt book and the registration notebook, and send them to the accounts office to be deposited in the bank. Each time money is collected from a registrar for banking, a receipt is issued to the registrar by the insurance management team member collecting it from a serially number General Counterfoil Receipt book.

Like in the first insurance year, registration was very slow at the beginning of the insurance year and only started picking up towards the end of the year. The demographics of registered members for year 1 and year 2 are summarized in tables 1,2 and 3. Figures 3 to 5 summarize registration by area council in year 1 and year 2 as well as the age and sex distribution of registered members.

Figure 3 – Registration by area council

Registration by Area Council in 1<sup>st</sup> and 2<sup>nd</sup> Insurance Years



In the 2000/2001 insurance year, the 773 registered households represented a total of 3,062 individuals representing approximately 3% of the district population and an average household size of 4. In the 2001/2002 insurance year, 2126 households comprising 7690 persons were registered representing approximately 7.5% of the district population and an average household size of 4.

The average household size of 4 among registered households is one lower than the district average of 5 persons per household. It suggests that in spite of efforts either some households did not register all their members or the larger households are not registering in the scheme.

In both the 1<sup>st</sup> and the 2<sup>nd</sup> insurance years, the age and sex distribution of the registered members is typical of the general age and sex distribution of the district from the 2000 census. This suggests that any adverse selection is probably minimal and the registered members of the scheme are representative of the general population distribution of the district.

Figure 4 – Age distribution of enrolled members in the first and second insurance years

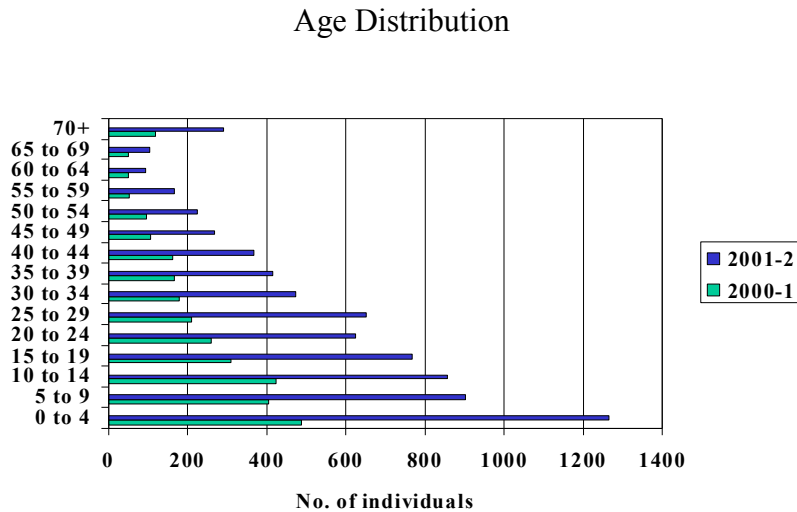
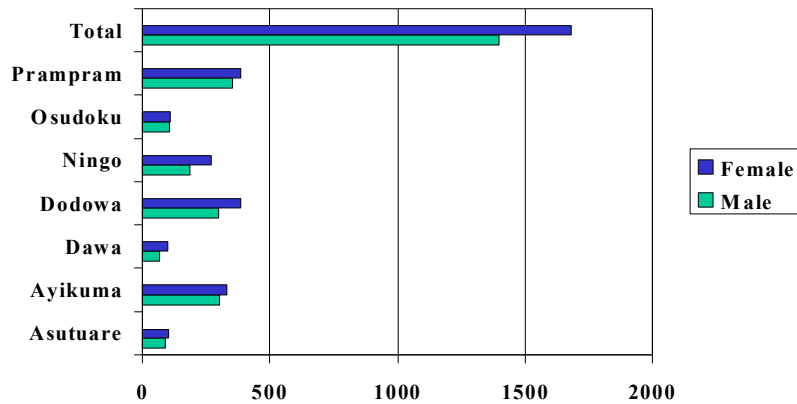


Figure 5 – Sex distribution by area council in the second insurance year



### Sex Distribution by Area Council (2000/2001)



### 3.2 Service utilization

The Dangme West health insurance scheme has a gatekeeper system such that all clients using a hospital must have been referred there from a primary care clinic before the scheme will pay the bill. Service utilization in the year under review is described for primary care clinics and for hospitals. It is also compared with utilization in the first insurance year.

#### 3.2.1 Primary care services

In the first insurance year there was a total of 2705 outpatient contacts among all the insured households i.e. 3081 insured persons. This gives an average of 3.5 outpatient contacts per insured household in the course of the year and 0.9 or approximately 1 outpatient contacts per insured person. Table 2 summarizes the number of contacts per primary care clinic per month over the period. Table 2 also summarizes the total number of outpatient contacts for insured as well as non insured clients over the period.

There was a total number of 51 Hospital (secondary or referral) contacts among all the insured clients. This gives an average of 51/775 referral contacts per insured household and 51/3084 per insured person. Table 3 summarizes the number of contacts per referral hospital per month over the period.

### **3.2.2 Hospital services**

## **4. OTHER ACTIVITIES**

### **4.1 Social Mobilization and awareness raising**

Social mobilization and awareness raising continued to be an important function

Pictures – Getting people to appreciate the insurance scheme

Pictures – Public health education using drama

### **4.2 Ensuring active stakeholder involvement and participation**

Pictures

### **4.3 The Challenging task of service delivery**

Pictures

## **5. PREMIUM INCOME AND EXPENDITURE**

The premium fund has been used exclusively for the reimbursement of claims related to use of primary and hospital services by members of the scheme. In some cases direct reimbursement for use of hospital services has been done to members of the scheme for reasons explained below. All the administrative start up costs of the scheme as well as the administrative costs of managing the scheme have been borne out of GOG and DPF budgetary allocations to the District Health Administration, District Assembly funds or special budgetary support from the interested development partners. The details are explained in the sections below.

### **5.1 Insurance Premiums Income**

In the second insurance year, a total of seventy two million four hundred and fifty six thousand five hundred cedis (C 72,456,500) was collected in premiums from the enrolled households. This is a little over twice the amount of the total of C 35,075,000 collected in premiums in the first insurance year. The increase in amounts collected is due in part to the increased number of enrollees, and in part to the fact that the premium for enrollees aged between 5 and 69 years was raised from C 12,000 per head to C 15,000 per head.

Premiums for people in the categories officially exempted by MOH policy from paying fees for primary care clinic use i.e. children under 5 years and the elderly over 70 years was six thousand cedis (C 6,000) in year one and year two. It was not possible to completely exempt them from premiums because the exemption fund does not cover hospitalisation.

The difference in premium for the exempt categories was taken from the exemptions fund. Currently this fund is sent to the districts as a bulk check. Thus from records for the first insurance year, there were 489 insured children under 5 years and 118 elderly over 70 years to make a total of 607 insured people in the exempt categories. The difference between the C 6,000 they paid and the actual premium of C 12,000 was C 3,642,000. This money was therefore requested from the exemptions fund and paid into the premium fund. It could not be paid in the first year and was added to the payments in the second year. For the second insurance year, there were 1,267 children under five and 292 elderly over 70 years making a total of 1,559. The difference between the premium of C 6,000 they paid and the C 15,000 paid by everybody else was C 14,031,000. Again this money was requested from the exemptions fund and paid into the premium fund. The year one exemption money and the year two exemption money together added C 17,673,000 to the premium fund.

Of the C 35,075,000 collected as premiums in year one, C 14,479,469 was used to reimburse use of primary care facilities in the district. C 3,498,900 was used to reimburse use of referral hospitals. A further amount of C 1,655,250 was paid directly to clients as reimbursements for services they had to pay for out of pocket at referral hospitals or drugs they had to purchase themselves. Thus there was a balance of C 15,441,381. At the beginning of the second insurance year therefore, the total amount of money in the premium fund account was C 105,570,881. Fifty million cedis (C

50,000,000) was put in a fixed deposit account to collect some interest, and the rest was kept for immediate payment of bills.

## 5.2 Insurance Premiums Expenditure

Table ... summarizes the reimbursements from the premiums collected by month by primary care clinic and table ... provides the same information by referral hospital.

Table ... summarizes the direct reimbursements to clients.

## 5.3 What is an actuarially fair premium?

From data on total outpatient utilisation (old and new cases) for the year 2002, 15,559 old and new cases (12,009 new and 3,550 old) were seen in public sector health facilities in the district. The total revenue generated as IGF from those who were not insured was C 208,212,493. Revenue generated from insured clients was C 38,229,821. Thus the total revenue was C 246,442,314. (However the revenue generated from the insured clients is less than the actual revenue because all the clinics have outstanding balances to be paid by the health insurance administration. Payment has delayed because there were some problems with the data entry that are being cleaned up). Based on these figures, the average cost per outpatient consultation at public sector facilities in the district for 2002 was C 15,834.

In the first year of operation, utilization was much higher among the insured than among the uninsured with average utilization per insured person at approximately 1 per person per year. Data from health insurance companies in South Africa shows a utilization rate of approximately 3 per person per year.

Assuming that average utilization stays at 1 per person per year, C 16,000 will be needed per person per year to cover the costs of outpatient care. If it went up to 3 per person per year, C 48,000 would be needed per person per year to cover the costs of outpatient care.

The scheme has not been paying the full costs of inpatient care. For the first two years, it has paid up to a maximum of C 200,000 per referral episode. However, data has been kept on what the actual costs of care have been versus what was actually paid before the ceiling was reached.

## **6. SOURCES OF AND COST OF FINANCING FOR ADMINISTRATION AND SCHEME DESIGN MONITORING AND EVALUATION**

### 6.1 Development Partner Support for 2001/2002

The only development partner that provided support in the second year of scheme implementation was DANIDA. They provided C ..... to help the district up date the census of all households in the district.

### 6.2 Support from DHA regular budget (GOG & DPF)

Salaries of all MOH /GHS staff apart from the four research assistants and national service personnel assisting in the insurance office were paid through item 1 (personnel emoluments) of the GOG budget. Since staff gave part of their time to work on the scheme without additional remuneration from any source this represents a subsidy of scheme administration by GOG. A data entry clerk was recruited towards the end of the year to speed up the data entry. She is being paid locally.

In addition, support has been indirectly provided from the DHA regular budget in the form of:

- Office space and related overheads for utilities such as light and water
- Use of DHA and sub-district vehicles for mobilization and organization including fuel
- Use of office supplies such as paper, toner, photocopier etc

DHA regular budget has also been used for activities related to quality improvements such as staff training and supportive supervision

### 6.3 Special support from the Ministry of Health through the DPF

The district received an amount of C ... from the MOH donor pooled fund in response to a proposal submitted through the regional director and the DDG of the direct general.

The fund has been used to support the scheme to date as summarized below ....

### 6.4 Analysis of administrative cost of running the scheme

Any analysis of the administrative costs of running the scheme carried out at this stage is to a large extent theoretical because the scheme is still evolving. It is applied research to

evolve and evaluate a health insurance scheme for the non formal sector in Ghana that will work. Related to this evolution are many ‘product development costs’ that cannot be strictly classified as administrative costs of running the scheme.

The rough and ready analysis of the administrative costs of running the scheme provided here bristles with assumptions. Different scenarios are worked out to give a range given the numerous uncertainties. Work is going on to get more refined and detailed costing of the scheme as well as analysis of the administrative costs of running the scheme and a ratio of the administrative costs to the premiums collected and benefits provided. Plans are also being developed for the possible conduct of a cost benefit or cost effectiveness analysis of health insurance versus Cash and Carry.

The costs used in the current analysis are the costs that would be involved in just running the scheme. All other costs such as research, monitoring, evaluation and redesign activities that are currently part of the scheme because it is experimental are excluded from the compilation of administrative costs.

Currently, the scheme is run part time by staff of the district health administration and the health research centre. It does not have the resources to employ its own staff. What is being done is to train some of the existing staff and some national service personnel to eventually form a core of staff whose sole job will be to run the scheme. Based on experience to date, the kind of staff that would be required and their job descriptions have been developed as well as the hours they would need to put into running the scheme. The administrative costs of running the scheme worked out here are based on these staff. The payments rates used are the government compensation rates in the health sector for staff of the qualifications spelt out as being needed to form the full time secretariat of the scheme.

The minimum staff complement for the scheme would be:

The minimum office space required for running the scheme at the district level would be a four room office with space distributed as:

- ❑ Manager’s office
- ❑ General office (Administrative assistants)
- ❑ Information office (Information manager and data entry clerks)
- ❑ Public relations office

## **7. CONSTRAINTS /CHALLENGES AND THE WAY FORWARD**

### **7.1 General Constraints /Challenges**

Our major constraints and challenges have been:

#### **(a) COMMUNICATION /IE&C**

Fostering adequate and clear communication links with the community and ensuring community understanding of the scheme has been a major challenge. The district wide nature of this scheme makes it a particular challenge. Despite the fact that it is one district, predominantly inhabited by the Ga-Adangme ethnic group with numerous similarities, there is still a lot of variation among communities socially, culturally and economically.

#### **(b) QUALITY OF CARE**

Time and again, community members have made it clear that without an assured basic adequate quality of care they are not interested in using services in the public sector. At the same time, the problem of quality of care in the public sector is a complex one that requires several interventions for which the resources, both manpower and material are not necessarily always available. Also challenging is the fact that the referral hospitals are not under the jurisdiction of the Dangme West district health sector.

#### **(c) REFERRALS**

The scheme is working with 10 primary care clinics scattered all over the districts and 5 referral hospitals located in 3 different regions. There is no district hospital. This presents quite a challenge since it requires constant communication and negotiation with a wide variety of actors who are geographically and administratively separate. It is however a challenge that may end up to be one of the strengths of this scheme if it works out successfully. This is because it will provide experiences and ideas as to the way ahead to expand community health insurance schemes to cover more and more of the population in Ghana. It is not going to be possible to cover large portions of the population of Ghana with health insurance without working with a diversity of clinics and stakeholders.

#### **(d) THE GHANAIAN ECONOMY /POVERTY**

The general economic constraints in the country as a whole and the health sector in particular does not always make it possible to respond to problems e.g. quality of care issues as rapidly and thoroughly as desirable. This can be discouraging for clients, providers as well as administrators. It requires a lot of staying power to persist in attempting to improve the system in making things work under such circumstances.

#### **(e) THE MANAGEMENT INFORMATION SYSTEM**



## (f) OTHER CHALLENGES

### 7.2 Attempts to resolve constraints /challenges

Health education and communication activities are being intensified. In addition to continued use of all the other methods already discussed, a comic for use in schools to educate JSS and primary pupils as a way of reaching their households has been designed from the flip chart used for community education. Discussions are going on with the Ghana Education Service (GES) in the district as to how best to use the comics in the schools. Negotiations to carry out radio programs have already been mentioned.

Quality of care is a complex problem with many related underlying issues. Currently the issues of reward and incentive systems and supervision are being addressed. There is a per head rate that is being paid as an incentive to each clinic for the registered clients of the scheme they see. There is also a supervisory checklist and schedule for monthly to quarterly support visits from the district level to the sub-district level and from the sub-district level to the community level. A system of clinical seminars has recently been started. Details of the quality of care program can be provided on request.

Work is ongoing to try and improve communication and linkages with all participating facilities through meetings, discussions, letters and memos. During the period under review, two of the referrals hospitals had a change in management. Plans are afoot to start the briefing and negotiation process there all over again. Also important in working effectively with so many facilities is information management. The computerized database developed for use in the scheme is an essential part of this process and work is ongoing to complete it.

There is very little one can do about the general economic constraints beyond constantly exploring how to maximize the use of whatever little is available and minimize waste. This is a strategy that the scheme has used and continues to use while hoping for an improved economic climate.

### 7.3 Lessons Learnt and Implications for the Way Forward

There are several lessons that have been learned from implementation of the scheme in the first year of operation that have implications for the way forward. In many instances, the plans for the second year of operation have been adjusted based on these lessons.

#### 7.3.1 Quality of Care

Quality of Care is key to the sustainability of any scheme. Clients expectations are that the care they receive would improve when they join the scheme. This is not a completely new finding. Before the start of the scheme, consultations with communities and households in the district brought out over and over again that the interest of communities was not just in the removal of financial barriers to care but also in the improvement of quality of care. They saw financial barriers as relative in that if quality of care improved,

they would feel more satisfaction with contributing to any scheme. After the start of the scheme the same concerns have been voiced.

Areas clients have been specifically concerned about included the quality and availability of drugs, the dignity and respect with which they are treated by staff as well as the range of services available among others. In the year under review, the insurance administration had to deal with several client complaints related to this issue. It was observed that some clients got offended when they did not see significant changes in the service and talked of not registering in the second year.

Quality of care is however, a function of the inputs required to deliver the service as well as the personnel themselves and as such both areas need to be handled concurrently. In spite of good intentions, if the resources to deliver an acceptable quality of care are not there it may not be possible to rapidly change the situation. The District Health Management team struggled the whole year and continues to struggle with the question of how to rapidly improve quality of care in a situation of systemic resource constraints as well as organizational arrangements in the public sector and an organizational culture that makes rapid change and innovation very difficult sometimes. For example in the public sector, remuneration, job security and rewards are not directly linked to performance and staff may have no real incentive to be outstanding achievers. This is especially so when at the same time the inputs and training to deliver the required standard of service may not be readily available.

### **7.3.2 Linkages with providers**

As has already been mentioned, the hospital services for clients registered in the scheme are provided by five different referral hospitals in three different regions. Moreover some of the hospitals are in the public sector, and others are in the mission sector (private not for profit). This has meant the need to spend a lot of time working on linkages, and collaborative arrangements and trying to work out a system that will be acceptable to all these partners despite their variable modes of administration.

In summary it can be said that it is possible to establish linkages with hospitals in other districts and regions and collaborate with them in health service delivery. The crucial thing is constant dialogue and communication to set up a clear and simple system agreeable to all parties. The importance of dialogue with all relevant stakeholders in the collaboration has been a very important lesson. An important lesson learnt is that for effective collaboration it is important to dialogue effectively not only with the management of the participating referral hospitals but with the frontline staff whose actions can make or break the collaboration. Lessons learnt from the district's collaborative effort could provide useful insights into how the public sector can contract out services to the private sector.

### **7.3.3 Communication of messages**

Messages on the Health insurance scheme were tailored to the socio-cultural milieu of the different parts of the district. Even though the people are predominantly one ethnic group,

they are very diverse in their socio-cultural practices and perceptions. It is also important to find out from the people themselves, the appropriate communication messages to use.

To date several approaches have been used and continue to be used including individual and group discussions, community meetings (durbars), handouts, posters, billboards, gong gong beating, radio, dialogue with political and opinion leaders as well as drama.

Communication is especially important given that health insurance remains a relatively new concept to the average Ghanaian and needs to be well explained and well understood. This takes time and effort. Moreover, the need to create a proper understanding is there regardless of whether you are communicating with community members, providers, members of the district assembly or even technical experts within the Ministry of Health /Ghana Health service.

Though the “susu” and funeral contribution concepts have been in existence in our communities for generations, risk sharing for a period of illness which might never occur is something that people need a bit of explanation to grasp. This is because with the well known ‘susu’ arrangements as well as funeral contributions, there is always a “collection” period during which one receives in material terms a payback for all that one has been contributing. They are strictly pre-payment rather than risk sharing schemes in that sense. With health insurance, if an individual does not fall sick during the year, his or her contribution elapses. People kept on asking during the durbars what an individual would receive if he/she did not use the services at all during the year. Towards the middle to the end of the insurance year, there were reports from the clinics of clients who tried to create some reason to use the services and thus gain some benefits despite not having a real need.

Moreover, experience in the year under review clearly showed that to be sure that adequate communication of information has occurred, there is a need to ‘over communicate’ so to speak through repeated explanations, discussions, publicity, question and answer type of dialogues etc before one can be certain of beginning to make headway. Sub-groups of the community may also be easily overlooked.

An important lesson for subsequent years and indeed for anyone who wants to implement health insurance is to hasten slowly. Apart from the effort already put in to explain the scheme, work is ongoing to dialogue and further explain the scheme to community members. Moreover, this is something that will have to be carried on for several years to come using multiple channels and methods of communication. Like many other interventions in the health sector, the ability to effectively communicate this way is very dependent of the availability of resources both financial and human as well as expertise and know how and the willingness to be in there for the long haul.

### **6.1.8 Management and Administration**

If a scheme would work, there must be a core of committed individuals who believe in the process, are committed to its success and are prepared to patiently work at it until they see their common vision come into being. With time more and more people must be drawn into thinking and working like that core group to ensure sustainability.

Gradually, over time more people are getting involved and thinking ahead about issues that affect the management of the scheme. They have learnt “by doing” and have gained the capacity to provide solutions to problems that come up without always consulting.

Related to this, it is important to ensure that the scheme delivers on its promises or stated benefits to the members. People get discouraged when they encounter difficulties in accessing the stated benefits for which they have contributed and tend to dissuade others from participating in the scheme.

Dialogue has been kept up through community meetings with members of the scheme to listen to their experiences with the scheme, explain and apologise for lapses where necessary and give them an insight into the background for some of the problems they encounter, request for their suggestions and enlist their support in correcting them. The DHIMT has also tried to change the situations that can be changed such as increasing awareness about the scheme in the referral hospitals to prevent patients being turned back.

Employment of many fulltime staff in the running of schemes is not very beneficial. The important thing is to design systems that require minimal human effort. When the systems are well thought out and efficient, the only peak periods will be the registration period or the beginning of an insurance year when data has to be entered. Several full-time staff leads to high administrative overheads and becomes a drain on the finances of the scheme.

Information management is critical to the success of any health insurance scheme. It is essential to keep accurate records of all documents, discussions, and ideas during the pre-implementation and implementation phase. This helps in documentation and report writing.

In conclusion, things will not always work as initially planned. Scheme administrators must be prepared for planning and re-planning. Things don't always turn out as planned and it is important to recognize this and be ready to plan and re-plan to ensure that the objective is accomplished. People learn by doing and over time, with constant monitoring, evaluation and feedback will learn better ways of doing. There should therefore always be flexibility and preparedness for change over time and in response to changes in the environment. This will ensure continuous improvement in systems and more efficient ways of providing services that are of acceptable quality to members.

## 7.4 The way forward

## APPENDIX 1 – DETAILED TABLES

Table 1 – Households registered by sub-district and by area council

Sub-District /Area Council (AC)	1 <sup>st</sup> Insurance Year			2 <sup>nd</sup> Insurance Year		
	No. of households	No. of persons	% of all registered households	No. households	No. Persons	% of all registered households
<b>Dodowa sub-district Total</b>	<b>329</b>	<b>1314</b>	<b>43%</b>	<b>579</b>	<b>2140</b>	<b>27%</b>
Dodowa AC	194	684		339	1155	
Ayikum AC	135	630		240	985	
<b>Prampram sub-district Total</b>	<b>183</b>		<b>24%</b>	<b>348</b>	<b>1280</b>	<b>16%</b>
Prampram AC		738		348	1280	
	<b>183</b>					
<b>Ningo sub-district Total</b>	<b>167</b>	<b>621</b>	<b>22%</b>	<b>542</b>	<b>1627</b>	<b>25%</b>
Ningo AC	128	465		386	1075	
Dawa AC	39	165		156	552	
<b>Osudoku sub-district Total</b>	<b>94</b>	<b>389</b>	<b>12%</b>	<b>657</b>	<b>2426</b>	<b>31%</b>
Asutuare AC	55	193		518	1830	
Osuwem AC	39	215		139	596	
<b>DISTRICT TOTAL</b>	<b>773</b>	<b>3062</b>	<b>100%</b>	<b>2126</b>	<b>7473</b>	<b>100%</b>

Table 2 – Age group listing by area council

Age group	Year 1 (2000/2001)								Year 2 (2001/2002)							
	Dod	Ayi	Pra	Nin	Daw	Asu	Osu	Total	Dod	Ayi	Pra	Nin	Daw	Asu	Osu	Total
0-4	86	100	105	111	36	18	33	489	140	158	189	244			119	1267
5-9	79	88	89	58	34	26	30	404	114	127	167	146			70	902
10-14	95	99	106	52	21	23	27	423	144	130	159	103			60	855
15-19	66	59	87	33	9	26	30	310	138	103	135	93			64	766
20-24	66	46	79	30	11	13	16	261	90	71	127	80			57	625
25-29	61	29	39	44	6	21	11	211	109	66	104	102			46	650
30-34	50	40	35	27	5	12	12	181	79	58	85	70			36	473
35-39	42	29	31	24	13	14	15	168	70	59	59	57			26	416
40-44	40	29	48	19	9	7	11	163	74	50	69	42			25	367
45-49	19	20	36	11	5	7	8	106	39	28	53	28			26	268
50-54	24	23	24	13	2	6	3	95	44	36	37	26			14	226
55-59	14	10	13	6	1	5	3	52	33	19	31	15			9	167
60-64	17	14	6	6	1	4	2	50	26	14	8	10			2	94
65-69	9	11	18	6	1	2	3	50	14	18	20	11			10	105
70+	24	25	22	16	11	9	11	118	49	44	37	44			32	292
Total	692	622	738	456	165	193	215	3081	1163	981	1280	1071			596	7473

Table 3 – Sex distribution by area council

Area council	Year 1 (2000/2001)						Year 2 (2001/2002)					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Asu												
Ayi												
Daw												
Dod												
Nin												
Osu												
Pra												
Total												



**TABLE 4A – NUMBER OF PATIENT CONTACTS (INSURED CLIENTS) PER PRIMARY CARE CLINIC AND PER REFERRAL HOSPITAL BY MONTH FOR THE PERIOD OCTOBER 2000 – SEPTEMBER 2001**

	Oct 2000	Nov 2000	Dec 2000	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	Jun 2001	Jul 2001	Aug 2001	Sep 2001	Total
<b>DODOWA</b>													
Dodowa RHC	9	9	9	20	37	65	93	127	103	105	7	7	591
Kordiabe CC	0	0	0	0	0	6	17	30	22	21	27	22	145
Agomeda CC	0	0	0	0	13	28	33	49	52	76	70	64	385
<b>PRAMPARAM</b>													
Prampram RHC	0	0	0	13	52	72	99	158	124	86	94	92	740
Dawhenya RHC	0	0	0	5	7	5	5	11	1	4	6	4	48
<b>NINGO</b>													
Ningo RHC	0	0	0	0	42	54	83	81	87	84	0	0	431
Nyigbenya CC	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>OSUDOKU</b>													
Asutare RHC	0	0	0	0	0	14	29	38	73	55	30	46	285
Osuwem CC	0	0	0	0	0	7	5	7	2	12	11	3	47
Duffo CC	0	0	0	0	3	3	1	4	4	8	4	6	33
<b>HOSPITAL</b>													
Agomanya	0	0	0	0	0	2	0	3	3	2	3	2	15
Akuse	0	0	0	0	0	4	0	3	7	2	7	6	23
Battor	0	0	0	0	2	0	0	0	0	0	0	2	4
Tema General	0	0	0	0	0	0	0	0	0	0	1	0	1
Ridge	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct Reimbursement	0	0	0	1	1	1	3	0	1	4	4	0	15

**TABLE 4B – NUMBER OF PATIENT CONTACTS (INSURED CLIENTS) PER PRIMARY CARE CLINIC AND PER REFERRAL HOSPITAL BY MONTH FOR THE PERIOD OCTOBER 2001 – SEPTEMBER 2002**

	Oct 2001	Nov 2001	Dec 2001	Jan 2002	Feb 2002	Mar 2002	Apr 2002	May 2002	Jun 2002	Jul 2002	Aug 2002	Sep 2002	Total
DODOWA													
Dodowa RHC													
Kordiabe CC													
Agomeda CC													
PRAMPARAM													
Prampram RHC													
Dawhenya RHC													
NINGO													
Ningo RHC													
Nyigbenya CC													
OSUDOKU													
Asutuare RHC													
Osuwem CC													
Duffo CC													
HOSPITAL													
Agomanya													
Akuse													
Battor													
Tema General													
Ridge													
Atua													

Table 5a – Total number of Outpatient Contacts (Insured and Un-insured clients) per primary care facility by month over the period October 2000 – September 2001

Sub-districts	Oct 2000	Nov 2000	Dec 2000	Jan 2001	Feb 2001	Mar 2001	Apr 2001	May 2001	Jun 2001	Jul 2001	Aug 2001	Sept 2001	Total
Dodowa Subdist													
Dodowa RHC	573	595	408	618	516	452	521	636	647	695	613	536	6810
Kordiabe CC	125	123	108	161	102	59	58	111	91	106	111	106	1261
Agomeda CC	195	211	220	237	181	193	184	203	225	241	209	198	2497
Prampram Subdist													
Prampram RHC	353	350	324	438	403	350	401	579	634	647	486	454	5419
Dawhenya CC	41	32	39	93	60	36	52	107	44	68	66	49	687
Ningo Subdist													
Ningo RHC	217	191	237	251	246	195	192	328	179	372	324	656	3388
Nyigbenya CC	28	19	7	23	28	13	13	27	27	40	48	41	314
Osudoku Subdist													
Asutsuare RHC	230	278	198	302	144	194	190	210	213	193	137	140	2429
Osuwem CC	51	43	36	54	69	33	24	21	13	24	26	22	416
Duffor CC	60	108	71	143	80	55	53	70	101	73	42	49	905

Table 5b – Total number of Outpatient Contacts (Insured and Un-insured clients) per primary care facility by month over the period October 2001 – September 2002

Sub-districts	Oct 2001	Nov 2001	Dec 2001	Jan 2002	Feb 2002	Mar 2002	Apr 2002	May 2002	Jun 2002	Jul 2002	Aug 2002	Sept 2002	Total
Dodowa Subdist													
Dodowa RHC													
Kordiabe CC													
Agomeda CC													
Prampram Subdist													
Prampram RHC													
Dawhenya CC													
Ningo Subdist													
Ningo RHC													
Nyigbenya CC													
Osudoku Subdist													
Asutsuare RHC													
Osuwem CC													
Duffor CC													

Table 6 – Reimbursements by month by primary care clinic

	Agomeda	Asutuare	Dawhenya	Dodowa	Duffor	Kordiabe	Ningo	Osuwem	Prampram	TOTAL
Oct-00				62,545.00						62,545.00
Nov-00				62,545.00						62,545.00
Dec-00				62,545.00						62,545.00
Jan-01			23,179.00	109,368.00					67,562.00	200,109.00
Feb-01	66,600.00		37,914.00	230,473.00	14,751.00		266,220.00		176,086.00	792,044.00
Mar-01	137,190.00	76,237.00	23,405.00	437,582.00	12,368.00	35,816.00	320,713.00	30,723.00	263,455.00	1,337,489.00
Apr-01	206,728.00	76,237.00	23,405.00	437,582.00	12,368.00	35,816.00	320,713.00	30,723.00	263,455.00	1,407,027.00
May-01	330,957.00	220,361.00	43,909.00	764,066.00	15,294.00	271,986.00	430,774.00	30,200.00	694,931.00	2,802,478.00
Jun-01	270,535.00	398,612.00	2,139.00	639,176.00	18,210.00	123,355.00	455,398.00	8,080.00	788,136.00	2,703,641.00
Jul-01	400,740.00	269,173.00	10,553.00	822,770.00	42,416.00	105,638.00	460,089.00	57,574.00	305,686.00	2,474,639.00
Aug-01	437,931.00	154,814.00	27,110.00	55,457.00	15,716.00	122,520.00	-	57,739.00	386,413.00	1,257,700.00
Sep-01	416,282.00	309,206.00	32,836.00	39,443.00	17,926.00	94,663.00	-	10,870.00	395,481.00	1,316,707.00
TOTAL	2,266,963.00	1,504,640.00	224,450.00	3,723,552.00	149,049.00	789,794.00	2,253,907.00	225,909.00	3,341,205.00	14,479,469.00
Oct-01										
Nov-01										
Dec-01										
Jan-02										
Feb-02										
Mar-02										
Apr-02										
May-02										
Jun-02										
Jul-02										
Aug-02										
Sep-02										
Total										

Table 7a – Reimbursements by month by referral hospital (Direct hospital payments plus reimbursement of client receipts)

	Agomanya	Akuse	Battor	Tema	Atua	Ridge	TOTAL
Oct-00							
Nov-00							
Dec-00							
Jan-01							
Feb-01							
Mar-01							
Apr-01							
May-01							
Jun-01							
Jul-01							
Aug-01							
Sep-01							
TOTAL							
Oct-01							
Nov-01							
Dec-01							
Jan-02							
Feb-02							
Mar-02							
Apr-02							
May-02							
Jun-02							
Jul-02							
Aug-02							
Sep-02							
Total							

Table 7b – Reimbursements by month by referral hospital (Direct hospital payments only)

	Agomanya	Akuse	Battor	Tema	Atua	Ridge	TOTAL
Oct-00							
Nov-00							
Dec-00							
Jan-01							
Feb-01							
Mar-01							
Apr-01							
May-01							
Jun-01							
Jul-01							
Aug-01							
Sep-01							
TOTAL							
Oct-01							
Nov-01							
Dec-01							
Jan-02							
Feb-02							
Mar-02							
Apr-02							
May-02							
Jun-02							
Jul-02							
Aug-02							
Sep-02							
Total							







Table 7 – Comparison of Utilization of Primary Care clinics by insured and uninsured clients by month over the period under review

	All OPD attendance	Insured OPD attendance	Uninsured OPD attendance	Utilization /person (insured)	Utilization /person (uninsured)	Ratio of Utilization by Insured to Uninsured	
Oct-00							
Nov-00							
Dec-00							
Jan-01							
Feb-01							
Mar-01							
Apr-01							
May-01							
Jun-01							
Jul-01							
Aug-01							
Sep-01							
TOTAL							
Oct-01							
Nov-01							
Dec-01							
Jan-02							
Feb-02							
Mar-02							
Apr-02							
May-02							
Jun-02							
Jul-02							
Aug-02							
Sep-02							
Total							



