Ministry of Health
Ghana

Independent Review
Health Sector Programme of Work 2009

Ghana

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The Review Team

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List of abbreviations and acronyms

ADHA	Additional Duty Hours Allowance
ARI	Acute Respiratory Infection
ART	Antiretroviral Therapy
ATF	Accounting Treasury and Financial
BCC	Behaviour Change Communication
BMC	Budget Management Centre
CHAG	Christian Health Association of Ghana
CHIM	Centre for Health Information Management
CHN	Community Health Nurse
CHO	Community Health Officer
CHPS	Community Health Planning and Service
CIP	Capital Investment Plan
CMA	Common Management Arrangement
CMR	Child Mortality Rate
CMS	Central Medical Stores
CYP	Couple Years Protection
DA	District Assembly
DANIDA	Danish International Development Assistance
DCE	District Chief Executive
DFID	UK Department for International Development
DHA	District Health Administration
DHIMS	District Health Information Management System
DHMT	District Health Management Team
DMHIS	District Mutual Health Insurance Scheme
DP	Development Partner
EC	European Commission
EOC	Emergency Obstetric Care
EPI	Expanded Programme on Immunisation

FC	Financial Controller
FP	Family Planning
GH¢	New Ghana cedis
GAS	Ghana Ambulance Services
GBS	General Budget Support
GDHS	Ghana Demographic and Health Survey
GHS	Ghana Health Services
GOG	Government of Ghana
GMA	Ghana Medical Association
GPRS	Ghana Poverty Reduction Strategy
GSS	Ghana Statistical Services
GWEP	Guinea Worm Eradication Programme
HA	Holistic Assessment
HF	Health Fund
HIPC	Highly Indebted Poor Countries
HIRD	High Impact Rapid Delivery
HMIS	Health Management Information System
HR	Human Resources
HRD	Human Resource Directorate
IALC	Inter-Agency Leadership Committee
ICB	International Competitive Bidding
ICT	Information & Computer Technology
IEC	Information, Education and Communication
IGF	Internally Generated Funds
ILO	International Labour Organisation
IMR	Infant Mortality Rate
IRP	International Reference Price
IRT	Independent Review Team
ITN	Insecticide Treated Net
JICA	Japan International Cooperation Agency

KATH	Komfo Anokye Teaching Hospital
KBTH	Korle-Bu Teaching Hospital
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MA	Medical Assistant
MCH	Maternal and Child Health
MDBS	Multi Donor Budget Support
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Ratio
MoH	Ministry of Health
MOFED	Ministry of Finance and Economic Development
MOLGRD	Ministry of Local Government and Rural Development
MOU	Memorandum of Understanding
MTEF	Medium Term Expenditure Framework
NAS	National Ambulance Services
NBTS	National Blood Transfusion Services
NCD	Non-Communicable Disease
NDPC	National Development Planning Commission
NHI	National Health Insurance
NHIA	National Health Insurance Authority
NHIF	National Health Insurance Fund
NHIS	National Health Insurance System
OPD	Out-Patient Department
PE	Personal Emoluments
PFM	Public Financial Management
PNC	Post Natal Care
POW	Programme of Work
PPM	Planned Preventive Maintenance
PPME	Policy, Planning, Monitoring and Evaluation

PPP	Public-Private Partnership
RCH	Reproductive and Child Health
RDHS	Regional Director of Health Services
RH	Reproductive Health
RHA	Regional Health Administration
RHMT	Regional Health Management Team
RHNP	Regenerative Health and Nutrition Programme
RSIMD	Research Statistics and Information Management Directorate
SBS	Sector Budget Support
SD	Supervised Delivery
SWAp	Sector-Wide Approach
TA	Technical Assistance
TBA	Traditional Birth Attendant
TH	Teaching Hospital
TTH	Tamale Teaching Hospital
TWG	Technical Working Group
U5MR	Under-Five Mortality Rate
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organisation

Executive summary

Brief summary of the report will be added to the final draft.

1. Introduction

The independent health sector review 2009 was carried out from March 15th to April 2nd 2010. It is part of a broader annual review including Budget Management Centre (BMC) reviews and performance hearings (involving districts, regions and heath related agencies); the inter-agency review; the health partner's review; and the in-depth review of some agreed key areas. The Ministry of Health (MoH) and its agencies brief the Parliamentary Select Committee on Health on the sector performance, progress and challenges. Finally, findings and recommendations are discussed at the Health Summit and the way forward mapped out.

The independent sector review has been carried out annually for many years by a mixed international and national expert team. Some 'fatigue' has been noted with this intensive annual process of reviews. Collecting the necessary evidence and organizing timely interviews has been somewhat difficult this year. The Independent Review Team (IRT) provides some comments regarding the organization of the present review and recommendations regarding future independent reviews in section 4.

This year the ToR specified the following key areas for review: a) non-communicable diseases; b) health service delivery including the functionality of the district health system and the progress in provision of emergency obstetric care (EOC; MDG 4 and 5); c) human resource rationalization; d) monitoring and evaluation; e) capital investment; f) good governance and partnerships; and g) health financing and financial management.

Then overall objective of the 2009 annual review is to provide an independent assessment of the progress made in the implementation of the three year lifespan of the 5 YPOW 2007-2011. The last two years of the current POW will be incorporated into the new MTDP 2010-13 (being developed). The present 2009 annual review has been complemented by a retrospective desk review of the implementation of the 2007 and 2008 POWs. The latter is presented in Annex 3 and summarized in section 2.2.

During the review (both the desk review and the 2009 review) it became apparent that some of the main obstacles of the Ghana health sector to improve performance are in the broad domain of governance. The IRT decided to focus its efforts more in this field (and less on the health service delivery part). As agreed with MoH, the main part of the feedback in this report deals with governance and summarises main system-related findings. Specific annexes deal more in detail with specific elements of the TOR. In order to improve 'readability' of the report and accessibility to a wider audience, the main report has been kept short and focused.

Section 2 of the report summarises the findings of the holistic assessment 2009 (section 2.1) and of the desk review of the 2007 and 2008 processes and achievements. The full reports are presented respectively in annex 2 and 3.The core of the 2009 review is presented in section 3 on governance and sector organization. Annexes 4 to 8 bring some of the details of specific areas specified in the TOR. Section 4 discusses the usefulness of the annual review and the main conclusions and recommendations are summarised in section 5.

2. Sector Performance

2.1 Holistic Assessment of the sector performance in 2009[1]

In 2008, the Holistic Assessment was introduced as part of the annual health sector review to provide a structured and transparent methodology to assess progress in achieving the objectives of the POW 2007-2011.

The conclusion of the holistic assessment is that the health sector in 2009 was *highly performing*, with a sector score of +1. Service delivery indicators (Strategic Objective 2) and capacity improvement indicators (Strategic Objective 3) were generally improving, while indicators on healthy lifestyle (Strategic Objective 1) were worsening. The indicators for Goal 1 (*reduction of excess risk and burden of morbidity, disability and mortality especially in the poor and marginalized groups*), Goal 2 (*reduction of inequalities in health services and health outcomes*) and Strategic objective 4 (*Governance and Financing*) did neither experience significant overall improvement nor deterioration.

Table 1: **Sector score**

GOAL 1	N/A
GOAL 2	0
GOAL 3	0
STRATEGIC OBJECTIVE 1	-1
STRATEGIC OBJECTIVE 2	+1
STRATEGIC OBJECTIVE 3	+1
STRATEGIC OBJECTIVE 4	0
Sector score	**+1**

While the sector score remained positive with a score of +1 for 2009, the sector score for 2008 was significantly higher at +4. This could be interpreted as waning of the positive trends experienced in 2008, but such an analysis has a few caveats. Not all indicators are measured all years, so the same indicators, goals and strategic objectives are not necessarily measured year on year. Therefore, comparing years would be an attempt to measure a moving target. Another issue is that the holistic assessment does not assign any weight to indicators, i.e. the score can be high in a year with worsening trend of a number of more *important* indicators' trend as long as the majority of (*less important*) indicators' trends are positive.

The outcome of this initial assessment of indicator trends and achievement of milestones will be presented at the April Health Summit and is intended to be qualified by discussions and negotiations at the subsequent business meeting, in order to create consensus on sector performance.

Out of the 4 agreed milestones for 2009, two have been achieved: a) *Clinical protocols have been established for early detection and treatment of diabetes, cardio-vascular diseases and common forms of cancer* (see section 3.4 for comments on non-communicable diseases); b) the *Public Financial Management (PFM) programme in the health sector is being strengthened* (this is an ongoing process, that needs further focus and support; see section 3.2.8 and annex 8 for comments on the process). Two more milestones were not achieved: a) an *information document and communication strategy related to prevention of NCDs* is being developed but has not yet been shared; and b) the *facility rationalisation pl*an has not yet been completed.

[1] The complete version of the holistic assessment is presented in annex 2. Some elements may still be updated before the health summit if requested information would become available.

The table below summarizes the values of sector-wide indicators for the 5-Year Programme of Work and annual targets specified in the 2009 Annual Programme of Work.

Table 2. Annual sector-wide indicators for the period 2006 to 2009

	2006	2007	2008	POW 2009 target	2009 performance
Goal 1: Ensure that children survive and grow to become healthy and reproductive adults that reproduce without risk of injuries or death					
IMR	71		50		
U5MR	111		80		
MMR	N/A		451		
U5 underweight	18%		13.9%		
Total Fertility Rate	4.4		4.0		
Goal 2: Reduce the excess risk and burden of morbidity, disability and mortality especially in the poor and marginalized groups					
HIV prevalence	2,9	2,6	2.2	2.4	2.9
Guinea Worm	4.136	3.358	501	200	242
Goal 3: Reduce inequalities in health services and health outcomes					
Equity: Poverty (U5MR)	1,18		1.72		
Equity: Geography (supervised deliveries)	2,05	2,143	1.97	1.90	1.49
Equity: Geography (nurse:population)	4,14	2,257	2.03	2.00	1.77
Equity: NHIS (gender)	N/A	N/A	1.22	1.20	-
Equity: NHIS (poverty)	N/A		1.6		
Strategic Objective 1: Healthy lifestyle and healthy environment					
% households with sanitaion	60,70%				
% households with access to impr water source	78,10%				
% obesity in population	25,30%		9.3%		
Strategic Objective 2: Health, Reproduction and Nutrition Services					
Exclusive breastfeeding	54,0%				
% Attended deliveries	44,5%	35,1%	39,3%	60%	45.6%
Family Planning (Couple Year Protection)	25.4%	23,2%	33.8%	35.0%	31.1%
ANC	88,4%	89,5%	97.4%	95%	92.1%
%U5s sleeping under ITN	41,7%	55,3%	40,5%	60%	N/A
Penta3	84,2%	88,0%	86.6%	90%	89.3%
HIV clients ARV treatment	7.338	13.249	23,614	30,000	33,745
OPD	0,52	0,69	0.77	0.75	0.81
Institutional MMR	219	224	201	170	170
TB success rate	67,6%	76,1%	84,7%	80%	85.3%
Strategic Objective 3: Capacity Development					
% population within 5km	N/A				
Doctor:population	15.423	13.683	13,499	10,000	11,649
Nurse:population	2.125	1.537	1,353	2,000	1,172
Strategic Objective 4: Governance and Financing					
% MTEF on health	16.2%	14,60%	14,90%	15,0%	14,6%
% non-wage GOG recurrent to district	40%	49%	49%	50%	5%
USD/capita	25,4	23,01	23.23	39	25.60
Budget execution rate	N/A	N/A	115%	100%	80.4%
% budget disbursed before June	N/A	N/A	23%	>50%	39%
% population with NHIS card	25%	36,2%	45.0%	45%	50%
% Claims settled within 4 weeks	N/A	N/A		N/A	-
% IGF from NHIS	45%	N/A	66.5%	70%%	-

Note: Greyed indicators are not measured annually.

Excess risk and burden of morbidity, disability and mortality especially in the poor and marginalized groups

The decline in median *HIV prevalence* among pregnant women, which was observed over the previous two sentinel surveys, could not be sustained in 2009, when the prevalence increased to 2.9%. Eastern region, and specially Koforidua, continued to be the areas with highest prevalence, 4.2% and 5.8% respectively and the lowest prevalence was found in Northern Region with 2.0% infected pregnant women. An estimated 267,069 adults and children lived with HIV and AIDS in 2009 and some 13% (33,745) of these were receiving antiretroviral treatment.

The number of *Guinea Worm* cases continued to fall with only 242 cases in 2009. Northern Region managed to reduce the number of cases by 50% but still accounted for some 98% of all cases.

Equity

2009 was the first year, where it was possible to estimate the survey based equity indicators. The indicator framework holds two indicators as proxy for *geographical equity*, supervised deliveries and nurse to population ratio by region. The indicator for *geographical equity of supervised delivery* continued previous years' improvement. Not only is the gap between the best and poorest performing region closing, both regions have also improved overall coverage and Northern Region improved coverage by almost 40%. Upper West Region saw the most significant reduction in coverage by nearly 10%, and is now close to the performance of Northern Region.

In 2009, there was furthermore an improvement in *equitable distribution of nurse*s among Ghana's 10 regions. Upper West Region had the highest number of nurses per regional population. Ashanti Region continued to have the lowest number of nurses per population, but saw a marked increase in total number of nurses in 2009 (26%).

The *doctor/population ratio* increased from 2008 to 2009 by 13%. The highest relative increase in number of doctors was recorded in Northern and Brong-Ahafo Regions, but Northern Region is still the region with lowest number of doctors per population. With a total of 895 doctors, 43% of Ghana's doctors were practicing in Greater Accra Region. The 3 Northern Regions have a total of 82 doctors, which corresponds to less than 4% of doctors in the nation.

The equity indicators for *poverty a*re U5MR and NHIS cardholders, by wealth quintile. The equity indicator for poverty (U5MR) was measured based on the DHS 2008. The equity indicator is estimated at 1.72. Since 2003, Ghana has seen a significant reduction of U5MR nationwide for all wealth quintiles; however, the reduction in U5MR has been greater in the highest wealth quintile compare to the lowest. Therefore, the distribution of U5MR by wealth has become increasingly unequal. The NHIS Card Holder ratio by wealth quintile was measured for the first time based on the DHS 2008 results. The calculation shows that significantly more individuals belonging to the highest wealth quintile register compared to the lowest quintile. This is especially evident for the male population.

Healthy lifestyle and healthy environment

Obesity (BMI ≥ 30) among women aged 15-49 increased by 15% from 2003 to 2008, and while almost 10% of the female population 15-49 is obese over 20% is overweight. With 19.4% of women in the age group being obese and 25.1% overweight, Greater Accra Region had significantly higher prevalence of obesity and overweight than any other region.

Provision of Health, Reproduction and Nutrition Services

Most health service indicators experienced a significant positive trend from 2008 to 2009. In accordance with the targets for improved maternal and neonatal health set out in the POW 2009, the indicators for supervised deliveries and institutional MMR improved. This positive trend started in 2007.

From 2008 to 2009, the coverage of pregnant women, who received one or more *antenatal care visits*, dropped by 5.4%. In the same period, the proportion of pregnant women who received 4 or more visits increased significantly from 63.8% to 81.6%. This indicates that the majority (almost 90%) of women now follow the recommended ANC course of minimum 4 visits, which can be interpreted as an overall improvement of antenatal services in the country.

The *proportion of deliveries attended by a trained health worker* increased by 17%, and hence continued the positive trend experienced since 2007. The DHS 2008 estimated the percentage somewhat higher at 58.7%. A deeper analysis of the DHS 2008 data reveals that there were large

regional variations in the indicator. In Greater Accra Region 84.3% deliveries were attended by a skilled provider, while only 27.2% were attended by a skilled provider in Northern Region. Also the routine health information indicates that Northern Region performed relatively poorer than other regions, the region did however achieve major improvement of this indicator by almost 40% from 2008 to 2009.

The *institutional MMR* continued the positive trend, and was reduced by 15% from 2008 to 2009. Almost all regions achieved improvement of this indicator, but in Upper West Region there was a serious increase in the MMR by 145% from 109 to 267 per 100,000 live births. The total number of maternal deaths recorded in the region increased from 19 to 41.

From 2008 to 2009, *contraceptive prevalence rate* dropped by 8%. While long term couple years of protection (CYP) remained at around 142,000, short term CYP dropped by 33% from 654,072 in 2008 to 439,573 in 2009. The indicator trend corresponds well with information presented to the review team concerning a general shortage of short term methods in Ghana during the previous year. The social marketed brands of condoms, e.g. Ghana Social Marketing Foundation brand, which in 2008 constituted more than half of all condoms sold in Ghana, have reportedly been in particular shortage in 2009.

After a slight drop in *Penta 3 coverage* in 2008, performance is now back on track, almost reaching the target of 90% coverage. The DHS 2008 estimated the percentage of Penta 3 at 87.7%, which corresponds well with routinely collected data. A regional break down of the routine data indicates that coverage in Greater Accra Region is significant lower that the national coverage. This could not be confirmed by an EPI survey from 2009, which was performed in Greater Accra Region and showed significantly higher coverage of Penta 3 at 96.1%.

*Outpatient (OPD) visits per c*apita continued previous years' increase and reached the 2009 target. While every inhabitant of Brong Ahafo Region in average visits the outpatient department 1.15 times a year, people of Greater Accra and Northern Region have an average utilisation of OPD services less than half of Brong Ahafo Region.

Governance and Financing

The total *number of card holders* increased from 10,417,886 in 2008 to 12,123,338 in 2009. This is, however, an accumulated figure of cards issued since health insurance started, and the actual number of individuals holding a valid NHIS membership card in 2009 is therefore expected to be lower due to health insurance dropout (e.g. lack of renewal, death and emigration). It has been specified by the NHIA that the figure represents an accumulation of *individuals* who were issued one or more cards and not the accumulation of *cards issued*, i.e. the figure increases every time an individual renews his or her membership card.

Region of excellence

A regional comparison of selected service indicator trends from 2008 to 2009 shows that Upper East Region experienced relatively larger improvements compared to any other region.

	Penta 3	ANC	Supervised deliveries	FP acceptor rate	OPD per capita	Institutional MMR
Highest performance	11.8%	-2.0%	38.8%	27.3%	35,3%	-43.9%
Lowest performance	-2.4%	-9.2%	-9.6%	-49.0%	-11,4%	144,6%
Median % change	3.2%	-5.4%	8.1%	0.3%	4,9%	-15,2%
Upper East Region	**11.8%**	**-2.0%**	**30.2%**	**26.0%**	**35.3%**	**1.0%**

It would be interesting to investigate further why UER has made such marked improvements and whether lessons can be learnt for other regions.

For a detailed description of the Holistic Assessment Tool and underlying principals as well as details of the 2009 estimations please refer to annex 2.

2.2 Mid Term Desk Review POW 2007-2011

The medium term review took as point of departure to compare the original 5 year strategic plan and Programme of Work (POW) titled 'wealth through health' with the subsequent annual POWs (2007, 2008 and 2009) and reviews (2007 and 2008) to analyse whether and in which way perceived and actual priorities have been taken forward from one plan to the other, as evidenced in the various reviews. It therefore attempted to *measure process and not necessarily progress or achievements* that are the subjects of the annual independent reviews and whereto, if applicable, reference is made. The medium term review was hence limited in scope and restricted to a desk review of the different documents since 2007 and tries to complement the independent review for 2009. The full text of the desk study is presented in annex 3 while this chapter is only devoted to emerging 'red lines' in the process of the implementation of the 5 year POW.

More specifically, this desk review has taken a *historical look* at progress, process and actions by comparing identified intentions for change with actual changes and its impact/effects on progress. A difficulty in comparing the three subsequent annual POWs versus the original 5 year POW is the *shift in 2008 from a theme based approach to programming to an operational agency approach* while the sequential reviews were based on then perceived attention areas for the Ministry of Health causing them to not cover all aspects of the POW under review. In terms of output and outcome, however, the availability of a stable set of sector wide indicators allows to draw some conclusions about progress that are captured in the 2009 holistic assessment (see section 2.1) which, as earlier mentioned, can be seen as a review of the cumulative outcome of the implementation of the 5 year POW. For a judgement on the process of planning and review within the sector this very clear shift in the planning modality flags what could be a significant 'red line' of increasing fragmentation within and between the actors in the sector. It indeed raises the question whether the change to an agency based annual POW in 2008 is a symptom of an evident 'silofication' of the sector[2]. Some of the underlying reasons for this will be discussed further in the report (see section 3). In addition to the inevitable and natural 'organic drift' versus the original goals, objectives and activities of the 5 year POW, this introduced three issues for the progress and follow up of the sector:

- *Programmatic elements and activities get lost to follow up*: The withdrawal of activities into the distinct silos - that are sometimes competing for the same resources - has caused the loss of synergies for 'crosscutting' issues that require sector wide planning. Activities referring to personal responsibilities and lifestyle (regenerative health and nutrition) would be examples.
- Programmatic elements and activities that are widely regarded as priorities for the ultimate goal of the 5 year POW (Wealth through Health) are *not sufficiently translated into action because of a lack of intra-sector collaboration*. They appear year after year with the same recommendations in the subsequent independent reviews. An example for this deviation would be the expansion of CHPS zones.
- Withdrawal of activities into in general technical inward looking departments and agencies has *skewed the sector towards biomedical solutions for health with less attention to 'softer' multi-sector issues*. Examples here would be water, sanitation and nutrition.

[2] With 'silofication' we mean here the clear trend of antagonistic management of the different departments and agencies (silos) that constitute the (public) health sector and which seems to hinder the holistic approach of the original 5 year strategy and POW.

3. Governance and health sector organisation

3.1 A health sector evolving over the past decades from fragmentation to integration and again to fragmentation

The health sector in Ghana has gone through *different periods of change* which have been extensively documented and discussed in literature[3,4]. In the 1980s tension existed between a policy environment aiming at financial decentralisation, strengthening district health systems and integrated approach to service delivery and the fragmented reality of 13 different health programmes, donor driven projects and balkanisation (donors supporting specific regions). These tensions lead in the 1990s to a progressive move to do business in a different way, aiming at a holistic sectoral approach, using GoG/MoH systems and strengthening institutional capacity. A process was established to discuss and negotiate health sector priorities and interventions and allowing the MoH more authority on comprehensive resource allocation and utilisation, including part of donor funds. The first Medium Term Health Strategy, the Five-Year Programme of Work and the Common Management arrangements (CMA) were ready by the end of 1996, which lead to the signing of the MoU between MoH and DPs in April 1998. The purchaser-provider split, with the creation of the GHS, was implemented in the same period. The main trust was a single plan and budget, jointly supported by GoG and DP resources, using common systems; moving from a fragmented to a comprehensive, more integrated approach. Reportedly, this process of change management has been fundamental for the health sector and implemented under various degrees of constraints and trust. The purchaser-provider split, while a rational choice has been a cause of tensions and power struggle in the sector. On the other hand, service delivery improved. Interestingly, we notice today *again a move away from a comprehensive, sector-wide, integrated approach regarding health service organisation and health service delivery to an increasingly fragmented approach*. This is reflected in several dynamics in the sector, but mainly: a) an increasing number of health (related) agencies without effective communication between agencies and without performance based / results based financing; b) a greater complexity/variety in health financing mechanisms; with an increasing tendency to earmarking financial and programme resources; and more emphasis on clinical / curative care through a (relatively new) health insurance financing; and c) a loss of focus in the respective POWs, moving from a theme based to an agency based focus (see section 2.2 and annex 3).

At the same time, the sector is constrained by some *major inefficiencies* which include: a) the delays in funding and in reimbursements; b) the high prices for medicines; and c) the learning by doing process of the national health insurance.

Other *system issues* that the IRT has addressed include human resources, health service delivery, information management and capital investment.

Some of the above constraints make it *increasingly difficult for DHMTs to comprehensively plan for locally set priorities*.

[3] Edward Addai & Liz Gaere, Capacity-building and systems development for SWAPs: the experience of the Ghana health sector, January 2001.

[4] Denise Vaillancourt, Do health sector-wide approaches achieve results? Emerging evidence and lessons from six countries (including Ghana), IEG Working Paper 2009/4.

3.1.1 Fragmentation and poor coordination of essential governance functions

In the present organisation of the health sector the *central MoH* (hereafter called MoH) is responsible for policy development, regulation, health financing, resource mobilisation and allocation, monitoring and evaluation of sector performance, and engaging with service providers (GHS, CHAG, teaching hospitals, private providers). GHS has over the years developed as a strong organisation responsible for all public service provision (with the exception of the teaching hospitals) in close collaboration with the CHAG health facilities and to a lesser extent with private providers (mainly in urban settings). The GHS has long been the sole 'main elephant' in the sector, but has recently been complemented by another powerful body, the NHIA, which increasingly manages a substantial part of the sector resource envelope.

A recent trend is that *some essential service functions of the GHS are being 'removed' from GHS* and organised in separate semi-autonomous agencies. Examples are the National Blood Transfusion Services (NBTS), the National Ambulance Services (NAS), the mental health hospitals. The list could be complemented in the future by for example the Laboratory Services, Radiotherapy Centres, etc. as is the case in some countries. While there may be a rationale for establishing **semi-autonomous agencies**, the IRT has the following observations: a) in countries where this type of organisation is being pursued, there is usually no comprehensive public provider service agency such as the GHS; b) it seems that GHS was not always in favour of such separation of functions, which may create tensions between new and existing agencies; c) reportedly newly created agencies do no longer communicate effectively with the GHS as they are 'accountable' to the MoH; and d) the MoH has not engaged with different health agencies through a performance or results based contract, making it difficult for the MoH to guide and follow-up on agency performance.

Multiplication of (semi) autonomous agencies requires increasingly *strong leadership* of the **MoH** and relevant senior management and technical skills at central MoH to steer, coordinate and ensure that all agencies implement sector priorities in a complementary and reinforcing way. The **Interagency Leadership Committee** [5] (see annex 4 for a more detailed analysis) can foster coordination between agencies but has no mandate to enforce collaboration and decisions made. This situation *may lead to further fragmentation and increased complexity* of the sector organisation[6].

While the **MoH** *has some of the carrots it does not seem to have an effective stick*. On the one hand, the MoH does not seem to be anymore in full control of the sector financial resources. This is reflected by: a) the apparent lack of authority by the MoH to steer the NHIA which is responsible for an increasingly important part of the sector resources (information sharing and communication between the NHIA and the MoH seems to be at best unsatisfactory); b) the increasing importance of earmarked donor funding versus SBS and previously used flexible health fund; and c) reportedly limited skills at the MoH to effectively negotiate with MoF. This reality is contrasted by an ever increasing request and competition by all agencies for more resources, as was apparent in the presentations made by most agencies during the inter-agency meeting. On the other hand, the MoH has not (yet) introduced effective management tools in order to follow-up on agency performance: a) no performance based or results based contracting with health agencies[7]; and b) a reportedly

[5] The Interagency Leadership Committee, chaired by the Minister, is a new forum created in 2008 to discuss cross-cutting issues (e.g. referral services, ambulance services…) on a quarterly basis. It helped agencies 'talking to each other' and seeking consensus but has no decision power. It was not very active in 2009 due to the transition between governments. Meetings are not linked to the annual plan and budget cycle.

[6] There is a tendency to remove responsibilities from GHS (blood transfusion, ambulance services, mental health, training, etc.). Is this a conscious move to reduce GHS power or to increase efficiency?

[7] Performance contracting (GHS – Region –District) has been introduced before but has not been enforced / used effectively. According to some informants, erratic GOG funding tends to make contracting ineffective.

weak monitoring and evaluation function at the MoH. The *risk is that agency performance is thus not effectively monitored, resulting in less than optimal sector performance*.

The **NHIA** combines *regulatory* functions (e.g. accreditation; service package; resource allocation and reimbursement policy), *financing* (reimbursement of claims and 'reinsurance', subsidizing the MoH for some prevention activities and investments, projects of Member of Parliament, investments in the national insurance function, overhead, etc.) and *control* (number and type of services delivered, prescription of medicines). Some countries have opted to concentrate all three functions in a single powerful body, but foresee checks and balances through transparent and effective negotiation and decision-making modalities involving civil society, professional bodies, government and private sector representatives. Other countries have decided to split functions between different agencies[8]. *Concentrating all three functions in one single body, without institutionalising sufficient checks and balances, carries the risk of shifting power balances in the sector*. This requires effective mechanisms to be in place for coordination, communication, negotiation, guidance and follow-up. From the present review it is not evident that those mechanisms are sufficiently well developed and effective. At present, the NHIA would benefit from increased transparency and effective communication with the MoH. The perception is more of competing entities in the sector rather than complementary agencies with a specific mandate and aligned with agreed common sector priorities.

According to the present law, the **NHIA** is in principle accountable to the Minister of Health, but de facto NHIA seems to be accountable to the President and Parliament, *reducing the authority of the Minister* to ensure effective complementarity between financing and provision of services; and to monitoring NHIA performance[9]. The *new draft HI bill* specifies the establishment of a National Health Insurance Commission, with regulatory authority over the National Health Insurance Scheme and any Private and Mutual Health Insurance Schemes, and with an expanded membership to cover critical stakeholders. It also aims at ensuring more structured collaborations and interactions between the Ministry of Health (MoH), the Ministry of Finance and Economic Planning (MOFEP), the National Insurance Commission (NHIC) and the National Health Insurance Authority (NHIA) and between the Regional and District Offices of the Schemes and the Political and Administrative Authority in the Regions and Districts. Depending on how these decisions are translated into practice, the new bill may go a long way in addressing the above issues[10].

It is unclear how the MoH ensures that the national health insurance **supports national policy /sector objectives**, as being translated into target setting and implementation by some agencies (e.g. GHS). *There seem to exist few effective avenues for formal collaboration between MoH, NHIA and GHS/CHAG*. Although by law accountable to the Minister of Health, the NHIA data are not easily shared with MoH senior staff[11].

[8] In Morocco for example, the National Health Insurance Agency has mainly a regulatory function. Financing and control functions are managed separately by specific agencies (for public employees, for private employees, for the informal sector) and the public authorities (MoH and MLG for the subsidy scheme of the poor). Similar and different organisational structures exist in several European countries.

[9] The NHIA CEO is appointed by the President and reports to the Parliamentary Select Committee. The recent NHIA reports for 2009 were not available at MoH at the time of the review.

[10] The IRT has only seen the September 2009 version of the draft bill. Reportedly, some important changes may still have been inserted in the draft bill that is presently with Cabinet and would be presented to Parliament in its next session (May 2010?), more specifically regarding the organisational structure. Some informants suggest that the idea of the NHIC would have been abandoned, while a separate fund management team would be responsible for administering the NHIF.

[11] As a consequence the MoH was not in a position to share up-to-date information on NHIA with the IRT. Requests for specific data submitted by the IRT directly to NHIA have not been honoured by the time of writing the report.

Closer collaboration between key agencies is fundamental for effective service delivery. MoH should continue to work closely with GHS, CHAG, other health agencies and teaching hospitals in developing policy and strategic plans. In addition, MoH should work closely with NHIA on policy issues regarding health financing and health insurance. Also MoH, GHS, CHAG, TH and NHIA should work together at a technical level on issues such as basic package, provider payment systems, provider claim management, control of provider and client behaviour. The above could be done through *joint technical working groups* (linked to the Inter-Agency Leadership Committee or institutionalised at the MoH).

The **rather 'insecure' political environment** in the past years may have contributed to some aspects of the fragmentation described above or to the fact that consequences fragmentation have yet to be addressed. While the change of government has created new positive dynamics, the reality is that ministers and deputy ministers have changed on several occasions over the past years. Also, top management (Chief Director and Head of PPME) have been in acting position for quite a long time.

The upcoming **Public Health Act, the new NHIA bill and the CMA** provide opportunities to reorganize and strengthen effective coordination of health agencies by the MoH / GOG with a view to ensure that sector priorities are being met. It would however require that complementarity and harmonization between the three initiatives is being ensured before they are finalized.

Key recommendation

The MoH to ensure strong sector leadership, enforcing its mandate. This could include the following initiatives:

- Implement and monitor performance / results based contract with all agencies
- Strengthen monitoring and evaluation functions at the MoH
- Strengthen the role of the Inter Agency Leadership Committee (see annex 4, p47 for specific recommendations)
- Create avenues for formal collaboration between agencies on specific issues (TWG)
- Confirm top level (Acting) management positions

3.1.2 While the resource envelope for health continues to increase, funding shifts towards clinical care and less flexible funding

The total resource envelope for the health sector (as per budget) has moved from GHc 21 per capita in 2006 to GHc 32 per capita in 2008 and **GHc 38 per capita in 2009**[12] (equivalent to about 27 USD per capita). But sector outputs, although improved, have not followed the same trend. And all agencies request more funds and resources. While this per capita resource envelope is among the highest in Sub Saharan Africa, critical sector outputs are rather average. This raises some fundamental questions: *Where does all the money go? How can efficiency of resource allocation/use be enhanced?*

[12] Double-counting of a significant proportion of IGFs which is funded through NHIF could overstate the true MoH share of the budget. On the other hand, substantial levels of off-budget financing are not included in the presented figures (see annex 8). This 2009 figure may still need to be adjusted.

The new financing mechanism of health insurance has substantially *increased resource availability for health, mainly for clinical services*[13]. As discussed further (see section 3.2.4) there is scope for efficiency gains under the present health insurance. On the other hand availability of GOG resources for operations (supervision, monitoring, etc.) and public health and preventive activities seem to have been reduced. This is mainly reflected in the continuous under funding of the item 2 and more specifically item 3 of the MoH budget. This is partially explained by the fact that the service claims reimbursed by the NHI cover some of the facility based operational costs and is partially the result of continuous overspending on item 1. Complementary funding by DPs through SBS/HF and earmarked funds ensures that prevention and public health activities remain resourced, but this is in fact a fundamental responsibility of the GoG (public health goods) which is insufficiently resourced by own government finances. *The latter requires for an informed policy dialogue by DPs and MoH with MoFEP. Proper tracking of expenditures for prevention and public health would allow for more evidence to convince MoF* (see annex 8 for a simplified flow of health funds under item 3).

While increasing the overall resource envelope, the new financing mechanism *shifts resource availability for comprehensive district health planning and implementation away from DHMTs to clinical service providers.* Presently, the main source of income for districts is IGF[14], largely from claims reimbursed by the health insurance, but these resources are with health facilities (service provision fund and drug revolving fund). Complementary GOG resources for implementation of district health plans have consequently be reduced. In order to compensate for this reduction and allow the DHMT to cover some district priorities, some districts request facilities to allocate a certain percentage of the service fund to the DHMT for public health activities, supervision, etc. (see annex 8).

At present, the NHIF *reimbursement for services to providers is not linked to performance targets* (clinical care or public health). This means that MoH and GHS cannot steer providers to ensure achieving public health targets with an important part of the sector resources. Many western countries have opted for this type of health insurance, traditionally excluding prevention and health promotion, and not linked to achieving set targets. However, because of resource constraints, there is an upcoming trend to increasingly link individual prevention and lifestyle to cost of health insurance. Other countries have chosen to link health insurance to sector and facility based (or target group based) clinical and/or public health targets. Basically, health providers have access to increased reimbursement or allowances when reaching pre-defined service targets[15]. Through the Norwegian Trust Fund, the WB is starting up a pilot on a performance-based or result based payment mechanism for primary health care services. If the results are positive, it may direct policy decisions in this domain. Reportedly, the WB project allows for close collaboration between main stakeholders, including MoH, NHIA, GHS, CHAG, etc.

While health insurance claims reimbursed to health providers are financial resources over which the DHMT has less control, the *other resources available under item 2 and 3 and via specific health programmes are increasingly earmarked*. This includes GFATM, earmarked donor funds, traditional ring-fencing of certain priorities by MoH (such as FP commodities and Guinea Worm activities), specific MoH programmes (e.g. HIRD). Increasingly MoH tend to 'ring-fence' GoG/SBS resources under item 3 as well. Although SBS resources are supposedly flexible, they tend to become more and more earmarked before reaching the operational level. This was quite different when the Health

[13] Unconfirmed data suggest total expected revenue for NHIA of GHc 361.8m for 2009; total payments are expected to be GHc 463.7m with an expected net deficit of GHc 206.9m financed from the reserve funds. GHc 464m is to be compared with the GHc 922m for health in the MTEF (more than 50%).

[14] A similar pattern applies to *CHAG* facilities (GOG GHc 38m of which 99% PE; IGF GHc 21m; DP GHc 1.5m).

[15] Egypt has pilot tested this approach for many years through a health services fund under the national health insurance. Performance targets included quantitative targets (e.g. number of patients attended per hour; EPI coverage; ANC attendance; etc.) and qualitative targets (patient files updated; patient satisfaction; prescription of medicines; etc.).

Fund was still operational and a main source of flexible funding for districts. While the IRT considers ring fencing for specific priorities acceptable at the national level, *comprehensive district health planning and local priority setting becomes meaningless if most resources are being earmarked or ring-fenced at the central level*.

Key recommendation

Limit compartmentalization of resources leading to further fragmentation:

- **Ensure sufficient and timely funding** across all levels and all financing modalities including for public health / preventive activities; and track expenditures for prevention and public health
- **Ensure sufficient flexible funds** supporting comprehensive district health planning
- **Strengthen the policy dialogue between MoH, DPs and MoFEP**: a) to ensure sufficient GOG funding for public health / prevention; b) to ensure timely release of GOG and SBS funding; and c) to ensure partial flexible funding

3.1.3 Given the dynamic changes in the sector, are we losing focus? And do we keep priorities right?

The shift in the 2008 POW from a theme based approach to programming to an operational agency approach has probably contributed to the fact that some aspects of the 5 year POW were lost to follow up, or not sufficiently translated into action, or were not implemented at all. The MTR (see section 2.2 and annex 3) discusses this in more detail. Verticalisation, fragmentation (of agencies) and its opposite integration have caused overlap and gaps between the respective areas of the POW. The switch in 2008 to an operational, agency based POW is symptomatic and might have contributed, as cause or consequence, to a fragmented approach towards these functional intervention areas. Cautiously a conclusion might be drawn that this orientation towards agencies has led to a 'silofication' of the health sector where the different silos are competing for government resources.

Examples where focus has been lost during the implementation of the present 5Y Strategic Plan include the following: regenerative health and nutrition; non communicable diseases; intersectoral collaboration; roll-out of CHPS; use of information for decision-making; and promotion of a local health industry.

Is the future picture of the Ghana health sector a health centre with an expensive satellite dish and up-to-date IT environment but no water? Why do we invest in workable high tech solutions at facility level and limit its use to health insurance data transfer only? The same equipment, without additional investments (except for state of the art anti-virus software), could be used to transfer DHIMS data, get regular feedback, introduce telemedicine, facilitate training and continuous education and as an incentive for staff staying in isolated areas (use of the internet).

3.2 A sector facing increased demand but constrained by important inefficiencies and weaknesses

The IRT did not perform a complete health sector review and only indicates some of the major inefficiencies that directly affect service delivery and need to be urgently addressed.

These include: a) the delays in funding and reimbursements; b) the high prices for medicines; c) the learning by doing process of the national health insurance; d) the human resources for health; e) the use of information for decision-making; f) capital investments; and g) public finance management.

3.2.1 Increasing coverage of health insurance leads to increased demand for services

The introduction of the NHIS has led to a significant increase in health care utilization. Outpatient utilization increased from 0.52 visits per capita in 2006 to 0.81 in 2009, an increase of 56%[16] . Inpatient utilization increased by XX% over the same period. The IRT is not aware of an analysis of the profile of users and of reasons for increased attendance and cannot confirm whether increased utilization is based on real needs and therefore would lead to better health[17].

Obviously such an important increase of utilization requires the health system to react in terms of staffing, provision of medicines, logistics, etc. It is not clear from the review whether MoH and service providers had anticipated this change and planned accordingly. The budgets for health, although increased substantially (mainly through the NHIA), do not suggest a substantial increase of health staff, nor for item 3 as discussed previously, nor for capital investments (staff housing, equipment)[18]. Also, planned NHIF transfers to MoH (for items 3 & 4) have been late and were largely below expectations in 2009 (see annex 8). It is therefore unclear how the health system copes with the increased demand for services and with the increased workload which has been mentioned as a problem at facility level during the field visits.

Key recommendation

- The NHIA and MoH / GHS / CHAG to **further analyse the profile of the increased utilization** and workload in order for the MoH, the NHIA and service providers to plan and act accordingly.
- Consequently, **ensure sufficient system inputs** to coop with increased demand for services

[16] As a comparison, when user fees were abolished in Uganda, OP attendance increased by 70% and remained at that level. Increased utilisation was sustained by a substantial increase in staff and budgets for medicines.

[17] Increased demand for services is probably a mix of client induced demand, provider induced demand and real needs. Further analysis is needed to identify the profile of increased utilisation (who, for what type of service, essential versus non-essential, demand, supply or DRG driven, etc.).

[18] Some categories of staff have increased substantially over the past years such as the Community Health Nurses and equipment bought in 2009 was mainly for EOC. Both are important but would not deal with all aspects of increased demand for services.

3.2.2 Delays in release of funding and in reimbursements constrain effective implementation and service delivery

The year 2009 has been extremely weak in terms of item 3 disbursements. By the end of June 2009, only 12% of GoG item 3 had been released. The disbursements to the regions and districts consequently were even further delayed. Some of the districts visited reported their first receipt of the year in the third quarter. Unlike for item 1 where MoFEP uses temporarily loans with BoG to pay personal emoluments, item 3 is only released when the balance of account is positive. This system seems to be accepted as a fact of life: MoH does not actively negotiate for faster disbursements.

By June 2009 only 43% of *SBS item 3* funding was released (only the SBS provided by the Netherlands was released in the first quarter; Danida SBS in July; and DFID SBS in December). The MoH has to file a separate application form to the MoFEP to access the SBS. This process takes a long time. At the beginning of February the MoH applied for the Netherlands SBS which was transferred to the bank account half May i.e. three months later.

Before, when part of the health fund, DP resources tended to come in time. According to DHMTs, *programme funds* arrived in 2009 with a delay of 3 to 4 months. No problems were mentioned by DHMTs regarding *item 2* funding through the District Assemblies. But a*ll DHMTs and RHMTs visited complain* about delays in fund release from central level and low levels of resources available through item 3, affecting implementation of planned activities.

By December 2009 MoH received only 20% of expected *transfers from NHIF*, mainly because of delays of inflows in NHIF. Delays in *service claims being reimbursed by DMHIS* remains a problem throughout most schemes (but some seem to do much better than others). According to some informants, this raises acute problems of bankruptcy of certain providers and lack of trust by suppliers.

Key recommendation

See 3.1.2

3.2.3 The average price of medicines in Ghana is on average three times the median international reference price

Reimbursement for medicines by NHIA to service providers takes into account local market prices (public sector, CHAG sector, private sector) but Ghana *drug prices are way above international market prices* (on average 300% of the median international reference price- IRP[19], but some are at 1000-1500%[20] and even more). Obviously these high cost are a constraint both for the sustainability of the national health insurance (as in 2009 claims for medicines were estimated at about 60% of total NHIA claims[21]) and for the affordability of uninsured patients. The table below indicates the prices for selected medicines in the public, private and CHAG sector as well as the prices reimbursed by the NHIA. All prices are compared to the IRP. The data suggest also that NHIA has set its reimbursement price levels too high, and that providers can make profits by procuring at lower prices. This practice is inflating the lower 'official' margins in the drug supply chain.

Table 3. Comparison of International reference prices, median prices in mission, public an private sectors with NHIA reimbursement prices (2007/2008)

	Internatioanal Reference Price (GHC)	Rural Mission sector		Rural public sector		Rural Private Sector		NHIS	
Medicine Name	IRP	Median price (GHC)	ratio to IRP	Median price (GHC)	ratio to IRP	Median price (GHC)	ratio to IRP	Reimbursement prices 2008	ratio to IRP
Ciprofloxacin	0.0292	0.2000	6.84	0.1750	5.98	0.1700	5.81	0.2	6.84
Clotrimazole	0.0077	0.1650	21.51	0.0584	7.61	0.1075	14.02	0.16	20.86
Diclofenac	0.0055	0.0350	6.40	0.0400	7.32	0.0300	5.49	0.1	18.30
Mebendazole	0.0156	0.4750	30.39	0.3500	22.40	0.7000	44.79	1.2	76.79
Phenytoin	0.0048	0.0800	16.69		-	0.1000	20.86	0.06	12.52
Quinine Injection	0.0768	0.1175	1.53	0.2500	3.26	0.1250	1.63	0.28	3.65
Ranitidine	0.0229	0.1200	5.24	0.1250	5.46	0.1000	4.36	0.2	8.73

Source: META Ghana CSO presentation at MeTA Ghana Forum, 17 December 2009

Without going into the specifics of the procurement and pharmaceutical supply system in Ghana, the rule of the thumb is that large scale procurement (e.g. by Central Medical Stores to cover national needs) should be able to obtain essential medicines in the global market at 60-70% of the median IRP (FOB country of manufacturer). Sea freight would add 5%, air transport 10%. Custom, import, storage and transfer duties in Ghana are estimated at 27.5%[22] bringing the cost ate CMS at 80 to 90% of the IRP. Different mark-ups, if local rules are being applied, would increase the price to roughly 120-150% of the IRP. In other words prices of medicines are on average at least twice too expensive in Ghana. Inefficiencies in the public supply system also increase prices for medicines[23], and are often even above local market prices in the mission or private sector.

[19] See the annual MSH International Price indicator guide; available at http://erc.msh.org

[20] Draft Report: Ghana Medicines Price and Availability Monitor; Ghana MoH/WHO/HAI collaboration; 2008. Quoted in: Policy Note: The Pharmaceutical Sector in Ghana, November 2009, WB & MoH/GNDP.

[21] Presentation NHIA at the March 2010 Interagency meeting; NHIA also quoted 55% at the 17 December 2009 MeTA Ghana Forum.

[22] Policy Note: The Pharmaceutical Sector in Ghana, November 2009, WB & MoH/GNDP.

[23] Revised draft, 25 March 2010, Ghana health commodities and security systems review (e.g. mark-up of over 100% applied by CMS; 10-15% by RMS; high mark-ups at the facility level as there is no fixed mark-up. The facilities buy the drugs and sell drugs at prices that the NHIS is willing to pay)

Key recommendation

- **MoH to assess the analysis and recommendations of the recent health commodity and security systems review** and to decide on appropriate action to address the inefficiencies in the pharmaceutical supply system
- **MoH to engage with all stakeholders (private, public, not for profit and civil society) in a multistakeholder forum (such as the Medicines Transparency Alliance (META) Ghana)** to address the high taxes, duties and the too high prices for medicines in Ghana; and take action to address those issues.

3.2.4 The NHIA manages a large part of the health sector resources but is constrained by a number of inefficiencies or weaknesses[24]

The NHIA is still a *young organisation (4 years young) and is learning by doing*. This is in contrast with similar processes in some other countries where an intense period of preparatory studies (e.g. several actuarial studies; testing of different packages; reorganisation of service provision; etc.), developing the regulatory framework as well as continuous debate in civil society have carefully prepared the progressive introduction of the national health insurance. Ghana has opted for a quicker, more dynamic but also more risky process of introducing a new organisation and financing mechanism which is yet to be adapted along the road, while learning from experience[25]. It should also be noted that Ghana has been successful in rapidly covering more than half of the population. In that sense, it has outpaced speed of implementation and coverage in some other countries and to a certain extent is at present the victim of its own success.

It is therefore *understandable that the present system is performing at a sub-optimal level*, but all weaknesses mentioned below have already been identified in different studies, are known to the NHIA and are either being addressed at the time of writing this report, or will most likely be addressed by the new bill or are the subject of further study or pilot projects. Given that the IRT had no access to the latest version of the new draft bill and did not receive any up-top-date data from the NHIA (with the exception of some information received during the interview), this section of the report is based on previous studies, information from some informants and field visits. Some of the information may therefore no longer apply.

It is not the purpose of the independent review to do an in-depth study of the national health insurance system in Ghana, nor to cover all issues. Many studies have been done and that information as well as different opinions are readily available[26]. However, given the importance of the new financing mechanism on the performance of the health sector, on the accessibility to

[24] See annex 8 for some more analysis on financial aspects of the health insurance scheme.

[25] Ghana is not the first country choosing for this approach. Mongolia has made the same decision in the 1990's. Rwanda has also opted for the 'fast track'.

[26] For example, Investing in Health in Ghana: A Review of Health Financing and the National Health Insurance Scheme, draft, May 2009 provides a good overview of the system in place. It has been used, amongst other sources, for the main observations in this section of the report.

essential services (especially for that part of the population that traditionally has limited access such as the informal sector and the poor) and the (important and still increasing) size of the resource envelope, there is an *ethical responsibility* for the GOG, the NHIA and the civil society in Ghana to ensure that inefficiencies and possible negative consequences are being addressed as soon as possible. Therefore, the IRT summarises some of the present weaknesses of the system and provides some options based on experiences elsewhere.

The fact that the NHIA has *no direct authority on the DMHIS* and that DMHIS are not co-responsible / accountable for the scheme's financial performance is a structural issue that needs to be addressed[27,28]. The IRT understands that the new draft bill would address this organisational issue.

Ghana has opted for a *broad package of basic clinical / curative services* (but excluding some important items such as FP, blood products, referral costs and in general prevention), that is said to be expensive[29]. Other countries opt for a more limited basic package and a complementary package. As indicated before, some countries also add selected individual preventive activities.

At present, the NHIA pays the same single flat fee for all categories of exempted persons, independent from expected consumption profiles. The *unique flat fee* provides no incentive to the DMHIS to register certain more expensive categories such as the poor or the elderly. The IRT notes that the NHIA plans to adjust the flat fee levels, once more accurate actuarial data will become available.

The present system has *few incentives to guide provider behaviour* (apart from not reimbursing unjustified claims and ad hoc clinical audits). This has lead to numerous examples of change of provider behaviour (e.g. claiming more expensive DRGs and polypharmacy[30]: on average prescriptions contain now 6 drugs per receipt as compared to 1.8 before NHIS; in monetary terms, claims for medicines totalled 60% of all claims in 2009[31]) which unnecessarily increases costs. This is a well-known effect of health insurance and service-based reimbursement systems. The NHIA has the intention to further develop provider assessment and control tools; and could learn from other country experiences how to address provider behaviour.

The *G-DRG system* seems to be complex for non-hospital based providers and outpatient services, but generally hospital service providers (especially CHAG) consider the hospital fee levels under NHIA more appropriate than previous hospital fees if paid in time. Many (public, CHAG) providers confirmed that training of prescribers was not appropriate / sufficient. On the other hand, NHIA prices for services delivered at primary care level / OP are perceived by public and private providers as below real costs, providing incentives to providers to favour uninsured, paying patients (at higher prices). The IRT notes that the NHIA is considering alternative provider payment systems for OP services such as capitation payment. Egypt has introduced the concept of registration with a preferred provider and capitation payment under the health insurance. Ghana could learn from these (positive and negative) experiences.

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[27] The NHIF does not levy fees from the DMHIS and the NHIA does not have sufficient oversight to influence the management of DMHIS. The DMHIS are each managed by their own boards. Therefore the design of the NHIS creates a weak incentive environment for DMHIS to avoid deficit.

[28] It is being proposed that DMHIS would become part of the NHIA organisation as decentralised offices. Critics question whether or not the NHIS could preserve the spirit of community involvement through its new set-up. This is an important issue that need to be addressed by the new bill.

[29] The IRT is not familiar with any actuarial study that has carefully assessed the cost of the package, the consumption pattern of client groups and the anticipated change of behaviour under an insurance scheme of providers and clients.

[30] Polypharmacy and rational use of drugs should be monitored and controlled by NHIA and GHS. GHS supervision systems are weak. Reportedly, a new performance management system is being worked on (meeting with all Medical Superintendents on 8-9 April). NHIA and GHS have to agree on targets.

[31] Presentation by NHIA at the Inter-Agency Meeting, March 2010.

Claim management by DMHIS results in long delays of reimbursement[32] (causing cash problems for providers; suppliers mistrusting providers; depleting drug stocks at facility level [33]) and sometimes in incorrect vetting (refusing to reimburse claims). The field visits to Northern and Volta Regions did not confirm improvements in claim reimbursement in 2009 (CHAG, public facilities) but some improvement was noted in one scheme in Greater Accra Region (but the same scheme was still confronted with an important backlog of claims)[34].

Premiums, that vary substantially between schemes (e.g. on average GHc 10 in one scheme and Ghc 24 in another scheme visited) are said to keep some users away (mainly part of the informal sector and the poor) and variable premiums may create problems of accessibility to providers outside of the said scheme. The one time premium may exacerbate accessibility to health insurance unless the price and exemption is in line with capacity and willingness to pay. It should be noted that, because of large exemption groups and part of the informal sector and poor staying away from health insurance, the contribution of premiums to the overall health insurance envelope is at present less than 10%. The IRT is not aware of any economic modelling used by NHIA to estimate future changes in membership and contributions. Morocco, with the support of the WB, has developed several macro-economic modelling tools to assess (amongst others) those aspects, which could be useful /adapted for Ghana.

There seem to be ongoing difficulties with managing the *membership database*, defining active versus non active card holders. Other problems that have been mentioned concern different software programmes used at facility level; problems with the interface and with use of temporary cards.

A single organisation or procedure for *accrediting* all public and private providers would allow for a standardised approach to quality norm setting, application and monitoring in the sector. This requires the MoH, GHS, CHAG and the Private Hospitals and Maternity Homes Board to agree with NHIA on a single responsible organisation for accreditation within or (preferably) outside the NHIA.

Accessibility for the poor is an issue in all national health insurance schemes. A number of initiatives are planned to improve the targeting of exemptions such as the LEAP programme, etc. Reportedly the NHIA has started discussions with the LEAP to develop a common approach / use the same definition and approach to identify the poor. But critics cite the additional costs of increasing the targeting of the exempt especially vis-a-vis the goal of maintaining the financial sustainability of the NHIS. Morocco is an interesting example as Ministry of Local Government and MoH are presently implementing a pilot test of means testing and identifying the ('absolute' and 'relative' poor) in the context of the national health insurance. Ghana could learn from these experiences.

[32] Delays are partly caused by late submission of providers (up to 1 month), delays in vetting of claims by DMHIS (up to 3 months) and delays in payments (up to 2 months). Total period can be up to 5 months. If the DMHIS has not enough cash to pay, a request for reinsurance is submitted to NHIA, which procedure takes on average another 2 months. Today, all DMHIS are being reinsured and get monthly subsidies from NHIA.

[33] According to GHS, there is today a medicines crisis and GHS has requested GoG to cover 40% of essential medicines needs to complement medicines availability at facility level. Inefficiency of CMS and lack of accountability contributes to the drug crisis. This is a vicious circle: because of unavailability, buying drugs more expensively on private market depletes budgets for drugs even more.

[34] Anecdotal evidence that private providers are reimbursed quicker because of deal with DMHIS

As indicated, the NHIA is a learning organisation and should be supported in addressing the structural, conceptual and operational issues in a structured and systematic way. The NHIA could probably benefit from an institutional support or twinning with another social health insurance scheme (as opposed to a private health insurance scheme; and complementary to the technical support already provided by several agencies[35]).

Key recommendation

NHIA to become an efficient health insurer in support of sector priorities:

- Asses whether the new HI bill (Regulatory Commission – streamlining organisation – reinforcing communication and coordination channels – clarifying accountability) effectively addresses the above issues. **Pass (and still adapt if necessary) the new bill**.
- **MoH and agencies to support NHIA as a learning organisation** addressing structural and operational inefficiencies (NHIA to consider twinning with another social health insurance scheme).
- Based on the (future) pilot experience, consider **introducing performance / results based financing and public health targeting** under NHI.
- NHIA to **collaborate** with MoH and service providers with a view to work together in achieving sector priorities
- NHIA to foster **transparency** as a basis for mutual cooperation and trust

3.2.5 Human resources for better health[36]

The MoH has implemented several interventions to strengthen the effectiveness and performance of the health workforce in an effort to improve the quality of health care and achieving greater equity of access to health services. The POW 2007-2011 outlined priority interventions including to enhance production and utilization, productivity, strengthen human resources management and forge closer ties with local communities and various other partners.

The health workforce and system has recorded significant improvements in education and production of health workers especially middle level health cadres, taken steps to improve deployment and utilization and enhanced salaries and incentives to motivate workers with recorded decline in staff attrition.

However, some important issues remain to be addressed, including:

Existing **disparities in health workforce distribution**. While there is acknowledgement of the existing disparity in the equitable distribution of skilled health workers along urban–rural and geographical axis, the precise pattern is not clear due to the absence of reliable information on the availability of health workers. The sector still lacks a reliable HRH information management system and existing databases are not regularly updated. The payroll data also has manifested discrepancies. Although the holistic assessment has indicated that equity of distribution of essential cadres such as nurses is

[35] The NHIA is being supported by the WB, PharmAccess, etc. The IRT is not aware whether the NHIA is being supported by an agency that has healthy insurance as its core business.
[36] See annex 5 for a more in-depth analysis of human resources for health.

substantially improving (most likely because of effectively addressing this issue by MoH and GHS), the data captured in the table below indicate how difficult it is to effectively attract and maintain doctors in some regions, i.e. the evidence of refusal of health workers to accept posting to the Upper East Region.

Trends in Doctors Postings, Upper East Region: (2001 – 2009)

Year	# Posted	# Assumed Duty	%
2001-2006	16	1	6.3
2007	9	1	11
2008	8	1	12.5
2009	10	1	10
Total	**43**	**4**	**9.3**

High Attrition of Health workers: While the country is grappling with the challenge of producing required health workers, there is a contradiction as the existing compulsory retirement policy (of 60 years) contributes to unacceptable high loss of skilled and experienced health workers. From available information, it would appear that the overall attrition of professional health workers is on the decline due to the several positive interventions undertaken by government between 2001 to 2007, including the recent upsurge in production interventions. The recent public payroll analysis also confirms a general decline in attrition particularly after 2006. However, a recent MoH analysis indicates that retirement from the sector as against other reasons, stands as the most consequential reason for attrition between 2004 and 2008. The picture and trend is worrisome given that majority of the health workers on the public payroll are young and relatively inexperienced (25-35 years of age), and it is estimated that some 14,439 health workers will reach the mandatory age of retirement in the next ten years.

While related curriculum development is ongoing within the sector, the **existing regulatory framework for most health cadres remains an issue of growing concern**. For example there exists no institutionalised framework for the regulation and accreditation of middle level health workers who constitute the bulk of the health workforce[37].

Under the present administrative arrangement, **key HRH management functions are held by the headquarters**. For example, there is concentration of salary management powers at the centre, coupled with powers to undertake posting and deployment, supervision of staff, approval of training and continuous medical education and training. This situation leaves regional and district health managers with little or no influence on these important personnel functions. The existing staff management relationship frequently leads to situations where many health workers receive their salaries while not at post. In such situation, region and district authorities have limited disciplinary remedies to sanction offending staff.

[37] Feedback from Key Informant interviews. March 2010.

Coordination of training over pre-service education in Ghana is still largely controlled by the MoH headquarters. Whereas the MoH has indicated its willingness to devolve responsibilities to regional health authorities, officials at the headquarters still exert control over key functions including knowledge and standards across the sector in terms the policy directions, governance, management, curriculum contents, the teaching environment (teaching material, infrastructure, lab requirements, and curriculum contents), funding and expenditure trends. This situation leaves little room for collaboration between the headquarters and regions in crucial areas including provision of support for shortages in the teaching staff, essential teaching supplies using local resources text books, internet access, classroom and house accommodation.

Key recommendation

- Urgently **undertake upward review of the mandatory retirement age policy from 60 to 65 years**, in view of the potential loss of highly skilled and experienced health workers within the next ten years.
- **Explore opportunities to devolve HR management functions**-(including training, recruitment, deployment, incentives, discipline and pay roll management).
- **Decentralize management and governance of health training schools**.
- **Establish a system for effective regulation and accreditation of middle level health workers:** promote investment to address weakness in the curriculum contents, the accreditation process, quality improvements in student/teacher imbalance, provision of essential learning materials in essential infrastructure, laboratory equipment, and functional utilities including electricity, water provision and system for HR data collection and analysis)

3.2.6 Managing and use of information for decision-making[38]

In the domain of information a clear policy guideline and strategy have been developed. Over the years, efforts have been made to synthesize various fragmented information systems and harmonizing data management tools for serving the sector with timely information. Nonetheless, the **performance of information systems in the sector has remained far from satisfactory**. With the current level of priority, the information strategy cannot be implemented and without this, desired improvements cannot be achieved.

The nationwide implementation of the District Health Information Management Software **(DHIMS) is a remarkable start** for establishing a single common information system in the country. It has provided a platform for inputting any data that the health sector collects. Though users and their supervisors have noted numerous problems in DHIMS, those are minor in comparison to the advantages that the software has provided for the management of the complex health information systems. Nonetheless, in order to avoid any frustration on the part of its users, the various problems that have already been noted before should be fixed urgently.

The existing systems have **adequate tools and guidelines to collect data** that are required for managing individual cases, managing the health unit, and for reporting to higher levels to calculate the indicators. While admiring those accomplishments, it should be noted that the forms introduced for routine reporting of disease and service statistics contain more than realistically required details.

[38] See annex 6 for a more in-depth analysis of information management.

It does not only add a burden to health workers whose primary duty is to deliver a quality service to the people, but it also affects the quality of data reported. Monthly reports can be drastically shortened while leaving the collection of other details to a special survey such as annual record reviews.

Data analysis and dissemination is woefully weak across all levels. Most data are rarely analysed and used at the point of collection. The districts that receive the plethora of data on monthly reports mostly use their time in entering the data into DHIMS and forwarding to the regions. Routine analysis and dissemination is not a priority. The same applies to the regions and MoH headquarters.

Contrary to poor routine analysis and dissemination, the **production of annual reports** has evolved as a standard practice or culture at all administrative levels. Currently, the content and format of annual reports are however not uniform. It would be ideal for each level to use a standard annual report template as a minimum requirement.

Visual display on key indicators by means of wall charts and graphs is a powerful tool to draw attention on key issues. They can be used to keep one-self reminded on the pertinent issue as well as to educate or inform others. Except a very detailed crowded chart on Guinea Worm surveillance data, barely any chart was found displayed at any institution the review team visited.

The **institutionalisation of annual reviews** at all levels is another remarkable development. In order to prevent this process from becoming only a ritual, a presentation in the review must provide a clear connection between what was planned for the year, what has been achieved, and what could not be achieved and why. In the recently held inter-agency review meeting, except for a few presentations, this link was missing.

The **holistic assessment** introduced in the annual review provides a bird's eye view on the sector's performance. More synergy could be achieved by adding a **league table concept** to rank the annual performance of health facilities, districts, regions, and various national programs. It would encourage and incite the stakeholders for better performance.

Key recommendations

- Provide a **separate budget line for the health information system** and allocate adequate resources (for operating and maintaining the system; for training and appropriate levels of HR; and for regular replacement / updating of the IT environment);
- **Fix the problems in DHIMS** and add the menu driven modules to generate dashboard report and program specific comprehensive reports. Create and link pivot tables to DHIMS (as in HISP database) and make them available to the stakeholders through the MoH website;
- **Equip the information units** at district, region, agency levels and at MoH with functional computers, A3 printers, antivirus software, internet connection, and an annual budget to maintain the system and generate the dashboard, quarterly and periodic reports;
- **Strengthen the necessary skills of all HIOs** to analyze data, generate dashboard, feedback, and comprehensive performance reports, and furthermost to disseminate the information to decision makers and facilitate the use.

3.2.7 Capital investments in support of reaching the MDGs[39]

Reporting on total expenditure for 2009 is still incomplete at this time. However the data available for MoH civil works and GHS transport, equipment and ICT suggests total expenditure of GH¢44.94 million, representing a 28% execution rate of the total identified annual budget.

The analysis of 2009 actual capital expenditure by level (civil works only) shows a significant weighting in favour of the primary level, with 74% of expenditure at the District and Sub-District level, and a further 8% being spent on infrastructure at the Training Institutions, in line with the overall sector policy direction.

Issues Arising

Capital expenditure data on transport, equipment and ICT by the agencies is not readily available, there is no routine reporting on progress and expenditure, and no single unit or desk is responsible for collecting data, monitoring and reporting on progress against the Capital Investment Plan as a whole.

Forecast inflows from NHIF did not materialise or were not captured in reporting, and there has been an increasing reliance (65% of expenditure) on the use of Financial Credits to develop new infrastructure on turnkey project basis.

Implementation of the planning methodology and framework has been restricted, and hence the **facility rationalisation agenda has stalled**.

Capital investment has made only a limited contribution towards achieving the MDGs in 2009 - only 300 out of an estimated national requirement of 6,400 CHPS Zones are completed with a compound for the CHOs.

Key Recommendation

MoH to ring-fence GH¢15 million from its capital budget per year for the next three years, to provide about 600 complete CHPS compounds over the period, and leverage this investment to obtain matching support from MLGRD and the District Assemblies.

See annex 7, p66 for specific recommendations.

3.2.8 Public finance management[40]

The health sector faces a *number of challenges with regard to public financial management*. The credibility of the health sector budget, the predictability and timeliness of disbursements to different levels in the system, the incomplete information on district, regional and NHIS expenditures and the accuracy of the financial reporting are all factors contributing to sub-optimal results in health sector delivery.

[39] See annex 7 for a detailed analysis of capital investment for health.
[40] See annex 8 for a more in-depth review of health financing issues.

The PFM Working Group developed a *framework for further actions on PFM strengthening* including an agreed timeline and budget. Besides the realisation of the long awaited "Accounting, Treasury and Financial Reporting Rules and Instructions" (ATF), little progress has been made in 2009. Securing funds for the implementation of the activities did not materialise and Working Group members were generally too occupied with their regular tasks to actively drive the agenda.

During the health Summit in November 2009, concerns were raised again about the lack of effective financial management in the sector including continuous delays to strengthen this area. These issues need to be seen in the broader context of the functioning of the PFM system in Ghana. Nonetheless, the MoH should be able to take appropriate actions within its own domain.

Key Recommendation

All PFM recommendations are already listed in the PFM strengthening plan. **IMPLEMENT THEM**

- 57 activities have been identified including a responsible unit, budget and timeline. **Prioritise them and identify quick wins**.
- **Institutional measures** are needed to assure that PFM strengthening will stay on the agenda in 2010.
- **DPs could play a more supportive role** by providing temporary assistance in this area.

3.3 What are the challenges that district face in order to deliver?

District health plans are not yet fully comprehensive, largely excluding NGOs and private providers. Planning is in principle done on a needs basis, but in reality without respecting budget ceiling (DHMTs receive budget ceiling for GOG funding but find it irrelevant as resource allocations are not in line with ceilings), taking into account last year's level and source of resources (e.g. if resources were available for HIRD and from GFATM or a specific donor, DHMTs will take this reality into account when developing next year's plan).

While *NGOs and private providers* are often not involved in the planning stage and in priority setting, they are *to a certain extent involved in service delivery* (e.g. completing DHIMS data, implementing PMTCT, allowing CHN to provide CWC/EPI services in private clinics, private providers involved in training, invited to quarterly meetings, etc.). Involvement however varies substantially between regions, districts, urban and rural areas based on the local context and motivation / leadership / interest of individuals.

Collaboration with District Assembly (DA) seems to be regular and continuous (e.g. participation of all DHMT members in specific DA committees; participation in Head of Department meetings, budget meetings, General Assembly, technical committees) and effective (DA contributing resources to health: e.g. for item 2, renovation, transport, equipment, feeding hospitalized patients meetings, Immunization Day, community education, problem solving in communities, etc.). Close collaboration with DA allows for civil society representation in discussions. Community representatives also invited at DHMT quarterly meetings.

Workload on reporting up is time consuming (including many different types of reports such as monthly DHMIS reports and 3 parallel reports; monthly financial reports; quarterly detailed and cumulative activity reports to DA and RHMT; semi-annual and annual report; plus underlying excel files, PPP, etc.). *Feedback is not standardized and regular*.

Supervision to public health facilities by DHMTs happens regularly (using locally developed checklists) and as a team. Feedback is provided. Frequency is however low (e.g. quarterly in Accra) because of lack of reliable transport and limited resources.

As indicated earlier, there were a number of developments in 2009 which created *financial challenges for service delivery* at the regional and district level:

- Utilisation and therefore also costs of curative care further increased.
- The provision of curative services was heavily challenged by the backlog on NHIS claims processing which has created serious liquidity shortages at provider level.
- The move of some donors from Health Fund to SBS resulted in extra delays in the chain of disbursements. The predictability of funds for item 3 deteriorated further in 2009.
- The MoH had the tendency to earmark SBS funds to particular Health programmes, thereby limiting the 'flexible funds' at regional and district level.
- Unforeseen expenditures, like an additional GHc 2 million for the Influence pandemic in 2009, were taken out of the item 3 budget, thereby further challenging the objectives of the PoW under item 3. Unforeseen expenditures like these are expected to be paid from the MoFEP contingencies budget, but access to and slow releases from the contingencies hamper a fast response in case of urgency so that item 3 is used instead.

In principle SBS can be allocated by the MoH according to needs. While there are certainly positive elements on earmarking at this level it is also important to signal that at district level these high volumes of ringfencing are felt as a big obstruction which also undermine the meaning of district health planning and budgeting. The limited and late releases on item 2 and 3 combined are placing the DHAs further under pressure. In 2009, GFATM and HIRD funds were important sources at district level to keep the system running. This is also reflected in the sector-wide indicators: most sector-wide service indicators monitored under the holistic assessment are indeed HIRD and GFATM related service indicators. Overall they have improved substantially in 2009. This may create the wrong impression that there is no issue in terms of resource availability and timeliness at district level. *The reality is that the earmarked funding for GFATM and HIRD have indeed been the lifeline and allowed districts in 2009 to implement those specific priorities. Other priorities that were not resourced such as non-communicable diseases*[41]*, regenerative health and nutrition, CHPS*[42]*, etc. remained largely off the radar of DHMTs. And lack of resources has reportedly cut down on other activities such as supervision, addressing referrals and emergency services, etc*. One of the districts visited started a pilot with an innovative concept on the 1st of January 2010. This District Authority assists the district health centres with NHIS claim processing before submission to the DMHIS. In turn, the District Authority receives 30% of the reimbursed claims for services (no drugs) which is used to support the health clinics with the implementation of the public health programmes.

Main challenges perceived by DHMTs are: limited and late funding; no flexible funding; ageing and unreliable vehicle fleet; lack of midwives, especially young ones; poor having no access to health insurance; parallel information and reporting systems; funding de-linked from disease burden, local priorities and resulting costs.

[41] See section 3.4 for comments on non communicable diseases.
[42] See Annex 9 for comments on CHPS.

Key Recommendation

- Most recommendations for improving meaningful comprehensive district health planning have been captured under previous sections.
- In addition, there is still scope for DHMTs to **more involve CHAG facilities, NGOs and private sector providers in planning and priority setting**.
- **Reinforce integrated 'horizontal' planning**: decentralisation strategies, engagement of civil society
- **Ensure holistic planning for health** (thematic and multi-sector) with ensuing (ministry) agency portfolio's: Opportunity of SMTDP development
- **Implement recommendations of study on partnership MoH-CHAG**
- **CHAG and GHS to consider developing an MoU between both agencies**

3.4 And what has been delivered in terms of the main 2009 service related priorities?

Two main priorities identified in the POW 2009 are *MDG 4 & 5 and non communicable diseases*. What has been the achievement given on the one hand the important resource envelope available for the sector and the many constraints discussed before?

Addressing Maternal and Newborn Health towards Attaining MDGS 4 & 5

Ghana still faces an *unacceptable high maternal mortality ratio* coupled with the high contribution of neonatal deaths due to (mainly) infant mortality. This situation calls for intensified action. The MoH has initiated several interventions to improve the situation. For, example, at the Partners Health summit held in April 2008, the Hon Minister of Health declared maternal mortality as a *national emergency* requiring accelerated action. His Excellency the President also announced the *free maternity care package* for pregnant women, implemented under the National Health insurance.

Funds have been released through the National Health insurance scheme for the provision of free maternal health services[43, 44]. There are however, as discussed before, emerging challenges with re-imbursement of service providers. There is widespread concern among service providers including the private sector that quality of services and sustainability may be difficult to achieve given the implications arising from delayed payment of reimbursement.

Furthermore, to address the maternal and neonatal health situation, a national consultative meeting was convened, and a multi-sectoral task force (the *Ministerial Task Force*) was established late 2007 to mobilize additional resources and do advocacy regarding MDG 4 & 5 and more specifically address relevant family planning issues, basic emergency obstetric and neonatal care and comprehensive abortion care. It presented its Action Plan during the April 2008 summit, with an increased focus on maternal health in HIRD (more resources for institutional deliveries, outreach services and staff training). In addition, the GHS had established a *safe motherhood task force*[45] under the Reproductive and Child Health department within the family Health Division.

[43] Ghana Health Service: Draft Handing Over Notes to the Transitional Team, GHS, January 2009.
[44] See also annex 8 on health insurance.
[45] A technical task force, comprising of different stakeholders such as UN agencies, CHAG, National Population Council, etc.

There is evidence that the government has catalysed action at the district and operational levels to accelerate multisectoral response to MDG 5. For example, the Ministerial task force on December 18th 2008 mobilized all regions and districts to assist with transporting pregnant women during emergencies. The Ministry of Information committed with providing communities with information on safe Motherhood, the private sector would continue to render valuable clinical and advocacy services. It was also agreed that human resources issues particularly the training of and posting of midwives and other cadres to assist maternal and new born care would be aggressively pursued.

Although the Ministerial Task Force has not been very active in 2009 (only one meeting) and the focus may have somewhat shifted under the new minister, *the 2008 action plan has influenced 2009 actions of GHS at operational level and through the Safe Motherhood Task Force*. Over the period 2007 to 2009, significant progress has been achieved overall, as is confirmed by the sector-wide service indicators (see table below and annex 2 for the holistic assessment). While significant, some indicators are only back at the 2006 level (e.g. institutional deliveries). And it is observed that family planning is yet to be included in the National Health Insurance supported service package. Given the proven advantage of family planning services to contribute to addressing maternal mortality we strongly suggest inclusion of family planning in the NHIS package in addition to focused action to address underlying causes of early neonatal and maternal deaths.

The *High Impact Rapid Delivery (HIRD) approach* is been implemented as a complimentary strategy to reduce maternal and child mortality. The HIRD approach combines the key principles of vision and data driven methods to achieve improved coverage of key cost-effective interventions, which have been proven to have a high impact on maternal and child mortality. The HIRD process has resulted in the organization of several planning and review meetings at different levels of the health system, with disbursement of funds to support activities in consonance with the national guidelines. *From the field visits it has been confirmed that maternal health was on the priority agenda of districts and regions visited*. Several districts could indicate progress in service indicators achieved and innovative strategies implemented. Several challenges have emerged including HIRD plans still being developed and reported on separately; inadequate data for planning and target setting; weak involvement of hospitals in planning and implementation. There has also been complaint of weakness in funding, poor integration of activities and weak involvement of district stakeholders in implementation and monitoring. Particularly, under funding of hospitals to improve and scale up maternal services is perceived as a challenge to expedite HIRD activities including procurement of equipment and supervision of services[46].
The *EOC mapping* is ongoing and near completion. Limited resources explain slow implementation of the study. Once completed a Road Map for implementation will be developed. Most equipment bought by GHS under item 4 in 2009 concern EOC.

As confirmed by the holistic assessment (see section 2.1), the *proportion of deliveries attended by a trained health worker* increased by 17%, and hence continued the positive trend experienced since 2007. The DHS 2008 estimated the percentage somewhat higher at 58.7%. A deeper analysis of the DHS 2008 data reveals that there were large regional variations in the indicator. In Greater Accra Region 84.3% deliveries were attended by a skilled provider, while only 27.2% were attended by a skilled provider in Northern Region. Also the routine health information indicates that Northern Region performed relatively poorer than other regions, the region did however achieve major improvement of this indicator by almost 40% from 2008 to 2009.

The *institutional MMR* continued the positive trend, and was reduced by 15% from 2008 to 2009. Almost all regions achieved improvement of this indicator, but in Upper West Region there was a

[46] MoH Ghana: HIRD Progress Report. February 2008.

serious increase in the MMR by 145% from 109 to 267 per 100,000 live births. The total number of maternal deaths recorded in the region increased from 19 to 41.

The coverage of pregnant women, who received one or more *antenatal care visits*, dropped by 5.4%. In the same period, the proportion of pregnant women who received 4 or more visits increased significantly from 63.8% to 81.6%. This indicates that the majority (almost 90%) of women now follow the recommended ANC course of minimum 4 visits, which can be interpreted as an overall improvement of antenatal services in the country.

Table 4. Selected health service indicators as per holistic assessment 2009

Maternal health	2007	2009
Attended deliveries	32.1%	45.6%
Antenatal care	89.5%	92.1%
Family planning (CYP)	765,566	581,573

Source: 2009 Holistic Assessment

The 2008 Ghana Maternal Health Survey estimates maternal death (MMR) at 451 per 100,000 live births. According to the DHS, the *use of modern contraceptives (FP) methods* has been relatively constant over the last five years : from 19% in '03 to 17% in '08. It is observed that whereas maternal health care utilization has improved (mainly because of free maternal health, NHIA coverage and a specific HIRD focus), utilization of modern family planning services have dropped by 8% from 2008 to 2009 (as measured by the contraceptive prevalence rate). The indicator trend corresponds well with information presented to the review team concerning a general shortage of short term methods in Ghana during 2009. The social marketed brands of condoms, e.g. Ghana Social Marketing Foundation brand, which in 2008 constituted more than half of all condoms sold in Ghana, have reportedly been in particular shortage in 2009.

Finally, *the very high number of still births* (mainly fresh still births) at the Teaching Hospitals (e.g. Kolebu and Tamale) of 7 to 8 % of all deliveries in 2009 is alarming and confirms that referral and emergency services throughout the health system remain an issue of great concern.

Key Recommendations

1. **Increase investment in CHPs and related PHC infrastructure and systems** within the context of the Ouagadougou Declaration including-deployment of skilled health workers, improved equipment, logistics, staff accommodation and non monetary incentives.
2. **In addition to the EOC study, undertake MCH service bottleneck analysis**, and initiate interventions to enhance community participation in maternal health activities and improved supervised skilled delivery; consider introducing voucher systems for transporting clients and TBA from home to the facility for safe delivery (as for example in Bangladesh); advocate for integrating FP in the NHIA basic package or provide FP services free; develop and implement the road map for EOC ASAP.
3. **Address the shortage and maldistribution of midwifes** (see also HRD).
4. **Ensure timely reimbursement of service providers** (see also NHIA).
5. **Address referral and emergency services.**

Addressing awareness towards the reduction of risk factors and improve management of non-communicable diseases

Non communicable diseases include several categories of diseases: a) the traditionally called chronic diseases such as diabetes, cardiovascular diseases, chronic lung diseases and different forms of cancer; b) genetic disorders such as sickle cell anaemia; c) injuries with chronic physical impairment; and d) genetic disorders causing impairment such as hearing impairment. Other chronic diseases such as mental health, HIV/AIDS and obesity are addressed by other specific programmes.

The POW 2009 mentions two main areas of focus, being: a) creating the necessary awareness towards the reduction of the risk factors of NCDs; and b) addressing service improvements in the management of NCDs.

Although mentioned as a special focus in the POW 2009, *NCDs did receive no more emphasis than in previous years.* The area is not considered a priority, which is reflected by the limited staff in GHS dealing with NCDs (2 staff, under the disease control programme) and 'chronic' under funding (no specific budget line from GOG; some limited funds from DPs/MoH and mostly earmarked for sickle cell or cancer; in 2009 no additional resources were allocated). District plans follow (promised, anticipated) availability of resources and not the actual disease burden. As a result they tend to focus primarily on specific, well resourced diseases such as malaria, HIV/AIDS, tuberculosis and polio.

The GHS Chronic Diseases Unit is fully aware of the *heavy and increasing disease burden* due to NCDs (especially hypertension, diabetes) and cardiovascular diseases being the primary cause of death (40%; more than malaria at 30%[47]) in Ghana. In 2007 a study on risk factors for NCDs was done in Accra. The document has not yet been distributed. The Ghana health surveys 2003 covered some data on tobacco consumption; the GHS 2008 on nutrition and alcohol. The DHS living standards 2005 (published 2009) included alcohol and tobacco consumption. Ongoing activities include media activities (radio interviews, training of NGOs, pray and talk, World Tobacco Day organised by the HE unit, etc.).

Resources for health education related to NCDs seem divided over several units in GHS including the CD unit, the HE unit, the PR unit with the Director General, the health research department (tobacco).

The *Regenerative Health and Nutrition* (RHN) programme falls in principle also under the NCD umbrella but is managed directly by one staff at MoH. As indicated in the 2007-2008 MTR, some focus seems to have been lost over the years. The programme was the previous Minister's initiative, but has since then been subject to resource competition as most other programmes. Some programme messages such as on healthy diets (vegetarian) are not always in line with other health education messages on healthy diet (eggs, meat). Integrating MoH RHN with the GHS Chronic diseases unit would be more efficient. In addition, the health education unit could be strengthened and split budgets for health education concentrated under a single unit.

In 2009 there was some expectation of funding for sickle cell anaemia and cancer, but it did not come. However, some preparatory work was done on those diseases. For *sickle cell anaemia*, GHS planned to take over a project of neonatal screening from the university and appointed a focal person. However, lack of funding and of consensus between different parties involved mean that negotiation meetings are still ongoing. The Gates Foundation may fund some of the transition costs; a MoU and POW have been developed.

GHS aims to develop a *cross-sectoral cancer control plan* with the help of AfrOx (Oxford, UK) but progress has been slow. In addition, a 13 million USD loan, facilitated by PACT (Programme of Action

[47] Source: GHS, disease control programme.

for Cancer Therapy) has been secured with a view to set up two cancer centres with radiotherapy units. Pending on approval of the loan by Parliament, money would become available in 2011.

Two cancer registry units exist in Accra and Kumasi. Both registries are limited to local data, provided by either one or more hospital departments. Systematic screening for cancer is not yet implemented in Ghana. Screening for cervix cancer is done in 3 FP centres and the papilloma virus vaccine is yet too costly to be accessible on any large scale (some discussions are ongoing with GAVI). Screening for breast cancer is implemented by some NGOs (there are less than 10 mammograms in Ghana and only few cytologists to interpret biopsies). PSA for prostate cancer is being checked (but no policy for standard check-up exists), while only few hospitals can implement the appropriate treatment (Accra, Kumasi, private).

A strategic framework for management, prevention and control of NCDs in Ghana is being developed (draft, March 2010) but was not shared with the IRT. This was one of the 2009 milestones and has not been achieved. According to the GHS, the DHIMS does not sufficiently cover specific NCD related data.

Standard treatment guidelines for managing NCDs have been updated (as was the case for the other diseases). This was one of the four agreed milestones for 2009 and has been achieved. However the standard treatment guidelines take a specific disease focus rather than a target group / client focus. Reportedly, no guidelines exist on how and when to screen specific target groups, resulting in a seriously under diagnosis of many NCDs (but especially diabetes and cardiovascular diseases). Some of the NHIA DRGs may have to be revised to take this into account. Overall, according to GHS, the quality of diabetic diagnosis is an issue.

Summarising, NCD did not get the attention in 2009 as planned. Although prevalence is alarming, the lack of focus on NCDs reflects a continuous (both at a political and professional level) underestimating of the silent effects of NCDs on the general health status and well-being of the Ghanaian people, that are preventable and manageable.

Key recommendation

- **Put NCDs high on the political agenda**, integrate different units of MoH and GHS dealing with NCDs in order to come up with one plan and budget, concentrate health education budget lines under the GHS Health Education unit, and allocate the needed human and financial resources.
- **Finalise, resource and implement the strategic framework** for management, prevention and control of NCDs.
- **Develop or update screening guidelines for NCDs**, focusing on specific target groups; and negotiate with NHIA how to best integrate a NCD screening focus in specific OP/IP DRGs.
- Although not managed under then NCD responsibility, **obesity is an increasing public health problem** (see holistic assessment, section 2.1) that needs to be addressed

4. How can annual independent reviews best contribute?

The IRT noticed a certain *'fatigue'* with the ongoing annual review process. This was clear from the inter-agency meeting where different agencies presented their previous year's performance with limited guidance on what and how to present (no standardised format) and no leadership to discuss main strategic issues in line with set sector objectives. There is a risk of this event becoming a routine activity losing its main purpose. In addition, it was difficult for the IRT to collect the necessary data and have the requested interviews in a timely manner. While the IRT is supposed to validate evidence, the review risks to become a frustrating and time-consuming exercise of expensive experts searching for the evidence with limited time for in-depth analysis and discussion.

The *2008 annual review* already commented on several aspects of the review process. We refer to that document for aspects of improving of routine systems for data collection and analysis; proposals for condensing the BMC reviews and planning process; and the limited added value of the partner's review through a self-assessment questionnaire.

In summary, the review process is an *intense and time-consuming process* taking up to 4 months. With the exception of the annual independent review, the process is very much locally owned and part and parcel of the annual planning and evaluation cycle. Although the IRT has not participated in the *districts and regional reviews*, it considers those essential for evaluating and improving performance and part of good management. From discussions held it appears that those peer review processes are much appreciated at the operational level and catalytic in improving performance. However, no standard

Similarly, the rationale for an annual agency based performance review is well understood and a necessary event if properly used. However, the review would benefit from a standardised presentation of previous years plans and achievements, constraints of reaching the set targets and how the next year plan will address those issues. Importantly, it would be informative if agency-based plans would clearly reflect how they contribute to main sector priorities (e.g. with the exception of the GHS presentation, none of the agency presentations indicated how they would 'do things differently' in improving maternal and neonatal health; and in managing NCDs) and if the inter-agency meeting would be used to discuss those main strategic issues under a strong guidance from MoH.

Regarding the annual independent review, the IRT has a number of observations. It can be questioned whether this type of intense independent review is necessary and should be done on an annual basis. Different models used in other countries and annual SWAp reviews may be interesting for Ghana to consider.

The holistic assessment should be continued on an annual basis by MoH. In order to fully own the process and the tool, it is recommended that next years assessment is used as capacity building of a national team or focal person in PPME to implement the tool. International technical support to this exercise could be progressively waned out.

The main independent review could be organised differently. Several options can be considered:

- Organising the independent review less frequently, for example year 1, 3 and 5 of the strategic planning cycle
- Continuing organizing the independent review annually
    - but more focused (one priority area); one example is the annual review in Tanzania done by a small technical team (2 international and 2 national experts); examples of recent focus was district health management; PPME
    - maintaining some continuity of experts[1] (e.g. keeping a core team of 2 experts and adding one or two experts as needed)
    - contracting an independent monitoring team for a number of years (e.g. a team of 4 experts has been contracted for a period of 5 years to monitor the sector performance in Papua New Guinea; advantages are continuity and flexibility)
- In order to ensure national ownership, it is recommended to have full-time involved national consultants as part of the team
- Given the unavailability of essential data at the time of the review, it can be questioned whether the independent review is organised too early in the process?
- The report would become more useful if shared with regional and district teams; and if recommendations are formally translated by the MoH and stakeholders into agreed actions that are implemented and followed-up during the next annual review.

5. Main conclusions and recommendations

The holistic assessment for 2009 confirms that the health sector has been performing relatively well in 2009. The health sector has achieved some substantial improvements in service indicators related to some but not all HIRD related activities, including maternal health; and in some equity indicators related to supervised deliveries and equitable distribution of nurses between regions. Notably, utilisation of health services has continued to increase significantly both as a result of increased health insurance coverage and exemption policy. Some indicators such as obesity worsened and in general healthy lifestyle, regenerative health and nutrition, NCDs, FP, CHPs and intersectoral collaboration received less than expected focus. Overall, indicators on governance and financing have been weak. The overall picture of performance is thus mixed.

Increasing fragmentation of the sector, both in terms of numbers of agencies with a specific mandate and increasing complexity of health financing, requires strong and dedicated leadership to manage the sector and ensure sector priorities are being met. The sector is constrained by some important inefficiencies that have a cross-sectoral impact. These include late release of funds, increasingly less flexible funding, too high prices for medicines and still sub-optimal performance of the new health insurance financing mechanism. The MTR of the POW 2007-2011 suggests that increased fragmentation, as a cause or a consequence, has lead to less focus on some agreed sector priorities over the period of the POW. In order to improve sector performance the above key constraints need to be addressed as soon as possible.

Other areas that require urgent attention include the compulsory retirement policy (of 60 years) which contributes to unacceptable loss of skilled and experienced health workers and the high numbers of the ageing workforce that soon will need replacement. Funding and resourcing the health information system, shifting the attention to use of data for decision making rather than

mainly collection of data and implementing the PFM strengthening plan are all necessary and essential steps for informed decision-making at all levels in the sector.

Accessibility to essential services for poor people remains an issue that requires dedicated actions through and beyond the national health insurance. This is a challenge for the health sector, even though it receives increasingly more resources for effective service delivery.

In terms of creating wealth through health, most important public health services are being provided at community, primary care up to district level. Fragmentation and limited collaboration between agencies, 'silofication', maintaining centralised management, increasingly earmarked funding, late release of funds and late reimbursement of services provided make comprehensive district planning less meaningful and to some extent obsolete. DHMTs and service providers continue to work under important system constraints that can be addressed and resolved by the MoH and central level agencies.

The recommendations summarised in the table below are meant to help the MoH, the respective agencies and civil society to address the above constraints for maintaining and continuously improving high level sector performance.

Table 5. Summary of main recommendations

Recommendations	Primary Actors	Other stakeholders
1. Governance		
1.1. The MoH to ensure strong sector leadership, enforcing its mandate. This could include the following initiatives: **1. Implement and monitor performance / results based contract with all agencies** **2. Strengthen monitoring and evaluation functions at the MoH** **3. Strengthen the role, the mandate and the effectiveness of the Inter Agency Leadership Committee (see annex 4, p47)** **4. Create avenues for formal collaboration between agencies on specific issues (TWG)** 5. **Confirm top level (Acting) management positions**	Minister of Health, MoH	All health agencies
1.2. Limit compartmentalization of resources leading to further fragmentation: **1. Ensure sufficient and timely funding across all levels and all financing modalities including for public health / preventive activities; and track expenditures for prevention and public health** **2. Ensure sufficient flexible funds supporting comprehensive district health planning**	MoH, MoFEP, DPs	

3. **Strengthen the policy dialogue between MoH, DPs and MoFEP: a) to ensure sufficient GOG funding for public health / prevention; b) to ensure timely release of GOG and SBS funding; and c) to ensure partial flexible funding**		
1.3. NHIA to become an efficient health insurer in support of sector priorities: **1. Asses whether the new HI bill (Regulatory Commission – streamlining organisation – reinforcing communication and coordination channels – clarifying accountability) effectively addresses the above issues. Pass (and still adapt if necessary) the new bill.** **2. MoH and agencies to support NHIA as a learning organisation addressing structural and operational inefficiencies (NHIA to consider twinning with another social health insurance scheme).** **3. Based on the (future) pilot experience, consider introducing performance / results based financing and public health targeting under NHI.** **4. NHIA to collaborate with MoH and service providers with a view to work together in achieving sector priorities** 5. **NHIA to foster transparency as a basis for mutual cooperation and trust**	NHIA, MoH, GoG	GHS, CHAG, private providers
1.4. MoH to urgently address the issue of high prices for medicines **1. MoH to assess the analysis and recommendations of the recent health commodity and security systems review and to decide on appropriate action to address the inefficiencies in the pharmaceutical supply system** 2. **MoH to engage with all stakeholders (private, public, not for profit and civil society) in a multistakeholder forum (such as the Medicines Transparency Alliance (META) Ghana) to address the high taxes, duties and the too high prices for medicines in Ghana; and take action to address those issues**	MoH	CMS, GHS, CHAG, private sector, civil society META
2. Service delivery		
2.1. The NHIA and MoH / GHS / CHAG to further analyse the profile of the increased utilization and workload in order for the MoH, the NHIA and service providers to plan and act	MoH, NHIA, GHS, CHAG	Private sector

accordingly. Consequently, ensure sufficient system inputs to coop with increased demand for services		
2.2. Strengthen meaningful comprehensive district health planning, priority setting and service implementation **1. Implement recommendations as above under 1.2** **2. In addition, there is still scope for DHMTs to more involve CHAG facilities, NGOs and private sector providers in planning and priority setting.** **3. Reinforce integrated 'horizontal' planning: decentralisation strategies, engagement of civil society** **4. Ensure holistic planning for health (thematic and multi-sector) with ensuing (ministry) agency portfolio's: Opportunity of SMTDP development** **5. Implement recommendations of study on partnership MoH-CHAG** **6. CHAG and GHS to consider developing an MoU between both agencies**	MoH, GHS, CHAG, RHMT, DHMT	NGOs, private sector providers, civil society
2.3. Continue focusing efforts on improving maternal and neonatal health **1. Increase investment in CHPs and related PHC infrastructure and systems within the context of the Ouagadougou Declaration including-deployment of skilled health workers, improved equipment, logistics, staff accommodation and non monetary incentives.** **2. In addition to the EOC study, undertake MCH service bottleneck analysis, and initiate interventions to enhance community participation in maternal health activities and improved supervised skilled delivery; consider introducing voucher systems for transporting clients and TBA from home to the facility for safe delivery (as for example in Bangladesh); advocate for integrating FP in the NHIA basic package or provide FP services free; develop and implement the road map for EOC ASAP.** **3. Address the shortage and maldistribution of midwifes (see also HRD).** **4. Ensure timely reimbursement of service providers (see also NHIA).** **5.** Address referral and emergency services.	MoH, GHS, CHAG, NHIA, Ministerial Task force Safe Motherhood Task Force	Nurses & Midwifes Council, Training Schools NAS
2.4. Put non-communicable diseases high on the political agenda **1. Integrate different units of MoH and GHS dealing with NCDs**	Minister of Health,	

in order to come up with one plan and budget, concentrate health education budget lines under the GHS Health Education unit, and allocate the needed human and financial resources.	MoH, GHS NHIA	
2. Finalise, resource and implement the strategic framework for management, prevention and control of NCDs.		
3. Develop or update screening guidelines for NCDs, focusing on specific target groups; and negotiate with NHIA how to best integrate a NCD screening focus in specific OP/IP DRGs.		
Although not managed under then NCD responsibility, obesity is an increasing public health problem (see holistic assessment, section 2.1) that needs to be addressed		
3. Human resources		
3.1. **Urgently undertake upward review of the mandatory retirement age policy from 60 to 65 years, in view of the potential loss of highly skilled and experienced health workers within the next ten years.**	MoH	GHS RHMT, DHMT, Training Schools Nurses & Midwifes Council
3.2. **Explore opportunities to devolve HR management functions- (including training, recruitment, deployment, incentives, discipline and pay roll management).**		
3.3. **Decentralize management and governance of health training schools.**		
3.4. **Establish a system for effective regulation and accreditation of middle level health workers: promote investment to address weakness in the curriculum contents, the accreditation process, quality improvements in student/teacher imbalance, provision of essential learning materials in essential infrastructure, laboratory equipment, and functional utilities including electricity, water provision and system for HR data collection and analysis)**		
4. Information systems		
4.1. **Provide a separate budget line for the health information system and allocate adequate resources (for operating and maintaining the system; for training and appropriate levels of HR; and for regular replacement / updating of the IT environment);**	MoH, GHS	RHMT DHMT
4.2. **Fix the problems in DHIMS and add the menu driven modules to generate dashboard report and program specific comprehensive reports. Create and link pivot tables to DHIMS (as in HISP database) and make them available to the**		

stakeholders through the MoH website; 4.3. **Equip the information units at district, region, agency levels and at MoH with functional computers, A3 printers, antivirus software, internet connection, and an annual budget to maintain the system and generate the dashboard, quarterly and periodic reports;** 4.4. **Strengthen the necessary skills of all HIOs to analyze data, generate dashboard, feedback, and comprehensive performance reports, and furthermost to disseminate the information to decision makers and facilitate the use.**		
5. Capital investment		
5.1. MoH to ring-fence GH¢15 million from its capital budget per year for the next three years, **to provide about 600 complete CHPS compounds over the period, and leverage this investment to obtain matching support from MLGRD and the District Assemblies.** 5.2. See annex 7, p66 for specific **recommendations**.	MoH MLGRD DA	GHS DHMT
6. Health Financing		
6.1. Implement the Public Finance Management Plan **1. 57 activities have been identified including a responsible unit, budget and timeline. Prioritise them and identify quick wins.** **2. Institutional measures are needed to assure that PFM strengthening will stay on the agenda in 2010.** **3. DPs could play a more supportive role by providing temporary assistance in this area.**	MoH DPs	
7. Monitoring and Evaluation		
7.1. Consider reorganising the timing, the scope and the process of the annual independent review **(see main report page 32 for some suggestions)**	MoH DPs	

ANNEXES
Annex 1. Terms of Reference

2009 HEALTH SECTOR REVIEW TERMS OF REFERENCE

January 2010

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TERMS OF REFERENCE FOR THE 2009 HEALTH SECTOR REVIEW

1. BACKGROUND

The health sector in Ghana undertakes annual reviews of its performance as part of the partnership arrangements. In this context, an independent review is organised annually to provide evidence of performance and to indentify areas requiring attention in subsequent years. The foundations of the annual reviews lie in the performance monitoring systems at the level of budget and management centres (BMCs), which form the backbone of the health service delivery in Ghana. The review also provides a strong basis for decentralised monitoring and management of service delivery. Outputs of the review inform current implementation and guide the planning process for the next programme of work and budget and therefore constitute a critical activity on the health calendar.

The year 2009 represents the third year of the implementation of the current Five-Year Programme of work (2007 - 2011). This has however been truncated as a result of new developments in the Government's policy development cycle. The new policy development cycle has mandated Ministries, Departments and Agencies (MDAs) to develop four-year Medium Term Development Plans (MTDP) for 2010 – 2013. In this regard the last two years of the current 5YPOW has been incorporated into the MTDP 2010-2013. In view of this, the Ministry will undertake a review of 2009, which in effect marks the end of the current 5YPOW, and also do a retrospective desk review of the implementation of the 2007 and 2008 POWs to assess the overall performance of the health sector for the three-year period.

The review will therefore place emphasis on the systems and structures, including arrangements, put in place to implement programmes outlined in the Five Year Programme of Work and assess results of policies and strategies. In this regard the review will incorporate agreements between Government and Development Partners under the MDBS/PRSC mechanisms. Specifically, the review will assess achievements defined in the MDBS/PRSC performance matrix using the agreed holistic assessment (HA) tool. The holistic assessment as was done for the 2008 review will provide a brief but well-informed, balanced and transparent appraisal of the health sector's performance and factors that may have influenced such performance. It will also inform the dialogue between Development Partners and Government at sector level and feed into the discussion at MDBS and at Central Government level

2. OBJECTIVES

The overall objective of the 2009 annual review is to provide an independent assessment of the progress made in the implementation of the three-year lifespan of the 5YPOW (2007-2011). Specifically the review will:

1. Provide an overview of the results achieved and the challenges faced in the implementation of the three-year period of the 5YPOW III including highlights of the key challenges.
2. Assess and describe the sector's performance for the year 2009 to include the holistic assessment.
3. Propose recommendations to address challenges identified.

3. FOCUS AND SCOPE OF THE REVIEW

The focus of the review is two-fold:

I. The 2009 Programme of Work. The priorities, targets, resources and responsibilities agreed in the 2009 Programme of Work will be reviewed. A holistic assessment of 2009 will be conducted. The review will also assess the performance of the 2009 MDBS triggers and targets for the health sector.

II. An assessment of the sector's performance over the three-year life span of the third five-year POW (2007-2011). The performance of the health sector for the three-year period will be placed in the context of the progress made on the milestones, sector-wide indicators and measured against the 2011 targets (the original end point of the 5YPOW) and the Millennium Development Goals.

The review will be sector-wide in scope. All BMCs, National Health Insurance Authority and Development Partners will review their contribution to the sector-wide objectives. The analysis of sector-wide performance will aim to demonstrate the contribution of the various components of the whole sector in the effort to deliver health as well as progress towards the MDGs.

4. METHODOLOGY AND ORGANISATION OF THE REVIEW

4.1 Methodology

The review process will involve a combination of self-assessment by BMCs, desk reviews, in-depth analysis and an independent assessment. The self-assessments will be conducted based on specific guidelines and end with performance hearings.

The desk reviews, in-depth analysis and independent review will be undertaken by a team of external and local consultants to review aspects of the health sector against the agreed terms of reference. The review will largely involve an analysis of documents and reports produced within the health sector. Review teams will undertake field visits to BMCs to validate information generated within the health system but not to collect primary data.

4.2 Organization of the review

The review will have 6 components. These are:

I. **BMC reviews and performance hearings** – Each BMC will review its progress in the implementation of the plans and budget for 2009, prepare a 2009 annual report and hold performance hearings which in incorporate an element of peer review. The Agencies responsible for the BMC will coordinate the BMC reviews and consolidate BMC reports into an Agency report. This component of the review is expected to start in January and end in February 2010.

II. **Interagency and Health Partners review**:

a. The inter-agency review will constitute a technical review to assess progress made in the implementation of the agency-specific programmes, priority health interventions agreed and key service delivery strategies in the 2009 programme of work. Agencies will be required to submit their reports as well as their power-point presentations before the interagency performance hearing.

b. The performance of the Health Partners will also be reviewed in relation to their contributions to the health sector as against the Paris Declaration and Accra Agenda of Action and reports made available to feed into the independent review. An independent assessment would be conducted.

III. **In-depth review of key areas:** A number of studies were commissioned last year by the Ministry and in collaboration with other health Partners. Some of these studies would be finalised to feed into the 2009 independent review and also be disseminated during the 2010 April Health summit. These include the following:
    a. Ghana Health Commodity supplies and security systems review
    b. Capacity Development Evaluation
    c. Factors Affecting Motivation for Rural Practices Among Students in Health Professional and Health Workers in Ghana
    d. Private Health Sector Assessment
    e. Research on Interaction of critical Health system functions and Global Fund supported programs

    In light of these ongoing studies, the no new in-depth studies will be carried out during the review.

IV. **Independent sector review** - This component of the process will be a strategic assessment of the performance of the sector. An independent team of national and international experts would be constituted to validate and synthesize the reports from the internal reviews conducted by the MoH, Agencies and Partners as well as the reports from the in depth reviews and ongoing assessments.

    The team shall conduct field visits to validate the reports but not to collect primary data. The independent review team will make recommendation for consideration by the MoH and Partners at the health summit. In addition to the review of the 2009 POW, a desk review of the 2007 and 2008 reviews will be undertaken and incorporated into the 2009 Independent review to provide a full three-year assessment of the health sector's performance. The desk review will emphasis on the objectives and key strategies and use the existing data - DHS, MICS, MMS, DHIMS, SAM, the two previous Review reports (2007 and 2008) and other studies in the area of Child Health, HIRD etc to present the state of the "Nations Health". In addition, the team will how the sector is progressing towards the implementation of the framework for the Ouagadougou Declaration.

    This component of the review will be carried out in country between **15th March and 2nd April 2010.** The draft report will be submitted to the Chief Director of the Ministry of Health on or before 7th April 2010. It is expected that the leader of the independent review team will make a presentation of the findings of the review at the health summit.

    Prior to the independent review, a nationwide data validation and consolidation exercise will be conducted to provide updated information on the sector-wide indicators.

V. **Briefing Session for the Parliamentary Select Committee on Health**: The Ministry and its agencies will organize a briefing session with the Parliamentary select committee on Health to present the sectors performance for the year 2009. This session is to offer the Ministry the opportunity to provide first hand information on its performance and progress for the year to the Parliamentarians and together discuss challenging facing the sector and how these can be addressed. This will take place from **April 8 – 9 2010.**

VI. **Summit** – The review will culminate in a summit to be held from **26-30 April 2010** to discuss findings and recommendations and map out the way forward. During the summit, the independent review and in-depth review reports will be discussed. A business meeting will be held at which the performance of the health sector, including the achievement of triggers and targets defined in the MDBS/PAF matrix. Partners at the end of the summit will sign an aide-memoire. The aide memoire will be shared with the

MDBS secretariat to form the basis of decisions on whether the health sector has achieved the targets and triggers defined in the MDBS/PAF matrix.

4.3 Overall coordination of the review process

A planning committee drawn from the MoH, Agencies, and Partners will be set up to coordinate the review. This committee will agree on the overall orientation for the review, identify and select consultants, ensure that the timetables for Agency and sector-wide activities are harmonized and milestones are met. They will also ensure that the review is adequately funded and of good quality and ensure proper distribution and dissemination of reports. The planning committee will be serviced by a secretariat housed in the Ministry of Health.

5. KEY AREAS FOR THE INDEPENDENT REVIEW

- Assess progress and challenges in creating the necessary awareness towards the reduction of the risk factors of non communicable diseases
- Assess progress and challenges towards service improvements in the management of non-communicable diseases.

5.1 Health Services Delivery

To improve the effectiveness of health service delivery, the Ministry of health in 2009 aimed to do things differently to ensure better results and attainment of agreed targets. In this regard, the sector decided to refocus programmes and activities to increase the chances of meeting the medium term targets and in particular reduces maternal and neonatal deaths. The 2009 POW emphasised on improving maternal and neonatal health, intensify EPI activities to maintain high coverage, improve clinical care and strengthen emergency services; and reposition CHPS to provide maternal health services to be a link in the referral and emergency services.

The review will therefore examine progress made and challenges confronting the sector in these areas. Specifically the review team will:

- Assess functionality of the district health system with particular reference to:
  - Planning and budgeting
  - Support and supervision systems
  - Referral systems at all levels
  - The provision of emergency services
- Assess the progress made with the provision of emergency obstetric care at all levels of the health sector.
  - Other interventions aimed at achieving MDG 4 and 5 including the implementation of the free maternal care initiative.
  - Assess progress made in addressing neonatal mortality

5.2 Human Resource Rationalisation

In 2009, the major challenge identified with HR management was the difficulties in HR planning due to lack of an update staffing norms to reflect the current situation. Staff retention and getting the right mix is still a challenge. The review will:

- Assess progress made and the challenges in the implementation of the recommendations of Human Resource Forum

- Assess mechanisms in place to improve productivity of the health workforce
- Assess the progress of the sector on HR management and rationalisation specifically in the areas of staffing norms related to staff placement, retention, and decentralisation of the management of salaries
- Assess progress made with the implementation of performance management contracts and challenges associated with moving forward with implementation
- Assess the progress made with updating the staffing norms.

5.3 Monitoring and Evaluation

- Assess progress made and the challenges in the implementation of the single reporting systems and the overall systems for data collection, validation, storage and analysis
- Assess the extent to which data is used for decision making and feedback
- Undertake a holistic assessment of the health sector using the HA tool

5.4 Capital Investment

In 2009, the Capital Investment Programme was guided by the principle of equity and access to care and therefore to focus capital investments on achieving the MDGs.

The review will:

- Assess implementation of the capital Investment plan for 2009.
- Assess progress with the implementation of the facility rationalisation agenda

5.5 Good Governance and Partnerships

Prior to 2009, the MoH encountered some challenges in the area of coordination and alignment of policies. To curb this, the Inter Agency Leadership Committee was strengthened to serve as a platform for the agencies to discuss and agree on priorities

The review will:

- Assess the existing governance structure within the health sector including the role of the IALC.
- Assess the purchaser – provider arrangements within the health sector
- Identify actions to strengthen the partnerships within the sector

5.6 Health Financing and Financial management

A sector PFM strengthening plan was developed towards the middle of 2009, though implementation has been constrained by delayed funding releases. Nevertheless, a number of activities have taken place in an attempt to address some of the recognised shortcomings in this area.

The review team will be expected to:

- Assess general progress made in development and implementation of the PFM strengthening plan, and specific progress in monitoring funding flows and budget

execution, revision of the Accounting, Treasury and Financial rules; and development of the internal audit strategic plan;
    - Assess measures taken towards the development of integrated planning at the district level within Ghana Health Service in the light of the 2008 IRR recommendations
    - Review changes in the Financial Statement in the light of 2008 IRR recommendations;
    - Assess the current situation in reporting of earmarked funding within the context of the overall reporting system at all levels, and make appropriate recommendations for strengthening performance in this area.
- Review measures taken to expand the use of BPEMS in the sector in the light of the current GOG plans for development of an Integrated Financial Management Information System (GIFMIS).
- Measures to improve the management and reimbursement of claims, and to address capacity challenges at all levels in this respect (provider, DMHIS and NHIA);
- Assess the progress in the implementation of NHIS

5.7 Agreed Milestones

In addition to the sector wide indicators, the sector agreed on some milestones for 2009. The review team will be expected to assess the implementation of these milestones, which will also feed into the holistic assessment.

- Working group on safe food and water established; implementation plan completed, costed and adopted.
- Clinical protocols established for early detection and treatment of diabetes, cardio-vascular diseases and common forms of cancer.
- Facility rationalisation plan completed and endorsed by health summit and used in the preparation of the 2010 POW.
- Private sector investment opportunities identified and PFM in the health sector strengthened.

6 OUTPUTS

The key outputs of the review are the Independent review report and an Aide Memoir signed by the MoH and Development partners. In addition the following will be developed by the MoH as part of the process:

- Agency Review Reports
- Partners Review Report
- Regional and District Review reports
- Report of Health Summit

7. TIMETABLE FOR THE REVIEW PROCESS

Activity	Timelines
BMC Performance Hearings	January – February 2010
Interagency and Health Partners review	March 9 - 11 2010
Parliamentary Briefing	April 7-8 2010
Independent sector review	March 15 – April 2 2010

Health Summit	April 26 – 30 2010

8. TEAM COMPOSITION

A team leader will be identified, assisted by independent experts in the key areas of the main review. A team of 6 consultants will be joined by sector resource persons from the MoH and its Agencies.

Suggested areas of required expertise:

1. Health Systems
2. Health Economist / PFM
3. Monitoring and Evaluation
4. Human Resource
5. Capital Investment

Annex 2. Holistic Assessment of performance in the health sector 2009

Introduction

The holistic assessment of performance in the health sector is a structured methodology to assess the quantity, quality and speed of progress in achieving the objectives of the POW 2007-2011. The primary objective of the assessment is to provide a brief but well-informed, balanced and transparent assessment of the sector's performance and factors that are likely to have influenced this performance. The assessment is based on indicators and milestones specified in the operational annual POW, derived from the strategic POW 2007-2011 which is linked with the GPRS II. More specifically, the analysis underlying the holistic assessment is based on the following elements:

- POW 2007-2011 Sector Wide Indicators and Milestones
- Annual POW including budget
- Annual Performance Review Reports from MoH and its Agencies
- Annual MoH Financial Statement
- National survey reports (Ghana DHS, MICS etc.)

Process

An initial assessment, in regards to realization of milestones and trend of indicators, is conducted as part of the annual independent health sector review process, following a predefined methodology. This assessment will be presented at the April Health Summit where overall performance of the sector will be discussed, taking into consideration factors which may have influenced performance. The assessment will be negotiated and agreed upon by Ministry of Health and its Development Partners during the subsequent Business Meeting, informed by discussions at the Health Summit. The outcome, regarded as the Holistic Assessment of performance in the Health Sector, will serve as an input into the Performance Assessment Framework (PAF) of the Multi Donor Budget Support (MDBS). The process is expected to facilitate establishment of consensus on the sector performance. Such consensus is regarded as important for the constructive sector dialogue and uniform approaches in budget support mechanisms.

Method

The initial assessment is in three steps:
First, each indicator and milestone is assigned a numerical value of -1, 0 or +1 depending on realization of milestones and trend of indicators. Indicators which are expected to be measured on annual basis are included in each year's assessment. Indicators which are not measured on annual basis (e.g. survey based information like MICS, DHS etc.) are included in the assessment if new information is available.
A milestone is assigned the value **+1** if the review team is provided with a statement from the relevant authority documenting the realization of the milestone; otherwise it is assigned the value **-1**.
An indicator is assigned the value **+1** (colour coded green) if

- The indicator has attained the specified annual target regardless of trend, or
- The indicator has experienced a relative improvement by more than 5% compared to the previous year's value

An indicator is assigned the value **-1** (colour coded red) if

- The indicator has experienced a relative deterioration by more than 5%, or
- If no data is available (*only applies to annually measured indicators and not to survey indicators*)

An indicator is assigned the value **0** (colour coded yellow) if

- The relative trend of the indicator compared to previous year is within a 5% range, or
- *The indicator has not previously been reported*

Second, the indicators and milestones are grouped into Goals and Strategic Objectives as defined in the Programme of Work and the sum of indicator and milestone values are calculated. Goals and Strategic Objectives with a positive score are assigned a value of +1, -1 if the total score is negative and 0 if the total score is 0.

Third, after assigning a numerical score to each of the Goals and Strategic Objectives the scores are added together to determine the sector's score. While a positive sector score is interpreted as a highly performing sector, a negative score is interpreted as an underperforming sector and a score of zero is considered to be sustained performance.

Results

Step 1: Results individual indicators and milestones

Goal 1 – Ensure that children survive and grow to become healthy and productive adults that reproduce without risks of injuries or death

Goal 1 indicators are not measured on annual basis, and for 2009, there is no new information available.

Infant mortality rate

2009 Performance: No new data for 2009
2009 Target: N/A
Source: DHS 2008
Outcome: N/A

1998	2003	2008	2009
57	64	50	-

The DHS 2008 showed a significant decline in IMR in the five years running up to 2008. However, some caution is called for, as the data was taken from the birth history in the Women's Questionnaire, and the study noted that women may be reluctant to report infant and child deaths, leading to an underestimate.

Under-five mortality rate

2009 Performance: No new data for 2009
2009 Target: N/A
Source: DHS 2008
Outcome: N/A

1998	2003	2008	2009
108	111	80	-

Under-five mortality rates have reduced substantially in the 2008 estimates, which is a significant gain for Ghana, though the caution mentioned under the IMR section above should be noted.

Maternal mortality rate

2008	2009

2009 Performance: No new data for 2009
2009 Target: N/A
Source: Maternal mortality survey 2008
Outcome: N/A

451	-

The maternal mortality survey reported MMR figures at 451 maternal deaths per 100,000 live births over the 7 years preceding the survey. There is no recent data available for comparison.

Under-five prevalence of low weight for age

2009 Performance: No new data for 2009
2009 Target: N/A
Source: DHS 2008
Outcome: N/A

2006	2008	2009
18%	13.9%	-

The DHS 2008 report showed a significant drop of 23% in the proportion of children who are below -2 standard deviations from the median reference population.

Total fertility rate

2009 Performance: No new data for 2009
2009 Target: N/A
Source: DHS 2008
Outcome: N/A

1998	2003	2008	2009
4.4	4.3	4.0	-

Total fertility rates have reduced over the past five years from 4.4 to 4, according to the DHS 2008. This is a drop of some 9%.

Goal 2 – Reduce the excess risk and burden of morbidity, disability and mortality especially in the poor and marginalized groups

HIV prevalence among pregnant women 15-24 years

2009 Performance: 2.9
2009 Target: 2.4
Source: NACP - GHS
Outcome: -1

2006	2007	2008	2009
2.9%	2.6%	2.2%	**2.9%**

The decline in median HIV prevalence among pregnant women, which was observed over the previous two sentinel surveys, could not be sustained in 2009, where the prevalence increased to 2.9%.

Eastern region, and specially Koforidua, continued to be the areas with highest prevalence, 4.2% and 5.8% respectively. The lowest prevalence was found in Northern Region with 2.0% infected pregnant women.

The national prevalence was modelled based on the annually measured sentinel survey result. In 2009, the modelled adult national HIV prevalence (15-49 years) was 1.9%, with an estimated 267,069 adults and children living with HIV and AIDS. There were 22,177 new infections and 20,313 AIDS deaths. Despite annual variations in the sentinel survey results, the model indicates that the national prevalence rate has stabilized at approximately 1.9%, and significant variations are not expected for the years to come.

Guinea Worm

2009 Performance: 242
2009 Target: 200
Source: CHIM
Outcome: +1

2006	2007	2008	2009
4,129	3,358	501	**242**

The number of Guinea Worm cases continued to fall with only 242 cases in 2009. Northern Region managed to reduce the number of cases by 50% but still accounted for some 98% of all cases.

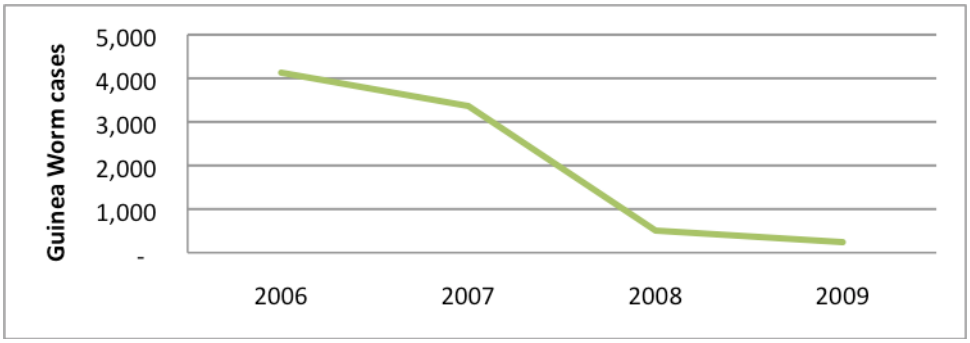


Figure 1: Guinea Worm cases, 2006-2009, CHIM

Goal 3 – Reduce the inequalities in access to health services and health outcomes

Indicators which are not measured on annual basis (e.g. survey based information like MICS, DHS etc.) are only included in the assessment if new information is available. For Goal 3, new information was available from the DHS 2008 on U5MR and NHIS cardholders broken down by wealth quintile.

Equity – Poverty (Richest/Poorest U5 mortality rate)

2009 Performance: 1.72
2009 Target: N/A
Source: DHS 2008
Outcome: -1

Wealth Quintile	1998†	2003	2008
Lowest	-	128	103
Second	-	105	79
Middle	-	111	102
Fourth	-	108	68
Highest	-	88	60
	-	1.45	**1.72**

†U5MR is not reported by wealth quintile in the 1998 DHS

The equity indicator for poverty (U5MR) was measured based on the DHS 2008. The indicator is calculated as U5MR among the lowest wealth quintile divided by U5MR among the highest.

The highest U5MR was reported among the lowest wealth quintile with 103 deaths out of 1,000 live births, whereas the lowest mortality was observed among the highest wealth quintile. The equity indicator is estimated at 1.72.

Since 2003, Ghana has seen a significant reduction of U5MR nationwide for all wealth quintiles. The reduction in U5MR has been greater in the highest wealth quintile compare to the lowest. Therefore, the distribution of U5MR by wealth has become increasingly unequal.

Equity – Geography (Supervised Deliveries)

2009 Performance: 1.49
2009 Target: 1.9
Source: CHIM
Outcome: +1

The indicator for geographical equity of supervised delivery continued previous years' improvement. Not only is the gap between the best and poorest performing region closing, both regions have also improved overall coverage and Northern Region improved coverage by almost 40%. Upper West Region saw the most significant reduction in coverage by nearly 10%, and is now close to the performance of Northern Region.

	2006†	2007†	2008†	2009
CR	74.0%	-	56.3%	-
UER	-	43.5%	-	-
WR	-	17.6%	-	-
BAR	-	-	-	53.7%
NR	25.1%	-	26.0%	36.1%
	2.95	2.47	2.17	**1.49**

†Updated in 2010 with new information from CHIM

	AR	WR	NR	BAR	CR	VR	UER	ER	UWR	GAR	Ghana
2006	40.8%	34.8%	25.1%	47.4%	74.0%	35.4%	38.4%	38.7%	28.8%	42.2%	44.5%
2007	26.7%	17.6%	27.7%	34.5%	22.3%	33.3%	43.5%	43.1%	32.9%	43.1%	32.1%
2008	35.0%	39.1%	26.0%	49.8%	56.3%	37.5%	40.4%	48.0%	40.6%	50.2%	42.2%
2009	42.4%	42.6%	36.1%	53.7%	52.5%	39.4%	52.6%	52.1%	36.7%	47.9%	45.6%

Table 1: Coverage of supervised deliveries by region, 2006-2009, Source CHIM

Equity – Geography (Nurses/Population ratio)

2009 Performance: 1.77
2009 Target: 2.0
Source: IPPD – MoH
Outcome: +1

	2007	2008	2009
GAR	-	1:952	-
AR	1:1,429	1:1,932	1:1,583
UWR	1:3,225	-	1:895
	2.26	2.03	**1.77**

In 2009, there was an improvement in equitable distribution of nurses among Ghana's 10 regions. Upper West Region had the highest number of nurses per regional population with an extra 108 community health nurses, 8 midwifes and 1 general nurse compared to 2008. Ashanti Region continued to have the lowest number of nurses per population, but saw a marked increase in total number of nurses in 2009 (26%).

General nurses, midwifes and community health nurses are includes in estimating this indicator.

	AR	WR	NR	BAR	CR	VR	UER	ER	UWR	GAR	Ghana
Indiv. per 1 nurse	1,583	1,461	1,520	1,434	1,134	982	918	941	895	915	1,172
Total no. of nurses 2009	3,084	1,749	1,536	1,581	1,695	1,973	1,106	2,537	750	4,680	20,691
% increase no. Nurses	26%	25%	20%	26%	18%	18%	24%	20%	18%	9%	19%

Table 2: Nurse/population ratio (lower is better), total number of nurses and % increase by region, source IPPD - MoH

Equity – Gender (Female/Male NHIS Card Holder ratio)

2009 Performance: No data
2009 Target: 1.2
Source: NHIA
Outcome: -1

2006	2007	2008	2009
N/A	N/A	1.22	-

Equity – Poverty (Richest/Poorest NHIS Card Holder ratio)

2009 Performance: 1.6
2009 Target: N/A
Source: DHS 2008
Outcome: 0

The equity indicator for poverty (NHIS Card Holder ratio) was measured for the first time based on the DHS 2008 results, and is calculated as the proportion of cardholders in the highest wealth quintile divided by the lowest. Since there is no baseline or target for the indicator, the outcome is 0.

Wealth Quintile	Women	Men
Lowest	29.3%	16.6%
Second	31.7%	22.5%
Middle	37.8%	25.9%
Fourth	43.8%	35.2%
Highest	47.0%	37.7%
	1.6	**2.3**

Due to restrictions in the sampling design of the DHS 2008, the indicator has been split into women's and men's' insurance coverage and only includes individuals of age 15-49. Children under 15 years were not included.

Strategic a Objective 1 - Healthy Lifestyle and Healthy Environment

Indicators which are not measured on annual basis (e.g. survey based information like MICS, DHS etc.) are only included in the assessment if new information is available. For strategic objective 1, new information was available from the DHS 2008 on obesity in adult population.

Milestone: Information document and communication strategy related to prevention of NCDs developed and shared

2009 Performance: No action taken
Source: MoH
Outcome: -1

Obesity in adult population (women age 15-49 years)

2009 Performance: 9.3%
2009 Target: N/A
Source: DHS
Outcome: -1

1998	2003	2008	2009
-	8.1%	9.3%	-

Obesity (BMI ≥ 30) among women aged 15-49 increased by 15% from 2003 to 2008, and while almost 10% of the female population 15-49 are obese over 20% are overweight. With 19.4% of women in the age group being obese and 25.1% overweight, Greater Accra Region had significantly higher prevalence of obesity and overweight than any other region. Western region had the second highest prevalence of obesity estimated at 9.9%. Upper West and Northern Region had the lowest prevalence with 2.4% obese, as well as 10.3% and 11.5% overweight, respectively.

	DHS 2003	DHS 2008
BMI <18.5 (thin)	9.3%	8.6%
BMI 25.0-29.9 (overweight)	17.2%	20.7%
BMI ≥ 30 (obese)	8.1%	9.3%

Table 3: Obesity and overweight among women 15-49, Source DHS 2003 and DHS 2008

Strategic a Objective 2 – Provision of Health, Reproduction and Nutrition Services

Milestone: Clinical protocols established for early detection and treatment of diabetes, cardio-vascular diseases and common forms of cancer

2009 Performance: *Protocols have been revised and captured in the Standard Treatment Guidelines which is in print*
Source: MoH
Outcome: ***+1***

Standard treatment guidelines for managing NCDs have been updated (as was the case for the other diseases). For the common forms of cancer only breast cancer has been included. Also, the standard treatment guidelines take a specific disease focus rather than a target group / client focus. Reportedly, no guidelines exist on how and when to screen specific target groups, resulting in an under-diagnosis of many NCDs.

% Deliveries attended by a trained health worker

2009 Performance: 45.6%
2009 Target: 60%
Source: CHIM
Outcome: ***+1***

2006	2007	2008	2009
44.5%	32.1%	39.1%	**45.6%**

The proportion of deliveries attended by a trained health worker increased by 17%, and hence continued the positive trend experienced since 2007. The target of 60%, however, was not met.

The DHS 2008 estimated the percentage of birth assisted by a skilled provider at 58.7% for Ghana. This figure is significantly higher than the percentage reported through the routine health information system, which raises a concern about quality and completeness of routine reporting on this indicator.

A deeper analysis of the DHS 2008 data reveals that there were large regional variations in the indicator. In Greater Accra Region 84.3% deliveries were attended by skilled provider, while only 27.2% were attended by skilled provider in Northern Region.

	AR	WR	NR	BAR	CR	VR	UER	ER	UWR	GAR	Ghana
DHS 2008	72.6%	61.7%	27.2%	65.5%	54.0%	53.7%	46.7%	60.8%	46.1%	84.3%	58.7%

Table 4: Percentage delivered by skilled provider, Source DHS 2008

Regional differences observed in the routine data are discussed under the above indicator "Equity – Geography (Supervised Deliveries)".

Contraceptive Prevalence Rate (for modern methods)

2009 Performance: 31.1%
2009 Target: 35%
Source: CHIM
Outcome: -1

2006	2007	2008	2009
25.4%	23.2%	33.8%	**31.1%**

From 2008 to 2009, contraceptive prevalence rate dropped by 8%. While long term couple years of protection (CYP) remained at around 142,000, short term CYP dropped by 33% from 654,072 in 2008 to 439,573 in 2009. The indicator trend corresponds well with information presented to the review team concerning a general shortage of short term methods in Ghana during the previous year. The social marketed brands of condoms, e.g. Ghana Social Marketing Foundation brand, which in 2008 constituted more than half of all condoms sold in Ghana, have reportedly been in particular shortage in 2009.

Antenatal Care Coverage

2009 Performance: 92.1%
2009 Target: 95%
Source: CHIM
Outcome: -1

2006	2007	2008	2009
88.4%	89.5%	97.4%	**92.1%**

From 2008 to 2009, the coverage of pregnant women, who received one or more antenatal care visits, dropped by 5.4%. In the same period, the proportion of pregnant women who received 4 or more visits increased significantly from 62.3% to 75.2%. This indicates that the majority, almost 90%, of women now follow the recommended ANC course of minimum 4 visits.

%U5s sleeping under ITN

2009 Performance: No new data
2009 Target: 60%
Source: -
Outcome: N/A

2006	2007	2008	2009
41.7%	55.3%	40.5%	-

The percentage of children under 5 years sleeping under ITN is a survey indicator, and in 2009 no survey was conducted.

Penta 3 immunization

2009 Performance: 89.3%
2009 Target: 90%
Source: CHIM
Outcome: 0

2006	2007	2008	2009
84.2%	88.0%	86.6%	**89.3%**

After a slight drop in Penta 3 coverage in 2008, performance is now back on track, almost reaching the target of 90% coverage. Compared to 2008, however, the improvement is within the 5% range indicating sustained performance, hence a neutral outcome.

A regional break down of the indicator reveals that coverage in Greater Accra Region (72.7%) is significant lower that the average of 89.3% and the median of 90.1%. An EPI survey from 2009 performed in Greater Accra Region shows significantly higher coverage of Penta three at 96.1% and percentage fully immunized at 90.0%.

The DHS 2008 estimated the percentage of Penta 3 at 87.7%, which corresponds well with routinely collected data.

HIV Clients receiving ARV therapy

2009 Performance: 33,745
2009 Target: 30,000
Source: National AIDS Control Programme
Outcome: +1

2006	2007	2008	2009
7,338	13,249	23,614	**33,745**

The number of patients receiving antiretroviral treatment continues to increase and exceeded the 2009 target of 30,000.

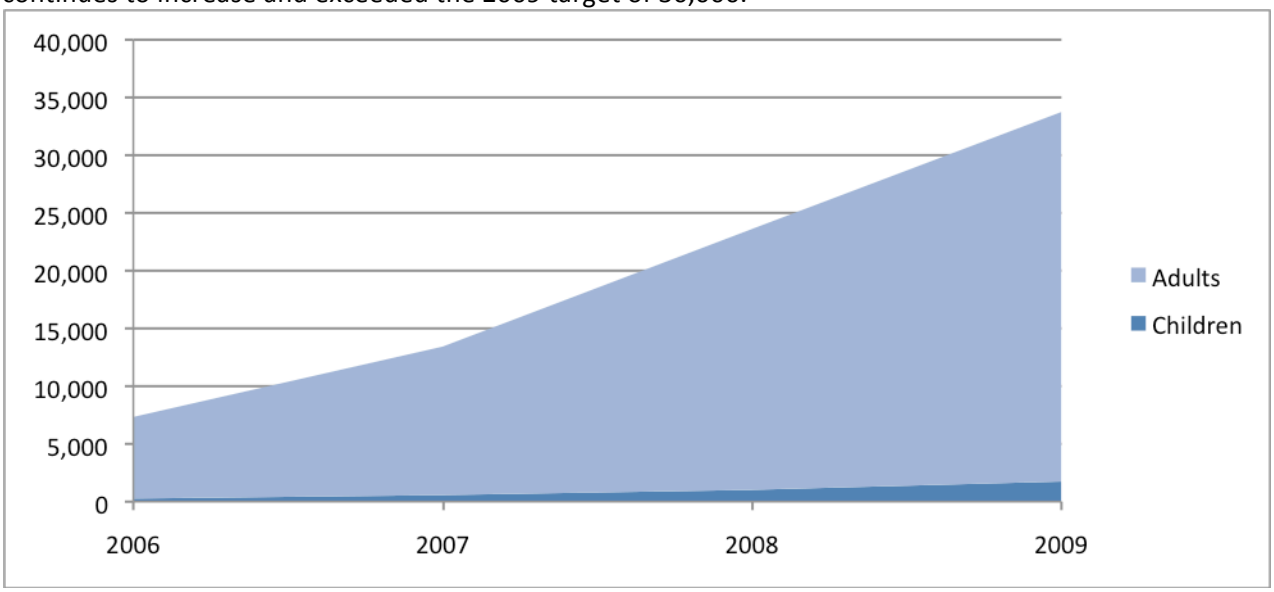


Figure 2: Antiretroviral treatment, children and adults, 2006-2009, National HIV Prevalence & AIDS Estimates Report 2009-2015

Out Patient Visits

2009 Performance: 0.81
2009 Target: 0.75
Source: CHIM
Outcome: +1

2006	2007	2008	2009
0.52	0.69	0.77	**0.81**

Outpatient (OPD) visits per capita continued previous years' increase and reached the 2009 target. While every inhabitant of Brong Ahafo Region in average visits the outpatient department 1.15 times a year, people of Greater Accra and Northern Region have an average utilisation of OPD services less than half of Brong Ahafo Region.

	AR	WR	NR	BAR	CR	VR	UER	ER	UWR	GAR	Ghana
2006	0.59	0.57	0.30	0.83	0.50	0.41	0.55	0.65	0.46	0.47	**0.54**
2007	0.72	0.72	0.31	1.02	0.70	0.51	0.69	0.94	0.65	0.60	**0.69**
2008	0.73	0.86	0.49	1.30	0.68	0.73	1.01	0.97	0.70	0.51	**0.77**
2009	0.89	0.99	0.53	1.15	0.71	0.69	1.37	0.95	0.72	0.51	**0.81**

Table 5: OPD per capita by region, 2006-2009, Source CHIM

Absolute figures for OPD visits show, that Ashanti Region has the highest load, followed by Brong Ahafo Region. Great Accra Region comes 5th despite its high regional population.

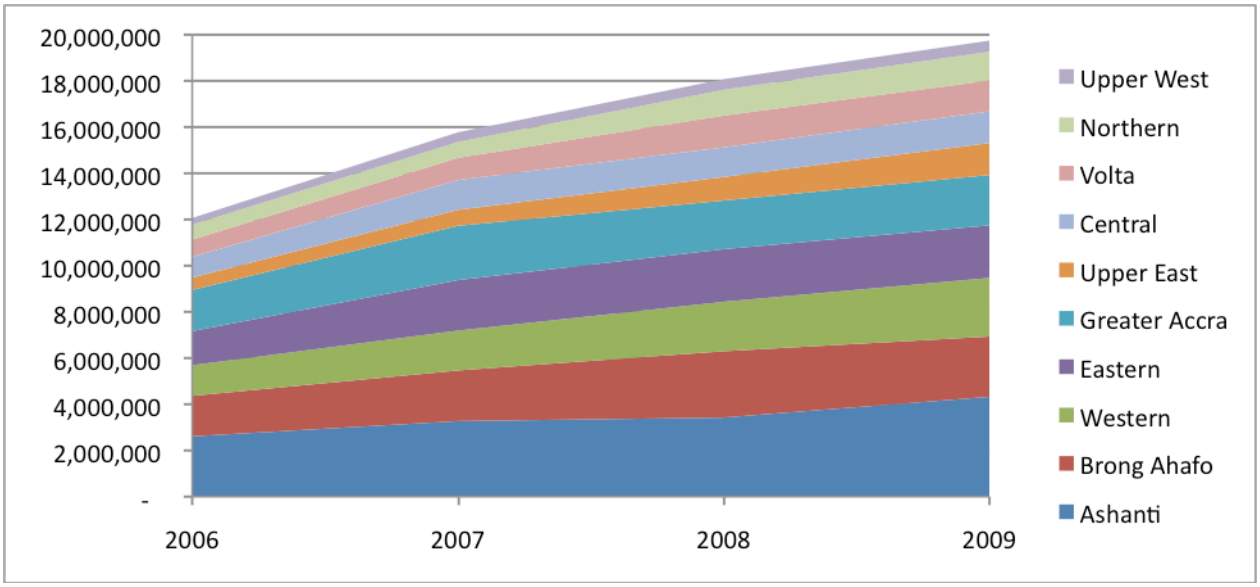


Figure 3: Total number of OPD visit by region, sorted highest to lowest, 2006-2009, Source CHIM

Institutional MMR

2009 Performance: 170
2009 Target: 170
Source: GHS
Outcome: +1

	2006	2007	2008	2009
Incl. TBA†	187	224	201	**170**
Excl. TBA†	-	-	258	**201**

†Estimated MMR based on RCH spreadsheet from GHS

Available Institutional MMR data included TBA deliveries. It was not possible to disaggregate maternal deaths into deaths which occurred at health facilities and deaths reported by TBAs outside facilities.

For the first figure (MMR 170), a total of 93.169 TBA deliveries have been included in the denominator, and the estimation is a continuation of previous years' practise. For the second figure (MMR 201), TBA deliveries have been subtracted from the total number of deliveries in the denominator, but due to non-availability of disaggregated mortality figures, the numerator may include maternal deaths registered outside a health facility. The MMR for 2008, recalculated with exclusion of TBAs, is estimated at 258. Regardless of which calculation method is being used, the institutional MMR has experienced a significant reduction from 2008 to 2009.

TB success rate

2009 Performance: 85.3%
2009 Target: 80%
Source: National TB Programme
Outcome: +1

2006	2007	2008	2009
67.6%	76.1%	84.7%	**85.3%**

The TB success rate slightly increased to 85.3% in 2009, which is above the target of 80%.

Thematic Area 3 – Capacity Development

Milestone: Facility rationalisation plan completed and endorsed by health summit and used in the preparation of the 2010 POW

2009 Performance: Milestone not achieved
Source: MoH PPME
Outcome: -1

Doctor:Population Ratio

2009 Performance: No data
2009 Target: 10,000
Source: IPPD
Outcome: +1

2006	2007	2008	2009
1:10,762	1:10,752	1:13,449	1:11,649

The doctor/population ratio increased from 2008 to 2009 by 13%. The highest relative increase in number of doctors was recorded in Northern and Brong-Ahafo Regions, but Northern Region is still the region with lowest number of doctors per population. With a total of 895 doctors, 43% of Ghana's doctors were practising in Greater Accra Region. The 3 Northern Regions have a total of 82 doctors, which corresponds to less than 4% of doctors in the nation.

The indicator is based on information from IPPD of MoH, and does only include doctors on government payroll (e.g. GHS facilities, CHAG facilities and Teaching hospitals).

	AR	WR	NR	BAR	CR	VR	UER	ER	UWR	GAR	Ghana
Indiv. per 1 doctor	8,316	33,623	56,940	16,794	22,088	26,907	37,603	16,132	47,932	4,783	11,649
Total no. of doctors 2009	587	76	41	135	87	72	27	148	14	895	2,082
% increase no. doctors	18%	1%	32%	32%	23%	9%	8%	10%	8%	9%	13%

Table 6: Doctor/population ratio (lower is better), total number of doctors and % increase by region, source IPPD - MoH

Nurse:Population Ratio

2009 Performance: No Data
2009 Target: 2,000
Source: IPPD
Outcome: +1

2006	2007	2008	2009
1:2,125	1:2,464	1:1,353	1:1,172

The nurse/population ratio improved from 2008 to 2009 and attained the target specified in the POW 2009. Regional distribution of nurses is discussed above under "*Equity – Geography (Nurses/Population ratio)*".

The indicator is based on information from IPPD of MoH, and does only include nurses on government payroll (e.g. GHS facilities, CHAG facilities and Teaching hospitals).

Thematic Area 4 – Governance and Financing

Milestone: Public Financial Management (PFM) programme in the health sector strengthened

2009 Performance: *Working group in place. PFM strengthening plan ready and was approved at the August Business Meeting. Some activities have been implemented and others hampered by delays in funding release.*
Source: MoH
Outcome: ***+1***

The PFM Working Group developed a *framework for further actions on PFM strengthening* including an agreed timeline and budget. Besides the realisation of the long awaited "Accounting, Treasury and Financial Reporting Rules and Instructions" (ATF), little progress has been made in 2009. Securing funds for the implementation of the activities did not materialise and Working Group members were generally too occupied with their regular tasks to actively drive the agenda.

% MTEF on Health

2009 Performance: 14.6%
2009 Target: 15%
Source: MoH
Outcome: ***0***

2006	2007	2008	2009
15.0%	14.6%	14.9%	**14.6%**

While the total allocation to health, in nominal terms, continued to increase from 2007 to 2009, the proportional MTEF allocation to health slightly decreased by 2.0% from 2008, and is now at the level of 2007. This results in a neutral outcome of this indicator.

In order to calculate the indicator, a number of assumptions have been made. The budget table was constructed from Appendix 3 and 4 as no equivalent MDA tables were given in the Supplementary Budget; this should ensure consistency with earlier years. IGF was not given in the Supplementary Budget but assumed to remain the same. In the supplementary budget, additional amounts were given for Item 1 and Item 2, but were not broken down for MDAs. There is a risk of double-counting much IGF due to the NHIS component, and true MoH share of budget could therefore be over-stated.

As budget execution for both Item 1 and Item 2 was greater than 100%, ideally the MoH allocations should have been raised, but information was not available to do this.

	MoH[†]	GOG
Discretionary		
Item 1	320,000,000	2,171,374,733
Item 2	5,024,021	593,324,815
item 3	12,261,312	186,641,387
Item 4	7,113,105	260,129,449
Sub-total GOG	**344,398,438**	**3,211,470,384**
Foreign Item 4	82,582,842	1,475,565,000
IGF	108,312,030	386,881,310
HIPC	11,427,000	131,788,000
MDRI		93,270,000

Sub-total Discretionary	***546,720,310***	***5,298,974,694***
Statutory		
GetFund		279,355,405
NHIF	391,821,551[†]	391,821,551
Road Fund		123,282,407
DACF		352,723,045
Sub-total Statutory	***391,821,551***	***1,147,182,408***
TOTAL BUDGET	938,541,861	6,446,157,102

Table 7: MTEF on Health, Source MoH-PPME

[†]NHIF was the only budget line being supplemented. The original NHIS budget was 375,209,162 GHC i.e. a supplement of 16,612,389 GHC.

% Non-wage GOG recurrent budget allocated to district level and below

2009 Performance: 5%
2009 Target: 50%
Source: MoH
Outcome: -1

2006	2007	2008	2009
48%	49%	49%	5%

Information incomplete.

Per capita expenditure on Health (USD)

2009 Performance: 25.6
2009 Target: 39 USD
Source: MoH (draft financial statement – exhibit B, p. 5)
Outcome: +1

2006	2007	2008	2009
21.5	21.7	23.2	25.6

From 2008 to 2009, the per capita expenditure on health increased by some 10% to 25.6 USD per capita. It has been noted by the MoH that the draft financial statement is incomplete and has some queries.

Budget Execution Rate of Item 3

2009 Performance: 80%
2009 Target: 100%
Source:
Outcome: -1

2006	2007	2008	2009
89%	110%	**115%**	**80%**

In 2009, budget execution rate of item 3 was calculated to 80%.

The indicator includes the following sources:

Source	Revised budget	Disbursed	Execution
GOG	12,261	10,510	86%
SBS/ Health Fund	60,081	61,081	100%
NHIF	344,900	267,594	77,6%
- Subsidy	228,400	212,850	93%
- Distress	40,000	39,850	100%
- MoH	76,500	14,894	19%
HIPC	4,246	491	12%
Total Item 3	**422,488**	**339,675**	**80%**

Table 8: Budget Execution Rate by Source

% of annual budget allocations to item 2 and 3 disbursed by end of June

2009 Performance: 39%
2009 Target: >50%
Source: MoH
Outcome: +1

2006	2007	2008	2009
N/A	N/A	23%	**39%**

Percentage of annual budget allocations to item 2 and 3 disbursed by end of June increased from 23% in 2008 to 39% in 2009.

		Revised budget	Disbursed by end June	% disbursement by June
Item 2				
	GOG	10,401	4,669	45%
	SBS/FH	-	-	0%
Item 3				
	GOG	12,261	1,481	12%
	SBS/FH	61,081	26,453	43%
TOTAL		83,743	32,603	39%

Tabel 9: Percentage disbursement by June

% Population with valid NHIS card

2009 Performance: 50.0%
2009 Target: 50%
Source: NHIA presentation
Outcome: +1

	2006	2007	2008	2009
Card holders	3,955,203	8,291,666	10,417,886	12,123,338
Population	22,303,947	22,933,235	23,291,360	24,252,441
% Card holders	17.7%	36.2%	44.7%	**50.0%**

The total number of card holders increased from 10,417,886 in 2008 to 12,123,338 in 2009. This is, however, an accumulated figure of cards issued since health insurance started, and the actual number of individuals holding a valid NHIS membership card in 2009 is therefore expected to be lower due to health insurance dropout (e.g. lack of renewal, death and emigration). It has been specified by the NHIA that the figure represents an accumulation of *individuals* who were issued one or more cards and not the accumulation of *cards issued*, i.e. the figure increases every time an individual renews his or her membership card.

% of claims settled within 4 weeks

2009 Performance: No data
2009 Target: 50%
Source:
Outcome: -1

2006	2007	2008	2009
N/A	N/A	N/A	N/A

% of IGF from NHIS

2006	2007	2008	2009

N/A	N/A	66.5%	-

2009 Performance: No data
2009 Target: >50%
Source:
Outcome: -1

Step 2: Grouping of indicators and milestones and group score calculated

GOAL 1	
Goal 1 total	**N/A**
GOAL 2	
HIV prevalence	-1
Guinea Worm	+1
Goal 2 total	**0**
GOAL 3	
Equity – Poverty (U5MR)	-1
Equity – Geography (supervised deliveries per region)	+1
Equity – Geography (nurses per region)	+1
Equity – Gender (NHIS female/male ratio)	-1
Equity – Poverty (NHIS wealth quintile)	0
Goal 3 total	**0**
STRATEGIC OBJECTIVE 1	
Obesity in adult population	-1
Milestone	-1
Strategic objective 1 total	**-2**
STRATEGIC OBJECTIVE 2	
Milestone	+1
% supervised deliveries	+1
Family Planning – CYP	-1
ANC	-1
Penta 3	0
HIV+ receiving ART	+1
OPD per Capita	+1
Institutional MMR	+1
TB success rate	+1
Strategic objective 2 total	**+4**
STRATEGIC OBJECTIVE 3	
Milestone	-1
Doctor to population	+1
Nurse to population	+1
Strategic objective 3 total	**+1**
STRATEGIC OBJECTIVE 4	
Milestone	+1
% MTEF on health	0
% non-wage recurrent to districts	-1
Per capita expenditure on health	+1
Item 3 budget execution rate	-1
% item 2+3 disbursed by end June	+1
% population with valid NHIS card	+1
% NHIS claims settled within 4 weeks	-1
% IGF from NHIS	-1
Strategic objective 4 total	**0**

Table 10: Goal and Strategic Objective group scores

Step 3: Sector score

The outcome of the health sector's performance assessment in 2009 is positive with a score of 1, which is interpreted as a highly performing sector.

GOAL 1	N/A
GOAL 2	0
GOAL 3	0
STRATEGIC OBJECTIVE 1	-1
STRATEGIC OBJECTIVE 2	+1
STRATEGIC OBJECTIVE 3	+1
STRATEGIC OBJECTIVE 4	0
Sector score	**+1**

Table 11: Sector score

Discussion of sector-wide indicators: Targets and achievements in 2008

The table below summarizes the values of sector-wide indicators for the 5-Year Programme of Work and annual targets specified in the 2008 Annual Programme of Work.

	2006	2007	2008	POW 2009 target	2009 performance
Goal 1: Ensure that children survive and grow to become healthy and reproductive adults that reproduce without risk of injuries or death					
IMR	71		50		
U5MR	111		80		
MMR	N/A		451		
U5 underweight	18%		13.9%		
Total Fertility Rate	4.4		4.0		
Goal 2: Reduce the excess risk and burden of morbidity, disability and mortality especially in the poor and marginalized groups					
HIV prevalence	2,9	2,6	2.2	2.4	2.9
Guinea Worm	4.136	3.358	501	200	242
Goal 3: Reduce inequalities in health services and health outcomes					
Equity: Poverty (U5MR)	1,18		1.72		
Equity: Geography (supervised deliveries)	2,05	2,143	1.97	1.90	1.49
Equity: Geography (nurse:population)	4,14	2,257	2.03	2.00	1.77
Equity: NHIS (gender)	N/A	N/A	1.22	1.20	-
Equity: NHIS (poverty)	N/A		1.6		
Strategic Objective 1: Healthy lifestyle and healthy environment					
% households with sanitaion	60,70%				
% households with access to impr water source	78,10%				
% obesity in population	25,30%		9.3%		
Strategic Objective 2: Health, Reproduction and Nutrition Services					
Exclusive breastfeeding	54,0%				
% Attended deliveries	44,5%	35,1%	39,3%	60%	45.6%
Family Planning (Couple Year Protection)	25.4%	23,2%	33.8%	35.0%	31.1%
ANC	88,4%	89,5%	97.4%	95%	92.1%
%U5s sleeping under ITN	41,7%	55,3%	40,5%	60%	N/A
Penta3	84,2%	88,0%	86.6%	90%	89.3%
HIV clients ARV treatment	7.338	13.249	23,614	30,000	33,745
OPD	0,52	0,69	0.77	0.75	0.81
Institutional MMR	219	224	201	170	170
TB success rate	67,6%	76,1%	84,7%	80%	85.3%
Strategic Objective 3: Capacity Development					

% population within 5km	N/A				
Doctor:population	15.423	13.683	13,499	10,000	11,649
Nurse:population	2.125	1.537	1,353	2,000	1,172
Strategic Objective 4: Governance and Financing					
% MTEF on health	16.2%	14,60%	14,90%	15,0%	14,6%
% non-wage GOG recurrent to district	40%	49%	49%	50%	5%
USD/capita	25,4	23,01	23.23	39	25.60
Budget execution rate	N/A	N/A	115%	100%	80.4%
% budget disbursed before June	N/A	N/A	23%	>50%	39%
% population with NHIS card	25%	36,2%	45.0%	45%	50%
% Claims settled within 4 weeks	N/A	N/A		N/A	-
% IGF from NHIS	45%	N/A	66.5%	70%%	-

Table 12: Sector Wide Indicators, 2006-2009. Greyed indicators are not measured annually.

Excess risk and burden of morbidity, disability and mortality especially in the poor and marginalized groups

The decline in median HIV prevalence among pregnant women, which was observed over the previous two sentinel surveys, could not be sustained in 2009, where the prevalence increased to 2.9%. Eastern region, and specially Koforidua, continued to be the areas with highest prevalence, 4.2% and 5.8% respectively and the lowest prevalence was found in Northern Region with 2.0% infected pregnant women. The national prevalence was modelled based on the annually measured sentinel survey result and estimated at 1.9%. Despite annual variations in the sentinel survey results, the model indicates that the national prevalence rate has stabilized at approximately 1.9%, and significant variations are not expected for the years to come.

An estimated 267,069 adults and children lived with HIV and AIDS in 2009 and some 13% (33,745) of these were receiving antiretroviral treatment.

The number of Guinea Worm cases continued to fall with only 242 cases in 2009. Northern Region managed to reduce the number of cases by 50% but still accounted for some 98% of all cases.

Equity

2009 was the first year, where it was possible to estimate the survey based equity indicators. The indicator framework holds two indicators as proxy for Geographical equity, supervised deliveries and nurse to population ratio by region. The indicator for geographical equity of supervised delivery continued previous years' improvement. Not only is the gap between the best and poorest performing region closing, both regions have also improved overall coverage and Northern Region improved coverage by almost 40%. Upper West Region saw the most significant reduction in coverage by nearly 10%, and is now close to the performance of Northern Region.

In 2009, there was furthermore an improvement in equitable distribution of nurses among Ghana's 10 regions. Upper West Region had the highest number of nurses per regional population with an extra 108 community health nurses, 8 midwifes and 1 general nurse compared to 2008. Ashanti Region continued to have the lowest number of nurses per population, but saw a marked increase in total number of nurses in 2009 (26%).

The doctor/population ratio increased from 2008 to 2009 by 13%. The highest relative increase in number of doctors was recorded in Northern and Brong-Ahafo Regions, but Northern Region is still the region with lowest number of doctors per population. With a total of 895 doctors, 43% of Ghana's doctors were practising in Greater Accra Region. The 3 Northern Regions have a total of 82 doctors, which corresponds to less than 4% of doctors in the nation.

The equity indicators for poverty are U5MR and NHIS cardholders, by wealth quintile. The equity indicator for poverty (U5MR) was measured based on the DHS 2008. The highest U5MR was reported among the lowest wealth quintile with 103 deaths out of 1,000 live births, whereas the lowest mortality was observed among the highest wealth quintile. The equity indicator is estimated at 1.72. Since 2003, Ghana has seen a significant reduction of U5MR nationwide for all wealth quintiles; however, the reduction in U5MR has been greater in the highest wealth quintile compare to the lowest. Therefore, the distribution of U5MR by wealth has become increasingly unequal. The NHIS Card Holder ratio by wealth quintile was measured for the first time based on the DHS 2008 results. The calculation shows that significantly more individuals belonging to the highest wealth quintile register compared to the lowest quintile. This is especially evident for the male population.

Healthy lifestyle and healthy environment

Obesity (BMI ≥ 30) among women aged 15-49 increased by 15% from 2003 to 2008, and while almost 10% of the female population 15-49 are obese over 20% are overweight. With 19.4% of women in the age group being obese and 25.1% overweight, Greater Accra Region had significantly higher prevalence of obesity and overweight than any other region. Western region had the second highest prevalence of obesity estimated at 9.9%. Upper West and Northern Region had the lowest prevalence with 2.4% obese, as well as 10.3% and 11.5% overweight, respectively. Compared to the DHS 2003 survey, obesity has increased by 15% from 8.1% to 9.3% in the female population aged 15-49 years.

The milestone specified in the 5YPOW for improvement of healthy lifestyle and environment related to the development of an information document and communication strategy to prevent NCDs. This milestone was not realised.

Provision of Health, Reproduction and Nutrition Services

Most health service indicators experienced a significant positive trend from 2008 to 2009. In accordance with the targets for improved maternal and neonatal health set out in the POW 2009, the indicators for supervised deliveries and institutional MMR improved.

From 2008 to 2009, the coverage of pregnant women, who received one or more antenatal care visits, dropped by 5.4%. In the same period, the proportion of pregnant women who received 4 or more visits increased significantly from 63.8% to 81.6%. This indicates that the majority (almost 90%) of women now follow the recommended ANC course of minimum 4 visits, which can be interpreted as an overall improvement of antenatal services in the country.

The proportion of deliveries attended by a trained health worker increased by 17%, and hence continued the positive trend experienced since 2007. The DHS 2008 estimated the percentage somewhat higher at 58.7%. A deeper analysis of the DHS 2008 data reveals that there were large regional variations in the indicator. In Greater Accra Region 84.3% deliveries were attended by skilled provider, while only 27.2% were attended by skilled provider in Northern Region. Also the routine health information indicates that Northern Region performed relatively poorer than other regions, the region did however achieve major improvement of this indicator by almost 40% from 2008 to 2009.

The institutional MMR continued the positive trend, and was reduced by 15% from 2008 to 2009. Almost all regions achieved improvement of this indicator, but in Upper West Region there was a serious increase in the MMR by 145% from 109 to 267 per 100,000 live births. The total number of maternal deaths recorded in the region increased from 19 to 41.

From 2008 to 2009, contraceptive prevalence rate dropped by 8%. While long term couple years of protection (CYP) remained at around 142,000, short term CYP dropped by 33% from 654,072 in 2008

to 439,573 in 2009. The indicator trend corresponds well with information presented to the review team concerning a general shortage of short term methods in Ghana during the previous year. The social marketed brands of condoms, e.g. Ghana Social Marketing Foundation brand, which in 2008 constituted more than half of all condoms sold in Ghana, have reportedly been in particular shortage in 2009.

After a slight drop in Penta 3 coverage in 2008, performance is now back on track, almost reaching the target of 90% coverage. The DHS 2008 estimated the percentage of Penta 3 at 87.7%, which corresponds well with routinely collected data. A regional break down of the routine data indicates that coverage in Greater Accra Region is significant lower that the national coverage. This could not be confirmed by an EPI survey from 2009, which was performed in Greater Accra Region and showed significantly higher coverage of Penta 3 at 96.1%.

Outpatient (OPD) visits per capita continued previous years' increase and reached the 2009 target. While every inhabitant of Brong Ahafo Region in average visits the outpatient department 1.15 times a year, people of Greater Accra and Northern Region have an average utilisation of OPD services less than half of Brong Ahafo Region. Absolute figures for OPD visits show, that Ashanti Region has the highest load, followed by Brong Ahafo Region. Great Accra Region comes 5th despite its high regional population.

Governance and Financing

The total number of card holders increased from 10,417,886 in 2008 to 12,123,338 in 2009. This is, however, an accumulated figure of cards issued since health insurance started, and the actual number of individuals holding a valid NHIS membership card in 2009 is therefore expected to be lower due to health insurance dropout (e.g. lack of renewal, death and emigration). It has been specified by the NHIA that the figure represents an accumulation of *individuals* who were issued one or more cards and not the accumulation of *cards issued*, i.e. the figure increases every time an individual renews his or her membership card.

Holistic assessment of the Health Sector performance in 2009

In 2008, the Holistic Assessment was introduced as part of the annual health sector review to provide a structured and transparent methodology to assess progress in achieving the objectives of the POW 2007-2011.

The conclusion of the holistic assessment is that the health sector in 2009 was *highly performing*, with a sector score of +1. Service delivery indicators (Strategic Objective 2) and capacity improvement indicators (Strategic Objective 3) were generally improving, while indicators on healthy lifestyle (Strategic Objective 1) were worsening. The indicators for Goal 1 (*reduction of excess risk and burden of morbidity, disability and mortality especially in the poor and marginalized groups*), Goal 2 (*reduction of inequalities in health services and health outcomes*) and Strategic objective 4 (*Governance and Financing*) did neither experience significant overall improvement nor deterioration.

While the sector score remained positive with a score of +1 for 2009, the sector score for 2008 was significantly higher at +4. This could be interpreted as waning of the positive trends experienced in 2008, but such an analysis has a few caveats. Not all indicators are measured all years, so the same indicators, goals and strategic objectives are not necessarily measured year on year. Therefore, comparing years would be an attempt to measure a moving target. Another issue is that the holistic assessment does not assign any weight to indicators, i.e. the score can be high in a year with worsening trend of a number of more *important* indicators' trend as long as the majority of (*less important*) indicators' trends are positive.

The outcome of this initial assessment of indicator trends and achievement of milestones will be presented at the April Health Summit and is intended to be qualified by discussions and negotiations at the subsequent business meeting, in order to create consensus on sector performance.

For a detailed description of the Holistic Assessment Tool and underlying principals as well as details of the 2009 estimations please refer to annex 2.

Region of excellence

A regional comparison of selected service indicator trends from 2008 to 2009 shows that Upper East Region experienced relatively larger improvements compared to any other region.

	Penta 3	ANC	Supervised deliveries	FP acceptor rate	OPD per capita	Institutional MMR
Highest performance	11.8%	-2.0%	38.8%	27.3%	35,3%	-43.9%
Lowest performance	-2.4%	-9.2%	-9.6%	-49.0%	-11,4%	144,6%
Median % change	3.2%	-5.4%	8.1%	0.3%	4,9%	-15,2%
Upper East Region	11.8%	-2.0%	30.2%	26.0%	35.3%	1.0%

Discussion and recommendations for indicator adjustments

For 2009, most indicator data was sourced from the Centre of Health Information Management (CHIM). This was an improvement over 2008 and is believed to signify an increased robustness of the data source. Furthermore, a number of the recommendations from last year's holistic assessment have been implemented, especially related to increasing transparent estimation of financial indicators. The Holistic Assessment Tool is based on trends of indicators, and comparable year-on-year data is therefore critical. Below is a discussion of problems encountered during the 2009 assessment and recommendation for adjustments.

Equity – Gender (female/male card holder ratio). As for 2008, the DMHIS did not report gender ratio of card holders to the NHIA, and for this year's assessment neither *registrants'* nor *card holders'* information on gender distribution could be obtained. It is recommended to change the definition of this indicator to reflect availability of data.

Institutional MMR: The MCH calculation of institutional MMR for 2009 included TBA deliveries, representing 17% of all recorded deliveries, in the denominator. This was also the case for 2008 and previous years. It is not clear whether the numerator, i.e. total number of maternal deaths, also includes death recorded by TBAs outside facilities. It is recommended to identify a source of delivery and maternal mortality information which excludes TBA deliveries and community deaths.

Budget execution rate of Item 3: There is no specified target for budget execution rate of item 3. It is recommended to define a *target range*, e.g. 95%-110%. Any trend towards that range would be regarded as a positive trend.

Annex A: Definitions and calculations for 2009 assessment

Indicator	Numerator	Denominator	Source	Calculation 2009
HIV Prevalence among pregnant women 15-24 years	N/A	N/A	National AIDS Control Programme. Sentinel Surveillance report.	Calculation was done in the annual sentinel survey report.
Incidence of Guinea Worm	New cases	N/A	CHIM	N/A
Equity Index: Pov	U5MR amon	U5MR am	DHS 2008	103/60

erty (Richest/Poorest U5 mortality rate)	g children of lowest wealth quintile	on g children of highest wealth quintile		
Equity Index: Geography (supervised deliveries)	Proportion of deliveries attended by a trained health worker in best performing region	Proportion of deliveries attended by a trained health worker in poorest perfo rm in	CHIM	33,714/93,382

		gregion		
Equity Index: Geography (nurses: population)	Number of nurses by total population in best performing region	Number of nurses by total population in poorest performing region	IPD – Ministry of Health. Population data from CHIM	2,442/4,881,428
Equity Index: Gender (NHIS registration)	Number of women registered with NHIS	Number of men registered with NHIS	NHIA	N/A
Equity	%NH	%N	DHS	37.7%/16.6%

Index: Poverty (NHIS registration)	ISCardholdersamonghighestwealthquintile	HISCardholdersamonglowestwealthquintile	2008	
%deliveriesattendedbyatrainedhealthworker	Nationalnumberofdeliveriessupervisedbytrainedhealthworker	Nationalnumberofexpecteddeliveries	MaternalandChildHealthUnitannualreport	442,766/970,097
Contracepti	New+	Target	MCH	1,811,777/5,820,585

ve Prevalence Rate	continuing FP acceptors	population (0.24 x total population)	spreadsheet	
Antenatal care coverage	Number of pregnant women registered to received ANC	Expected number of pregnancies	MCH spreadsheet / CHIM	893,747/970,097
Antenatal care coverage	Number of pregnant women with 4 or mo	Expected number of pregnancies	MCH spreadsheet / CHIM	729,403/970,097

	re ANC visits			
% U5s sleeping under ITNs	Number of surveyed U5s sleeping under ITN the previous night	Number of surveyed children	N/A	N/A
% Children receiving Penta 3	Number of children who received Penta 3	Expected number of children 0-12 months	CHIM	Not specified. Calculation done by CHIM.
HIV posi	HIV	N/A	NAC	N/A

tive individuals receiving ART	positive individuals receiving ART		Pannual report	
Outpatient attendance per capita	Number of OPD encounters (GHS, CHAG, Teaching Hospitals)	Total population provided by CHIM-GHS	CHIM–Ghana Health Service	19,747,839/24,252,441
Institutional Maternal Mortality Ratio	Number of maternal deaths at governmen	Number of live births in governm	MCH Spreadsheet	889/523,110 (MCH calculation including TBA deliveries)

	t and CHAG institutions, excluding TBA deliveries	ent and CHAG institutions, excluding TBA deliveries		
TB success rate	Number of patients proven to be cured of TB after completion of therapy	Number of patient commencing anti-TB therapy	National TB Programme annual report	Rate provided by NTP
Doctor: Pop	Number	Total po	IPPD	1,835/24,252,441

ulation ratio	of doctors registered at IPPD/MoH	population provided by CHIM	– MoH. Population data from CHIM	
Nurse:Population ratio	Number of nurses registered at IPPD/MoH	Total population provided by CHIM	IPPD – MoH. Population data from CHIM	17,427/24,252,441
% total MTEF on Health	MTEF allocated to health. Sources: GO	Total MTEF for GOG	Current year's GOG Annual Bu	6,446,157,102

	G + Donor + IGF + HIPC + NHIS		dget Statement	
% non-wage GOG recurrent budget allocated to district level and below				
Per Capita Expenditure on Health	Total expenditure on health in USD, exchan	Total population provided by CHIM-GHS	MoH Financial Statements. Populatio	

	gerate from Bank of Ghana per 01.07.2008		ndata from CHIM	
Budget Execution Rate of Item 3	Item 3 disbursements from GOG + SBS + HF + HIPC + NHIS (subsidies + distress + MoH alloc	POW item 3 budget (same sources).	PPME – MoH	

	ation)			
% of annual budget allocations to items 2 and 3 disbursed by end of June	Disbursements for item 2 and 3 by end of June. Sources: GOG and SBS.	Total budget allocations for item 2 and 3 (same sources)	PPME – MoH	
% Population with valid NHIS Membership	Total number of active NHIS members (valid NHIS card holders)	Total population provided by CHIM - GHS	NHIA annual report. Population data from CHIM	24,252,441

Proportion of claims settled within 4 weeks	Number of claims reimbursed (disbursed from DMHIS accounts) within 4 weeks of reception by DMHIS	Total number of claims received by DMHIS	NHIA annual report.	N/A
% IGF from NHIS	Total claims amount paid by DM	Total IGF	NHIA annual report. MoH fin	

	HIS		an ci al st at e m en ts.	

Annex 3. Mid Term Desk Review POW 2007-2011

Introduction

The Ministry of Health and its Development Partners decided to let the medium term review of the health sector programme of work 2007 – 2011 coincide with the annual independent review of the POW 2009.

The annual review provides an in depth analysis of progress against the POW 2009, that in itself can be seen as a continuation of the previous annual POWs building on and adjusting according to the two previous annual reviews and their recommendations. It will provide some insight into the progression against the five year POW objectives and milestones and, as such, is part of a cumulative process. The medium term review, however, will take a different point of departure. It sets out to compare the subsequent POWs with the subsequent reviews to analyse whether and in which way perceived and actual priorities have been taken forward from one plan to the other, as evidenced in the various reviews. It will therefore attempt to measure process and not progress or achievements that, as earlier mentioned are the subjects of the annual independent reviews and whereto, if applicable, reference will be made.

The medium term review is hence limited in scope and restricted to a desk review of the different documents since 2007 and tries to complement the various annual reviews.

The Health Sector Programme of Work 2007-2011; Creating Wealth through Health

2009-2010 marks the midpoint of this Programme of Work. The title of the work programme, "Creating wealth through health", places the health sector within the overall national development agenda as follows:

- Improving the health of the populace, particularly through prevention and promotion leads to savings in time and money spent on health care
- Improving health improves productivity in current generation of workers and improved IQ and learning in children and hence productivity in future generation
- Creating Jobs within the health sector could lead to (i) economic empowerment of employees, (ii) import substitution and reduction in the use of scarce foreign exchange earnings for imported drugs and (iii) generation of foreign exchange through the export of standardized quality products.

While taking cognisance of the Millennium Development Goals the programme derives its objectives from the "physiological fact that the primary cause of disease is not the bacteria or virus, but the weakened resistance brought about by health destroying living habits, physical and emotional stress, ageing and environmental sanitation". Therefore the strategic approach defines four themes:

- Healthy lifestyles and healthy environments
- Health, reproduction and nutrition services
- Capacity for health development
- Governance and financing

Within the national vision of attaining middle income status with a minimum of 1000 USD per capita by the year 2015, the sector has defined its contributing vision as: "Creating wealth through health".

This is substantiated by the ministry's mission statement that the Ministry of Health aims to contribute to socio-economic development and wealth creation by promoting health and vitality, ensuring access to quality health, population and nutrition services for all people living in Ghana and promoting the development of a local health industry. The ultimate goal of the health sector is to ensure a healthy and productive population that reproduces itself safely. This goal can therefore be seen as proxy for overarching wealth creation and *mutatis mutandis* the objectives that would achieve this goal as the yardsticks against which progress will be measured:

1. Ensuring healthier mothers and children through the scaling up implementation of high impact and rapid delivery health interventions
2. Promoting good nutrition and regenerative health across the life span
3. Combating communicable diseases such as HIV/AIDS, Malaria, Tuberculosis, epidemic prone diseases and diseases that almost exclusively affect the poor such as Buruli ulcer, Guinea worm, Leishmaniasis, lymphatic filariasis, etc.

The following areas of action were defined as point of departure for developing the subsequent detailed annual Programmes of Work:

- Promoting healthy lifestyles and healthy environments
- Providing health, population and nutrition Services
- Investing equitably in capacity development of the health sector
- Promoting the use of Information for planning and management of the health sector
- Ensuring sustainable and equitable Financing
- Promoting a local health industry
- Ensuing good governance and partnership

The context of the health sector has a long history of partnership and coordination with national and international bodies for the development of health and health services. Governance and partnerships are important for the effective functioning of the health system and achieving health sector objectives. Governance arrangements include: (i) institutions and their organizational structures, (ii) managerial processes including policy formulation, priority setting, resource allocation, planning, monitoring and evaluation, (iii) coordination mechanisms (iv) performance assessment and accountability and (iv) regulation. With regards to partners, there is a firm commitment to the Paris declaration and the ensuing confirmation thereof in the AAA. At the beginning of the 5 year POW this was, however, not fully translated and therefore made integral to the POWs development agenda.

The harmonisation and alignment in terms of finances for the health sector will be addressed through the planning and budget cycle. The 5 year POW sets out to introduce sector wide programme budgeting within a firm government Medium Term Expenditure Framework and to develop a comprehensive strategy for resource mobilisation from both domestic and international sources. The National Health Insurance is foreseen to increase coverage while ensuring financial sustainability including a review of the subsidies, premium, tariff structure and administrative cost. Multi-sector and multi-stakeholder process will be established and strengthened and systems and programmes will be implemented to ensure alignment, harmonisation and predictability.

Monitoring and evaluation of the five-year programme will involve a systematic process of collecting, analyzing and using data to improve programme management and guide resource allocation. The monitoring and evaluation exercise will be integral to the management process and will support learning and decision making. Monitoring as a process will be closely linked to the implementation of the programme of work. It involves quarterly collection and assessment of the

performance of the different components of the programme of work. Specifically it will aim at determining whether activities are being implemented as planned, milestones are being achieved and outputs are being delivered. Monitoring will also involves tracking progress towards goals and objectives. Management teams, Councils and the Ministry of Health will traditionally responsible for monitoring the implementation of programme of work. In addition to the quarterly monitoring and reporting system, the Ministry and Agency will institute systems joint monitoring visits to provide technical support to Agencies, and BMCs. These support visits will be structured and targeted primarily at assisting health sector improve performance in areas where performance is less than optimal. Annual reviews and evaluations will be conducted by external teams. In depth review of key areas will be conducted on a selective basis in response to individual terms of reference related to specific issues, concerns and themes relevant to one or more component of the programme of work. The reviews will involve in-depth analysis of context and variables affecting performance will aim at assisting the sector to make judgment on the relevance, efficiency, effectiveness, adequacy, sustainability and impact of components of the (or the whole) programme of work.

The dialogue with development Partners follows a similar pattern. There are quarterly 'business' meetings between government and partners where progress against the POW is discussed and monitored. On two of these occasions these meetings are combined with a 'summit' allowing a wider audience to input in the planning (one summit) and review (the other summit) of the sector. A 'rolling' matrix of action points and responsibilities is maintained and updated during the business meetings.

Process versus progress

As was earlier mentioned the sequential annual reviews provide a cumulative picture of progress against stated targets as summarised by the sector wide indicators. They further provide an analysis of the underlying systems and programmes that led to these achievements (or lack thereof). This desk review takes a *historical* look at this progress, process and actions by comparing identified intentions for change with actual changes and its impact/effects on progress as outlined in the 5 year POW. A difficulty in comparing the three subsequent POWs versus the original 5 year POW is the shift in 2008 from a theme based approach to programming to an operational agency approach. This has caused that some aspects of the 5 year POW were lost to follow up. The sequential reviews were based on then perceived attention areas for the Ministry of Health causing them to not cover all aspects of the POW under review. This demonstrates the limitations of a desk review in that some aspects of actual progress on especially ongoing (system) processes cannot be covered. In terms of output and outcome, however, the availability of a stable set of sector wide indicators allows to draw some conclusions about progress that are captured in the 2009 POW review which, as earlier mentioned, can be seen as a review of the cumulative outcome of the implementation of the 5 year POW.

Healthy lifestyle and environment

1. Regenerative health and nutrition

Although a lot of emphasis is placed on this theme in the original five years POW - it is indeed the core of the underlying strategy embodied in regenerative and nutrition health objectives and targets - it appears to disappear off the radar as a discrete programme element after the first year of implementation. In the first POW (2007) distinctive mention is made of the paradigm shift to regenerative health and nutrition. Although the review of the 2007 POW mentions that a strategic plan was finalised to scale up the regenerative health and nutrition programme, the subsequent agency based POWs refer only cursory to the multi-sector and personal physical fitness aspects of it while biomedical public health aspects seem to be maintained. It might be argued that this in effect indicates the mainstreaming of this theme, but important referral to personal healthy lifestyles is

missed. No baseline for the indicators proposed for this theme has been established. The lack of progress might have to do with some of the issues identified in the review of the POW 2007 when it refers among others to a seemingly lack of targeting, lack of consultation with MoH and GHS staff on nutrition, lack of involvement of DHMTs, the perception of a vertical intervention, lack of impact monitoring and insufficient anchoring within a multi-sector context. The review of the 2008 POW remarks that it difficult to assess performance since no reports are available over the actual work done in the programme and sees as a way forward an integration in the GHS public health activities. In the 2009 POW, however, no direct activities relating to regenerative health and nutrition can be found besides a tangential referral to public awareness on food safety, improvement of data on risk factors of specific diseases and the intention to conduct screening programmes for specific NCDs (breast and prostate cancer).

2. Public health legislation

Although the 5 year POW mentions the review and promulgation of the public health law, the 2007 review remarks that it is unclear to what extent these activities have been taken forward. No specific mention of the public health law is made in the subsequent POWs and reviews. Our understanding is that the review of the public health act is now in its final stages to be passed into law soon.

3. Inter-sector collaboration

This aspect of the original 5 year POW had specific action points on the national and peripheral level that, according to the POW 2007 review, were unclear in the way they were taken forward. The subsequent POWs only make mention of sector collaboration in their activity matrices where one column refers to the collaborators concerning specific agencies, ministries and other partners. The 2008 POW review makes no mention on progress in terms of collaboration between different sectors, although there is some cursory mention of multi-sector activities in the recommendations where it concerns integration of the non-functional regenerative health and nutrition programme, comprehensive district health planning and NHIS accreditation and cost containment.

Coverage of high quality health, reproduction and nutrition services

Health interventions are delivered through a combination of family oriented community based services, population and outreach oriented schedulable services and individual oriented clinical services. The service delivery modes determine where, how and operational strategies for the delivery of health services. In general, interventions delivered in the same way usually use the same set of inputs and face similar constraints. For this reason, strengthening the health system as a whole tends to benefit the delivery of health interventions. In this vain the following will discuss the different activities deployed by the health sector in Ghana in relation with the underlying delivery systems and their (lack of/insufficient) integration and collaboration.

The 5 year POW identifies the provision of health services as generally not adapted to socio-cultural needs, values and practices. Health facilities in both the public and private sectors operate as discrete entities rather than as part of a network of providers. The referral system is (2007) non functional leading to increased cost to clients, providers and government and relatively poor health outcomes.

Traditional and alternative medicine practice are used by the population and yet not adequately supported and regulated. The sector has been unable to adopt a holistic delivery approach to service delivery consistent with the local demand, choices and practices involving the use of all kinds of providers including allopathic, traditional and alternative practitioners (5 year POW 2007-2011).

The key objective identified for this theme was to ensure equitable access to good quality, safe and affordable health, reproductive and nutrition services that improve health outcomes, respond to people's legitimate expectations and are financially fair.

The following intervention areas were identified in the 5 year POW and progress in each is discussed below, although verticalisation, fragmentation (of agencies) and its opposite integration have caused overlap and gaps between the respective areas. The switch in 2008 to an operational, agency based POW is symptomatic and might have contributed, as cause or consequence, to a fragmented approach towards these functional intervention areas. Cautiously a conclusion might be drawn that this orientation towards agencies has led to a 'silofication' of the health sector where the different silos are competing for government resources. In order to satisfy counterpart funding to specific programmes (see later) more government resources have (therefore?) been ring fenced by the Ministry of Health leading to complaints of agencies regarding their room to manoeuvre.

1. Communicable disease control

The High Impact Rapid Delivery (HIRD) strategies have been scaled up to cover all districts in Ghana, however, the 2007 review notices that their planning runs parallel with routine district health planning, presumably because of weak capacity for planning at that level. For the 2008 POW a continuation of HIRD was planned without addressing this issue. In October 2008 GHS in collaboration with Unicef and the WHO evaluated the HIRD initiative and affirmed the value of HIRD for child health but concluded that it is initiated by disease control, child health and nutrition programmes that have their own sources of funding, own procedures and own methods of work. HIRD has not managed sufficiently to pull these programmes together, partly because funding comes vertically from different funding sources. It has become a vertical programme in its own right, the monitoring systems are weak and information is hardly analysed. Non integration with district planning remains and unpredictability interferes with other activities at that level. The 2009 POW makes no mention of HIRD under the service delivery chapter. This could indicate that it now constitutes an integral part of the GHS services, but leaves in doubt whether the same is the case at the district planning level.

The EPI intervention was geared to maintain and increase the existing high coverage rates. Evidence indicates, however, that Penta 3 coverage remains static at best. The POW 2008 review states that there is no reason for complacency with regard to the success of the EPI programme. As with HIRD, EPI still remains a verticalised intervention with its own reporting channels.

Other disease specific interventions as for HIV, tuberculosis, malaria, nutrition, reproductive health and neglected diseases have in addition to the above mentioned led to high transaction cost at the peripheral, district level and regional level (review 2008 POW), while these inefficiencies are not easily recognised at the national level, where programme officers are focussed on their own programme and on accountability towards their development partners.

The 2007 POW makes no mention of Community Health Services and Planning (CHPS) as a strategy to implement health service delivery but a first needs assessment was made by GHS to roll out the initiative. The review of the POW 2007 identifies CHPS as a key issue and concludes that it is important to revisit the strategy and to roll out CHPS in the context of increasing supervised deliveries by skilled attendants. CHPS appears first in the POW 2008 as a specific strategy but although an intensification of the expansion of CHPS compounds was foreseen the review of the 2008 POW still recommends the mapping and analysis of best practices in CHPS for harmonizing the community health approach. The 2009 POW reiterates that the roll out of CHPS has been extremely slow, but no evidence in the activity matrix of a specific roll out for the intervention is present.

2. Non communicable disease control

The 5 year POW states the importance of strengthening the programme for the control of non-communicable diseases (NCD) through the establishment of a cancer registry, the establishment of screening programmes and the strengthening of the mental health programme. Although the design and implementation of screening programmes appears in the 2007 POW these are only repeated in the subsequent POWs, while no reference to them is made in the review report. This leads to the belief that no real progress is made in this important area and that although the importance of NCDs is increasing while Ghana is going through an epidemiological transition the point of gravity of the health service delivery system remains strongly biased towards communicable diseases.

3. Reproductive health and sexual health rights

The Maternal Mortality Ratio remains very high. Although this assessment was until 2008 only based on institutional GHS data that give at best a doubtful indication of the real situation when a lot of deliveries take place at home, this was later affirmed in the 2007 Maternal Health Survey that measured a total MMR of 451 in the five preceding years. Antenatal coverage has remained high during the three programme years at around 90% of all pregnant women, but the target for MDG 5 remains out of reach. The 2007 POW contains the three elements of family planning, delivery care and referral and Post Abortion Care (PAC), the 2007 POW review reports large regional and socio-economic disparities, financial barriers to receive maternal care, socio-cultural factors, poor quality and non availability of services as reasons for the unacceptable performance. During 2008 the then Minister of Health declared maternal mortality an emergency and renewed emphasis was placed on maternal health with the establishment of a ministerial task force. This task force formulated four priority areas: Family planning, emergency obstetric care, adolescent health and PAC. The request to formulate a timed and costed implementation framework could, however, not be honoured. During 2008 pregnant women were declared exempt for enrolment fees for the NHIS. This has presumably led to a significant increase in assisted deliveries. Furthermore plans to extend Basic Emergency Obstetric Care (BEOC) to the CHPS level are in an advanced stage of development. Because of its nature the MMR indicator can only be measured to reduce in the years to come.

Because of the agency centred nature of the 2008 and 2009 POWs the family planning (FP) component seems to disappear from the radar in these two documents although repositioning FP is mentioned in the 2007 POW and the activity matrix of the 2009 POW. The two reviews of 2007 and 2008 both indicate a large unmet demand for modern methods with a slowly decreasing fertility rate. In the 2007 review a lack of male involvement, lack of integration of services, socio-cultural factors, provider bias and foremost insufficient commodity supplies as underlying causes. Although a study in 2008 recommended the inclusion of long term methods under the NHIS (with savings in the long term) and the 2007 review recommended the same, no progress is made to this respect.

4. Nutrition

As was earlier mentioned the nutrition programme in the health sector shows insufficient linkage with the regenerative health and nutrition programme, although this is a stated activity area of the 5 year POW. Further activity areas were rehabilitation (therapeutic feeding) an supplementary feeding, collaboration with the Ministry of Education for the benefits of the school feeding programme, inclusion of nutrition in the curriculum of health workers and establishing an in-service training programme. Although the 2007 POW reiterates these areas of activities and adds the strengthening of HIRD in terms of nutrition interventions as well as programmes to control micro-nutrient deficiencies, the agency based POWs of 2008 and 2009 make no mention. The review of the 2008 POW concludes that although the percentage of underweighted children under 5 is reducing to 15% in 2008 stunting with 30% and severe stunting with 11% remains unacceptably high.

5. Emergency preparedness and response

Ambulance services have taken centre stage under this issue in the first three years of implementing the 5 year POW. The intention was to scale up ambulance services by *inter alia* linking the facility based ambulances with the national ambulance service (NAS) and to consolidate the scaling up to the regional level. Inter-sector collaboration with the Ministry of Transport, the Police Service, the Ghana @ 50 Committee and the CAN 2008 was mentioned. The 2008 POW puts figures to these activity area and aims to establish 6 additional ambulance stations and to strengthen the communication links between NAS, facility based ambulance and health facilities. A NAS bill is then under preparation. Although the review of the 2007 POW mentions the deterioration of the health sector vehicle fleet, of which only 75% is operational, it does not split this out specifically for ambulance. It is therefore difficult to follow up on the 2007 activities - for instance how many additional stations have been established - but the 2009 POW talks again about additional (10) stations. Whether this would then make up the total over the three years 16 additional stations is not clear.

In general there is no standard emergency response system; the response to outbreaks is in the hands of the GHS. There is a functional disease surveillance system which has worked well for meningitis and polio. The National Disaster Management Organisation has an Epidemic Subcommittee and in the MoH there is a Ministerial Medical Emergency Services Committee, but so far the committee is not covering epidemic outbreaks.

6. Clinical care

Like with other issues from the original 5 year POW details of the progress in this activity area are lost to follow up when the annual POW changes to an agency based document. Recurrent issues seem to be human resources both in quantity, quality and distribution (this is discussed in a separate chapter of this report) and commodity supply and distribution (a comprehensive report is expected in 2010). Perhaps the most important factor impacting on clinical care has been the steady increasing enrolment of the population under NHIS. OPD and IPD utilisation have increased significantly. However, for example the existence of two different drug lists indicates an inherent tension between the main financers (NHIS) and the main implementers of health services (GHS) in Ghana. The effects of the resources availed through the NHIS to the health sector will be discussed separately later.

7. Traditional and alternative medicine practice

The 5 year POW clearly states the development of a traditional and alternative medicine sector that integrates into the general health system. While the POW 2007 takes the issues out of the 5 year POW almost literally forward, the subsequent POWs of 2008 and 2009 list specific activities, most of them reflect systems and capacity building for the Traditional Medicine Practice Council and only cursory mentioning the integration of alternative medicine in the health service delivery system of Ghana. Activities differ from year to year and the subsequent reviews offer no insight in actual progression within this activity area.

8. Rehabilitation

The only aspect of the rehabilitation activity area that can be somewhat reliably followed up throughout the sequential POWs and reviews are mental health issues a declared priority of government. A key issue here seems to be the passing of the mental health bill which is mentioned in all POWs seemingly without progress hampering the furthering of the development of the sector. There seem to be continuing issues with the balance between hospitalised and community care and a lack of qualified human resources.

Strengthening Health Systems capacity

Capacity refers to the stock of capabilities available to the health system for health delivery. It includes a mix of technical, managerial and logistic capacity required to promote, protect and improve health. Capacity development will emphasize the creation, expansion or upgrading of capabilities in the health system to fill capacity and service gaps, improve individual and institutional performance, and achieve objectives of the health sector.

1. Investing equitably in capacity development of the health sector

Human resources

The original 5 year POW describes activity areas that could conveniently be summarised as:

- Expanding the workforce and adapt curricula to realities in the field
- Enhance human resource planning
- Develop and deploy human resource policies, incentives and advocacy to retain critical mass
- Decentralise management of human resources

Initially the 2007 POW sets off to increase the production of middle level cadre, to continuously refine strategies for retention and equitable distribution and to enhance productivity. Important aspects were the establishment of a HRH consultative group and stock taking of the then current situation. The review of the POW 2007 concluded that a policy framework and projection of staff requirements for the 5 year POW were achieved and that salary rationalisation provided a platform for the introduction of performance management. The head count led to a cleaned payroll and there was a downward trend in attrition. Performance management would become one of the priority areas for the POW 2008. It is surprising, however, that no such activity can be found in the 2008 POW, instead its major policy thrust is to ensure an equitable distribution of the right numbers and mix of staff and to introduce staff improvement programmes on the analysis that the new salary package did not translate into an increased productivity of the health workforce. The review of the 2008 POW observed that the focus on the production of middle level cadre was maintained but that the sector might be sacrificing quality for quantity risking overproduction. Concerning the distribution of staff it remarked that, although there are still significant inequities in the distribution of health workers, a positive step has been taken by the Inter-Ministerial Posting Committee that became closely engaged in decisions of distribution while the MoH had removed itself from operational distribution and the agencies did get the autonomy to affect internal postings. However, re-distribution of staff between agencies remained a challenge. The key challenge of recognised was the absence of agreed staffing norms. There is no clear direction as to what constitutes health workforce productivity and definite models of measuring performance are yet to be developed, although the GHS has introduced a staff performance appraisal system in 2008. Staff performance management is still an issue, but different models are on trial. The wage bill continues to escalate and in 2008 a deficit budget was generated. It seems that the sector becoming top heavy (large numbers of staff occupying the top end of their grades), that produced health workers are expected to be employed by the MoH and its agencies and that the explosion of recruitment of middle level cadre has led to this escalation. The review recommended developing criteria and models for agencies to work towards the successful implementation of decentralised staff management. The 2009 POW focuses specifically on productivity and performance through effective and efficient management, taking forward issues identified in the two preceding years.

Infrastructure development

The 5 year POW set out to deploy an integrated capital investment planning model based on need and national standards of the health sector in the development of a prioritized five year capital investment plan 2007-2011 and an annual capital investment plan. The construction of CHPS compound was seen as a priority as well as hospitals and health centres in under-served areas.

The 2007 POW mentions the completion of the heath services planning methodology and framework for capital investment and the mobilising of finances for the establishment of 80 CHPS compounds. It speaks of collaboration with DPs to develop and institute a routine progress and expenditure tracking system for capital investment to be operational in 2007. A capital investment plan was duly developed in 2007 (CIP III) outlining three scenarios of maintenance of the current system, limited expansion and full needs based expansion. Prudent management reduced the capital investment debt to 0 by early 2008. In practice this meant that only projects requiring counterpart funding, projects under ICB with legal implication for delayed payments, payment of outstanding bills, projects earmarked for completion in 2007 and projects urgently required in deprived areas were honoured. No mention is made in the review of the POW of the foreseen CHPS expansion. The same prudent approach was taken in the POW 2008 with a focus on the completion of ongoing projects with priority to projects with significant contribution to enhancing quality and equitable access to health care while commencing the major rehabilitation of Tamale Teaching Hospital, construction of Bekwai, Nkawie (ORET funding) and Tarkwa district hospitals and the Sunyani Regional Hospital staff accommodation project. The target for the establishments of CHPS compounds was set at 50. Apart from these priorities a list for completion of ongoing projects as well as the commissioning of new projects was mentioned.

The review of the 2008 POW did not include elements of infrastructure development and so follow up of plans is lost. The POW for 2009 largely includes unfinished business from 2008 and the commissioning of further district hospitals in Wa, Kumasi, Madina, Weija, Kumasi, Tepa, Salaga, Wenchi, Konongo-Odumasi and Twifo-Praso. No details on financial investment are available apart from total figures that might be questioned for inclusiveness.

Supplies and logistics management

The original 5 year POW focuses on production, procurement, supply, distribution and rational use of medicine (traditional and modern) and vehicle replacement and preventive maintenance. The 2007 POW takes this forward with a focus on the implementation of a framework to address affordability, sustainable financing, safety, quality and efficacy of medicines. *Inter alia* the harmonization of the standard treatment guidelines and essential medicines with the NHIS. Considering two still existing drug lists in 2009, little progress has been booked against this activity area. Furthermore the 2007 POW indicates the mobilisation of resources for vehicle replacement and to improve the management and preventive maintenance of the fleet.

The review of the 2007 POW reports a poor state of maintenance of the sector's vehicles with only 75% of the 399 vehicles roadworthy with significant regional disparities in the availability of vehicles. It reports further an effective logistics system for essential medicines and supplies with only minor stock outs at the facility level.

The 2008 POW only mentions in very general terms the procurement of transport for specifically the district level without giving any targets. It remains quiet about the procurement of drugs and medical commodities, apart from a annexed procurement plan that provides little insight in efficacy, efficiency and effectiveness of the effort. The review of the 2008 POW makes no reference to the procurement of drugs. The 2009 POW has again no targets with respect to vehicles and the capital investment budget only states ballpark total figures. To address the (medicine) supply chain this

POW focuses on the facilitation of visible follow through on procurement practices and broad stakeholder engagement. The result is broadly formulated as improved medicines and logistics supply security. A comprehensive commodity security study was commissioned in 2009 of which the results are expected in the first quarter of 2010.

2. Promoting the use of information for planning and management of the health sector

Health information has six components: Resources comprising human and ICT, indicators, data sources including population based and administrative data sources, systems for data management, information products and dissemination and use.

The health sector has established a robust and stable framework of sector wide indicators to monitor progress. A subset of these indicators constitutes a holistic performance assessment that is now a firm starting point for the sector debate and prioritisation and planning of services. At the core of the sector wide indicators lies a now unified DHMIS that is also adopted by the second largest provider of services, CHAG. However, there is concern that data collection is still too time consuming for service implementers, while utilisation at the district level and below remains questionable. The earlier mentioned 'vertical' programmes add to the data collection burden by requiring specific data for monitoring, and the unified DHMIS, which received much attention in the first few years of implementing the 5 year POW remains under threat through these different demands that are increasing with further fragmentation of the health delivery system.

Comprehensive district health plans are conceived through a bottom up needs based process which invokes inherently tensions with the top down, resource based planning from the centre. Since a lot of district public health interventions are implemented in a centralised top down manner followed by resources, integrated district planning is often not adhered to; ad hoc planning for succinct interventions is more rule than exception. This in turn has also led to insufficient use of data to appropriately plan locally.

3. Promoting a local health industry

The original 5 year POW mentions the development of micro-enterprise for public health interventions through collaboration with the private sector in concurrence with the Ministry of Trade and Industry to avail capita/micro-credits for potential investors. Although in the POW 2007 the intention is expressed to create a better understanding of the health industry as a basis for enhancing the capacity and sustainability of the health system and contribute to the national economy, this is lost to follow up in the subsequent agency based POWs.

Promote good governance, partnerships and sustainable financing

1. Ensuring sustainable and equitable financing

Far out the most important initiative in the financing of health services in Ghana has been the introduction of the NHIS and the steady increase of the enrolment of the population. At the end of 2008 the NHIF was providing 41% of the total public resource envelope for health. The sustainability of the scheme is however threatened by several factors; current payment systems (tariff creep, incentives on over prescription), absence of co-payments with inherent moral hazard, a comprehensive benefits package that covers 95% of all health interventions, poor gate- keeping, poor monitoring and control, low premiums for the informal sector (not based on actuarial analysis) and a high proportion of exempted groups. Currently the health insurance acts as well as the premium/NHIL systems are under review and a clearer picture of the future of NHIS is expected in

2010. This would sit squarely within the intentions of the new government to introduce a one off premium payment.

A recurrent discussion issue is the pro-poor aspect of the insurance scheme and the difference of definitions used by the NHIS and for example the livelihood sentinel surveys to identify the poor. The opinion of the MoH is to define the poor according to definitions applied by the Ministry of Social Welfare and direct subsidies for exempt groups accordingly, although some voices plead for geographic targeting of the poor. How the poor argument is affected by the one off payment is still hanging in the balance and will depend on and is waiting for the new legislation and tariff structure.

As earlier mentioned the exemption of pregnant women under NHIS has increased the number of assisted deliveries significantly. However, due to the character of interventions around delivery cost will outstrip the subsidised premium which will bring further sustainability issues to the fore. The intention of the NHIA to decouple under 18 children from their parents and thus realise a de facto exemption of the whole under 18 population of Ghana has yet to be materialised.

With NHIS, money follows infrastructure. There will therefore be a tendency for higher facilities to capture reimbursements disproportionally and similar areas which have higher levels of infrastructure. A separate concern is the balance between preventive and curative services. At present those facilities generating revenue from the NHIS become increasingly financially independent, while funds for public health activities are stagnant. This has change the power balance between hospitals in particular and health managers at district regional and national level. There is no evidence of redistribution from hospitals to health administrations.

One of the equity concerns relating to the NHIS is how it has affected the non-insured. When the new tariffs were introduced in 2008 it affected the cash and carry prices as well. Assessing to what extend the non-insured have been squeezed out of the market is not straightforward, but the fact that the majority of IGF is generated by the NHIS, while its membership is relatively below that input suggest that the non-insured are using fewer and/or less expensive services.

2. Ensuing good governance and partnership

As red lines some issues are recurring throughout the different themes of the original 5 year POW important for good governance and partnership:

- The fragmentation of the health delivery package caused by a programmatic agency based approach and donor earmarking.
- Skewing of services towards curative care (and more in general bio-medical solutions) at the detriment of public health activities and local horizontal management of services and caused by the changing modalities of financing the sector. Connected with this is the feeling that the NHIS is more and more setting the agenda for health services because they in effect control accreditation, quality control and implementation of health services.
- Geographic and income inequities of access to health services.

These issues have the attention of the MoH and development partners, and some ongoing debates will address possible remedial action. New Common Management Arrangements or under construction that will encompass all stakeholders in the sector possibly addressing the fragmentation of the sector; A strengthening of the Inter Agency Leading Committee that might address the ‘ silofication’ of the sector; and, the new public health acts and health insurance legislation that might allow a more strategic approach towards NHIS expenditures.

At the same time with the strengthening of the CHPS approach and the opportunities offered by programmes (e.g. GFTAM, GAVI) to invest in system building and capacity at the district and regional level appropriate local planning might become more achievable, but requires a more integrated 'horizontal' approach, as opposed to agency based, towards planning at the different levels.

Annex 4. Note on Inter-Agency Leadership Committee

1. Background

As health services have grown more complex over the past decades, the Ministry of Health and Government of Ghana have responded by creating agencies (currently numbering 17) responsible for coordinating, providing and/or regulating various aspects of the national system throughout the nation's [165] districts. Communication and collaboration between these agencies is instrumental to the realization of the objectives set out in the Ghana Health Sector Medium Term Development Plans (SMTDPs). The Heads of Agencies have had a history of collectively meeting with the Ministry of Health sporadically over the past several years, although generally these meetings have been infrequent. In total, minutes were found to be documented for only nine Heads of Agency meetings from 2002 to 2007.

In early 2008, a decision was taken to revitalise the previous Heads of Agencies meetings into the Ghana Health Sector Inter-Agency Leadership Committee (Inter-Agency Leadership Committee, or IALC). The primary purpose of this committee is to institutionalize a key leadership structure across the Ministry of Health and its Agencies. This team of leaders is also intended to act as a "Ministerial Advisory Committee" and by that can be considered as "a cabinet" for the Minister of Health.

The Inter-Agency Leadership Committee has the following collective goals:

1. To jointly agree on sector wide priorities, policies and goals as a team;
2. To ensure alignment of Agency and Inter-Agency activities with health sector priorities, goals and objectives;
3. To discuss progress, make decisions and resolve issues for key Agency and Inter-Agency activities, as well as any other critical health issues or situations that require the benefit of an Inter-Agency collaborative problem solving approach that results in clear action items including person(s) responsible and timeframe deadlines;
4. To create operational synergies between agencies to improve the efficiency and effectiveness of the sector as a whole, and to avoid duplication of services or activities between Agencies;
5. To act as the health sector advisor/ "cabinet" to the Minister and provide input/direction into MoH policies;
6. To distribute key information concerning current pressing sectoral issues across the sector and downward through each agency to support the implementation of health sector policies and strategic directives within the scope of the IALC.
7. To leverage collaboration venues (such as Health Summits) to share information with other stakeholders and intersectoral partners to ensure alignment with specialty work streams run by Agencies and their partners.

8. To be accountable for health sector performance by reviewing indicator metrics of peer agencies and/or health priority areas and making recommendations and decisions on how to address any gaps in results.

The Inter-Agency Leadership Committee is intended to convene four times per year (quarterly) for ongoing governance planning, strategic decision making, and performance oversight, and to discuss current pressing issues. The Committee members develop a shared agenda, and periodically evaluate the agenda structure to ensure that there is an emphasis on cross cutting areas best addressed through collaboration of health sector leadership.

Core membership of the Committee is comprised of the Minister of Health, the Deputy Ministers, the Heads of Agencies, and the Chief Director. Other guests (i.e. training and research institutions, development partners, civil society, the private sector, other Ministries, Agency board members, health sector specialists etc) are invited as participants on an ad hoc basis when asked to speak to particular agenda items or support any committee member to make decisions on a specific agenda item. The MoH PPME secretariat is responsible for coordinating agendas and meeting materials, and therefore also attends each meeting.

2. Findings

A survey of the first full year of IALC meetings found that average attendance in the four quarterly IALC meetings in 2008 successfully exceeded its target of 80%, with an overall rate of 82%. It is noted, however, that attendance did fall from the first meeting and reached a low of 71% in the 3rd meeting.

The survey results also indicated that attendance could be strengthened moving forward by

a) ensuring attendance by the Minister;
b) reinforcing team “norms” established at the October 15/16 2008 Portfolio Management Workshop; and
c) emphasizing the importance of the meetings as convening the leadership team of the health sector, and as a team of advisors to the minister.

Analysis of the Minutes of last December’s meeting indicates that in 2009 3 meetings were held, and the first meeting of 2010 only took place on 24th March, suggesting that the IALC may have difficulty in meeting its target of 4 meetings in the calendar year. Ensuring the attendance of the Minister, which was flagged as a key requirement in the review of 2008, appears to continue to hinder the convening of meetings on an annually planned basis.

Another factor impeding the effective functioning of the IALC is the attendance or non-attendance of key agencies, in particular the GHS and the NHIA. Both of these agencies were absent from the March 2010 meeting, which limited the ability of IALC to agree on implementation mechanisms for the decisions reached, such as the new tariff structure for the National Ambulance Service (NAS). It appeared that the late notification of the meeting date, which clashed with pre-arranged activities for both agencies, was responsible for their non-attendance.

The discussion of the new NAS tariff structure at the March 2010 meeting provided some evidence of the IALC's ability to follow through on issues discussed at earlier meetings – the issue had been raised at the December 2009 meeting, and NAS had been tasked to prepare a proposal for review at the following meeting.

3. Recommendations

1 To be truly effective as the key forum in the health sector for resolving issues and making action-oriented decisions, the IALC needs to have legal backing from Cabinet to institutionalise it as a permanent structure within the sector. It also requires as part of this legal backing a clear mandate to enforce collaboration, in the event of the committee's inability to reach a voluntary consensus on specific issues.

2 To ensure IALC's ability to re-align agencies' activities with sector priorities and objectives, there needs to be a clearly defined and communicated linkage between the IALC's meeting schedules and agendas, and the sector's established planning, budgeting and review cycle. Without such a linkage, the decisions of the IALC cannot be operationalised on a timely basis, and it risks becoming a mere 'talking shop', lacking the ability to influence implementation of its recommendations.

3 The issue of the MoH's authority (or lack thereof) to direct the NHIA, which is increasingly becoming the single most significant funding source for the sector, on policy issues is one that threatens the effectiveness and credibility of the whole IALC initiative. NHIA does not appear to regard itself as an agency of the Ministry, and only reluctantly accepts the Minister's personal oversight of its operations. Unless and until the NHIA is brought fully into the health sector under the authority of the Ministry of Health, its full participation in the IALC may never be realised.

Annex 5. Note on human resources

The Five Year Strategic Plan 2007-2011

The Five Year Health sector goals are built around the Minister's Vision of wealth creation though provision of quality health care to the people of Ghana[48]. Addressing human resources for health challenges has been an underlying priority of the of the Ministry of Health (MoH) with a view to providing sustainable solutions within the context of the short to medium term conceptual framework of national development goals and policy direction of the health sector.

The five year strategic plan 2007-2011 identified a situation characterized by weak middle level personnel staffing, excessive support staff, inadequate staff mix and imbalances in the health workforce distribution, including weak institutional capacities for human resource information, supervision and monitoring.

As part of the projected sector goals, the MoH has identified projected human resource requirements, standards and vacancies for the next five years with key result areas and critical success factors. The plan also takes cognisance of the MoH identified need to take concrete actions in order to address issues related to promotion and prevention of health in its totality with a view to enhancing outcomes of the Millennium Development Goals (MDGs). This shift –amongst others- required production of health cadres to undertake promoting health lifestyles, healthy eating and healthy environment at the community.

To achieve the sector goals, and to ensure that sufficient human resources are available and effectively managed and utilized, the following human resource management policy measures were initiated by the MoH in collaboration with stakeholders including the Ghana Health Service (GHS):

a) Increase production and recruitment of health workers focusing on middle-level staff[49].

Table 1. Gap between numbers of staff required and numbers available by staff category

Category of Staff	Total Number 2008	No required by 2010	Gap
Medical officers	2026	3732	1706
Dental Surgeons	31	50	19
Pharmacists	1550	2726	1176
Expatriate doctors	200	-	200
Professional Nurses	7304	1900	11696
Enrolled Nurses	2956	-	-
Community Health Nurses	3246	12934	9688
Registered Midwives	2810	8205	5395
Medical Assistants	430	1242	600
Allied Health professionals	588	2500	1912
Non-Clinical Support Staff	27918	30100	2182
Health assistants (Clinical)	-	7176	7176

[48] Ministry of Health: Human Resource Policies and Strategies for the Health Sector. 2007-2011.

[49] Ghana Health Service: Draft Handing Over Notes to the Transitional Team, GHS, January 2009.

b) Retain, distribute equitably and increase productivity of health workers by strengthening supervision, refining compensation and incentive schemes, and enhancing legislation and regulation.

Table 2: Staff projections, 2007-2011

Types of health worker	Number at post in January 2006	Yearly intake % increase each year	Drop out rate from schools	Attrition rate once employed	Norm agreed (worker/per pop)	Target number 2011(based on norms)	% increase 2006-2011
Medical officers	2026	10	1	1.5	1:5800	3732	84
General nurses	10206	5	1	2.5	1:1300	19181	88
Midwives	2810	20	1	1.5	1:3000	8205	192
Community health nurses	3246	5	2	1	1:2000	12934	298
Laboratory technicians /technologist	430	5	1	1.5	1:23000	1062	147
X-Ray technologist	108	5	1	1.5	1:23000	1062	883
Pharmacist	1550	10	1	1.5	1:8000	6225	69
Health Assistants	0 (prog to start in 2009)	20	1	0.5	1:3500	7176	
Medical Assistants	500	50	2	1.5	1:20000	1242	148

Source: MoH/GHS Strategic HR Plan 2007-2011.

Legislation and Accreditation:

Ghana has adopted the PHC approach to health care delivery and practical steps have been taken to update curriculum for identified health cadres[50,51]**.** The objective is to achieve 80% coverage of health services and to prevent 80% of diseases that afflict the Ghanaian population. As part of the response to enhance development of multipurpose health workers, the MoH has taken steps to train multipurpose health workers at the district and sub-district levels of the health services. The community health nurse training programme is part of such approach. Curriculum development is driven by the need to achieve competency based outcomes taking into consideration the current and emerging needs of the sector.

However, while related curriculum development is ongoing within the sector, the existing regulatory framework for most health cadres remains an issue of growing concern. For example there exists no institutionalised framework for the regulation and accreditation of middle level health workers who constitute the bulk of the health workforce[52]. Furthermore, concerns have been expressed on the continued reliance by the community health and health training schools under the MoH on the Human Resources Directorate of the MoH for major strategic and operational decisions.

c) Empower environmental health care inspectors to enforce standards for environmental hygiene

[50] Nursing and Midwifery Council of Ghana: Curriculum for the Community Health Nursing (CHN) Programme. July 2007

[51] Nurses and Midwife Council of Ghana: Curriculum for the Registered General Nursing (RGN) Programme: July 2007

[52] Feedback from Key Informants interviews. March 2010.

To enhance implementation of the above policy measures identified stakeholders including Ghana Health Service, Teaching Hospitals, regulatory bodies , professional associations, training institutions and the Christian Health Association of Ghana and private sector were assigned roles and responsibilities. Further the MoH undertook consultations with stakeholders including the Forum on Human Resources for Health and key recommendations were reflected in the five year human resource five year plan (**See Annex A**).

B. Current situation and progress

Increase production capacity

Table 3: Establishment of new Health Training Courses and Institutions

Type	Institution		
	MoH	**CHAG**	**Private**
Ghana College of Physicians and Surgeons	**1**	**-**	**-**
General Nursing	**1**	**1**	**-**
Direct Midwifery	**8**	**-**	**-**
Diploma in Community Health Nursing	**2**	**-**	**-**
Community Health Nursing	**2**	**-**	**1**
Medical Laboratory Technology	**-**	**-**	**2**
Health Assistants Clinical	**7**	**-**	**-**
Total	**21**	**1**	**6?**

The MoH has taken steps to increase the production capacity of the sector including the establishment of a) the Ghana College of Physicians and Surgeons; b) twenty one New Programs reflected in the table above; c) five general nursing schools; and e) new programmes for direct entry into midwifery and health assistant (clinical) courses and a diploma course in community health nursing. In addition, CHAG and the private sector together have opened seven new schools in general nursing and health assistants (clinical).

Moreover, the MoH has made commendable progress in promoting the retention of health workers despite ensuing challenges currently faced with satisfying demands by health workers for improved incentive and allowances. The achievements within the Brain gain project is work noting. In addition, the government has instituted measures to attract, recruit and retain health workers in the country. Incentive measure includes purchase of saloon cars, housing schemes, payment of additional duty allowance, consolidated salary and tax waiver.

We observe the absence of large scale system wide non financial incentives to complement existing financial arrangement to motivate health workers. This is considered necessary given the frequency of staff agitation for improved terms and conditions of service. For example, the GHS and the Teaching Hospital have been engaged in salary negotiations with the unions (Ghana Medical Association, Ghana Registered Nurses Association and the Health Services workers Union of TUC since September 2008[53]. Specifically improvements in incentives need to be focused to improve motivation of health workers especially in underserved areas and should stimulate need improvements in achieving appropriate and equitable distribution of staff and retaining these cadres in deprived areas.

[53] Ghana Health Service: Draft Handing Over Notes to the Transitional Team, GHS, January 2009.

Distribution pattern of health sector staff:

While there is acknowledgement of the existing disparity in the equitable distribution of skilled health workers along urban–rural and geographical axis, the precise pattern is not clear due to the absence of reliable information on the availability of health workers. The sector still lacks a reliable HRH information management system and existing databases are not regularly updated. The payroll data also has manifested discrepancies.

Table 4: Distribution of the health workforce by category

Category of staff	Total number	%
Medical officers	2026	10.1
Dental surgeons	31	0.2
Pharmacists	1550	0.8
Expatriate doctors	200	1.0
Professional Nurses	7304	36.3
Enrolled Nurses	2956	14.7
Community Health Nurses	3246	16.1
Registered Midwives	2810	14.0
Medical Assistants	430	2.1
Allied Health Professionals	588	2.9
Traditional Birth Attendants	367	1.8

Age Distribution:

The MoH has in partnership with the various agencies engaged the Ministerial Committee on Postings, collated identified vacancies and taken measures to address existing vacancy gaps. For example, steps have been taken to advertise vacancies and post staff to Regions and Teaching Hospitals based on the vacancies applied. Discussions are ongoing meanwhile to accelerate implementation on the much needed policy on a rotation system for hard to reach areas, and on secondment of staff from GHS to CHAG in view of the budget item 1 ceiling assigned to the various Agencies. In addition, Regional Health Directors are being mobilized to form Regional Posting Committees to ensure fair distribution of staff in the region and not to accept new staff who refuse to report to another region for posting. As a complementary effort, BMC Heads are urged to assist with ensuring availability of accommodation to staff posted to their health facilities, and in addition to assist to supervise the process of job allocation and to ensure that staff are assigned to their rightful jobs (for e.g. an officer being paid as a Professional Nurse should be assigned to a nursing job and not posted at the records unit to pick up files or at a store unit as storekeeper)

Staffing Norms:

The MoH developed staffing norms for the entire health sector in 1992, and concern has been raised as majority of the existing norms require updating to reflect current and emerging needs of the health sector. The MoH has recently established a multi-disciplinary task team to determine staffing norms, and a team has been tasked to undertake a review of data available on staffing norms. In addition, work is ongoing on the conduct of the workload indicator study to guide the establishment of the norms. A major challenge is the lack of readily available data for planning and decision making. To address these challenges, the MoH has put in place a mechanism to establish inter-agency collaboration in HR data collection, collation and standardization in order to facilitate analysis and dissemination of reliable HR data in the health sector. The ongoing process would however need fast tracking to enable the ministry undertaking the appropriate measures for updating the staffing norms to meet current and emerging needs of the sector.

Performance and Contract management:

The development of performance and management contract is been given priority attention at both the organizational and individual levels by the MoH. *Monitoring and Supervision tools are been developed to supervise HR activities and build capacities of agencies. The* regions and CHAG have been mobilized to make use of the tools and submit to HQ monthly progress report indicating what has and has not been achieved during the month. Inventory of existing pieces of HR policies and guidelines have been undertaken with a view to ensure that HR activities are consistent with policies and procedures[54],[55].

Furthermore, to strengthen governance and management of HR, a number of policies and guidelines were developed and disseminated by the GHS including[56]**:**

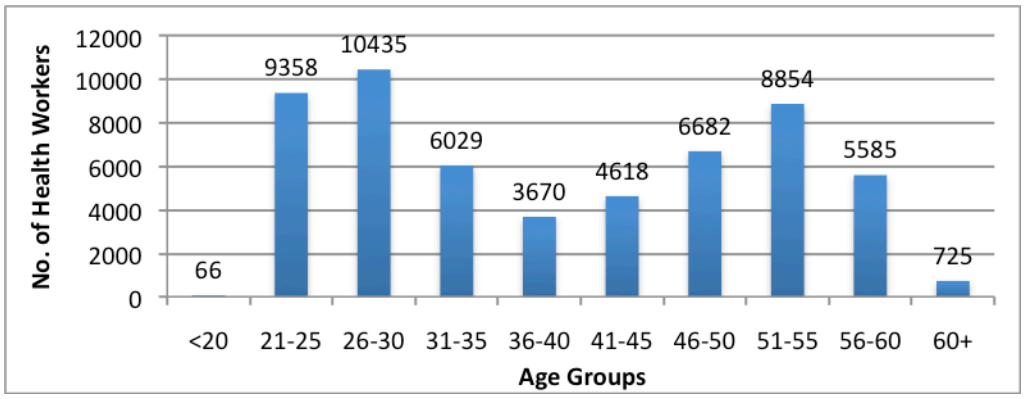
- In-service training policy (IST) and guidelines.
- Policy guidelines for promotions, postings and counselling.
- Curriculum for improving management of public health interventions in the sub region

Despite the stated achievements, feedback from the field would indicate a need to accelerate the review process and make available approved copies of performance contracts to all BMCs and stakeholders. In addition, there is need to formulate a uniform HR management structure at the Regional and District Health Directorates. Within this context the need has been expressed to encourage and train Regional and District HR Managers to effectively perform human resource management functions.

Staff Attrition:

The existing health workforce is affected by attrition of existing health workers both public and private. From available information, it would appear that the overall attrition of professional health workers is on the decline due to the several positive interventions undertaken by government between 2001 to 2007, including the recent upsurge in production interventions. The recent public payroll analysis also confirms a general decline in attrition particularly after 2006. However, a recent MoH analysis indicates that retirement from the sector as against other reasons, stands as the most consequential reason for attrition between 2004 and 2008. The picture and trend is worrisome given that majority of the health workers on the public payroll are young and relatively inexperienced (25-35 years of age), and it is estimated that some 14,439 health workers will reach the mandatory age of retirement in the next ten years.

Figure 1. Age distribution of health workforce, Aug. 2008 *Source:* Antwi and Ekey, 2009



[54] MoH: Human Resource Policy and Strategies for the Health Sector, 2007-2011
[55] Ghana Health Service: Human Resource Division, 3 Year Activity Plan 2009-2011. May 2009.
[56] Ghana Health Service, 2008 ANNUAL REPORT.

Conclusions:

The five year programme of work outlined clear strategies to improve the workforce effectiveness and performance. The MoH has taken bold strides towards attaining the stated objectives in the POW 2007-2011 including taking actions to improve health workers motivation, formation of task team to streamline policy on training and granting of study leave, quota system for study leave, creation of establishment for post basic courses (Post basic nursing, in Eye, ENT, and intensive care) review of staff grading structure and promotion system for the various MoH agencies to ensure harmonization. Already the MoH and its agencies have also taken positive steps to increase production of health workers especially middle level cadres and ongoing efforts are on course to better equip and enhance the operational effectiveness of health workers.
While commendable achievements have been recorded, three important challenges requiring urgent attention are noted. Firstly, the scarce availability of reliable data for accurate planning and analysis to achieve a comprehensive picture of issues and requirements. Secondly, unconfirmed data on impending retirements seem to indicate that the health workforce is still faced with huge attrition arising from the mandatory retirement age of 60 years. This trend is worrisome given that majority of the health workers on the public payroll are young and relatively inexperienced. It is estimated that some 14, 439 health workers will reach the mandatory age of retirement in the next ten. In addition, we observe the absence of an approved plan to address deployment disparities in the health workforce distribution and devolution of HR management functions to districts.

Recommendations:

The following are the main conclusions from this review:

- There is an urgent need to **undertake upward review the mandatory retirement age policy from 60 to 65 years**, in view of the potential loss of highly skilled and experienced health workers within the next ten years.
- **Explore opportunities to devolve HR management functions-(**including training, recruitment, deployment, incentives, discipline and pay roll management**)**.
- **Decentralize management and governance of health training schools**.
- **Establish a system for effective regulation and accreditation of middle level health workers:** promote investment to address weakness in the curriculum contents, the accreditation process, quality improvements in student/teacher imbalance, provision of essential learning materials in essential infrastructure, laboratory equipment, and functional utilities including electricity, water provision and system for HR data collection and analysis)

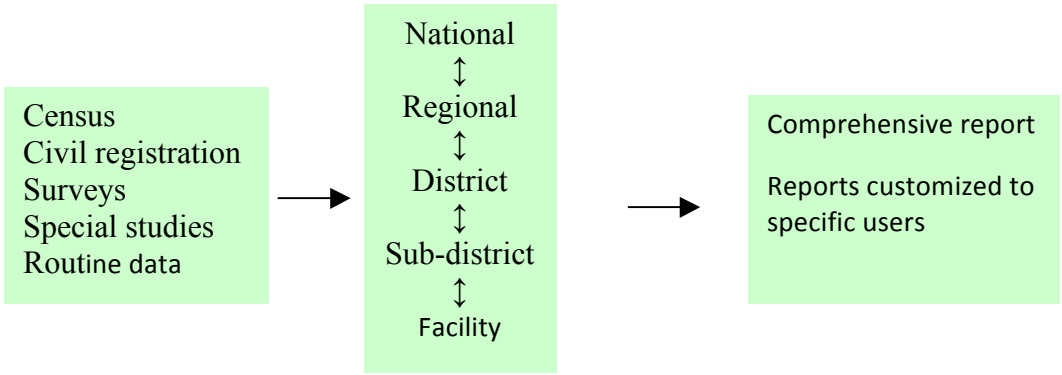
To achieve the above recommendation, major increase in funding both recurrent funding and capital investment to scale up quality of education and infrastructure for primary health care is envisaged as essential to achieve stated goals and objectives of the MoH policy document of 2007 – the *HRH Policies, Strategies and Plans (2007-2011).*

Annex A: Summary status of HR Summit recommendations

Issue	Summit recommendation	Strategies
Work force production	1. **Expansion** of health training schools to increase production of required numbers 2. **Achieve cost** reduction of training (convert allowances to scholarships, modular training, bonding and placement, link training with placement , recruit from local area 3. All agencies to develop HR plans to **accurately estimate HRH needs** 4. **Regulation and accreditation** of lower health cadres	• Progress on multiple fronts including establishment of new training schools e.g. -7 newly established schools to training midwives, expansion of facilities in existing schools to admit more students. • Planning and projection to accurately estimate HRH needs undertaken • Regulation and accreditation process commenced for other cadres. Formal accreditation and regulation for middle level health workers absent.
Staff Distribution, Skill Mix and Motivation	1. Implement staff deployment to address existing imbalance 2. Update staffing norms 3. Promote need based staff recruitment based on identified recruitment ceilings 4. Promote staff motivation schemes 5. Promote efficient and accurate documentation	a. Process to institutionalize compulsory rural posting for all health workers initiated. b. MoH is in the process of developing innovative non financial incentive strategy c. Regular production of HR returns
Health Financing	1. Negotiate and seek for increase in health budget with MOFEP to achieve the Abuja target 2. Decentralize staff emolument 3. Implement reduction strategies to reduce escalating wage bill 4. Promote private participation in health	a. Staff rationalization completed with significant saving for government b. Computerization of staff nominal roll
Staff Productivity	1. Develop performance contracts to monitor BMCs and individual performance 2. Develop need based in-service programs 3. Promote best practices and study tours 4. Devolve staff recruitment, deployment and management to regions	a. Conduct regular staff and BMC appraisals b. Institutionalize peer review forums

Annex 6. Note on information systems

The current design of the health system of Ghana demands a comprehensive health information system at national, regional, district, and facility levels in which demographic and health related data from various data collection sources such as census, surveys, special studies, as well as from routine sources are periodically updated, analysed, and disseminated. It is better explained in the diagram below:



Ghana has set a vision for the information system as "all decision making in the health sector at all levels is informed by information resources that are accurate, timely, relevant, complete, concise and readily accessible". In the bid to realize this vision, the POW 2007-2011 had set certain priorities. Table 1 below summarizes the implementation status of those priority interventions.

Priority activities 2007-2011 POW	Implementation Status as of March 2010
Implement the Health Sector ICT policy and strategy	No progress
Develop and implement a strategic plan for National Health Management Information System including a link between financial management and service delivery information	Plan developed, not endorsed.
Strengthen Demographic Surveillance Sites and community based surveillance systems	Nothing has been added on existing system.
Scale up the district wide system for information management to ensure the availability and accurate and reliable routine service based data	Inadequate input, progress not satisfactory.
Improve management of and access to health information	No progress.

Reviews are conducted every year at districts, regions, and national levels. At the end, an independent review is conducted to validate the findings that are derived from all those reviews. Table below presents a summary of implementation status of the recommendation of the annual independent review of 2008.

Urgently bring together the two systems into one repository to avoid duplication and enhance data management efficiency and effectiveness. Specifically:	
• Establish single district and regional repositories.	No progress
• Resource the district, hospital, regional and national information system to enable it to provide quality and timely health information.	No additional resource provisioned
• Develop a Central Health Data Repository at CHIM as contained in the draft Health Information Strategic Plan.	No progress
• Require RSIMD/CHIM to provide monthly information to all programmes and quarterly summary reports to defined stakeholders that require information for decision making to avoid the need for establishing a parallel system.	No progress
Improve the DHIMS database so that it can generate information to inform decision making and regular performance review meetings. Specifically:	
• Provide IT support to ensure that the DHMIS can generate district, hospital and regional health performance summary statements.	No progress
Address staffing issues. Specifically:	
• Identify districts with a shortage of health information staff and deploy and use existing trained staff strategically to provide targeted support and supervision to staff involved in district and hospital data management.	No progress
• Institute systematic investment in the development of data management capabilities rather than programme-focused and specific indicators.	No progress
Enhance analysis and use of information. Specifically:	
• Ensure districts and regions use information during performance review meetings to analyse trends and determine required action by managers and service providers.	No progress
Explore in the short to medium-term ways of incorporating management data into DHIMS to facilitate sector-wide reporting. Specifically:	
• Explore how DHMIS fields could be expanded to incorporate the specific insurance indicators required by the proposed NHIS MIS.	No progress
• Review other sector inputs (e.g. human resources, financing) and mechanisms for incorporating them into the DHIMS.	No progress

It is crystal clear from the level of past 3 years' efforts, that the commitment and investment made in the information systems, specifically in routine health information systems, severely undermines the importance of a robust routine monitoring system to realize the challenging goals of the health sector.

It should be noted here that despite the significant growth in investment in the health sector, the information system remained neglected.

The next two sections of this chapter present the brief discussion on "the achievements and constraints in overall information management" followed by "how well the available information is being used in decision making".

a) Progress made and challenges of single reporting systems and overall systems for data collection, validation, storage and analysis

During the last two decades, the information management in the health sector has been the subject of several reviews, development, and improvement. Yet, the management of routine health information (that includes disease and service statistics, human resource, finance, logistics and supplies, physical assets, etc.) faces the same challenge. The system does not have appropriate human resources, reasonable budget support, and appropriate equipment and materials.

District Health Information Management Software (DHIMS):

The District Health Information Management Software (DHIMS) aims at integrating the information management at the district level. It provides a platform for inputting any data that the health sector gathers. Nationwide rollout of DHIMS indeed was a remarkable achievement in the history of development of health information systems in the country. However, the DHIMS has several deficiencies. It does not include TB and HIV data. It does not capture some RCH data, which has been made a case for justifying a parallel reporting. It appears that there are problems in malaria, nutrition, and morbidity modules. These latter issues are simple and straightforward and being fixed by CHIM with a financial support from the Malaria control program. The main weakness in DHIMS is the lack of menu driven report modules to generate comprehensive report, dashboard reports, and program specific customized reports. In the absence of these features, the utility of DHIMS has been confined to data storage.

Despite several recommendations made in the past, the information system is still suffering from lack of appropriate ICT equipment and other supplies.

Maximizing the use of available resources is another missed opportunity observed year after year. Satellite dishes installed nationwide at facility level could be used more effectively than only transferring data to NHIA. It can be used for telemedicine, distance education, general communication, and transferring the health information.

Data Collection

Data required for managing the individual cases, managing the health unit, and managing the health system is well captured in the data collection instruments (registers, cards, forms). The DHIMS database already contains a wealth of permanent and semi-permanent data. The current data collection tools and systems are adequate for addressing the information needs of the sector.

Reporting

Information needed for managing the health sector is gathered from various non-routine and routine data sources. These include census, periodic surveys, ad hoc studies, and routine reports of health facilities. Each source has its specific purpose and its limitations. Data is routinely gathered to monitor key performance indicators and to support ongoing management of health programs. Various kinds of surveys are conducted to gather additional data which cannot be gathered through routine sources. Contrary to this principle, most monthly reporting forms have been designed to collect data in tedious detail that are rarely used in routine monitoring and ongoing management of the health system. As a result, health workers are overburdened, data quality is deteriorating and reporting deadlines are missed. Data on various age groups, gender and other variables that might

be useful in policy and strategic planning can be gathered more efficiently and scientifically through annual or biannual review of facility based records.

Data quality

Data on the collection tools are generally complete. However, errors are often made while compiling data into various variables and transcribing them into report forms. Compilation of data on too many variables is tedious and highly error prone.

Errors are also made at higher levels while aggregating data from multiple sources. Different data values are generated from different departments while the source of the data is the same. This remains unresolved as long as more than one reporting channel is maintained for reporting the same data.

A most important feature in DHIMS is that data value entered at district level cannot be changed at regional or national levels. If a correction is required, it has to be done at the point of original entry. Further, DHIMS maintains disaggregation of data by health facility or specific provider making it possible to verify a reported value at any level at any time.

Data analysis and Dissemination

Data analysis and dissemination is woefully weak across all levels. Most data are rarely analysed and used at the point of collection. The districts that receive the plethora of data on monthly reports mostly use their time in entering the data into DHIMS and forwarding to the regions. Routine analysis and dissemination is not a priority. The same applies to the regions and MoH headquarters.

A report produced at any level has never covered more than 25 percent of data available on the reporting forms. It clearly indicates that a lot of data is gathered which is never analysed and used.

Contrary to poor routine analysis and dissemination, the production of annual reports has evolved as a standard practice or culture at all administrative levels. Currently, the content and format of annual reports are not uniform. It would be ideal for each level to use a standard annual report template as a minimum requirement.

Visual display on key indicators by means of wall charts and graphs is a powerful tool to draw attention on key issues. They can be used to keep one-self reminded on the pertinent issue as well as to educate or inform others. Except a very detailed crowded chart on Guinea Worm surveillance data, barely any chart was found displayed at any institution the review team visited.

The MoH who started publishing the health information bulletin in 2000 stopped publishing after a few erratic publications up to 2004. The title of the bulletin “information for action” was appropriate, though the content and level of analysis was more academic than quick actionable. Regardless, it was a noble start of information dissemination. The ministry must reinstate periodic publication with more simplified graphs and charts and less textual descriptions making it suitable to its purpose “information for action”.

b) Extent to which data is used in Decision making and feedback

Annual review

Annual joint/peer reviews have been institutionalised at all levels. Data from various sources are compiled and presented in the reviews. However, those reviews are considered higher level requirements rather than an opportunity to reflect on own performance.

The independent review team had an opportunity to observe the interagency level review where all national stakeholders were expected to take part. It is noted that most presentations did not follow the review guidelines. Plans were not linked to achievements and explanations regarding performance were largely missing. Many stakeholders were absent during various presentations.

Routine monitoring

Routine data is primarily meant for ongoing monitoring and taking corrective actions. Corrective actions timely introduced could help achieve planned results. If routinely collected data are not used in tracking progress and taking corrective measures, no other reason can justify the collection of routine data. Routine data is more expensive than the data collected from census or surveys. The reporting forms, human resources, health workers time and IT environment altogether consumes a lot of resources.

A well structured and properly used routine monitoring system can make tremendous differences in service delivery if the delivery point has some resources at its discretion. Since facilities generate some resources, a simple systematic monitoring system instituted at health facilities can make important impact.

Exceptionally, and because of political focus, some indicators such as maternal deaths and guinea worm cases are being strictly monitored at all levels. But generally districts, regions and national programs are equally weak in routine monitoring and taking corrective measures. Despite the plethora of data available in the current routine reporting system, their use in ongoing monitoring of performance is extremely low. In fact, the health facilities lack necessary tools and guidelines.

Holistic assessment versus sub-district, district and regional league tables

A holistic assessment concept has been introduced as part of the annual performance review with a positive, neutral and negative score based on achievement or non-achievement of set milestones and sector-wide indicators. Then, all scores are summed up to derive a single summary measure. This is good for assessing the global performance of the sector. To make the resultant score useful for taking actions at sub-national levels, it would be very appropriate to introduce a league table concept to rank the annual performance of health facilities, districts, regions, and various national programs. It would encourage and incite the stakeholders for better performance.

Caution should be exercised while selecting the indicators for the league table and assigning the value to each of them. League tables should use five to seven indicators from the list used for the holistic assessment. It should cover the indicators of various performance domains such as user satisfaction, coverage of service, quality of service, efficiency, and equity. It must reveal who is doing best– and worst – to meeting health needs of the population; and who has achieved the greatest change over the year under review.

Feedback on individual report

The feedback process should start right at the health facility. Once the responsible person submits a monthly report to the facility in-charge, an internal review and feedback meeting should be organized. At the district, the person responsible for receiving the facility reports should browse through the report for data consistency and make a follow-up with the concerned facility for any errors and omissions. Then the data should be entered into DHIMS, analyzed, comparative charts created on key indicators, the dashboard report generated and discussed in the DHMT, and sent back to the health facilities. The facility data could be used for discussion on interpretation and actions to be taken during a follow-up supervisory visit at the facility. The same procedures should be repeated at the regional and national level.

The above feedback process is not happening for many reasons. Firstly, this concept is not understood by those who are supposed to practice it. Secondly, the resources required to send written feedback are not available.

Recommendations

1. Provide a separate budget line for the health information system and allocate adequate resources (for operating and maintaining the system; for training and appropriate levels of HR; and for regular replacement / updating of the IT environment);
2. Fix the problems in DHIMS and add the menu driven modules to generate dashboard report and program specific comprehensive reports. Create and link pivot tables to DHIMS (as in HISP database) and make them available to the stakeholders through the MoH website;
3. Equip the information unit at district, region, agency levels and at MoH with functional computers, A3 printers, antivirus software, internet connection, and an annual budget to maintain the system and generate the dashboard, quarterly and periodic reports;
4. Strengthen the necessary skills of all HIOs to analyse data, generate dashboard, feedback, and comprehensive performance reports, and furthermost to disseminate the information to decision makers and facilitate the use.

Annex 7. Note on capital investment

1. Background

Reviews undertaken in 2006 on the Capital Investment Plan II (2002 – 2006) assessed the sector as overdeveloping facilities and equipment in some locations and under-investing in other areas, whilst expanding the publicly provided health services beyond the limits of available operating funds and professional staffing. Added to these challenges were changes in the political and economic environment, including the movement of some DPs to Multi Donor Budget Support (MDBS), and the introduction of the Growth and Poverty Reduction Strategy (GPRS II).

In preparing the Capital Investment Plan III (CIP III, 2007 – 2011), the strategy of equity and access to quality health care still remained the primary focus, as a means to achieving the MDGs. The major objective of the CIP III was defined as *focusing on increasing geographical access, well maintained health facilities and health enhancing infrastructure with emphasis on deprived and peri-urban areas.* This objective was derived from Strategic Objective 3 of the overall sector 2007-2011 POW, which aimed at strengthening health system capacity to expand, manage and sustain high coverage of services

The long-term investment framework for the CIP III was built on the following key elements:

1) Over time, to re-appraise and subsequently to re-prioritise ongoing and proposed new projects, so as to adequately link investment policy and planning with the objective of improving service delivery;
2) To engineer a shift in resource allocations towards the primary level and the achievement of the MDGs, based on clear and objective processes and criteria applied by the regional and district health authorities;
3) To move away from the centralized planning model that has been applied over the years, and greatly improving collaboration with the political authorities at the decentralized level; and
4) To promote the use of alternative financing mechanisms, based on increased levels of private sector participation, for the upgrading and expansion of regional and teaching hospitals, as well as the construction of facilities for statutory bodies.

Based on growth rates from Actual expenditure during the CIP II period, the CIP III projected total resources available of $511 million for the five-year CIP III period, an average capital investment inflow of about $100 million per year. However funding constraints encountered in 2008 had resulted in a 50% cut in the GOG capital investment budget allocation for that year, and a consequent accumulation of unpaid bills to contractors.

Against this background, the annual CIP for 2009 defined its expenditure priorities as follows:

- Commitments such as Matching Funds required for projects funded under mixed credits/grants and payment of accumulated debts from 2008;
- Projects with 100% secured/earmarked funding;
- Ongoing projects procured under international competitive tendering with legal implications for GOG arising from delays in payments;
- Ongoing projects with high level of completion and substantial sunk cost that can be completed in 2009;

- Investments that respond to the key priorities of the 2009 POW and the Health Policy with emphasis on investments that can propel the achievement of the MDGs by 2015.

A total investment requirement of GH¢199.7 million was projected, of which GH¢160.4 million was expected from identified sources, leaving a financing gap of GH¢39.3 million. Out of the identified allocation by source, only 4.4% was expected to come from GOG, with Earmarked Grants and Credits accounting for 47.4%, NHIS for 28.5%, and IGF for 15.3%.

2. Actual Performance for 2009

Reporting on total expenditure for 2009 is still incomplete at this time. However the data available for MoH civil works and GHS transport, equipment and ICT suggests total expenditure of GH¢44.94 million, representing a 28% execution rate of the total identified annual budget. The 2009 actual reported expenditure is summarised in the table below.

2009 BUDGET			2009 ACTUAL		
Expenditure Priority	**Allocation GH¢**	**% of Budget**	**Expenditure Priority**	**Actual GH¢**	**% of Actual**
Matching Funds/Counterpart Funding for projects funded under mixed credits/grants	72,237,953.38	45.04	Matching Funds/Counterpart Funding for projects funded under mixed credits/grants	2,350,000.00	5.23
Ongoing projects procured under International Competitive Bidding with legal implications for delayed payments	7,179,540.00	4.48	Ongoing projects procured under International Competitive Bidding with legal implications for delayed payments	) 31,430,998.11	69.94
Ongoing projects with high level of completion and substantial sunk cost	13,070,769.00	8.15	Ongoing projects with high level of completion and substantial sunk cost	)	
Other investments that respond to the key priorities of the 2009 POW with emphasis on investments that can propel the achievement of the MDGs	15,046,174.00	9.38	Other investments that respond to the key priorities of the 2009 POW with emphasis on investments that can propel the achievement of the MDGs	)	
Expansion of Training Institutions	14,693,221.00	9.16	Expansion of Training Institutions	)	
Equipment, Transport and ICT	37,098,570.70	23.13	Equipment, Transport and ICT	9.086,809.91	20.22
MoH/GHS/Outstanding Bills	1,075,000.00	0.67	MoH/GHS/Outstanding Bills	2,074,422.89	4.61
TOTAL	**160,401,228.08**	**100.00%**	**TOTAL**	**44,942,230.91**	**100.0%**

Although actual expenditure could not be disaggregated for some categories of expenditure priority, the above analysis suggests that MoH retained some degree of discretion over Item 4 expenditure in 2009, in terms of completing ongoing projects and responding to POW priorities.

The analysis of 2009 actual capital expenditure by level (civil works only) shows a significant weighting in favour of the primary level, with 74% of expenditure at the District and Sub-District level, and a further 8% being spent on infrastructure at the Training Institutions, in line with the overall sector policy direction.

2009 Achievement – Civil Works

Achievements in civil works are grouped under three headings, namely initiation of turnkey projects; full completion of ongoing projects; completion of preparatory works for turnkey and bilateral sponsored projects; and reactivation of abandoned projects in the Accra – Tema Metropolis.

Initiation of major turnkey projects: Construction of 100-bed Hospital with Malaria Research Centre at Teshie, Accra with Chinese Government funding; Construction of 5 Polyclinics with specialized maternity facilities in Northern Region at Karaga, Buipe, Kpandai, Tatale, Janga and Chereponi with financial support from the Austrian Government; Construction of District Hospital at Bekwai with ADB funding; and Construction of Winneba District Hospital with Dutch ORET funding.

Full completion of ongoing projects: Feasibility study and fund mobilization for the development of a Maternity and Children's Hospital at Ridge Hospital, Accra; 10 new Health Centres with funding from OPEC; GHS Head Office complex at Limb Fitting Centre, Accra; Facilities in the following Nurses' Training Colleges: Tamale NTC, Akim Oda CHNTS, Ashanti-Mampong MTS/HATS; and Phase 1 of Bolgatanga Regional Hospital.

Completion of preparatory works including Value For Money Audits, negotiations and Statutory approvals for the implementation of the following proposed turnkey and bilateral-sponsored projects: Major rehabilitation and upgrading of Tamale Teaching Hospital with Dutch ORET funding; Re-equipping of 13 laundry facilities in selected nationwide hospitals with Belgian/KBC Bank funding; Expansion of Radiotherapy and Nuclear Medicine facility at KATH and KBTH with OPEC and BADEA funding; Development of 2 Regional Hospitals and staff housing at Wa and Kumasi with Euroget financing; Development of District Hospitals and staff housing at Madina/Adenta in Accra, Tepa, Salaga, Nsawkaw, Konongo-Odumasi, and Twifo-Praso; Phase 2 of Bolgatanga Regional Hospital; and 5 new Health Centres nationwide and 3 District Hospitals with Abu Dhabi and OPEC funding respectively.

Reactivation of abandoned projects in the Accra – Tema Metropolis: Usher Polyclinic Theatre; Maternity Block at Achimota Hospital; Upgrading of Maamobi, Kaneshie and Mamprobi Polyclinics; and Maternity and Children's Block at Tema General Hospital.

2009 Achievements - Transport

The main achievements for transport were the procurement of 4,000 motorbikes, funded in the main through earmarked funds (Malaria, TB, HIV/AIDS, etc). Due to their funding sources, the deployment of these motorbikes has targeted public health programmes, leaving out hospitals. The latter, together with the DHMTs, are being encouraged to take up the opportunity of acquiring pick-ups through a hire purchase scheme arranged by the Ministry, under which MoH has paid the initial 30% of the cost while the beneficiaries are expected to pay the balance at a monthly cost of GH¢1,500 per vehicle.

Other transport activities in 2008 – 2009 have included implementation of the Transport Operational Guidelines; quarterly drivers' training programmes; developing a three-year plan for fleet augmentation through replacement and expansion; and providing advisory services to both local and international health sector organisations.

2009 Achievements - Equipment

In the field of equipment, most of the institutional care equipment upgrading or replacement requirements have been identified through the planning process, and then funded through mixed credits under which manufacturers both supply the equipment and arrange for the credits. Major activities in this area in 2009 included the supply of essential obstetric equipment to District Hospitals and Health Centres in the Central, Eastern and Upper East Regions, funded by the UK Government under the High Impact Rapid Delivery (HIRD) Programme. Under the Clinical Laboratory Improvement Project, conventional laboratory equipment is being phased out and replaced with automated analyser, while the Spanish Protocol 2 is enabling the replacement of mortuary, laundry and medical gas systems, as well as operating theatre and obstetric equipment, in 2 Regional and 35 District Hospitals. A remaining credit facility Euro 580,000 was also released to MoH in 2009 under the Stericon project, for the procurement of user consumables, additional equipment and orthopaedic implants.

3. Implementation of 2007 CIP Review Recommendations

While Capital Investment was not included in the 2008 Independent Health Sector Review, the 2007 report did review the first year of the CIP III. The main recommendations of the 2007 Review, and the current (March 2010) status of their implementation, are summarised in the table below.

RECOMMENDATION	IMPLEMENTATION STATUS AS AT MARCH 2010
Relate CIP III priorities to the three resource envelope scenarios by applying specified resource allocation criteria (1st Call – complete ongoing projects, support to safe motherhood and child health at primary level; 2nd Call – vehicles for supervision, infrastructure in underserved areas; 3rd Call – training institutions, ICT)	Within the resource constraints, ongoing projects have been given a high priority in 2009, although it is not possible to determine how many projects have actually been completed and commissioned from the data presently available. A substantial investment was also made in acquiring motorbikes for community health services, while a hire purchase scheme was introduced to enable facilities and DHMTs to acquire pick-ups for monitoring
Enter into dialogue with MOFEP on acceptable decentralised capital investment payment mechanisms to enhance expenditure effectiveness.	Not yet implemented, capital investment payment mechanism remains highly centralised within MOFEP
Develop an overview of the total resource envelope for district capital investment.	Uncertainties over resource availability, and continuing centralisation of capital investment decision-making, have restricted opportunities for district-led resource allocation
Develop a medium-to-long-term capital investment plan that prioritises addressing inequities and achievement of MDG 4 and MDG 5, using Service Availability Mapping and Health Services Planning Methodology and Framework to identify priorities	Infrastructure development has been weighted towards modern high-tech District Hospitals and Health Centres, due to the reliance on supplier-driven Financial Credits. However the ongoing supply of essential obstetric equipment to 150 Health Centres and 40 District Hospitals under the High Impact Rapid Delivery (HIRD) Programme has made a significant contribution towards achieving the MDGs
Strengthen Planned Preventive Maintenance, by developing PPM procedures and budget allocation	Procedures have been developed but implementation has stalled, due to budgetary constraints

guidelines, implement and monitor	

4. 2007 - 2009 Issues Arising

Capital expenditure data on transport, equipment and ICT by the agencies is not readily available, reflecting inadequate information flow between GHS and MoH, and laterally within each organisation. With the exception of the reports on civil works produced by the Capital Investment Management Unit of MoH-PPME, there is no routine reporting on progress and expenditure, and no single unit or desk is responsible for collecting data, monitoring and reporting on progress against the Capital Investment Plan as a whole.

Problems have arisen in trying to reconcile operational data with with MoH annual Financial Statements. Estimated total MoH/GHS 2009 Item 4 expenditure of GHC 44.94 million (per PPMEs and SSDM data), is significantly lower than the GHC 204.70 million recorded for Item 4 per draft 2009 Financial Statement – the financial data includes loan agreements that have been entered into but not yet disbursed, and credits of GH¢196 million at the DHA level for recurrent costs of Programme activities, thereby overstating expenditure.

Forecast inflows from NHIF (46% of the total CIP III resource envelope, and 7.5% of the 2009 Budget) did not materialise or were not captured in reporting. There has been an increasing reliance on the use of Financial Credits to develop new infrastructure, often on turnkey project basis which goes against efforts to build capacity within MoH/GHS - 65% of actual inflows were from Financial Credits, mostly at the level of District Hospitals. There was very limited investment of GOG funds at the sub-district level, with only 3 new CHPS Compounds actually funded by MoH in 2009.

Implementation of the planning methodology and framework has been restricted, and hence the facility rationalisation agenda has stalled – Districts continue to develop proposals for investments, but funding for implementation is limited, and decisions on capital investments are sometimes based on political considerations and funding availability rather than technical grounds. One example of this is the Austrian-funded project for construction of Polyclinics/Health Centres – although the selection of locations was directed towards the Northern Region by use of the Service Availability Mapping in the first phase, it has been moved to the Upper East Region in the next phase, although the Northern Region continues to be underserved.

Capital investment has made only a limited contribution towards achieving the MDGs in 2009. Out of an estimated 6,400 CHPS zones required nationwide, over 2,300 have been demarcated but only 500 made functional, out of which a mere 300 are completed with a compound for the CHOs. District Assemblies' budgets are increasingly constrained in their efforts to provide CHPS infrastructure, and the November 2009 Joint MoH – Partners Business Meeting noted that "in the absence of sufficient compounds, CHOs are being placed at health centres, thereby defeating the purpose of their training". The approach of 'staff before infrastructure' therefore appears to limit the CHOs' ability to undertake sustained primary care work in the communities.

DHMTs and facilities at the District level appear to be using their own initiative to acquire small items of medical equipment and ICT equipment through their IGF surpluses, although these are mostly reported as Item 2 expenditure, in order to get around the central control on Item 4 expenditure (this may account for some of the apparent over-expenditure on Item 2).

Mobility at the District level appears to have been considerably enhanced by the acquisition of 4,000 motorbikes in 2008–2009. The hire purchase scheme for acquisition of pick-ups has generated

considerable interest from DHMTs and facilities, although there are uncertainties over how they will be able to meet the monthly payments.

It appears that little attention is being paid to the recurrent maintenance cost implications of new capital investments, especially for the modern Polyclinics and District Hospitals currently being constructed in an era of increasingly limited availability of Item 2 funds.

5. Recommendations

- The MoH should hold regular high level meeting with MLGRD and NDPC with a view to improving collaboration on the CHPS, as recommended by the November 2009 Business Meeting Aide Memoir. Without a concerted effort to ensure the presence of CHOs in the communities, Ghana will struggle to achieve the MDGs.

- As its contribution to the substantial investment needed nationwide, MoH should ring-fence GH¢15 million from its capital budget per year for the next three years, to provide about 600 complete CHPS compounds over the period. MoH will then be seen to be making a real commitment to implementing the CHPS programme, and will be in a stronger position to demand contributions from District Assemblies for more of these facilities.

- The problem of monitoring physical progress and reporting on financial expenditure for capital investment (including transport, equipment and ICT) persists. The earlier well-functioning systems for monitoring in the past, have fallen into disuse and have not been replaced by any alternative systems. It is recommended that the Capital Investment Management Unit (CIMU) of the MoH PPME should be tasked to coordinate quarterly monitoring and reporting to the Director of PPME on progress and expenditure on all capital investment. This information should be validated by quarterly monitoring visits to the Districts by MoH and partners, to assess budget implementation.

Annex 8. Note on health financing and health insurance

1 PFM in the health sector

The health sector faces a number of challenges with regard to public financial management. The credibility of the health sector budget, the predictability and timeliness of disbursements to different levels in the system, the incomplete information on district, regional and NHIS expenditures and the accuracy of the financial reporting are all factors contributing to sub-optimal results in health sector delivery. These issues need to be seen in the broader context of the functioning of the PFM system in Ghana (all sectors). Nonetheless, the MoH should be able to take appropriate actions within its own domain.

PFM working group

The move from DFID, the Netherlands and Danida from pooling funds into the Health Fund to providing SBS from 2008 onwards has to some extend formalised the issue to strengthen PFM in the health sector. The Framework Memorandum for SBS partners commits the GoG to continued efforts to strengthen PFM, as follows: "*Strengthening Public Financial Management (PFM) is a requirement of budget support programmes. Within the existing framework of the MOFEP PFM programme, signatory Ministries and signatory DPs will jointly develop a programme for PFM strengthening in the health sector in the first six months of implementation of this FM. The programme will be sequenced and integrated into the APOWs starting in 2009 at the latest.*"

Box 1. Key findings on PFM in the health sector

- The health sector still leads in PFM but without a conscious effort to build and maintain the fundamentals.
- The pre-requisites for effective financial management in the health sector need immediate attention to ensure a sound foundation for investments in improvements.
- A coordinated effort to clarify roles and linkages across the sector for ensuring accountability must be made and sustained.
- A structured approach to performance management that rides on the existing rigorous annual planning and review process must be put in place. This system must be decentralised across agencies, levels and BMCs and tied to an incentive and sanction system
- A well structured institutional mechanism for environmental scanning and risk management.
- A systematic and structured model for identifying capacity needs in a manner that is linked to policy priorities and targets and coordinated such as to improve outputs.

Source: PFM issues paper, December 2008

A formal process in this direction started in June 2008 when interested stakeholders formed a Working Group and agreed on a two phased approach. Phase 1 involved the production of a MoH Public Financial Management Strengthening Issues Paper with the objective to 1) map current activities related to PFM strengthening both within the MoH and her agencies at central and decentralised levels; 2) identify outstanding concerns, and 3) to propose actions necessary to address those concerns. This study, carried out with external technical assistance, was finalised in December 2008. As part of phase 2, the PFM Issues Paper was discussed and commented on among stakeholders in April 2009. The Working Group met on a couple of occasions in 2009 for further discussions on PFM-related concerns. The Working Group's main achievement in 2009 was the development of a framework for further actions, listing 57 (non-prioritised) activities including the responsible unit, a timeline and budget. Beyond this milestone (one of the recommendations of last year's review), implementation of the identified activities were generally slow.

One of the PFM-related outputs that materialised in 2009 is the finalisation and printing of the updated version of the "Accounting, Treasury and Financial Reporting Rules and Instructions" (ATF) which became effective from January 2010. The AFT will standardize and improve the financial management procedures and processes within the sector and guide financial auditing and reporting. The update was needed to incorporate legal acts (e.g. the Public Procurement Act and the Internal Audit Agency Act) and policy changes (introduction of NHIS, HIRD programme) after the publication of the first ATF in 1997. A training programme on the ATF started in the first quarter of 2010.

Besides the realisation of the long awaited ATF, little progress has been made. The members of the Working Group were hampered by the lack of budget releases and were generally too occupied with their regular tasks to actively drive the agenda. During the Health Summit in November 2009, concerns were raised again about the lack of effective financial management in the sector including continuous delays to strengthen this area. It is therefore recommended to take institutional measures to assure that the PFM strengthening plan will stay on the agenda in 2010. DPs could play a more active role by supporting temporary assistance in this area. Further, it is recommended to prioritise between the 57 activities. The sector will benefit for instance from improving the link between the MTEF (on-budget) with the PoW (on-plan) and the FS (on-account) to be able to provide budget performance feedback. But besides the more complicated matters, the Working Group can focus on some quick wins: Sector Budget Committee meetings to take place, solving the IGF double counting in the MTEF and sharing of information on the budget allocation formula between NHIS, GHS and MoH.

2. Allocations to health

Based on the corrected Annual (Supplementary) Budget Statement, the allocation to the health sector as a percentage of the total fiscal space for 2009 is 14.6 percent (see also holistic assessment indicator 27 for an explanatory note). Double-counting of a significant proportion of IGFs which is funded through NHIF could overstate the true MoH share of the budget. On the other hand, substantial levels of off-budget financing are not included in the presented figures. All in all, the allocations to health grew in nominal terms with 25%; about 7% in real terms based on an average inflation rate of 18% in 2009. In relative terms as a proportion of the MTEF allocation there was a slight decline of 2%. The total allocation is considered relatively stable and in the margin of the Abuja-target of 15 percent.

Nominal MTEF allocations to health 2006 – 2009 (GHc '000)

	2006	2007	2008	2009
MTEF allocation – Health	478,655	563,756	752,233	921,929
MTEF allocation – Total	2,948,398	3,869,832	5,059,868	6,446,157
% MTEF allocation to Health	**16.2%**	**14.6%**	**14.9%**	**14.6%**

There is a difference between the MTEF allocations to health and the PoW budget. Not all earmarked funding captured in the PoW is included in the MTEF. Of MoH's anticipated earmarked funding of GHc 225 mln (Needs final check for final version), only GHc 82.6 million (37%) is included in the MTEF. There are no satisfying explanations for the difference. Some might be due to handling of loans/mixed credits for capital, and some part is due to MoFEP practice of discounting projected external aid inflows due to previous low absorption and/or disbursements.

In turn, not all funding is captured in the PoW. Sensibly, only funds which are fully aligned with the programmes and activities stipulated in the PoW should be included. The reality is that much of the off-budget and part of the earmarked funding does not support the sector's direct programmes. Neither does the ministry have direct control over them. Including all these funds would create the misleading impression that much funding is available to support the health sector's programme of work.

The challenge for 2010 is therefore to improve further alignment with the PoW and MTEF. A number of initiatives in this respect have already started:

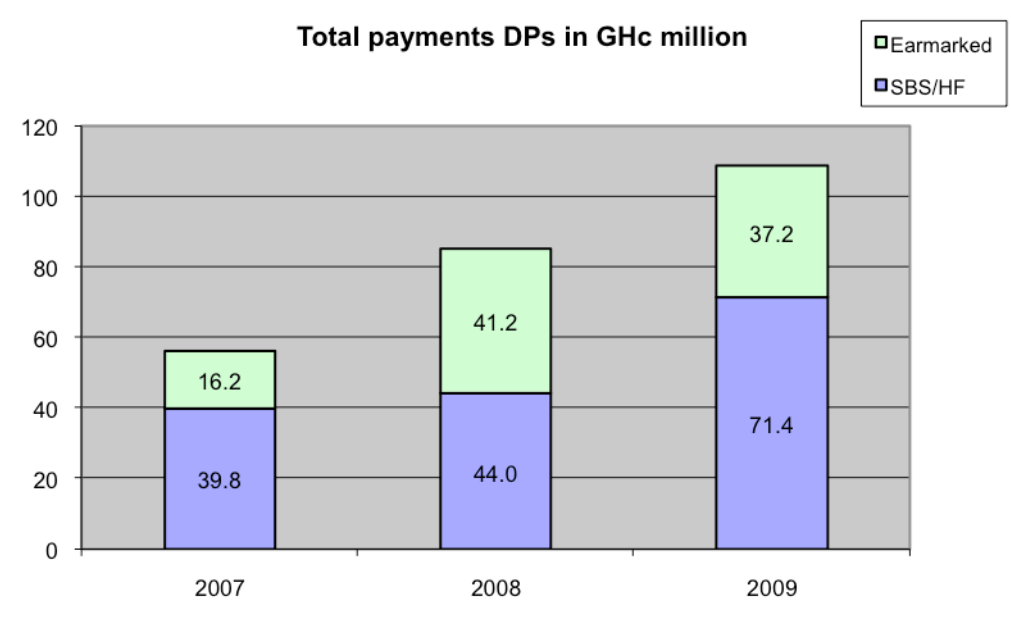
- At Central level, the MoH already uses the sector dialogue to bring partners providing earmarked funding on board to align the envisaged activities with the overall PoW. USAID already joins the discussion table and this is seen as a welcome initiative. Similarly, the Global Fund Secretariat has been asked to be represented in the dialogue.
- A format for submission of indicative budget information from earmarking partners has been developed to strengthen capture within plans and budgets. Most DPs use the format (in line with activity 5 of the PFM strengthening plan).
- There is a team currently re-drafting the CMA, and this draft will include the earmarking donors.
- As a follow-up on one of the action points of the Health Summit in April 2008, the MoH and DPs prepared a MoU on earmarked funding. For the moment, the MoU is still a draft.

The trend of changing health financing sources continued in 2009. The relative shares of the GoG and DPs further declined in favour of increasing IGFs through the NHIS.

Trends in Partner Funding

By the end of 2009, DPs contributed GHc 108.6 million to the health sector out of which 37.2 million (34%) was earmarked to specific MoH programmes. This is lower than in 2008, when almost half of the on-budget donor contributions (48%) were earmarked, the major part (71%) being the contributions by the Global Fund. The Health Fund/SBS contributions therefore relatively gained on importance again. It is important to note though that in 2008 the MoH transferred GHc 10 million (equivalent to 2/3 of the SBS from DFID) to the NHIA for the free Maternal Delivery programme; an

amount therefore not captured in the 2008 MoH Financial Statement. For 2009, another GHc 10m allocation for free maternal delivery has been made but was actually transferred to the NHIS by the end of year. The full DFID SBS is therefore (still) included in the figures thereby suggesting that more funding is available to the MoH.



Source: FS 2007, 2008 and 2009 (draft)

3. Expenditures on Health

According to the draft Financial Statement 2009, the MoH realised a total revenue of GHc 969.5 million, against a total expenditure of GHc 915.9 million.

Table 1. Expenditures per item, 2005-2009, GHc million

Expenditure	2005	2006	2007	2008	2009
Item 1 - Personal Emoluments	142.4	235.2	264.8	325.0	395.6
Item 2 - Administrative Expenses	38.4	27.4	53.5	47.1	65.1
Item 3 - Service Expenses	95.4	130.0	159.2	234.5	250.6
Item 4 - Investment expenses	73.0	109.5	86.1	98.9	204.7
Total	**349.1**	**502.1**	**563.6**	**705.5**	**915.9**

(item 4 2009, is probably incorrect, awaiting further information)

Table 1 summarises the relative expenditures and performances per item in 2009 with the 2008 figures in between brackets which are further explained below.

Table 2. Overview of relative expenditures and performance on expenditures per item, 2009 and (2008)

	Item 1	Item 2	Item 3	Item 4
Share of total expenditures	43.2% (46.1%)	7.1% (6.7%)	27.4% (33.2%)	22.3% (14.0%)*
Allocations last five years	Between 41 and 47%	Between 5 and10%	Between 26 and 33%	Between 14 and 22%
Main source of Funding	GoG	IGF	IGF/MoH Programmes	Financial Credits
Share of GoG expenditures	96.1% (97.1%)	1.4% (2.8%)	2.1% (3.5%)	0.4% (2.1%)
Share of total per item going to the regions	12.1% (12.5%)	12.6% (13.8%)	15.3% (9.2%)	0.4% (13.0%)
Share of total per item going to the districts	57.3% (45.0%)	53.7% (40.6%)	41.0% (46.9%)	96.5%* (29.4%)
Predictability GoG / Programme Funds	yes	No	No	Yes
Timeliness GoG funds	yes	Yes	No	-

(*) Financial Credits are over reported in 2008 FS and probably also in 2009. 2008 figure has been corrected by reducing item 4 with GHc 451.4 million.

Item 1 – Personal Emoluments

The majority of funds, around 43 percent of the total expenditure, is used for Personal Emoluments payments. In fact, almost all GoG funding is used for item 1. In 2006, a political decision was made on a substantial wage increase as an incentive for staff motivation and to reduce the risk of losing health workers to other (private) sectors or abroad. Since then, the MoH managed to stabilize the relative share spent on wages. None of the health workers reported any structural issues on the payments of personal emoluments in 2009. The field visits confirmed that staff at all levels receive their salary payments and without delays. While being the largest expenditure item, the supervision on item 1 is relatively weak. Through the introduction of a quarterly payroll census – introduction planned for 2010 – the Financial Department in cooperation with the General Administration wants to obtain accurate information from each health facility director on the number and location of workers and to clean the payroll from names who for various reasons, have been out of the system but are still on the payroll.

Item 2 - Administration

One of the consequences of the high expenditures on wages is that it leaves limited resources available for other non-salary recurrent expenditures. The funds available for administration at the regional and district health authorities seem to fluctuate heavily year-to-year, scoring badly on predictability. In 2008, shortfalls on the overall health budget were settled by reallocating the budget from items 2 and 3 to item 1 to safeguard salary payments. In 2009, item 2 saw a budget cut of around 50% when the final budget was approved in around March. This was supposed to cut down on "waste and inefficiencies" but was not realistic and MoFEP ended up paying out of contingency through a supplementary budget. These shifts in expenditure shares cause considerable difficulties at regional and district level. Since these budget reallocations are not monitored on activity level in the financial statement, it is important to signal the growing imbalance between salary and non-salary expenditures and how this affects service delivery reported elsewhere.

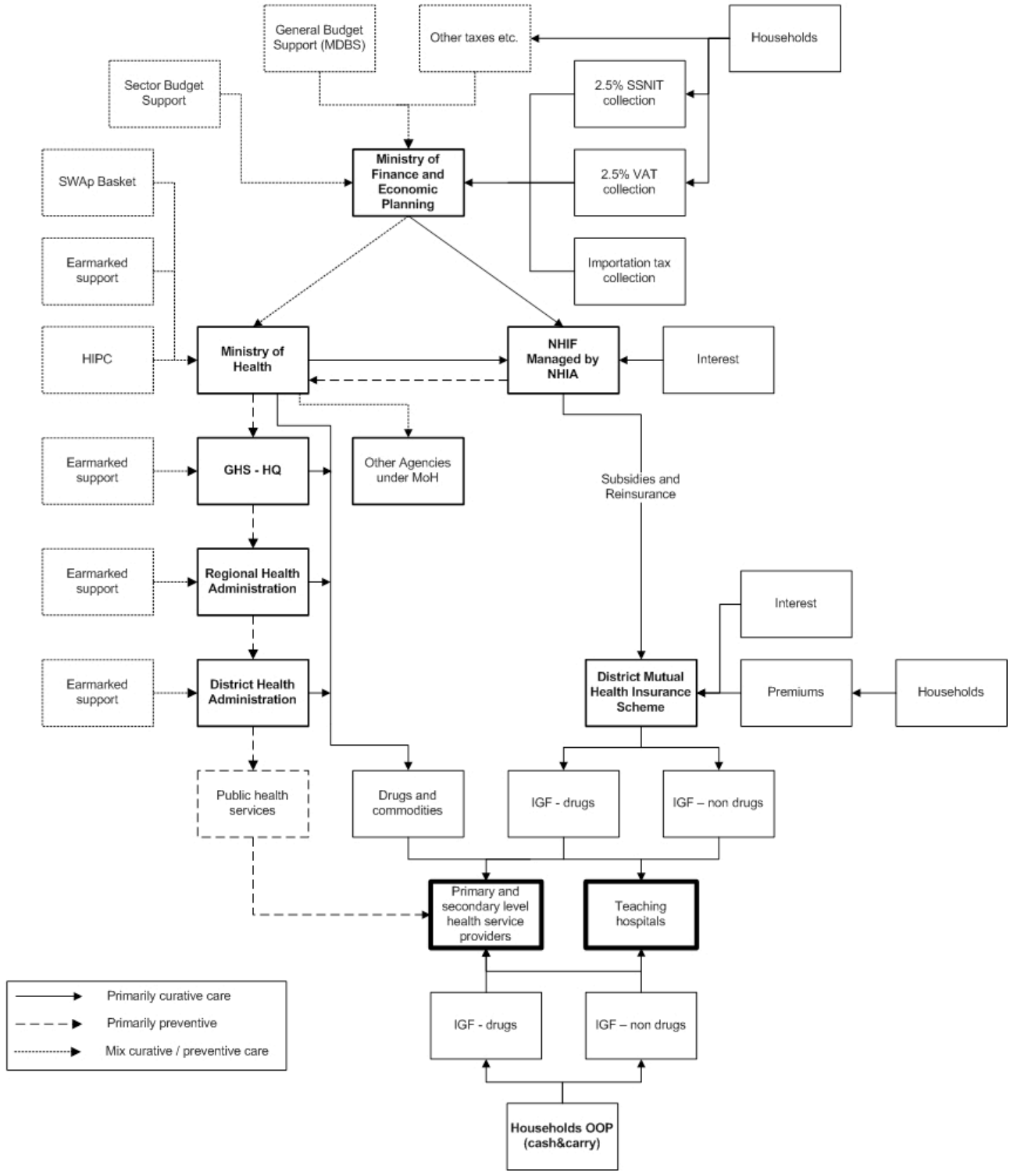
Item 3 - Services

The figure below illustrates the flow of funds under item 3. Both preventive and curative care are paid from item 3. The current structure of the financial statement makes it impossible to distinguish between preventive and curative care expenditures.

Curative services are solely covered from the facility's IGFs through the NHIS and Cash and Carry. In addition, the MoH allocated (but not yet transferred) GHc 10 million (equivalent to 2/3 of the SBS from DFID) to partially subsidize the NHIA's free Maternal Delivery programme.

Preventive health services are paid directly from the MoH Budget. The NHIS contributes to the promotion of preventive care (allocated to public health programmes as well as certain infrastructure improvements) by allocating a certain amount of NHIS revenues to the MoH. In 2008, the NHIS contribution was GHc 42.5 million. There are no rules to determine the NHIS contribution to the MoH; available budgetary space seems to be the main criteria. This would also explain the lower planned contribution of GHc 30.3 million in 2009.

Simplified flow of health funds – Item 3



GHS has the technical responsibility for the implementation of the MoH public health programmes (including the HIRD strategy) and uses allocation formulas to distribute the funds to the Regional Health Authorities which in turn allocate the funds to the districts. The MoH Programme budget is supplemented by (earmarked) donor support which enters the systems at different levels. The main contributors of earmarked funding are the Global Fund for HIV/AIDS, TB and Malaria and USAID, the latter is not included in the national financial reporting system. Although not substantiated by figures, the feeling exists that preventive care is loosing ground compared to curative care, especially since the introduction of the NHIA and IGF. If true, this is would be an alarming development that needs to be altered. More information and analysis is needed in this regard.

There were a number of developments in 2009 which created financial challenges for service delivery at the regional and district level:

- Utilisation and therefore also costs of curative care further increased.
- The provision of curative services was heavily challenged by the backlog on NHIS claims processing which has created serious liquidity shortages at provider level.
- The move of some donors from Health Fund to SBS resulted in extra delays in the chain of disbursements in particular from the MoFEP to the MoH. The predictability of funds for item 3 deteriorated further in 2009.
- The MoH had the tendency to earmark high volumes of SBS funds to particular Health programmes, thereby limiting the 'flexible funds' at regional and district level.
- Unforeseen expenditures, like an additional GHc 2 million for the Influenza pandemic in 2009, were taken out of the item 3 budget, thereby further challenging the objectives of the PoW under item 3. Unforeseen expenditures like these are expected to be paid from the MoFEP contingencies budget, but access to and slow releases from the contingencies hamper a fast response in case of urgency so that item 3 is used instead.

The main issues are further discussed below:

Timeliness of GoG disbursements

The year 2009 has been extremely weak in terms of item 3 disbursements. The first GoG item 3 **tranche** with a Warrant Date of 3 February was received at the Bank of Ghana account on 28th of April. By the end of June 2009, only 12% of GoG item 3 had been released. The disbursements to the regions and districts consequently were even further delayed. Some of the districts visited reported their first receipt of the year in the third quarter.

MoFEP and MoH see the change of Government as the main explanation for the delays in disbursements, but the fact that item 3 is based on cash management is another important factor. Unlike for item 1 where MoFEP uses temporarily loans with BoG to pay personal emoluments, item 3 is only released when the balance of account is positive. This system is accepted as a fact of life; MoH does not actively negotiate for faster disbursements.

Timeliness and allocations of Sector Budget Support

SBS as a new aid modality is not yet fully understood. SBS is kept on a separate account and still reported and tracked separately in the MTEF, PoW and FS while it should actually be treated as GoG funds. The MoH has to file a separate application form to the MoFEP to access the SBS. This process takes a long time. At the beginning of February the MoH applied for the Netherlands SBS which was transferred to the bank account half May i.e. three months later. The Danida SBS took even longer with an application date at the end of April and a lodgement date in the beginning of October.

Because SBS is not integrated into the GoG funds, it is possible to track in the PoW how the MoH has allocated the SBS funds. Interestingly, only GHc 1.5 million out of GHc 54.9 million (less than 3%) is available for operational costs for MoH and its agencies (excluding NHIA). The remaining part is intended to secure:

1) the central procurement of commodities (like vaccines, contraceptives, ITNs and drugs)
2) the implementation of public health programmes (like MCH campaigns)
3) Health System Strengthening;
4) Public Finance Management strengthening;
5) Equipment maintenance and reagents.

The latter ring-fenced item should actually be paid by the facilities from IGFs, but some of the larger equipment manufacturers have negotiated that their maintenance contracts are directly paid by the MoH and not by the facilities. The total value of these contracts is GHc 10.4 million, about 19% of total SBS.

District Planning

As stated above, the current reporting structure allows commenting on the allocations of SBS. In principle SBS can be allocated by the MoH according to needs. While there are certainly positive elements on earmarking at this level it is also important to signal that at district level these high volumes of earmarking are felt as a big obstruction which also undermine the meaning of district health planning and budgeting. The limited and late releases on item 2 and 3 combined are placing the DHAs further under pressure. In 2009, GFATM and HIRD funds were important sources at district level to keep the system running. One of the district visited started a pilot with an innovative concept on the 1st of January 2010. This District Authority assists the district health centres with NHIS claim processing before submission to the DMHIS. In turn, the District Authority and the district health centres have agreed that the DA keeps the value of 30% of the reimbursed claims for services (no drugs) which is used to support the health clinics with the implementation of the public health programmes.

4. National Health insurance Scheme

The NHIS did not provide membership or financial data. Instead, the team used provisional estimates from the Allocation Formula 2010 (version October 2009), provided by the MoH.

Analysing NHIS enrolment is complicated because only the numbers of registered exempt groups are available. There is no information available on the number of premium paying registrants. In addition, NHIS membership needs to be renewed on an annual basis and there is no overview available on valid card holders. With this important remark in mind, the available estimates do show a significant growth. The total registrations of exempt groups by the end of October 2009 were 9.7 million compared to 8.8 million in 2008 (+10%).

The exempt groups consist of the following categories: indigents (3%), under 18 (70%), above 70 (10%), SSNIT pensioners (0.7%), SSNIT contributors (9%) and pregnant women (7%). The definition of indigents is rather strict and only about 300,000 registrations fall in this category. Even though outreach activities were reported by the DMHIS, the increase in this category has been very limited in 2009 (about 6,000 persons). Several options have been discussed on how to include the poor from what is supposed to be a social health insurance scheme. Cooperation is sought with the LEAP programme of the Ministry of Social Welfare to better target the poor.

The main source of income to the NHIF are the CEPS collection, the 2.5% VAT and 2.5% SSNIT collection. The releases by the MoFEP by the end of November totalled GHc 248 million out of which GHc 115m were funds due in 2008, leaving a balance of GHc 133.5m as funds received for 2009. With a total expected revenue of GHc 361.8m for the whole year, this would imply a final release in the last month of GHc 113.3m. This is rather unlikely and probably will result into a carry over to 2010 comparable to last year. Total payments are expected to be GHc 463.7m with an expected net deficit of GHc 206.9m financed from the reserve funds (GHc 169.4m) plus opening bank balance of GHc 37.5m.

	Expected revenues 2009		Expected expenditures 2009
MoFEP total releases	361.82	Subsidy – Exempt Group	246.30
Less releases due in prior year	(115.00)	Admin. Support and Logistic	32.10
MoFEP releases for the year	246.82	Reinsurance	40.00
		Support to preventive services	41.50
Funds Free Maternal Care	10.00	Health service investment	68.52
Reserve Funds	169.38	Authority Operations	12.27
		MIS & ICT Solutions	10.83
		Head Office Building	6.18
		Investment	6.00
Total	426.2	Total	463.70
		Net Balance	(37.50)

Except for the newly introduced free maternal health care there is no explicit link with the overall sector policy. The subsidy for each exempt group in 2009 was the same (GHc 18) with the exception of pregnant women (GHc 20). The allocation formula is thus kept rather simple, which is done on purpose, but at the same time does not distinguish between different health care needs and related costs per exempt group. The flat allocation fee does also not provide an incentive to DMHIS to actively register 'more expensive consumers' such as the poor. The practical value of the allocation fee is limited, because the providers prepare their claims and are reimbursed based on the DRG classifications. The allocation fee is thus only relevant to calculate the total allocation to the DMHIS, which in practice will get reinsurance when the allocated funds are inadequate. The budget for reinsurance was GHc 8.32 million in 2008 and has increased to GHc 40 million in 2009, indicating an increased need for reinsurance.

The actual expenditures on exempt groups till October 2009 were GHc 212.9m, a significant increase of 64% compared to the GHc 129.7m in 2008, yet, within the budget of GHc 246.3 for 2009. Audited financial statements are needed to be able to make more comprehensive conclusions on the financial situation and sustainability of the system.

Claim processing

As clearly outlined in last year's review, there are considerable delays in the chain of claim processing, both upwards from the providers preparing and submitting their claims to the DMHIS as well as downwards in subsidy payments, reinsurance and reimbursements of claims. At the end of 2008, the health facilities had outstanding claims worth GHc 49 million. The outstanding claims at the end of 2009 are not available but all qualitative information suggests a further increase.

A large proportion of claims is still handled manually. The introduction of the DRG system is generally felt as an improvement, at least for inpatient services and when compared with the previous user fee system, though there are still some ICT-related hick-ups to overcome. For OP services and first line facilities, it is felt that the DRG system may be too complicated. Regarding ICT-related hiccups, there are for instance delays in receiving a valid membership card, during which period the DMHIS is allowed to issue temporary cards, but claims from members with a temporary card can't be vetted through the automatic system.

Due to the substantial growth in membership and utilisation of services, the DMHIS don't have the capacity to handle all claims in time. During one of the field visits, the scheme manager of the DMHIS pointed out to receive about 30,000 claims a month. With an average capacity to vet 30 claims a day per staff member and with only 2 staff members available for vetting, the scheme has a structural problem which is currently addressed with assistance from the regional NHIA office and by overtime work but for which no long-term solution is sought, hanging the new Health Insurance Act.

The DMHISs lose a lot of time on filtering for wrong or false claims. Examples of these rejected claims are for instance cases in which the:

- Claim has no ID-number
- Claim lists prescribed drugs outside the medicines list and also charge above the approved prices for drugs
- Claim is filed as though the patient was an inpatient while he actually visited the outpatient department
- Claim files treatments not meriting the diagnosed ailment and is not in compliance with the standard guidelines for treatment.

In particular the latter category causes frustration at the providers level who feel that the standard guidelines are too strict, leaving no room for different medical interpretations for the patient's sickness. There is also no clear cut solution on these kind of rejected claims. In principal, they should be returned to the provider for correction but it is unclear to which extend this is happening. Claims rejected by the mutual result as bad debt on the balance sheet of the provider.

Sustainability of NHIS

As part of the WB-funded Health Insurance Project, an actuarial study on the sustainability of the NHIS is ongoing. Preliminary results conclude that at this moment in time, the NHIS is sustainable though the situation starts getting critical. The study is modelling different scenarios including some macro-economic developments that may influence the revenue generating capacity of the NHIS. For instance, the NHIS may benefit indirectly from higher volumes of VAT income through increased consumption levels from future oil revenues or directly by increasing the VAT levy. While these kind

of scenarios are interesting to investigate, the number of assumptions is too high to rely on. As it stands now, only demographic growth may already turn the balance. Therefore, the sector needs to focus on rapid actions to rationalise use of services, control volume and price of drugs prescribed and detect fraud and abuse by providers or patients.

Currently, there are no imbedded mechanisms in the NHIS to impose good quality of care. Through the Norwegian Trust Fund, the WB is starting up a pilot on a results-based financing mechanism for primary health care services. If the results are positive, it may direct policy decisions for upscaling to other districts.

Other ongoing research and activities concern the rationalisation of drugs. The NHIA has put in place some control measures like a formulary based on the Essential Drug List with reimbursement prices based on median prices observed in the market, as well as prescribing guidelines for common conditions. The investments in a nationwide IT system should further provide the possibility to detect indications of irrational use, over-use and fraud by patients or providers.

Changes to the proposed Health Insurance Bill

Growing unease of the NHIA on the functioning of the DMHIS as independent, autonomous and decentralised companies with their own governing boards, subsidised by the NHIA but without clear supervision or administrative and financial control mechanisms has led the NHIA to commission a study which informed a revision of Act 650 on the health insurance law.. Simultaneously, the Act covers issues like the benefit package, tariff structure, quality of care etc. Box 2 below summarises the main changes proposed by the revised Act. At the time of writing, the Draft Act has been sent to Parliament.

Box 2 - *The key changes of the proposed Health Insurance Bill*

1. The establishment of a National Health Insurance Commission, with regulatory authority over the National Health Insurance Scheme and any Private and Mutual Health Insurance Schemes, and with an expanded membership to cover critical stakeholders.

2. The establishment of one National Health Insurance Scheme to absorb all the District Mutual Health Insurance Schemes in existence, to operate as District Offices of the Scheme, with immediate operational and administrative oversight by regional offices of the Scheme. This National Health Insurance Scheme will have the authority to process and pay claims to service providers all over the country.

3. Ensuring more structured collaborations and interactions between the Ministry of Health (MoH), the Ministry of Finance and Economic Planning (MOFEP), the National Insurance Commission (NHIC) and the National Health Insurance Authority (NHIA) and between the Regional and District Offices of the Schemes and the Political and Administrative Authority in the Regions and Districts.

4 Ensuring that at least ninety percent of the National Health Insurance Fund (NHIF) is utilised to meet the core functions of the NHIS.

5. The provision of a legislative avenue for the provision of various tiers of health insurance services by regulations made by the NHIC.

6. Refocusing attention on quality of healthcare by strengthening and clarifying licensing, certification and regulation

7. Ensuring local voice in the quality of healthcare service and the general operation of Health Insurance Schemes through a three-tier system of complaints and dispute resolution procedures.

8. Ensuring more consistent interaction between the NHIS and other social protection laws and programmes; and

9. The creation of additional sources of revenue for the National Health Insurance Fund and the establishment of a Committee to manage the Fund.

Source: Draft policy and legislative proposals for reform of the NHIS

Annex 9. Note on CHPS

The Community-based Health Planning and Services (CHPS) initiative is a program strategy adopted by the MoH as a national programme to bridge the gap in health care access. CHIPS is designed to translate innovations from an experimental study of the Navrongo Health Research Centre (NHRC) into a national program for improving the accessibility, efficiency, and quality of health and family planning services (Binka et al. 1995; Pence et al. 2001; Debpuur et al. 2002). Within the Five Year Programme of Work 2007-2011, the CHPs implementation is designed to guide national health reforms to support community-based primary health care as component of the pro-poor services[57].

CHPS was launched by the MoH with a view to improving accessibility to primary health care. This was against a background that despite the existence for two decades of "health for all" policies, in 1990 more than 70 percent of all Ghanaians still lived more than eight kilometres from the nearest provider, and rural infant mortality rates were 50 percent higher than corresponding urban rates (MoH 1998). Hence improving access to health-care delivery, therefore, remained a primary goal of health-sector reform in the 1990s.

At its core, the Ghana Community-based Health Planning and Services initiative brought to an end various vertical programs and established mechanisms for the decentralized administration of health care. This initiative involves a process of evidence-based organizational change for extending the logic of the sector-wide approach to the community level.

Among the essential elements of the CHPs intervention is the creation of community health compounds. Community health services require a simple facility that provides a room for the community health officer's living area and another for a clinic. Developing such facilities contributes to community ownership of the CHPS initiative by involving local leaders in planning and resource mobilization and volunteers for construction work. In addition, CHIP also promotes procurement of essential equipments for primary health care services and logistics (including bicycles and motor bikes), plus posting community health officers to the compounds. The posted officers are expected to carry out clinical and community outreach services including making household visits to provide family planning services, health education, and ambulatory care and outreach clinics for childhood immunization. The CHIP outreach is designed to serve as a vital referral link between the health facilities and community.

Current Status of CHPs:

An in-depth review of the CHIPS was undertaken as part of the annual health sector review 2008 with mixed results highlighted below[58]:

- CHPS involved six general implementation activities "CHPS Milestones" including planning, community entry, community compound construction, community health officer, essential equipment and volunteers. Completion of these six milestones heralds a functional CHPS.
- Evidence suggest that the definition and understanding of CHPs is not consistent across board, and hence most of the CHPS programmes were focusing on building compounds for curative services and little outreach services to the detriment of preventive and promotive programmes.
- CHIPs compounds have grown from 19 in 2000 to 401 in 2008 though overall implementation of the programme of the CHPS programme nationwide has been below average (only 31% of the planned output).

[57] Frank Nyator, J. Koku Awonor-Williams et al "The community based planning and services initiative (CHIPS): Fostering evidence based organizational initiative in a resources constrained setting"; 2003. No 180. Population Council

[58] In-depth Review of the Community–based Health Planning services (CHPS) : A Report of of the Annual health Sector Review 2008. Final Report, Accra, April 2009.

- The necessary partnership among stakeholders (local government, communities, NGOs and development partners) and required buy-in for the effective commencement of the CHPS has in practical sense not materialized.
- Training of the Community health Nurses has been very successful with a school established in each region. While about 1500 CHN have been absorbed into the GHS, the adequate deployments of midwives remain a challenge.
- Limited community mobilization skill for CHOs, hence community participation and mobilization component of CHPS is weak leading to more static and curative services provision.

Conclusion and implications:

CHPs initiative is an innovative evidence based intervention with potential to enhance accessibility and ownership of PHC services by communities. Ghana has made a bold decision in investing in CHPs infrastructure. After an initial surge in momentum especially in the period from 1999 to 2005, the planned roll out of the CHPs appears to be losing momentum. Hence to revitalize the programme the MoH should reaffirm the CHPS strategy and provide the required leadership, setting realistic roll out targets, budgets and coordination.

On the positive side, whereas overall progress in scaling up CHPs is below expectations, there is the potential opportunity by the MoH to explore avenues within component 4 of the health sector budget to enhance investment in CHPs infrastructures and services. To achieve this objective there is need for advocacy at the district and regional levels to mobilize social groups and traditional institutions to participate in CHP activities. In view of the envisaged increase in skilled health workers required for effective delivery of services, this process would benefit from a closer monitoring of the current expansion of production of health workers with a view to tracking emerging human resource requirements to achieve stated objectives including maternal and neonatal health targets.

Given the wide variety in experiences with CHPS (different models, depending on different funders) and the very slow uptake in some regions, different innovative models and/or approaches may need to be explored by region and urban versus rural areas.

Annex 10. List of key informants

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