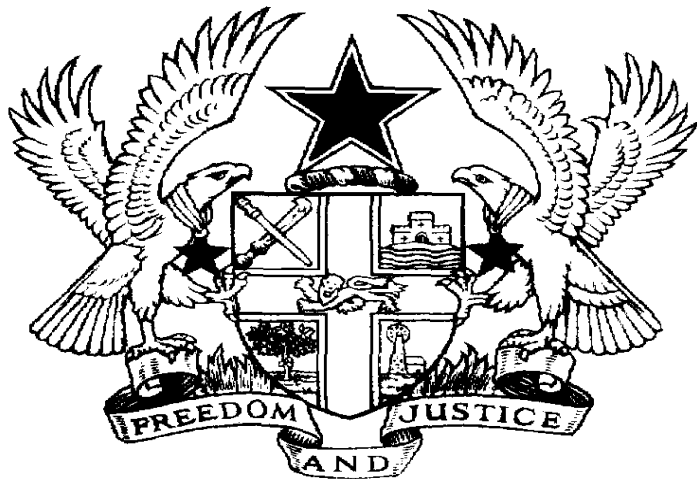


Ministry of Health Ghana



Holistic Assessment of the Health Sector Programme of Work 2014

Acknowledgements	4
Executive summary	5
1. Introduction	6
2. Assessment of the Health Sector Performance in 2014 using the Holistic Assessment Tool	7
3. Assessment of health sector trends in 2014	12
4. Regions of excellence and regions requiring attention	40
5. Implementation status of the POW 2014	43
6. Capital Investment	48
7. Summary of recommendations by the review team	Error! Bookmark not defined.
8. Implementation status for Aide Memoire Recommendations	55
9. Conclusion	56
Annex 1: Sector Wide Indicators and Targets – HSMTDP2014-2017	61
Annex 2: Holistic Assessment Tool	63
Annex 3: Objective weighting	69
Annex 4: Indicator Weighting	70
Annex 5: Assessment of indicators	73
Annex 6: Analysis framework for POW 2014 implementation	104
Annex 7: Procurement in 2014	113

List of abbreviations and acronyms

ART	Antiretroviral Therapy
CHAG	Christian Health Association of Ghana
CHPS	Community Health Planning and Service
CIP	Capital Investment Plan
DFID	UK Department for International Development
DHIMS	District Health Information Management System
EmONC	Emergency Obstetric and Neonatal Care
EPI	Expanded Programme on Immunisation
FP	Family Planning
GHS	Ghana Health Services
GOG	Government of Ghana
HMIS	Health Management Information System
HRH	Human Resources for Health
IGF	Internally Generated Funds
IMR	Infant Mortality Rate
iMMR	Institutional Maternal Mortality Ratio
ITN	Insecticide Treated Net
KATH	Komfo Anokye Teaching Hospital
KBTH	Korle-Bu Teaching Hospital
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
MTEF	Medium Term Expenditure Framework
NCD	Non-Communicable Disease
NHIA	National Health Insurance Authority
NHIF	National Health Insurance Fund
NHIS	National Health Insurance Scheme
OPD	Out-Patient Department
POW	Programme of Work
PPME	Policy, Planning, Monitoring and Evaluation
SBS	Sector Budget Support
TH	Teaching Hospital
U5MR	Under-Five Mortality Rate
WHO	World Health Organisation

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The team would like to thank all individuals who contributed in diverse ways to this review and who kindly gave their time and support to the review process.

Executive summary

Performance in the sector for 2014 was mixed. Whilst performance of indicators generally improved, implementation of key milestone activities was poor. The poor implementation of the milestones had a negative effect on the overall performance of the sector. Funding for priorities in the POW including the milestones was a challenge with most the activities not funded. Child mortality indicators in particular improved considerably. Infant mortality reduced from 50 to 41 per 1,000 live births, under-5 mortality dropped from 80 per 1,000 to 60 per 1,000 live births.

Although funding for the health sector nominally improved, per capita expenditure expressed in USD dropped from 47.1 in 2013 to 32.8 in 2014. Proportion of the sector's budget for goods and services funded by the central government is low (12%). The bulk of funds for service delivery is from earmarked funds and funds from DPs. Funds from these sources are dwindling and may have a negative impact on service delivery. A very huge proportion (96%) of funds for financing health infrastructure are from loans and mixed credits. The financial challenge of the sector is immense and efforts must be made to implement the health financing strategy to ensure additional funds are mobilized to support service delivery

The sustainability of the NHIS has become an emergency. The NHIA is confronted with a high expenditure on claims per active member estimated to about GH¢96. About two thirds of the clients are in the exempt category and this puts further strain on the finances of the authority. The NHIA is scaling up with capitation but is faced with structural and systems difficulties. Efforts are underway to find solutions to these challenges, which has delayed the scale-up plan. Although expenditure on claims has been on the rise over the years, premium has remained stagnant, and this together with other factors has limited the NHIA's ability to mobilise additional resources to support their operations. There is a need to review the benefit package, curb frivolous use and reform the payment and premium structures.

Recruitment into our training institutions does not take into consideration needs in terms of numbers and mix. This has resulted in the over production of some categories of health professionals. An example is the training of the health assistant clinical (HACs). Over 3,000 HACs graduated from our training institutions. Northern region has strongly indicated that it does not need more HACs since what they have is already surplus to requirements. Nevertheless, additional 1,000 HACs are expected to graduate in the region this academic year. The other human resource challenge is the skewed distribution of critical staff resulting in shortages in other areas.

The Upper East Region has shown the way in innovating to achieve set targets. About 47% of the all deliveries take place at the sub-district and CHPS centre level. The region has adapted very well to its inadequacies in terms of health infrastructure and human resource. Despite these achievements, all cause mortality seems to be high and increasing, and attention must be paid to this phenomenon, which may negate the good work done in the long run.

Similarly the Northern region has limited infrastructure, which limits access to health services. Inadequate staff numbers and mix further compounds the problem. Transport networks in the region are poor making it difficult for the limited staff to adequately provide services to all populations. The DHS results indicate that the Northern Region's performance is below average compared to other regions though routine reports indicate otherwise. There is a need to review the region's projected population to ensure that routine health information reports, in relation to its population targets, are more realistic

1. Introduction

The Ministry of Health routinely reviews its performance on annual basis. This review starts from the lowest level of service delivery, which culminates in a health summit where stakeholders review and validate the report as presented and make recommendations for improvement in the subsequent year. The report is thus only finalised after the summit when stakeholders would have made recommendation for improvement of the report

The year 2014 represent the first year of implementation of the Health Sector Medium Term Development Plan II (HSMTDP II) 2014-2017. This is also the first time the revised holistic assessment tool is being applied. The revised tool assigns weights to indicators, objectives and milestones. The milestones carry 25% of the weights of the objectives. It therefore means that non-implementation of the milestones will have significant implications for the overall performance of the sector. Some of the indicators in the indicator set relies on population surveys such as the Multiple Indicator Cluster Survey (MICS) and the Demographic and Health Survey (DHS). The 2014 assessment therefore included results from the just published preliminary results of the 2014 DHS.

Since the holistic assessment tool was first used to assess sector performance, a number of critical issues with the methodology were identified:

- Concern that the holistic assessment is not a true reflection of sector performance
- The analysis is skewed towards performance of selected service providers
- The analysis is skewed towards primary health care
- The assessment is not significantly influencing policy or strengthening sector management

The revision of the tool addressed these issues with the hope to improve the credibility of the holistic assessment.

The report is organised into nine chapters. The first chapter provides a background to this report. Chapter two deals with assessment results, chapter 3 assessment of sector trends and 4 present an analysis of regional performance, region of excellence and regions requiring attention. Chapter 5 deals with implementation of the POW and Chapter 6 implementation of capital investment. The extent to which the aide memoire has been implemented is on chapter seven whilst chapter eight covers conclusions and recommendations.

2. Assessment of the Health Sector Performance in 2014 using the Holistic Assessment Tool

The holistic assessment tool provides a framework for assessing the health sector comprehensively and holistically. The primary objective of the holistic assessment of the health sector is to provide a very brief but well-informed, balanced and transparent assessment of the sector's performance and factors that likely influenced this performance. The holistic assessment should also lead to a suggestion of corrective measures when performance is less than anticipated. Its purpose is to facilitate and to structure the dialogue between all development partners, other key stakeholders and the GoG at sector level.

Since the holistic assessment tool was first used to assess sector performance, a number of critical issues with the methodology have been identified:

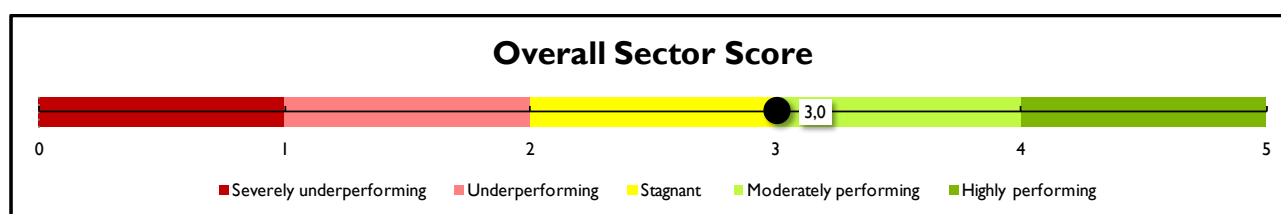
- Concern that the holistic assessment is not a true reflection of sector performance
- The analysis is skewed towards performance of selected service providers
- The analysis is skewed towards primary health care
- The assessment is not significantly influencing policy or strengthening sector management

The tool was revised in 2014 to address these issues and to improve the credibility of the holistic assessment. Compared to previous years, the revised tool applies weights to all indicators and objectives. Milestones have been given substantially more weight compared to previously and now comprise 25% of the total weight for each objective. Moreover, the revised tool displays performance on a wider scale ranging from 0 to 5 and with five colour codes compared to three in the previous tool. Annex 2 contains detailed information about the tool and Annexes 3 and 4 contains the basis for weighting of objectives and indicators. Annex 5 present a detailed analysis of each of the indicators in the HSMTDP indicator framework.

The Holistic Assessment of the 2014 Programme of Work is the first time the revised tool is applied.

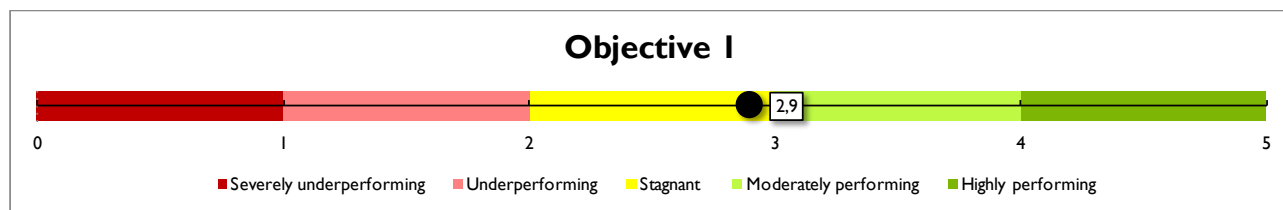
Overall Sector Score

The overall sector score is **3.0** in 2014, which represent a moderately performing sector. The general trend of indicators was positive in 2014, but only few milestones were implemented. Since milestone constitute 25% of the overall weight for the objectives, poor implementation of these had high impact on the overall score.



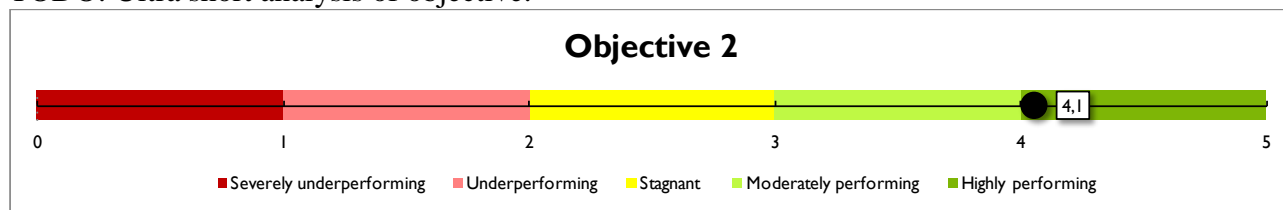
Objective 1: Bridge the equity gaps in geographical access to health services

TODO: Ultra short analysis of objective.



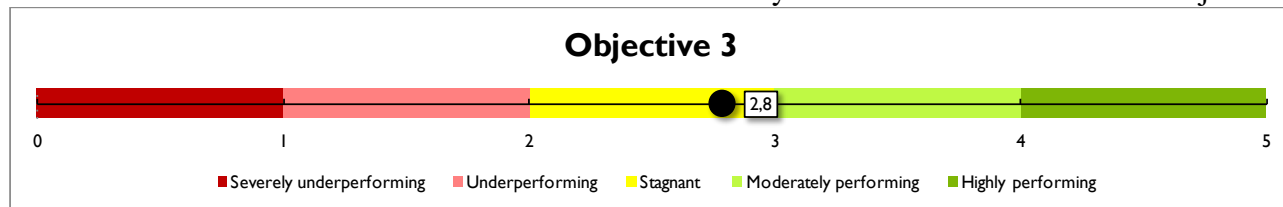
Objective 2: Ensure sustainable financing for health care delivery and financial protection for the poor

TODO: Ultra short analysis of objective.



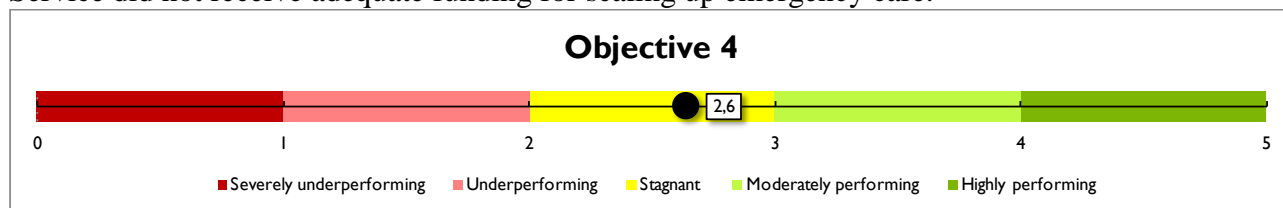
Objective 3: Improve efficiency in governance and management of the health system

TODO: Ultra short analysis of objective.



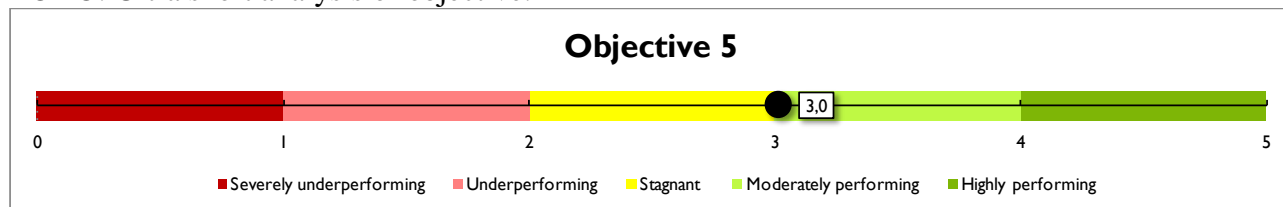
Objective 4: Improve quality of health services delivery including mental health services

Assessment of objective 4 was wrought with challenges of inconsistent data, especially for traditional medicine and mental health. This led to a poor overall score. Moreover, mental health authority has not yet been able to start implementation of their strategic plan, and Ghana Health Service did not receive adequate funding for scaling up emergency care.



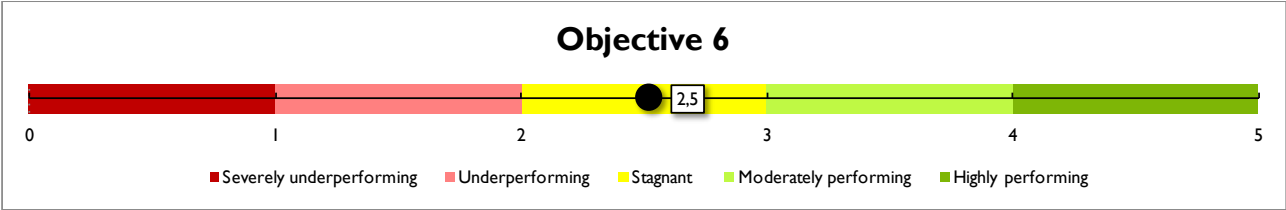
Objective 5: Enhance national capacity for the attainment of the health related MDGs and sustain the gains

TODO: Ultra short analysis of objective.



Objective 6: Intensify prevention and control of non-communicable and other communicable diseases

TODO: Ultra short analysis of objective.



Ministry of Health – Holistic Assessment of 2014 Programme of Work

No.	Indicator	Trend				Performance 2014	
		2010	2011	2012	2013	Target	Result
Objective 1: Bridge the equity gaps in geographical access to health services							
1.1	Number of functional ambulance service centres	N/A	24	121	122	140	128
1.2	Number of functional CHPS zones	1,241	1,659	2,175	2,315	2,450	2,948
1.3	Per capita OPD attendance	0.91	1.05	1.17	1.16	1.17	1.15
1.4	Equity poverty: U5MR	N/A	N/A	2.04	N/A	<1.9	N/A
1.5	Equity geography: Supervised deliveries	1.6	1.6	1.5	1.6	<1.5	1.6
1.6	Equity geography: Doctor to population	11.0	10.9	10.7	16.7	13	13.1
1.7	Equity geography: Nurse to population	2.0	1.7	1.9	2.0	<1.9	1.9
1.8	Equity gender: Female/ male NHIS active membership	N/A	N/A	1.23	N/A	N/A	N/A
Objective 2: Ensure sustainable financing for health care delivery and financial protection for the poor							
2.1	Proportion of total MTEF allocation to health	7%	9%	8%	10%	≥15%	11%
2.2	Per capita expenditure on health (USD)	28.60	35.00	50.70	47.1	>44	32.8
2.3	Budget execution rate (Goods and Service as proxy)	94%	82%	87%	56%	>80%	61%
2.4	Proportion of population with active NHIS membership	33%	33%	33%	37%	>39%	38%
2.5	Proportion of NHIS members in exempt categories	-	63%	63%	63%	>63%	66%
2.6	Proportion of population covered by NHIS as indigents	-	0.5%	0.5%	4.1%	5%	5.5%
2.7	Proportion of NHIS expenditure on claims reimbursement	-	72%	77%	79%	>80%	76%
2.8	Equity poverty: NHIS members	N/A	N/A	0.69	N/A	>0.7	N/A
Objective 3: Improve efficiency in governance and management of the health system							
3.1	Doctor : Population ratio	1:11,698	1:10,402	1:11,515	1:10,170	1:10,000	1:9,043
3.2	Nurse : Population ratio including CHNs	1:1,516	1:1,599	1:1,362	1:1,084	1:1,000	1:959
3.3	Midwife : WIFA Population ratio	1:1,566	1:1,505	1:1,611	1:1,525	1:1,400	1:1,374
3.4	Proportion of health facilities in current registration	18%	19%	20%	21%	>22%	22%
3.5	Proportion of receivable funding for NHIS received from MOF	-	-	-	54%	>75%	79%
3.6	Proportion of NHIS claims settled within 12 weeks	N/A	N/A	N/A	N/A	>5%	-
3.7	Proportion of GOG spent on goods and services	-	-	34.5%	31.1%	>12%	11.5%
3.8	Proportion of GOG spent on assets	-	-	2.2%	11.6%	>2%	18.4%
3.9	Proportion of health budget (goods and services) allocated to research activities	-	-	-	-	>0.8%	-
Objective 4: Improve quality of health services delivery including mental health services							
4.1	Institutional all cause mortality	-	-	27.8	25.5	<35	21.3
4.2	Proportion of regional and district public hospitals offering Traditional medicine practice	-	-	-	4.8%	>5%	4%
4.3	Proportion of public hospitals offering mental health services	-	-	-	-	No b.l.	2%
4.4	Institutional Malaria Under 5 Case Fatality Rate	-	-	7.6	6.7	<6	5.3
4.5	Surgical site infection rate	-	-	-	-	<5%	5.3%
4.6	Percentage of public hospitals with functional emergency team	-	-	-	-	No b.l.	-
Objective 5: Enhance national capacity for the attainment of the health related MDGs and sustain the gains							
5.1	Unmet need for contraception	N/A	N/A	26%	N/A	<23%	30%
5.2	Couple Year Protection (CYP), All sources incl. the private sector	1,424,585	1,988,893	2,012,807	2,070,630	>2.30 mill	2,608,352
5.3	Infant Mortality Rate	N/A	N/A	53	N/A	<50	41
5.4	Institutional Neonatal Mortality Rate	-	-	5.5	5.9	<5.5	4.29
5.5	Neonatal Mortality Rate	N/A	N/A	32	N/A	<30	29
5.6	Under-5 Mortality Rate	N/A	N/A	82	N/A	<75	60
5.7	Maternal Mortality Ratio	N/A	N/A	N/A	380	<300	N/A
5.8	Institutional Maternal Mortality Ratio	164	174	152	155	<145	144

Ministry of Health – Holistic Assessment of 2014 Programme of Work

5.9	HIV prevalence rate	1.5%	1.7%	1.3%	1.2%	<1.1%	-
5.10	Proportion of infected pregnant women who received ARVs for PMTCT	-	-	70%	76.4%	>40%	66%
5.11	Proportion of babies born to HIV mothers being HIV negative after 18 months	-	-	93%	93%	>93%	92%
5.12	Proportion of children U5 who are stunted	N/A	N/A	23%	N/A	<16%	19%
5.13	Proportion of children fully immunized (proxy Penta 3 coverage)	86%	86%	88%	86%	>88%	90%
5.14	Proportion of mothers making fourth ANC visit	43%	53%	72%	66%	>75%	67%
5.15	Exclusive breast feeding for six months	N/A	N/A	46%	N/A	>50%	52%
5.16	Proportion of deliveries attended by a trained health worker	41%	49%	55%	55%	>58%	57%
5.17	Still birth rate	-	-	19.6	17.9	<20	17.9
5.18	Postnatal care coverage for newborn babies	-	-	18%	37%	>50%	44%
5.19	Proportion of children under 5 years sleeping under ITN	N/A	N/A	42%	N/A	>65%	47%
5.20	TB treatment success rate	85%	87%	85%	86%	>88%	87%
Objective 6: Intensify prevention and control of non-communicable and other communicable diseases							
6.1	Non-AFP polio rate	1.8	2.2	1.6	2.7	>2	3.0
6.2	Population prevalence of hypertension	N/A	N/A	N/A	N/A	No b.l.	N/A
6.3	Number of deaths attributable to selected cancers	-	-	-	-	No b.l.	-

Table 1: Sector wide indicators 20014-2017, greyed out indicators are not measured on annual basis.

3. Assessment of health sector trends in 2014

Access to Health Care

National Ambulance Service

With six new centres, National Ambulance Service continued to expand the number of ambulance service centres in 2014. Close to 60% of all Ghana's 216 districts are covered by ambulance services. The lowest coverage is in Brong-Ahafo, Ashanti and Western Regions with 47%, 44% and 45% of districts covered, respectively, while Upper West Region has the highest coverage with 9 out of 11 districts (80%) covered. In 2013 NAS responded to a total of 12,251 calls, which in 2014 increased by almost a third to a total of 16,258 calls. This number comprised both Emergency and Non-Emergency cases (mostly inter-hospital transfers). The largest group of cases were women between 15 and 44 years, possibly due to deliveries and related obstetric complications. The average case-response-time has worsened over the past years (from about 12 minutes in 2007 to 19 minutes in 2014).

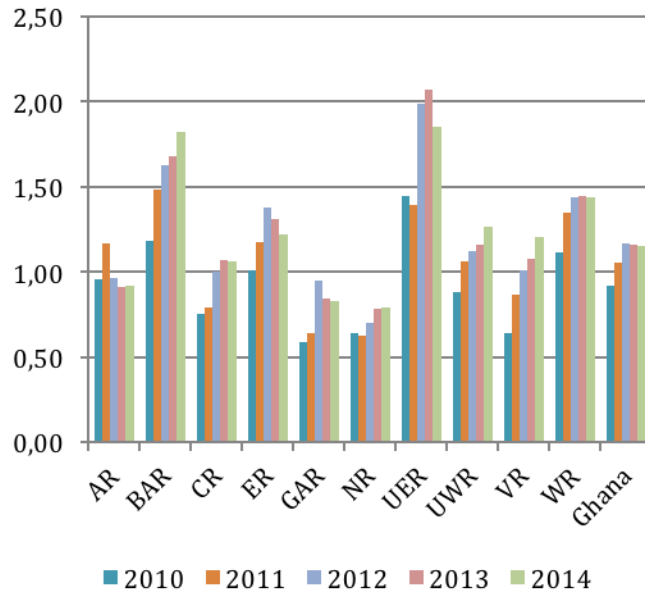


Figure 1: OPD per capita by region in 2014. Source DHIMS

Outpatient Department

The number of OPD visits per capita can be seen as a proxy measure for patients' access to health care. The OPD per capita increased considerably from 0.55 in 2006 to 1.17 in 2012 (Figure 1), but since 2012, the per capita attendance has been stable around 1.15 visits per person per year. It is not clear if this figure include data from quasi-governmental providers like 37-Military Hospital, Police Hospitals and University Hospitals, since these facilities do not currently report within the DHIMS.

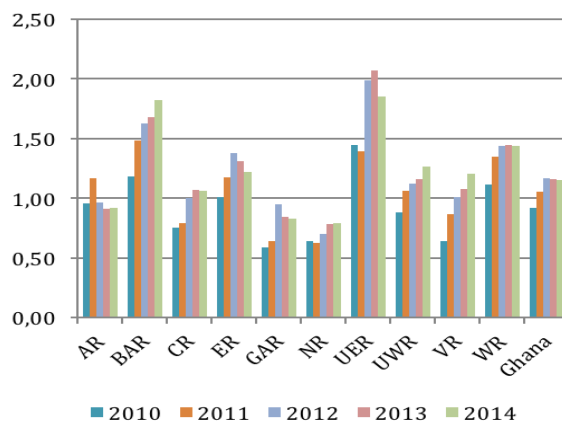


Figure 2: OPD per provider type in 2014.

Patients insured by NHIS make about three quarters of all new OPD visits. The proportion of insured patients is higher for revisits, up to almost 90%.

The largest providers of OPD services are government facilities with about 55%, private providers and CHAG with 23% and 19%, respectively (Figure 3).

The national average obscures large regional variations in performance and trends (Figure 1). The region with highest uptake of OPD services is Upper East, while the lowest is Northern Region. After the introduction of capitation in Ashanti Region, the uptake of OPD services dropped sharply and seems to have stagnated around 0.9 visits per year. It would be important to assess whether the initial drop in service uptake represents a successful reduction in frivolous use or deteriorated access to health service for those in need. The review team recommends that NHIA develops tools to continuously monitor per capita utilisation of OPD and reduction in frivolous use.

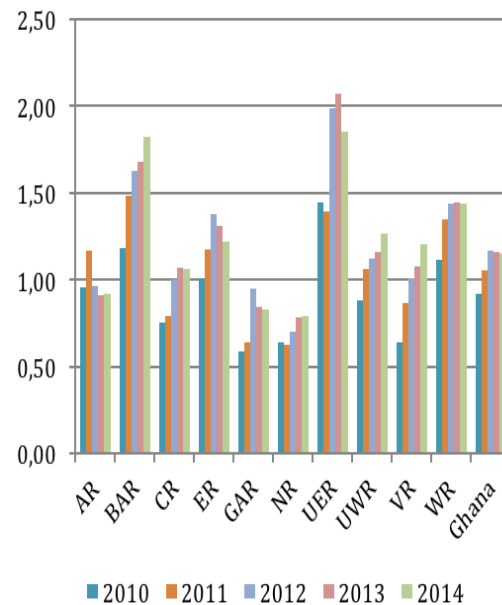


Figure 3: OPD per level of health care for selected regions in 2014. Source DHIMS

Analysis shows that about a third of OPD services in Ashanti Region are provided at the lowest level of the health system, i.e. sub-district clinics and CHPS, compared to the national average of about 50%. In Upper East Region about 75% of OPD services are provided at the lowest levels of the health care system (Figure 3). This finding may indicate that patients in Ashanti Region chose their *Preferred Primary Provider* (PPP) from higher levels of the health care system, e.g. a district hospital instead of the local sub district clinic. When district level hospitals are preferred over sub district and CHPS clinics, the lowest levels of the health care system will be underutilised which again could lead to financial deprivation of the sub-district health centres and CHPS clinics. This concern should be taken into account in the design of scale-up of capitation.

Since 2012, Eastern Region has experienced a worrying negative trend in OPD utilisation. It is not clear if this has any implications for access to health care. As there are no obvious explanations for this trend, the determinants need to be investigated. In the same period, OPD utilisation in Brong-Ahafo, Upper-West and Volta Regions has improved considerably, especially Volta Region. This improvement may partly be due to improvements in data and reporting quality, since Volta Region increased completion rate for OPD reporting from 84% in 2013 to 91% in 2014.

CHPS

Though the concept and definition of functional CHPS zones has been determined and accepted by all stakeholders, different figures from various authorities using varied criteria were generated. Figures from the DHIMS data differ from others from the PPME of the Ghana Health Service and those submitted by the Regional Directors group. Functional CHPS zones reported in DHIMS was 2,119 whilst the figure reported by the PPMED-GHS was 2,948 and the figure reported by the regional directors was 2,580. The

milestone for establishing new functional CHPS was 686 in order to reach a total of 3,001 functional CHPS zones. With 633 new zones, the milestone was not achieved. However, the target for the year in the programme of work was 2,450, which was met.

In the current review of the CHPS policy, a functional CHPS zone is defined as *‘where all the milestones have not been completed... but a community health officer has been assigned and provides a defined package of services to the catchment population, from house to house in the unit area’*. This is a straight forward definition with minimum or no ambiguity and one will expect that all stakeholders would adhere to and report appropriately. The varied figures on the functionality of CHPS zones should be examined and corrective measures put in place to ensure improved reporting. From the analysis on maternal health service delivery, it is clear that the CHPS concept has a potential to increase coverage of service delivery and therefore a major driver of maternal and child health services as demonstrated in the Upper East Region where about 30% of the CHPS compounds have midwives that provide maternal health services.

National Health Insurance Scheme

Coverage

National Health Insurance continue to increase. The number of active members increased from 9.8 million in 2013 to 10.3 million in 2014. The proportion of the population covered by the NHIS increased only slightly from 37% to 38%. In 2014, the biometric registration of members was rolled out in six regions, which in some cases slowed down registration due to unstable supply of power and network connectivity. While a faster increase in coverage would be desired from the perspective of improved access to health care, this would also increase the financial burden on NHIS and challenge the sustainability of the scheme. Within only a decade, the scheme increased its subscriber base to over 10 million members, which must be commended. However to further increase the subscriber base, the scheme and its sponsors would need a more innovative way of mobilising the additional resources to keep pace with the rate of expansion of the scheme.

Exempt groups

NHIS provides free membership to certain population groups with the goal to improve financial access for the poorest and most vulnerable populations. The exempt categories include SSNIT pensioners, elderly above 70 years, pregnant women, children under 18 and indigents. Currently two thirds of all active NHIS members belong to the exempt categories, i.e. they

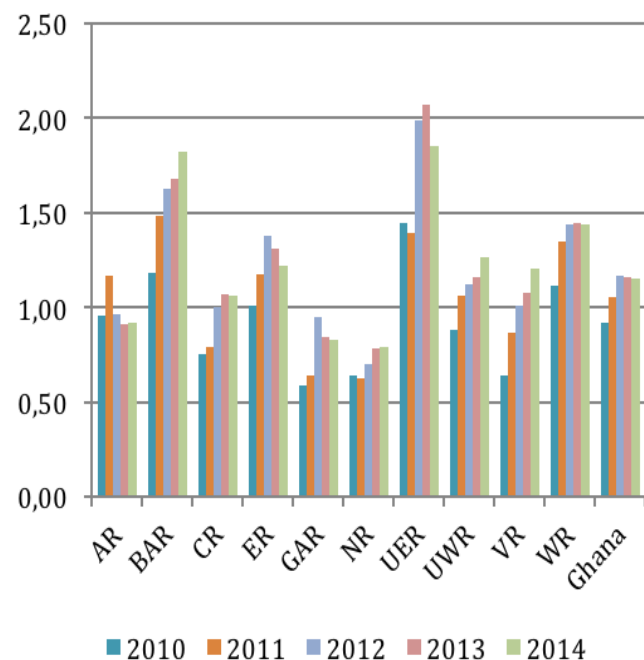


Figure 4: Exempt members by membership type 2011-2014. Source: NHIA

receive benefits but do not pay any premium (Figure 4). This may lead to increased financial pressure on the scheme. There is therefore the need to assess the current exemption policy with the view to improving targeting of the poor and vulnerable. Improved targeting effort could reduce “leakage” and improve efficiency. Analysis of the socioeconomic status of those who benefit from exemptions could inform the debate about exemptions, leakage and financial sustainability of NHIS, and perhaps lead to decisions about reform of the exemption schemes.

Figure 4 and Table 1 show that the number of pregnant women exempted under the free maternal health policy decreased substantially between 2012 and 2013 and remained low in 2014. In 2014, only 34% of all women with expected pregnancy were registered under the free maternal health care policy. The reason for the observed reduction is not clear and further analysis will be needed to understand this declining trend.

Year	Registered	Expected	Proportion
2011	712,718	1,011,488	70%
2012	742,279	1,037,286	72%
2013	239,481	1,063,767	23%
2014	373,760	1,090,949	34%

Table 1: Proportion of expected pregnant women exempted under NHIS

In 2013, NHIS increased the share of active members exempted as indigents from 0.5% to 4.1% of the total population. NHIA estimates that about 8% of the population are eligible for exemption as indigent, and the target is to increase the share annually until 8% of the population is covered. The method to enrol the poorest is by linking NHIS membership to the LEAP (Livelihood Empowerment Against Poverty) programme. Moreover, NHIA has increased enrolment of persons in prisons and patients in mental health institutions.

Claims

The expenditure on claims has increased steadily since 2011, and with a total of 968.5 million GHC spent on claims in 2014, the amount has increased by more than 75% (in nominal terms) over four years (Table 2). One reason for the increase in claims expenditure is the introduction of Value Added Tax (VAT) on medicines in 2014. Since medicines constitute over half of the expenditure on claims, this had a substantial impact.

Predictability and adequacy of funds for NHIS is a major challenge for timely reimbursements. In 2013, NHIS received about half of the expected funds, while this improved to about 80% in the 2014 calendar year. It has become the norm that the outstanding amount of money will be transferred to NHIS in the ensuing year.

The average annual claims expenditure per member can be calculated to be 94.4 GHC in 2014. The average premium paid by active members from the informal sector is calculated to be about 11 GHC. Due to the constantly increasing expenditure on claims and the

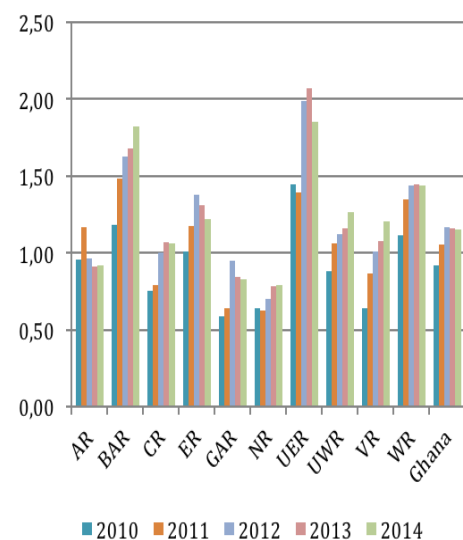


Figure 5: Average premium and claims expenditure per active member 2011–2014. Source: NHIA

fact that the average premium has been constant at about 11 GHC, expanding coverage of the informal population could pose a financial risk to the scheme. There is therefore a need to revise the policy on premiums.

The high proportion of claims expenditure also limits the options for further expanding coverage of the exempt groups, increasing service uptake and expanding the benefit package. There is a pressing need to reduce claims expenditure by a combination of reforms outlined in the implementation plan for the health sector's Health Financing Strategy.

	2010	2011	2012	2013	2014	% of total in 2014
Claims	395.06	548.71	616.21	783.36	968.48	75.6%
Admin and logistic support	12.04	17.2	6.93	4.31	4.48	0.3%
Support to MOH	75.52	147.33	74.67	31.68	29.16	2.3%
Operating	31.26	36.75	71.35	140.02	128.46	10.0%
NHIS ID card	23.69	9.62	20.05	27.69	76.57	6.0%
IDA project (WB)	0.25	3.29	9.07	0	0	0%
Loan payment	0	0	0	0	73.61	5.7%
Total	537.82	762.9	798.28	987.06	1,280.76	

Table 2: NHIS expenditure by line items 2010-2014. Source NHIA.

Human Resources for Health

Doctors

With about 400 additional doctors employed by MOH in 2014, the doctor to population ratio improved from one doctor to 10,170 persons in 2013 to one doctor to 9,043 in 2014. For the first time, the doctor to population ratio has passed the mark of 1 doctor to 10,000 persons. There are large interregional variations with one doctor per 2,700 population in Greater Accra compared to 1 doctor to 36,000 population in Upper West Region. But with an increase of 50% more doctors in Upper West, this inequity gap reduced in 2014. Upper West Region was able to achieve this by attracting more doctors using personal contacts, improved incentive packages (remuneration, accommodation etc.) and collaboration with the district assemblies. The large number of doctors in Accra, leading to marked inequity, can to some extent be explained by newly trained doctors who work as house officers and are attached to Medical and Dental Council in Accra (Table 3). However, when house officers are excluded from the equation Greater Accra still has one doctor to about 4,100 population.

Ghana Health Services	1,362
CHAG	354
Training Institutions	2
Tertiary Health Services	730
Tertiary Health Services: Psychiatric Hospitals	12
Min Of Health HQ	7
Medical and Dental Council†	549
Total	3,016

Table 3: Doctors by department by 31st December 2014, source IPPD.† House Officers

	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2009	600	140	87	157	839	50	34	17	78	80	2,082
2010	562	141	88	155	876	72	29	14	80	91	2,108
2011	624	143	103	161	1068	114	25	17	88	88	2,431

2012	513	145	100	141	1004	130	28	16	90	85	2,252
2013	493	141	101	147	1383	118	32	14	98	88	2,615
2014	541	145	114	171	1651	117	34	21	114	108	3,016

Table 4: Number of doctors by region 2009-2014. Source IPPD

Nurses

The nurse to population rate continued previous years' improvements and met the target of less than 1,000 persons per 1 nurse. This computation includes community health nurses. About half of all nurses included in the computation are community health nurses. The nurse to population ratio improved across all regions and the distribution became more equitable, but Northern Region continues to lack behind the rest of the country.

Midwives

The staff strength of midwives improved substantially in 2014. Analysis shows that there are large regional variations in midwife numbers and productivity (Table 5). In Volta and Ashanti Regions, a midwife on average has about 110 deliveries per year compared to Northern Region, where a midwife on average has about 190 deliveries (70% more). The question is what are the reasons for this variation? Could it be due to variations in distribution of health facilities, availability of equipment, differences in local leadership and accountability structures, cultural factors, age or something else? More analysis is required to answer these important questions in order to improve productivity in all regions.

	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2009	133	104	147	47	48	104	100	72	46	146	89
2010	132	110	162	80	76	114	119	84	79	148	106
2011	125	148	162	98	98	135	138	96	99	185	123
2012	138	181	194	132	118	183	153	117	128	197	148
2013	134	168	185	124	113	199	126	144	116	172	141
2014	108	156	182	112	122	190	124	126	109	160	132

Table 5: Average number of deliveries per midwife by region. Source DHIMS and IPPD.

	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	-81	-45	3	-120	-266	52	-53	-49	-60	53	-565
2012	-45	-21	31	-85	-244	90	-45	-32	-8	52	-307
2013	-145	-43	33	-95	-277	97	-83	-18	-29	22	-538
2014	-337	-79	13	-164	-263	68	-110	-48	-69	-34	-1,023

Table 6: Estimation of midwife gap by region. Negative figure means an excess of midwives. Assumptions: Target of 175 deliveries per midwife per year, 60% coverage of skilled delivery. Source DHIMS, IPPD and WHO

The standard workload for midwives set by WHO is 175 deliveries per midwife per year. Based on this figure and the expected number of deliveries per region and given 60% skilled delivery rate, we could estimate the midwife-gap by region. The analysis shows that the mid-wife gap is negative for Ghana, i.e. according to WHO standards, there are more than enough midwives in the country. Especially Ashanti Region and Greater Accra Region have an excess of midwives. Northern Region has the largest midwife gap and need about 68 additional midwives to close this gap. Central Regions also has a need for additional midwives. The analysis shows that Ghana may not need additional midwives but instead need to implement more equitable distribution and improve the environment for increased productivity in certain regions. More comprehensive analysis is required to estimate the gaps more precisely, but these estimates could be seen as a warning sign

against sustained high production of midwives over time, since this in the medium to long term could lead to surplus of midwives and reduced productivity, inefficiency and burden on the ministry's budget.

The review team recommends that the ministry estimates the medium to long term midwife needs, and align the production to this need, so that the sector does not train too many midwives.

Given that the number of midwives is building up in Ashanti and Greater Accra Regions, the ministry should set up a team to look into redistribution of midwives to less endowed regions.

Age distribution

Figure 6 illustrates the age distribution of selected categories of health staff. For doctors and nurses, the curve is strongly skewed toward left, which means that the majority of these working populations are young. The curve for midwives is “camel-shaped” with a peak of 25-34 year olds and a peak of 55-60 year olds. While it looks like the production of midwives can match the attrition, there will be a substantial reduction of experienced midwives within the next 5 years. Facilities with experienced midwives should prioritise transfer of skills in order to mitigate the negative effect of retiring experienced midwives. Regions in their redistribution should also prioritise this to ensure that skills are transferred.

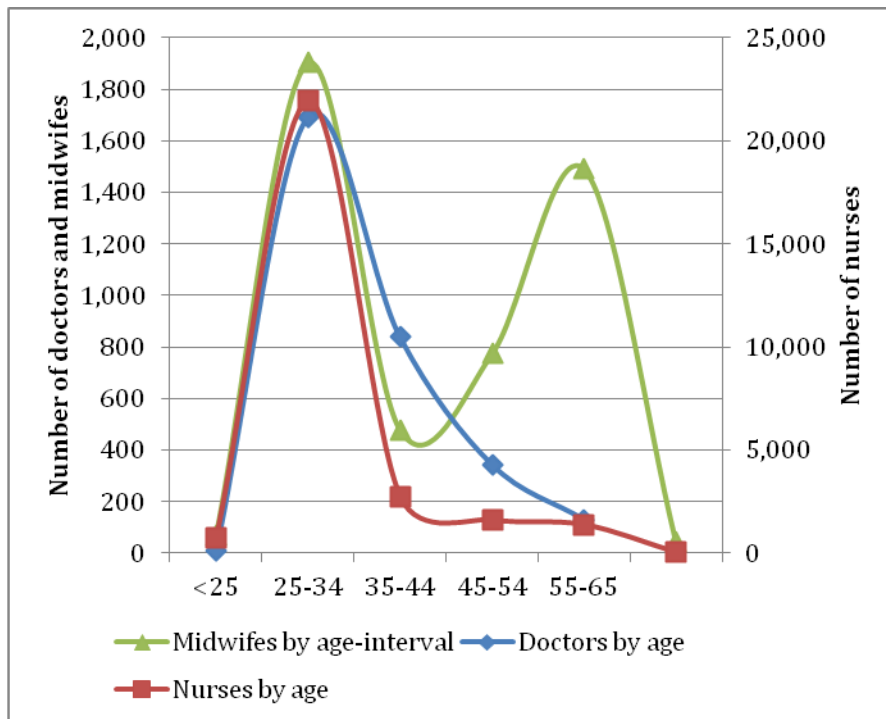


Figure 6: Doctors, nurses and midwives by age-groups by 31st December 2014. Source IPPD.

Inequality in distribution

Figure 7 illustrates inequality in distribution of doctors, nurses and midwives. The solid, black line represents equal distribution, while any curve under this line represents inequality. The size of the area under the curve represents the extent of inequality. Despite exclusion of house officers in this analysis, it is visible from the graph that the largest inequality is with respect to distribution of doctors. Nurses and midwives almost follow the same curve with a slightly more unequal distribution of midwives. Currently, in some cases, health

workers can collect their pay despite never taking up their post. A new proposal by MOH is to withdraw salary of staff who do not take their post. This is however not being broadly implemented. A new procedure of advertising by location is being implemented for Deputy Directors of Nursing Services (DDNS). In this case the money is earmarked for a certain post at a certain location. This new procedure for posting should be followed closely and considered for scale-up based on the lessons learned.

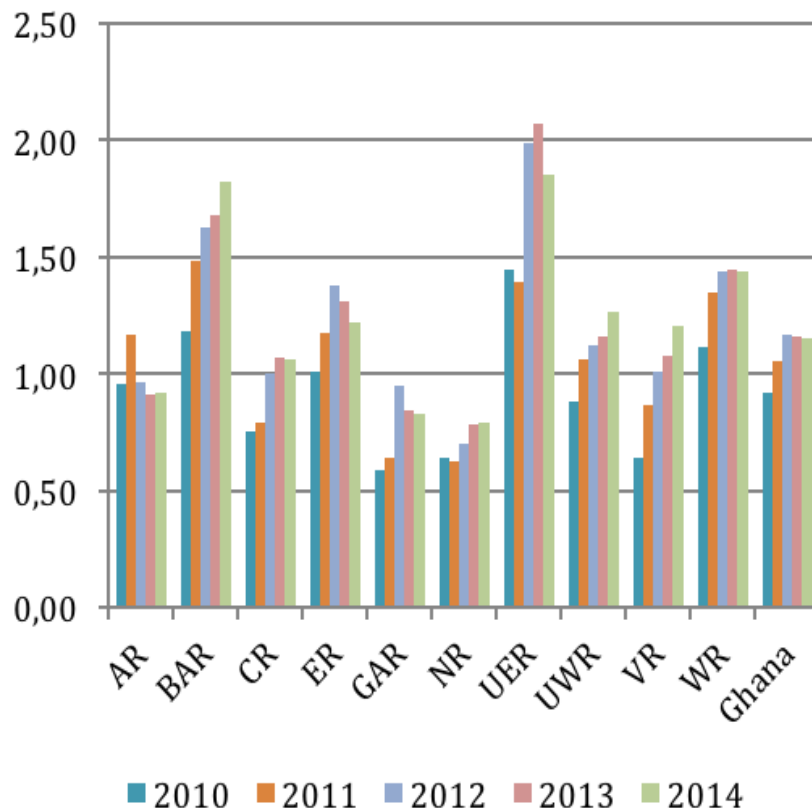


Figure 7: Equity in distribution of doctors (excluding house officers), nurses and midwives. Source: IPPD

Training of new staff

A total of 12,491 trainees graduated from our training institutions representing an increase of about 47% over the 2011 figure (Table 7). Post basic health professionals constitute about 27% of total graduants whilst basic health professionals comprise 72% and specialist health professionals less than 1%. The basic health professional have been grouped into five (General/mental nursing, Midwifery, Community Health Nursing, Health Assistant Clinical and allied health). A total of 9,009 basic health professionals graduated with health assistant clinical comprising 34% (3,096). Considering the fact that numbers for HATs are already too many on the field, a drastic reduction in recruitment numbers and possible suspension of further recruitment should be considered.

POSTBASIC PROFESSIONALS	HEALTH	2011	2014
POST BASIC MIDWIFERY		100	844
POST BASIC NURSING		184	238
POST BASIC ALLIED/MEDICAL		105	2311
TOTAL		2400	3393
BASIC HEALTH PROFESSIONLS			
General/Mental Nursing		1575	2,206
Midwifery(Basic/PB)		472	1,305
Community Health Nursing		1024	1,739
Health Assistant Clinical (HAC)		2450	3,096
Allied Health		439	663
TOTAL		5960	9,009
SPECIALIST PROFESSIONALS	HEALTH		
ANAESTHESIA			1
CHILD HEALTH		12	12
DENTAL SURGERY		2	5
FAMILY MEDICINE		6	5
GENERAL SURGERY		17	16
INTERNAL MEDICINE		8	8
LABORATORY MEDICINE		6	5
OBSTETRICS/GYNAECOLOGY		8	9
OPHTHALOLOGY		3	2
PSYCHIATRY			1
PUBLIC HEALTH		7	19
RADIOLOGY		1	5
UROLOGY		1	1
TOTAL		71	89

Table 7: Graduation of staff in 2011 and 2014. Source MOH-HR.

Health Financing and Expenditure

The calculation of government allocation to the health sector as proportion of the national budget (Abuja target) was revised in connection to the updated indicator framework for the HSMTDP II. The health sector budget figures are extracted from the annual POW and exclude earmarked funds, while the national budget figure is taken from the annual national budget. Since the methodology changed, we have recalculated the indicator for the years 2009-2013. The calculation shows that the relative allocations to the health sector are significantly lower than previously presented. Nevertheless, the analysis shows that government's commitment to health has been increasing over the past 5 years

(Figure 8). Figure 9 shows the annual budget allocations for health by the various sources.

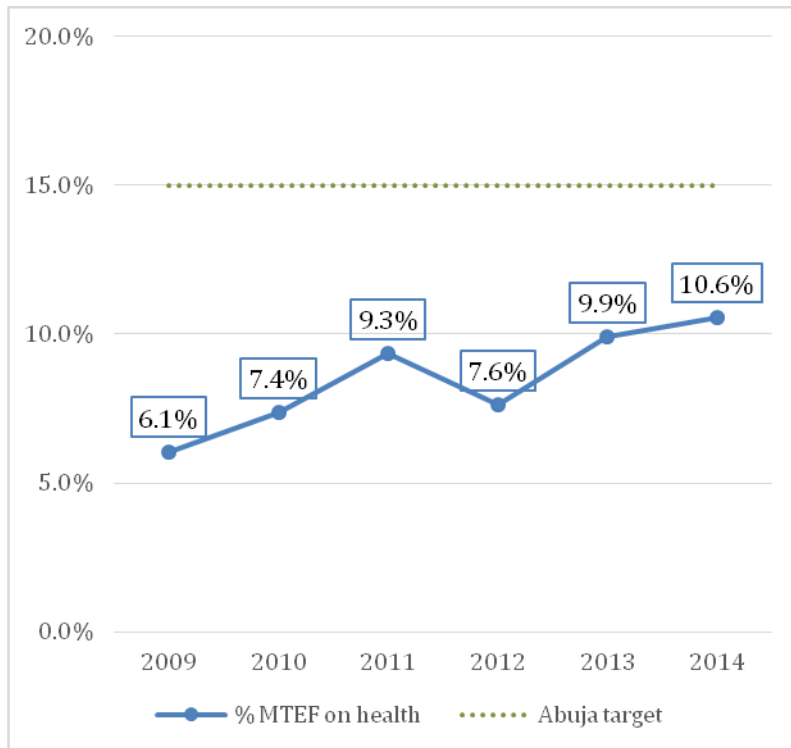


Figure 8: Proportional allocations of national budget to health. Source POW 2009-2014, National budgets 2009-2014 and Bank of Ghana USD exchange rate per 31st December.

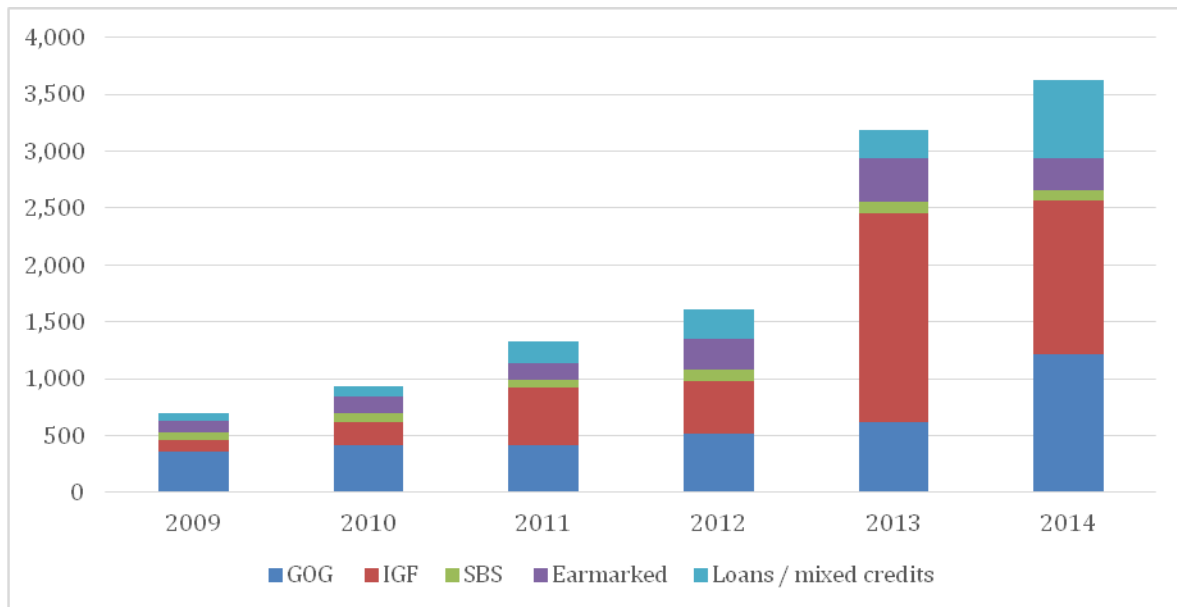


Figure 9: Annual budget allocations for health by funding source. Source POW 2009-2014

The health expenditure in GHC increased in nominal terms from 2,709 million GHC in 2013 to 2,866 million GHC in 2014 (Figure 10). Due to population increase and substantial inflation of the GHC to the USD, the per capita expenditure in USD experienced a dramatic decrease by over 30% from 47 USD in 2013 to 33 USD in 2014.

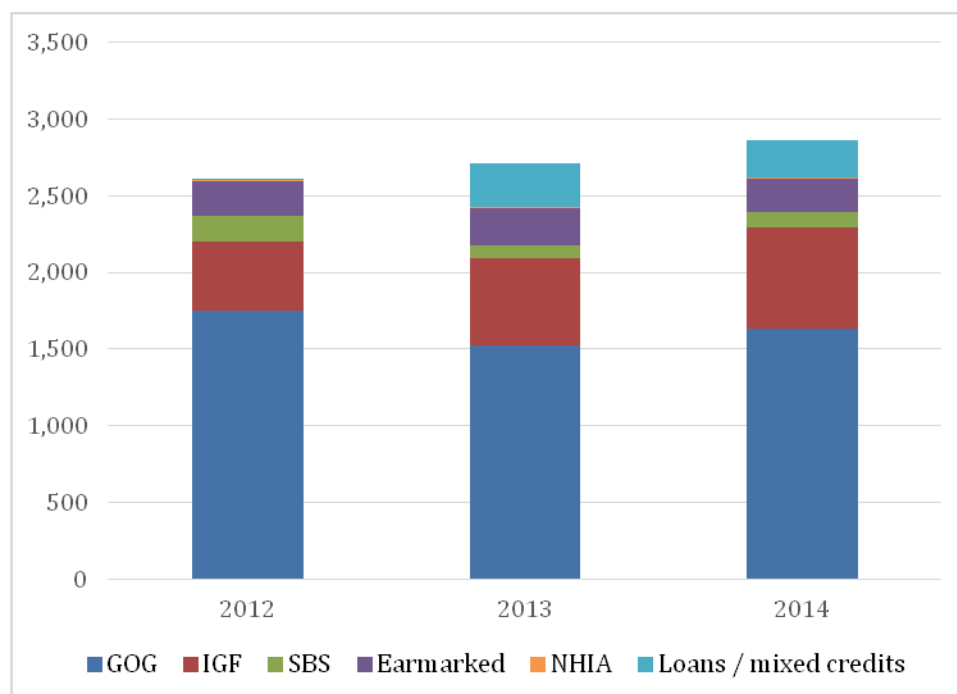


Figure 10: Annual expenditure by source. Source 2014 financial report.

About 11% of the total GOG expenditure including SBS was spent on goods and services, while 87% was spent on compensation and only about 2% went into assets. Looking at total expenditure from loans and mixed credits presented in the capital investment report on page 48, a total of about 545 million GHC was disbursed for capital projects and equipment. This figure is in variance with the total expenditure stated in the MOH financial report of about 245 million GHC. Efforts must be made to reconcile these figures.

The total expenditure for goods and services was close to 1 billion GHC. Close to 60% of the expenditure was classified as IGF primarily for curative services, where the majority comes from claims settled under NHIS. Second largest source was earmarked donor support of 216 million GHC. Expenditure categorised as GOG amounted to 115 million GHC while SBS was 84 million (Figure 11).

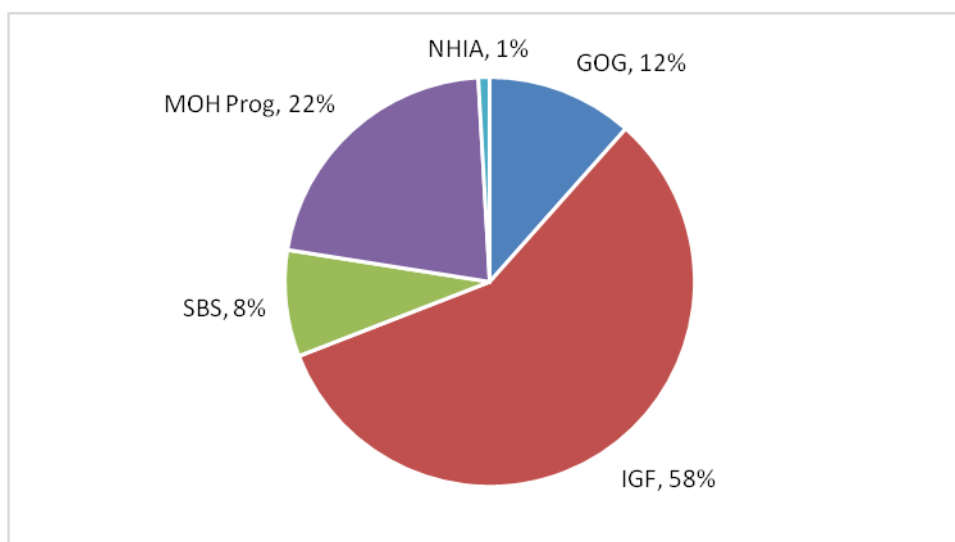


Figure 11: Goods and Service expenditure by source. Source MOH Financial Report 2014

The assumption is that most of the expenditure categorised as IGF is for provision of curative care services. Since a precise estimation of expenditure on preventive/public health is currently not possible, the proportion spent on preventive/public health care can be approximated by removing the IGF component from the total expenditure. This shows that expenditure on preventive/public health care is predominantly sourced from development partners with only 29% financed by GOG and NHIA. In the short to medium term Ghana is expected to experience dwindling inflow of support from development partners including GAVI, GFATM and SBS partners. This could have serious negative impact in financing and provision of preventive/public health service, e.g. immunization of children, treatment of TB, HIV and Malaria, if not offset by increased investments by government in preventive/public health care.

In order to increase government investment into preventive/public health care, there may be the need to establish a working ratio regarding what is spent on compensation, investment and goods and service and work towards achievement of such a target. This will ensure a balance in resource allocation and ensure planned programmed activities are carried out efficiently with the available resources.

Moreover, in the light of dwindling donor support there is a need to accelerate the implementation of the health financing strategy. The Health Financing Strategy presents 15 strategies to address the financial challenges in health including increasing GOG revenue, reforming NHIS premiums and exemptions, improving strategic purchasing and prioritising preventive/public health care service.

For the past two years, the budget execution for Goods and Services has been very low. In 2014, the sector spent less than two thirds of the budget. One possible contributing factor to low execution rate is difficulties in accessing the funds through the GIFMIS. Procedures are cumbersome and funds get locked up in the system and are inaccessible to the recipient.

Budget execution in respect of Donor Funds

SOURCE	2014 GHC '000	% of Total Receipt
DANIDA	43,994.20	10.45
DFID	64,065.40	15.22
JICA	6,060.60	1.44
GLOBAL FUND	44,136.30	10.49
CHINA	615.9	0.15
WHO	13,298.10	3.16
KOICA	1,352.70	0.32
KOFFI	1,599	0.38
UNICEF	1,287.60	0.31
OTHERS (Mixed credits)	244,515.60	58.09
TOTAL	<u>420,925.40</u>	<u>100.00</u>

Table 7: Budget Execution in respect of Donor Funds

A total of four Hundred and twenty million, nine hundred and twenty five thousand four hundred Ghana cedis (GH¢ 420,925,400.00) in the form of sector budget support, Earmarked funds, grants, loans and credits was spent. Mixed credits constitute the largest receipts (58.09%). DFID, DANIDA and Global fund are the largest contributors in the absence of loans and credit, collectively contributing over 86% of total donor receipt. The loans and mixed credits as indicated in the chapter on Capital investment were used to support the Ministry's infrastructure projects.

AGENCIES	GOODS AND SERVICES GHS	ASSETS	TOTAL	% execution
MOH HQ	65,783,203.50	12,652,731.89	78,435,935.39	77.4
GHS	13,319,933.26	4,981,282.95	18,301,216.21	18.1
TEACHING HOSPITALS	1,365,150.83	-	1,365,150.83	1.3
SUBVENTED	1,444,010.33	39.00	1,444,049.33	1.4
PSYCHIATRIC HOSPITALS	1,806,961.32	-	1,806,961.32	1.8
TOTAL	83,719,259.24	17,634,053.84	101,353,313.08	100.0

Table 8: Expenditure Report For Donor Funds By Agencies

The Ministry of Health spent a total of GHc 78,435,935.39 (77.4%) of total donor receipts in 2014. Goods and services constitute 83.9% of total MOH expenditure whilst the remaining was used on assets. About 18% of total donor receipts went to GHS and remaining 4.5% expended by the teaching hospitals, subvented organisations and the psychiatric hospitals. Of the total expenditure by the MOH, about 75% was spent on behalf of some agencies in respect of sector wide programmes and activities. Details of appropriation are indicated in the chart below.

DETAILS OF EXPENDITURE BY MOH HQ'S IN RESPECT OF SECTOR WIDE ACTIVITIES IN FAVOUR OF BMC'S

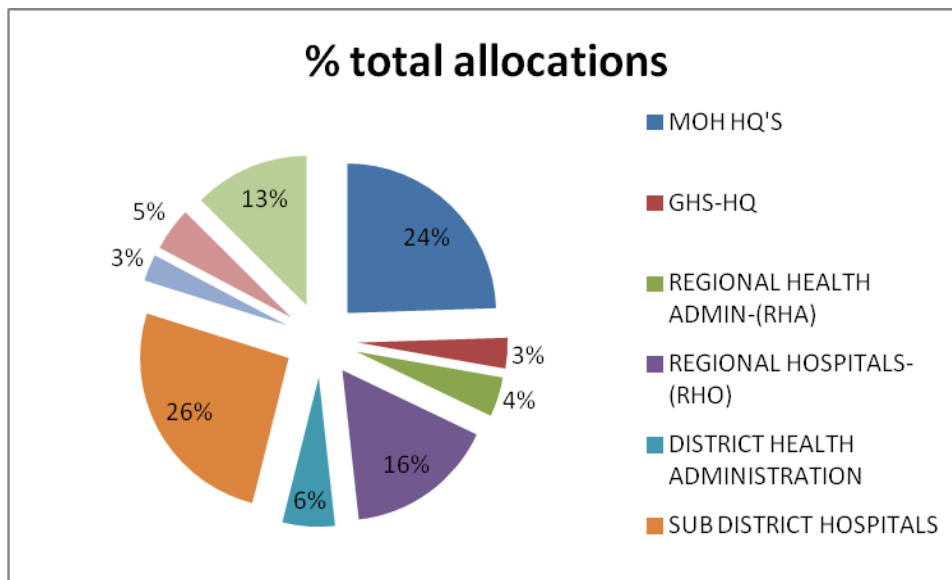


Figure 12: **Details Of Expenditure By MOH HQ's in Respect of Sector Wide Activities in Favour Of BMC's; Source Finance Directorate**

BMC'S	GOODS AND SERVICES-GHS	ASSETS	TOTAL	% execution
GHS-HQ	3,722,652.12	785,842.06	4,508,494.18	24.63
REGIONAL HEALTH ADMIN-(RHA)	5,516,775.73	-	5,516,775.73	30.14
REGIONAL HOSPITALS-(RHO)	1,186,228.04	-	1,186,228.04	6.48
TRAINING INSTITUTIONS	304,273.37	15,281.00	319,554.37	1.75
DISTRICT HEALTH ADMIN/SUB DISTRICT GROUP	2,494,582.80	1,534,245.67	4,028,828.47	22.01
DISTRICT HOSPITALS	58,706.04	1,142,210.00	1,200,916.04	6.56
POLYCLINICS	36,715.16	1,503,704.22	1,540,419.38	8.42
TOTAL	13,319,933.26	4,981,282.95	18,301,216.21	100

Table 9: Details Of Expenditure By Ghana Health Service In Respect Of BMCs Source: Finance Directorate

The Ghana Health Service expended a total of GH¢18,301,216.21 equivalent to 18.1% of total expenditure from donor funds. About 25% of total expenditure was made by the GHS HQ and 30% by regional Health administration. About 22% was spent by the district health administration.

CATEGORY	Staff Strength	% staff strength	Monthly Payroll Cost	Market Premium	Total Monthly Payroll Cost	Annual Payroll Cost	% of Total Annual Payroll Cost
DOCTORS	2857	3.33914	5,419,225.99	5,761,526.83	11,180,752.82	134,169,033.86	9.75
COMMUNITY HEALTH NURSE	13659	15.96405	9078911	5,265,769.00	14,344,680.00	172,136,160.00	12.51
ENROLL NURSE	12424	14.52063	8,261,807.54	4,791,848.37	13,053,655.91	156,643,870.92	11.39
GENERAL NURSE	14773	17.26604	16,878,435.40	10,073,730.19	26,952,165.59	323,425,987.08	23.51
STAFF MIDWIFE	4760	5.56328	5,610,686.20	3,557,128.75	9,167,814.95	110,013,779.40	8.00
PHARMACISTS	650	0.75969	952,896.40	594,016.10	1,546,912.50	18,562,950.00	1.35
BIOMEDICAL SCIENTISTS	720	0.84150	988,676.00	591,098.50	1,579,774.50	18,957,294.00	1.38
RADIOGRAPHERS	91	0.10636	123,464.10	73,588.77	197,052.87	2,364,634.44	0.17
MANAGEMENT (DIR, DEPT DIR, ETC.)	243	0.28401	601,647.00	993,189.30	1,594,836.30	19,138,035.60	1.39
ADMINISTRATORS & HRM	675	0.78891	815,259.60	244,577.90	1,059,837.50	12,718,050.00	0.92
Health Trainee & Intern	4500	5.25941	2,491,566.28		2,491,566.28	29,898,795.36	2.17
OTHERS	30209	35.30697	22,470,781.67	8,986,624.54gr	31,457,406.21	377,488,874.52	27.44
TOTAL	85561	100	73693357	40933098	114626455	1375517465	100.00

Table 10: 2014 PAYROLL COST BY CATEGORY; source IPPD

Total Annual Payroll cost amounts to GH¢ 1,375,517,465.00. This represents a decline of 1.1% from the 2013 payroll cost. The total staff strength on the payroll also declined from 91,094 in 2013 to 85,561 in 2014 representing 6.1% reduction. This could explain the relatively small but significant decline in the annual payroll cost. On the average, market premium constitutes 35.7% of total annual payroll cost ranging from 62.3% for directors to 23.1% for administrators and human resource managers.

Clinical Care

Over the past three years, the number of in-patient deaths has declined and the number of admissions has increased. This has led to substantial improvement in the institutional all-cause mortality rate from 27.8 deaths per 1,000 admissions in 2012 to 21.3 in 2014.

Upper East Region experienced increase in all-cause mortality rate due to steep decline in number of admissions.

Analysis presented above shows that a large proportion of OPD cases are seen at the lower levels of the health system in the Upper East Region. While this is generally considered appropriate, robust and accessible systems for referrals must be in place in order to match disease severity with clinical competency and ensure patient safety. The trend in Upper East Region should be followed closely in 2015.

HEFRA

HEFRA has registered and accredited between 50 and 80 additional facilities every year. About 22% of all facilities are currently registered and accredited by HEFRA. These facilities are all private since HEFRA has not yet started the registration and accreditation of public facilities. Given an estimated 3,000 private facilities in Ghana, HEFRA has registered about 45% of them.

It was challenging to the review team to distinguish between new registrations and re-registrations. Moreover, the review team were not presented with systematic information about facilities, which are no longer in operation.

Child health

Nutrition and breastfeeding

According to the preliminary findings of the 2014 DHS, nineteen percent of Ghanaian children are chronically malnourished with a height-for-age (stunting) below 2 standard deviations (SD) under national average, and 5 percent are severely stunted (below -3 SD). This is a reduction (improvement) of about 17% since the MICS in 2011 and about 47% since the DHS in 2008. Stunting increases with age, peaking at 28% among children age 24-35 months. A slightly higher proportion of males (20%) than females (17%) children are stunted, and stunting is greater among children in rural areas (22%) than urban areas (15%). By region, stunting ranges from 10% in Greater Accra to 33% in the Northern region. Stunting is inversely correlated with education and wealth. For example, 25% of children in the lowest two wealth quintiles are stunted, as compared with 9% of children in the highest quintile.

Between the MICS survey in 2006 and the MICS survey in 2011, there was a declining trend in the proportion of babies exclusively breastfed for the first six months, but the recent DHS from 2014 shows a positive trend with an increase of 6.6 percentage points from 45.7% in 2011 to 52.3% in 2014.

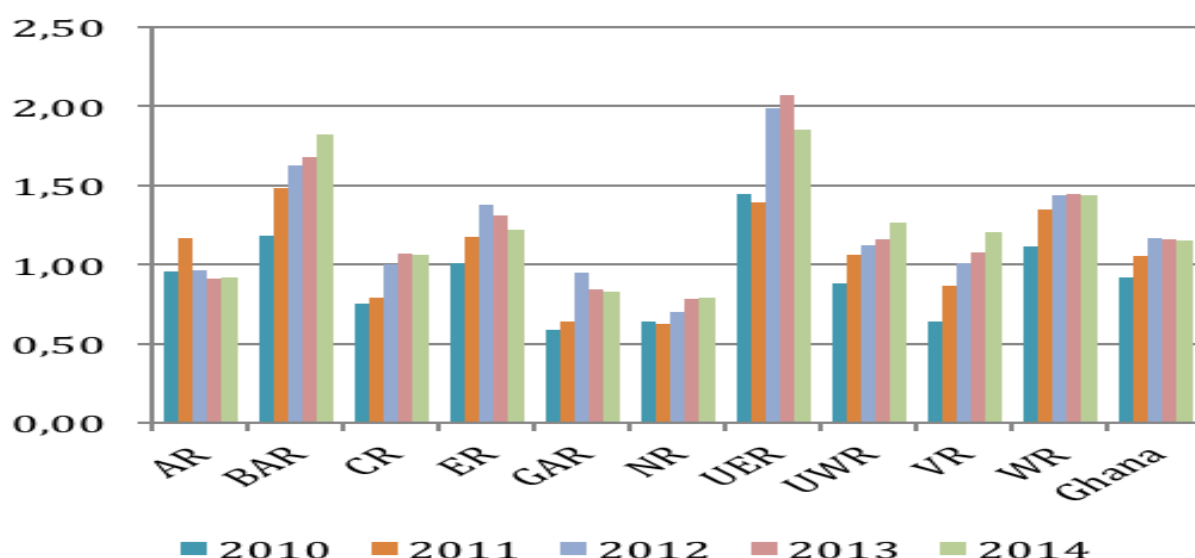


Figure 12: Penta-3 coverage by region 2006-2014. Source DHIMS.

Expanded programme of Immunization

The EPI coverage has fluctuated between 85% and 90% over the past eight years (Figure 12). The national coverage in the routine health information system corresponds well with the survey result of 2014, which is 88.5%. There are, however, issues with some regions especially Northern Region that constantly has reported coverage above 100% in the routine system but only 81% in the latest DHS, which is also the poorest performance among Ghana's ten regions (Figure 13). The "high" coverage in Northern Region is probably due to

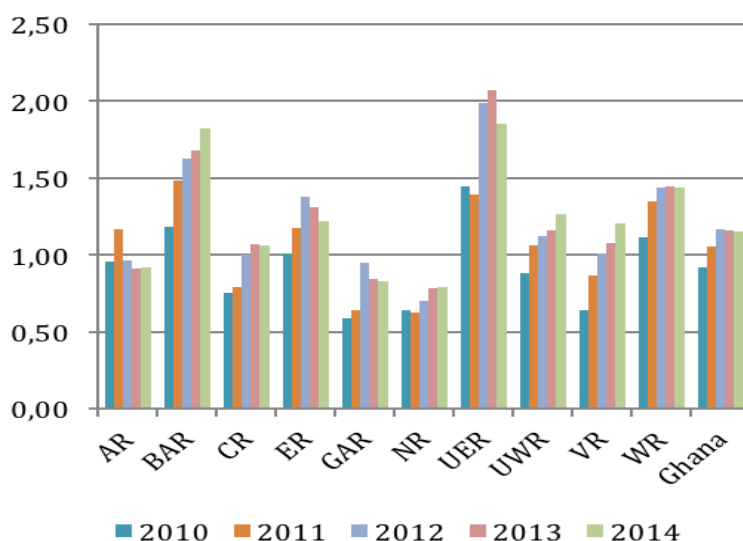


Figure 13: Penta-3 coverage by region 2008-2014. Source DHS and MICS

Ghana continues to observe vaccine preventable diseases, e.g. measles. A total of 1,039 measles cases were suspected in 2014. Of these suspected cases, 121 (11.6%) were

underestimation of the population base, which is also reflected by suspected overestimation of other maternal and child health indicators, e.g. antenatal care and supervised deliveries. Despite some variations, analysis of the latest three population based surveys confirms the stagnation of EPI coverage and for many regions a reduction compared to 2008 figures. This is a worrying trend since

confirmed positive for measles. Is this the effect of dwindling resources for public health activities at the district level?

Malaria

About 1 child for every 200 admissions with malaria died from the infection in 2014. This is a reduction of over 20% compared to previous years. The highest case fatality is observed in Central and Northern Regions with 1.38 and 1.06 deaths per 100 admissions, respectively. The number of children admitted with malaria continue to increase over the past years. This may indicate that efforts aimed at preventing severe malaria may not be achieving the desired effect or that other infectious conditions may be misclassified as malaria. It may be that health workers are not adhering to guidelines for diagnosing malaria particularly with the use of RDTs. GHS reported that the proportion of outpatient cases suspected for malaria who are tested by either microscopy or rapid diagnostic testing has increased from about 30% in 2010 to about 75% in 2014, which reduces the probability of misclassification.

The use of long lasting insecticide treated nets (LLINs) is one of the most effective ways to prevent malaria infections and deaths. Since 2006, the proportion of children sleeping under LLINs has doubled and in 2014 almost half of all children slept under an LLIN the previous night. 552,100 LLINs were distributed to pregnant women (through ANC) and children (through CWC) in Upper East, Eastern, Volta, Western and Central Regions. Moreover 1,374,200 LLINs were distributed through basic schools (both public and private) for school children.

Still Births

11,000 fetuses died before birth in Ghana in 2014. This corresponds to about 2 for every 100 live births. About 41% were intrapartum stillbirths while the remaining showed signs of maceration indicating antepartum death. Intrapartum (or fresh) stillbirths can to a large extent be prevented by high quality antenatal care and safe delivery practices. The stillbirth rate seems to have stagnated at a high level, which calls for more action. The review team recommends that all stillbirths should be audited at regional and teaching hospital level in order to identify the underlying reasons and address these.

Newborn, Infant and Under-Five Health

Between 1990 and 2014 infant and Under-Five mortality halved while neonatal mortality reduced by about 40% (Figure 14). The decline in mortality rates is especially pronounced over the past 10 years. Childhood mortality is strongly correlated to structural factors like economic development, general living conditions, social wellbeing, and the quality of the environment, that affect the health of entire populations. Therefore, childhood mortality indicators reflect both the economic and social conditions for the health of mothers and newborns, and the accessibility, quality and effectiveness of the health system. Over the past decade, the health system in Ghana has been strengthened with large increases in health personnel and improvements in infrastructure, leading to better geographical access to health services. In the same period, financial access has improved with the scale up of health insurance coverage and exemptions for the poorest and most vulnerable.

Since the last Demographic and Health Survey in 2008, the chance of surviving life's first 28 days (neonatal period) has not improved dramatically in Ghana. In the same period, survival of children between 29 days and 5 years improved substantially. Routine

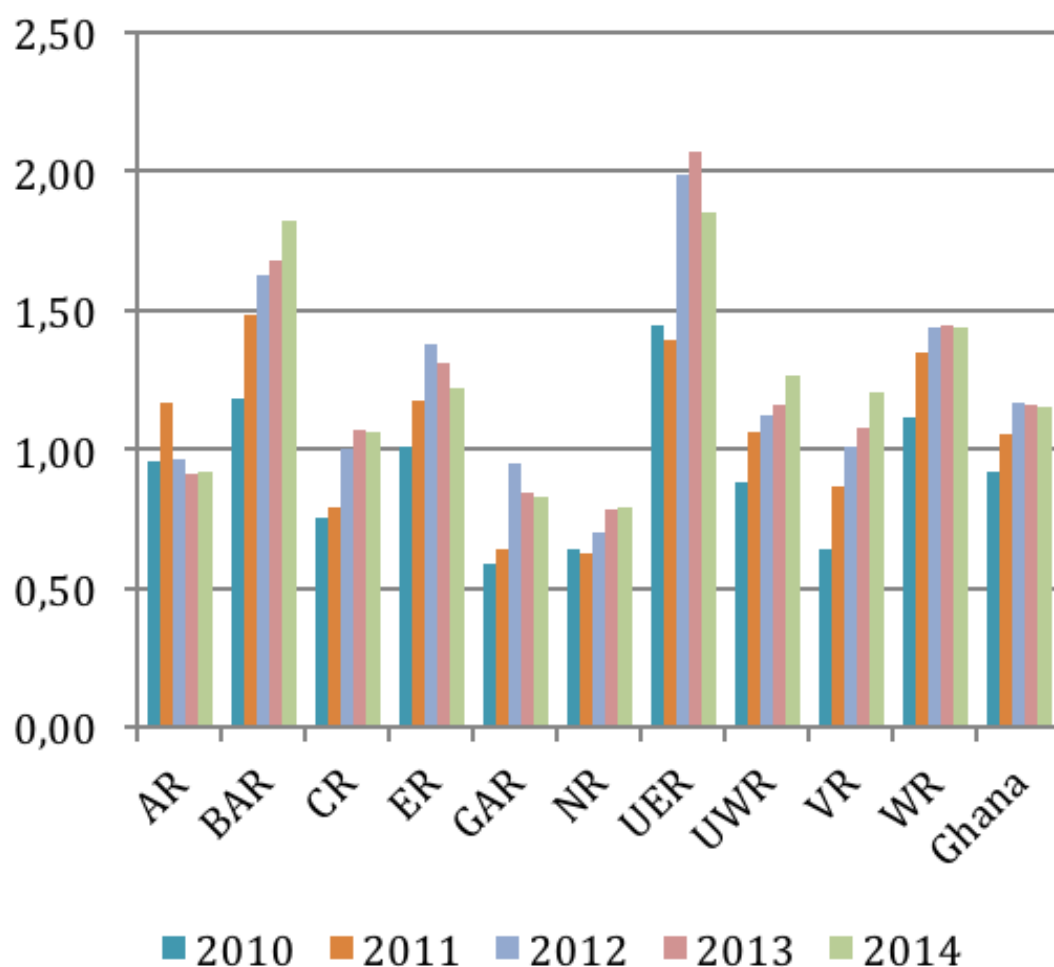


Figure 14: NMR, IMR and U5MR 1990-2014. MDG targets with dotted line. Source MICS and DHS.

information about neonatal mortality does indicate, that neonatal mortality after several years of worsening, started to improve in 2014. This could be a reflection of the increased focus on neonatal mortality with launching of a newborn strategy.

The development of clinical standards was part of the newborn strategy as a result of the lack of standard for newborn care in the country. Development of the standards was initiated in 2014 and is expected to be completed in 2015. This will promote standardized newborn care in all health facilities including private health facilities.

Previously, peer review tools have been introduced in health facilities to review performance, but they did not include any newborn care indicators. In the year under review, newborn care indicators have been introduced into the existing tools to enable facilities peer review newborn care in their health facilities.

As part of efforts to improve newborn outcomes the GHS in collaboration with PATH is building capacity of health staff within referral facilities in Brong-Ahafo, Eastern, Volta and Ashanti Regions. The training is on Helping Babies Breathe (HBB) and Essential Care for Every Baby (ECEB). Trained health staff are expected to build capacity of middle health care workers to provide quality care to mothers and newborns to reduce maternal and neonatal mortality rates. Similarly, health care providers from five regions; Upper West, Volta, Eastern, Ashanti and Brong-Ahafo Regions were trained on the maternal and newborn job aids.

Since only the preliminary report of the DHS 2014 has been published, it has not been possible to assess differences in mortality reduction between socioeconomic quintiles, NHIS members vs. non-members, urban/rural populations, regional variations etc. These analyses should be completed as soon as possible to provide basis for the policy debate and adjust sector priorities.

Postnatal Care

The proportion of mothers making first PNC visit within 48 hours after delivery has more than doubled since 2012, but a performance of 44% is still relatively low when the skilled delivery coverage of 57% is taken into account. As a minimum, all new mothers and newborn babies delivered at a health facility should receive a postnatal check-up before discharge.

Reproductive Health

Fertility and family planning

After a substantial drop in total fertility rate (TFR) in the eighties and beginning of the nineties, the rate has been stagnant between 4.0 and 4.4. The 2014 DHS estimated that a woman from Ghana would bear an average of 4.2 children in her lifetime. This is slightly higher than the 2008 estimate of 4.0 but slightly lower than the 2011 MICS estimate of 4.3.

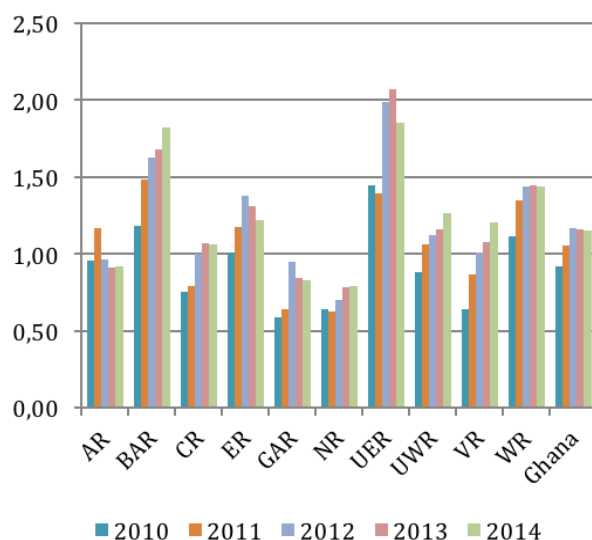


Figure 15: CYP by source 2010-2014. Source GHS and DHIMS.

While there was marked improvements in contraceptive prevalence and reduced gap in unmet need for family planning until 2011, the performance of these indicators seems to have plateaued or even worsened between 2011 and 2014.

Total unmet need for family planning was almost 30% in 2014 compared to 26% in the MICS in 2011. In the same period the contraceptive prevalence rate for any modern method dropped slightly from 23% to 22%, while CYP continued to increase. Methodologies to assess unmet need and contraceptive prevalence may vary between surveys, and it may be more appropriate to

compare performance in 2014 with the DHS from 2008. Such comparison shows some improvement from 2008, where more than 35% married women aged 15-49 had unmet need for family planning, to 30% in 2014.

CYP increased by over 25% from 2.07 million in 2013 to 2.61 million in 2014. Government provides the majority of family planning and the volume of public family planning services has been rapidly increasing, with over 150% increase since 2010 (Figure 15). According to the Family Health Division of GHS, all non-public providers submit reports on family planning service delivery directly to the national level and their information is not recorded in the DHIMS.

Antenatal care

Only about two thirds of all pregnant women make four or more ANC visits. A recent data validation exercise by MOH revealed several challenges with the current system for reporting on this indicator. Due to the data and reporting structure, it is required to thoroughly review antenatal care registers dating several months prior to the reporting period. This introduces risk of poor data quality and underreporting. This is illustrated by comparing the routine information with the survey based information, where the preliminary findings from the 2014 DHS gives a proportion of mothers making fourth ANC visit of 87.3% as against 67% in DHIMS. According to the DHS, the lowest performing regions are Volta (77.3%), Eastern (77.4%) and Northern (73.0%) Regions, while the remaining 7 regions all have coverage about 90%. GHS has identified late registration of pregnant women as one of the main challenges to achieve higher coverage. When a woman is registered and makes her first ANC visit late in pregnancy, there is not enough time to make all four visits before delivery.

Supervised delivery

Based on the routinely reported information, equity in access to supervised delivery is unchanged between 2013 and 2014. The poorest performance continues to be in Volta Region while Upper East Region has the highest coverage. The probability for a woman in Volta Region to deliver at a health facility is 45% compared to 74% in Upper East Region. Notwithstanding the unchanged equity index, there were improvements in skilled delivery coverage in both poorest and best performing regions (Figure 16).

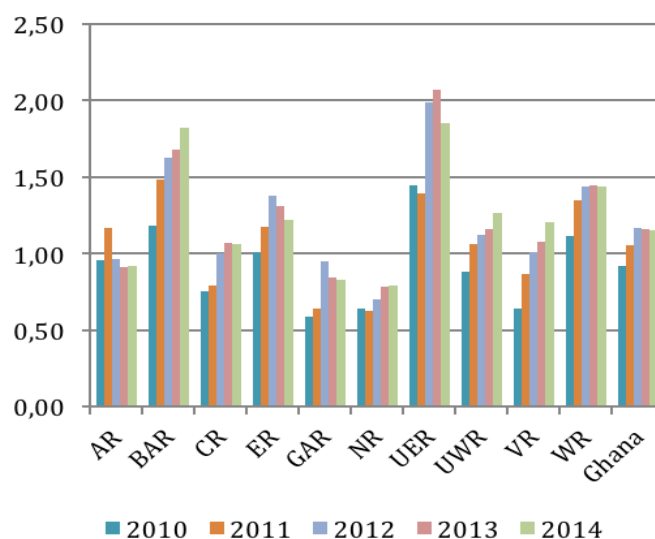


Figure 16: Supervised delivery coverage by region 2008-2014. Source DHIMS.

A recent field visit by MOH to Volta Region showed that the region has 191 CHPS compounds, but inadequate provision of basic equipment for

service delivery and appropriate staff for providing supervised delivery services are affecting their efforts aimed at improving service delivery. Only about 11% of deliveries occur in sub-district clinics and CHPS in Volta, this is the lowest in Ghana. The average in Ghana is 20% and highest is 47% in Upper East Region. Another major challenge is the mal-distribution of health infrastructure in Volta Region. The southern and middle belts seem to be more endowed with health infrastructure compared to the northern Volta.

Volta Region is averagely staffed with respect to midwives compared to other regions in Ghana, but midwives are mal-distributed with some parts of the region being more endowed than others. Midwives in Volta Region have on average 109 deliveries a year compared to 132 in Ghana and 190 in Northern Region. Productivity of some midwives is very low, and according to the Regional Health Management Team some conduct as few as 7 deliveries in a month. There is weak supervision and monitoring at the lower levels. A monitoring team from the regional directorate, which went round recently, noted that some district management teams had never visited their CHPS zones. The region has identified this as a challenge and is working out a strategy to ameliorate the situation. They however complain of limited funds since monitoring and supervisory visits tend to be very costly. One of the biggest challenges in Volta Region is geographical access to services since the region has 6 island districts and about a third of the people stay in the island communities. Staffs are reluctant to work in these island communities and some are unwilling to ride in the boats due to safety concerns. Volta Region has also identified poor staff attitude as a challenge.

For equity to improve, resources and effort must be invested into solving infrastructural and human resource challenges and expand service delivery at sub-district level in Volta Region.

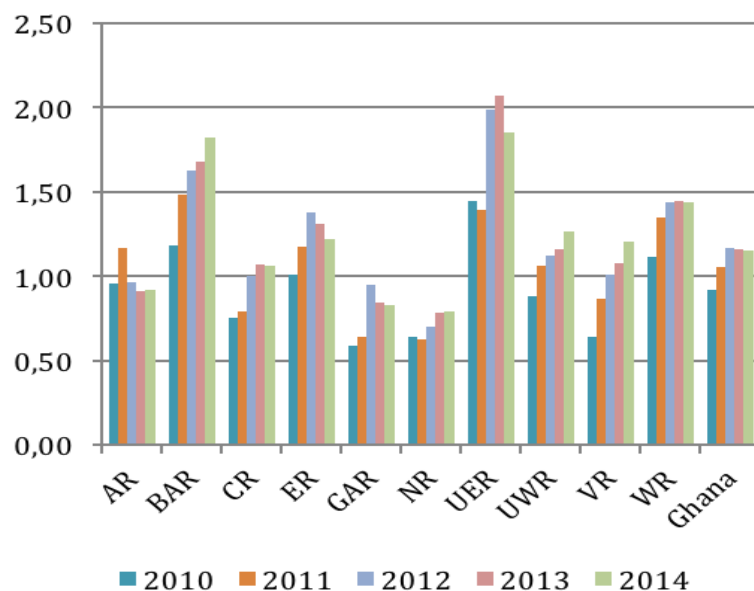


Figure 17: Relation between supervised delivery and midwife staffing strength by region in 2014. Bubble size represents number of deliveries. Source DHIMS and IPPD.

Figure 17 shows the relation between skilled delivery coverage and midwife staffing strength by regions. The size of the bubble represents the total number of skilled deliveries in the region. The figure shows that Upper East Region is well staffed and has a high coverage of skilled deliveries, while Northern Region has low staffing strength and low coverage. Volta Region has average staffing but relatively low coverage as discussed above. The low performance of Ashanti and Greater Accra Regions may possibly be

explained by underreporting from quasi-governmental and private providers, predominant in these two regions.

Survey based figures for supervised delivery are normally higher than routine figures due to incomplete reporting, inadequate coverage of non-governmental providers and inaccurate population estimates in the routine reporting system (DHIMS). Figure 18 illustrates this difference, and shows that the average gap between routine data and survey data for Ghana has halved from over 30% in 2008 to about 16% in 2014. This indicates that the routine health information system has improved. The figure also illustrates large differences in Ashanti and Greater Accra Regions. This is possibly due to inadequate data capture of skilled deliveries performed outside government facilities. Moreover, it is evident that the routine health information system in Northern Region is challenged by underestimated population figures leading to overestimated coverage.

Based on analysis of the survey based information, Volta Region is still ranking among the lowest regions with 66.3% skilled delivery coverage, but Northern Region is performing significantly worse with only 36.4%. This indicates that the sector must increase its focus on Northern Region despite relatively good performance based on routine information.

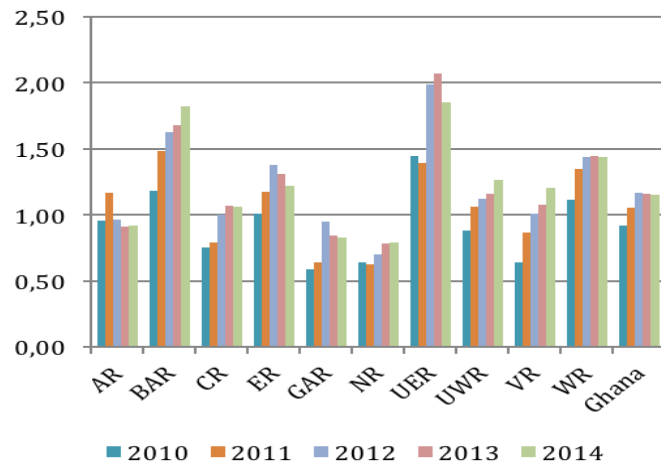


Figure 18: Differences in supervised delivery coverage between survey and routine reporting by regions (survey minus routine coverage figure). Source DHIMS, DHS and MICS

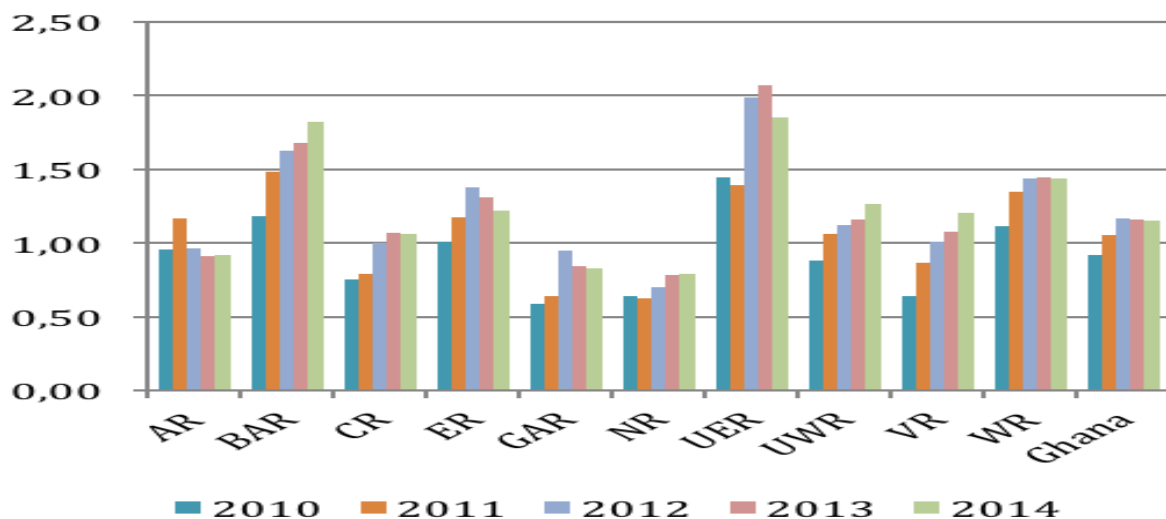


Figure 19: Supervised delivery coverage by region 2003-2014. Source DHS and MICS.

Maternal Mortality

Institutional Maternal Mortality Ratio was as high as 174 deaths per 100,000 live births in 2011 but has since then dropped to 144 in 2014. There are large regional variations in iMMR. The highest is in Greater Accra Region (185) followed by Volta Region (179) and Easter Region (176).

In 2010, the MOH/GHS and development partners developed an MDG5 Acceleration Framework (MAF). The MAF showed that additional investment focusing on skilled attendance at birth, emergency obstetric care and family planning would accelerate Ghana's move towards achieving MDG5 and also contribute significantly to the attainment of MDG 4 target. Erratic funding by both government and development partners has challenged implementation of MAF, but recently some DPs have shown renewed interest in providing direct support to MAF activities and procurements. As part of the MAF strategy, the MOH is planning a follow-up to the Maternal Health Survey of 2007. The survey is planned to take place in 2016 and will assess maternal mortality as well as status for Emergency Obstetric and Neonatal Care (EmONC).

	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2010	152	142	149	192	207	140	138	158	219	137	164
2011	197	127	124	207	242	171	127	160	201	101	174
2012	77	167	113	173	205	212	136	146	174	132	152
2013	125	138	122	200	198	174	108	193	161	153	155
2014	115	134	105	175	185	108	139	161	179	149	144

Table 8: Institutional Maternal Mortality Ratio by region. Source DHIMS.

HIV/AIDS

The proportion of HIV positive pregnant women who received ARVs for PMTCT declined to 66% in 2014 from 76% in 2013. Mother to child transmission is by far the most common way that children become infected with HIV. Without treatment, the likelihood of HIV passing from mother-to-child is 15-45%. However, antiretroviral treatment for the prevention of mother-to-child transmission (PMTCT) can reduce this risk. The declining trend in the supply of ARVs for PMTCT is therefore worrying. In 2014, there was a substantial increase in the number of pregnant women diagnosed with HIV who therefore require ARVs for PMTCT. This could partly explain the reduction in the proportion of persons that are treated for PMTCT. The challenge of providing adequately for PMTCT could reflect a more generalised lack of ARVs in Ghana and should be analysed in more detail to address bottlenecks.

According to the UNAIDS report on the global AIDS epidemic 2013, the risk that a woman living with HIV would transmit the virus to her child was 31% in 2009. This risk declined to only 7% in 2012, but has since been stagnant at this level. With the observed worsened access to PMTCT, there is a risk that again more babies will become infected from their mothers.

Tuberculosis

TB treatment success rate is reported with a 1-year lag. In 2013, about 87% of all diagnosed TB patients completed their treatment successfully, while the remaining 13% either dropped out of treatment or died before treatment was complete. The National TB Programme (NTP) finalised a national TB prevalence survey in 2014. The survey results

are not yet published, but preliminary findings indicate a correction of the national TB prevalence from 71 to 264 persons with TB per 100,000 Ghanaians. The NTP is concerned with inadequate screening and missed opportunities for diagnosing TB patients at facilities, leading to a too low number of presumed cases. Confirmation of the TB diagnoses among presumed cases is further complicated by sub-optimal diagnostic tests.

Polio

Non-polio acute flaccid paralysis (AFP) rate is an indicator of surveillance sensitivity. The global target is at least one case of non-polio AFP should be detected annually per 100,000 population aged less than 15 years, while Ghana's target is more ambitious of over two cases. In 2014, that target was met with 2.95 cases detected. There seems to be issues with parallel reporting of suspected non-polio AFP cases since figures differed between the DHIMS and the Public Health Report. Moreover, the source of the population figures used by GHS to calculate this indicator is unclear.

Cholera Outbreak

Cholera is endemic in Ghana with intermittent outbreaks. In 2014, Ghana recorded its worse cholera outbreak, which started on 10 June 2014 in the Accra Metropolis with 6 cases. The outbreak rapidly escalated reaching alarming magnitude of 28,922 cases and 243 deaths (Case fatality rate of 0.8%) as of 4 January 2015. This was the highest number of recorded cases in the past 34 years involving all the 10 regions and 60% of the districts (130 out of 216) in Ghana. The Figure 20 shows the cholera epidemic curve from 1980 to 2014. Figure 21 also shows the geographical distribution of the cholera cases in Ghana during the outbreak.

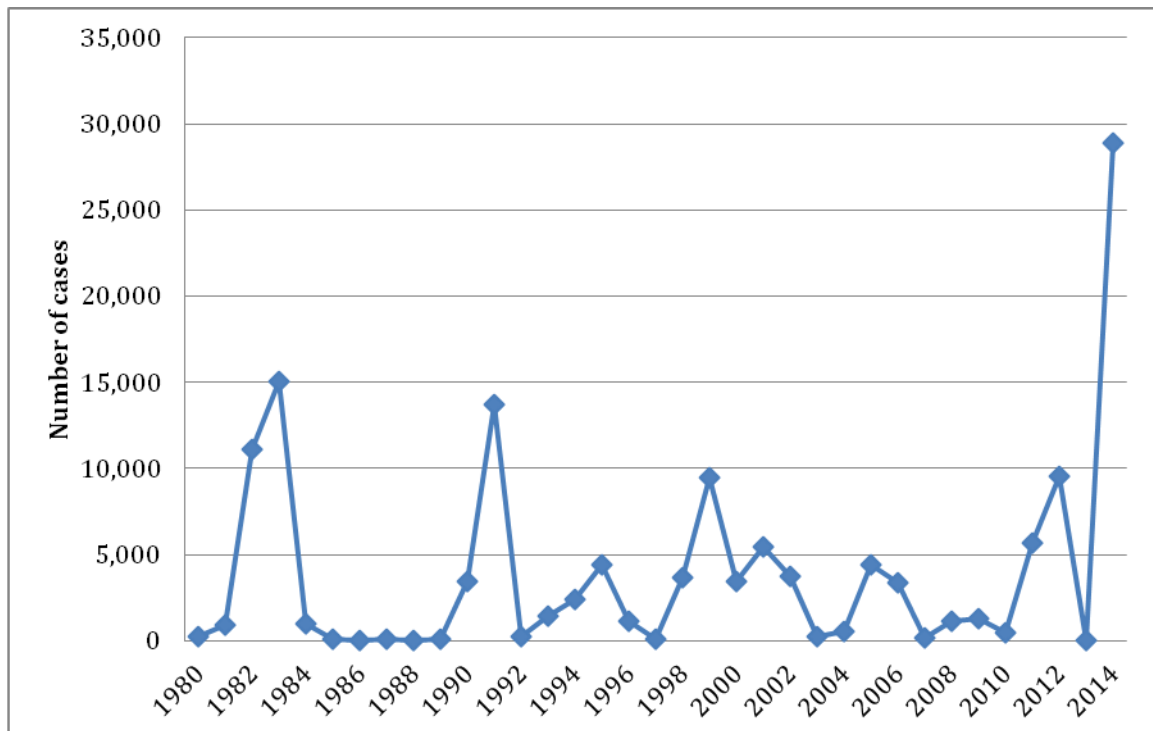


Figure 20: Cholera epidemiology 1980-2014. Source GHS.

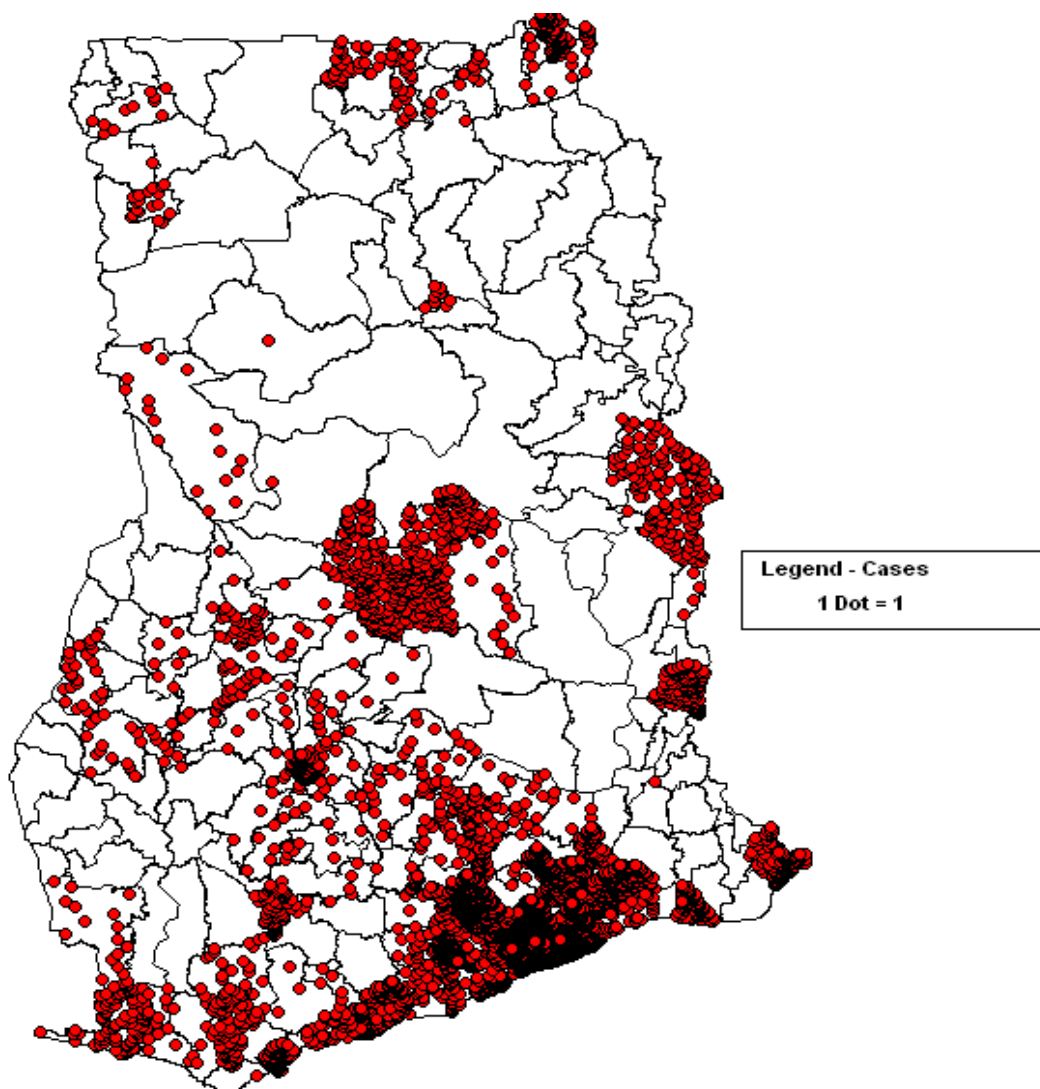


Figure 21: Geographical distribution of cholera cases. Source GHS.

Viral Haemorrhagic Fever – Ebola Virus Disease

In March 2014, WHO officially declared Ebola Virus Disease (EVD) outbreak in the three worst affected countries - Guinea, Liberia, and Sierra Leone which later spread to other countries; Mali, Nigeria, Senegal, Spain, Norway and the United States of America. The outbreak has resulted in 21,689 cases and 8,626 deaths as at 5 January 2015 according to WHO Situation Report.

Ghana is one of the 15 prioritized countries identified as high risk for a potential EVD outbreak and was therefore required to strengthen the health system to be able to detect and contain any outbreak. In 2014, the EVD surveillance yielded 131 suspected cases, which were thoroughly investigated with no confirmed case of EVD.

Structures and measures were put in place to respond to potential EVD outbreak. These includes; Planning and Coordination, Surveillance, Situation Monitoring and Assessment, Case Management arrangements, Social Mobilization and Risk Communication, Logistics, Security and Financial Resources.

A number of activities were carried out including, training of health workers on EVD, acquisition and supply of Personal Protective Equipment (PPEs), simulation exercises, screening for EVD at points of entries to Ghana. Some vital documents were also developed as parts of EVD preparedness plans. This includes, Health Declaration Forms for use at the Points of Entries, case definitions, case-investigation, reporting, feedback forms and protocol for data management. SOPs and protocols were also developed for sample collection, storage and shipment.

As part of country EVD preparedness plan, three major treatment centres were identified in Tema, Kumasi and Tamale to handle cases from the southern, middle and northern zones respectively. Works on the Tema treatment centre was completed; the centre was equipped and ready for use while works on the other centres reached various levels of completion.

4. Regions of excellence and regions requiring attention

In the review of POW 2011, the review team introduced a simplified holistic assessment based on regional performance of selected indicators to identify the region of excellence and the region requiring attention. The scoring of each indicator follows the rules of the holistic assessment adapted to regional analysis, albeit indicators are not weighted.

It is important to note that the regional performance assessment is only indicative since it is based on a limited number of service delivery indicators, which may not reflect the true performance of the individual regions.

	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR
TOTAL SCORE	3	9	5	6	7	8	10	8	7	7
OPD per capita	0	1	0	1	0	0	1	1	1	1
All Cause Mortality	1	1	1	1	1	1	1	1	1	1
U5 CFR Malara	1	1	-1	1	1	0	1	1	1	1
CYP	-1	1	1	-1	1	1	1	0	1	0
iNMR	1	-1	1	1	1	1	1	1	1	-1
iMMR	1	1	1	1	1	1	1	1	-1	0
EPI	1	1	0	0	0	1	1	0	1	1
ANC 4+	-1	1	-1	0	1	1	1	0	0	1
Skilled delivery	0	1	1	0	1	1	1	1	0	1
Still birth rate	-1	1	1	1	-1	0	0	1	1	1
PNC within 48h	1	1	1	1	1	1	1	1	1	1

Table 2: Holistic assessment of regional performance in 2014

	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR
TOTAL SCORE	3	9	5	6	7	8	10	8	7	7
OPD per capita	0	1	0	1	0	0	1	1	1	1
All Cause Mortality	1	1	1	1	1	1	1	1	1	1
U5 CFR Malara	1	1	-1	1	1	0	1	1	1	1
CYP	-1	1	1	-1	1	1	1	0	1	0
iNMR	1	-1	1	1	1	1	1	1	1	-1
iMMR	1	1	1	1	1	1	1	1	-1	0
EPI	1	1	0	0	0	1	1	0	1	1
ANC 4+	-1	1	-1	0	1	1	1	0	0	1
Skilled delivery	0	1	1	0	1	1	1	1	0	1
Still birth rate	-1	1	1	1	-1	0	0	1	1	1
PNC within 48h	1	1	1	1	1	1	1	1	1	1

Table 2 shows the result of the regional assessment. All regions have a positive total score. The highest performing region was Upper East with only a single neutral score and no negative scores. One of the keys to success in Upper East Region is the expansion of CHPS. In alignment with the revised CHPS policy, the region has posted midwives to the CHPS clinics to perform deliveries and the CHPS clinics provide a substantial part of the OPD services in the Region.

The poorest performing region was Ashanti Region due to low performance on reproductive health indicators and OPD per capita. Efforts should be made in 2015 to identify bottlenecks and mitigate for reproductive health service provision in Ashanti

Region. Eastern and Volta Regions were identified as regions requiring special attention in last year's review. In 2014, they were performing averagely.

Northern Region

As noted in the chapter above, Northern Region may have challenges with the population figures leading to overestimation of performance. This is underlined by results from the 2014 DHS, which shows poor performance across most indicators. The review team recommend population figures for Northern Region to be adjusted, so the routine health information system will be provide a better reflection of performance in this region.

A team from MOH visited Northern Region to explore the factors influencing their performance. The team interacted with the Regional Health Management Team, Kumbugu District Health Management Team (DHMT), Damango DHMT and Damango District Hospital Team. The following were the main issues identified

Population

The region recognizes the fact that their population is grossly underestimate and thereby making it difficult to truly measure their performance. The result of this is that the region has always reported higher coverage for most of the indicators creating impression that there are no challenges and that services have been delivered to all eligible children and women.

A typical example of the population underestimation is the situation in Kumbugu District. The National population estimate for the district for 2015 is 48,217 compared with estimate by the district at 57,019 people. Community Volunteers were engaged to do head count of the people in the district, community by community and this yielded a total population of 98,398.

Human Resources

The human resource situation in Northern Region is generally inadequate especially when you move out of the regional capital and particularly worse for the midwifery category. In Damango District hospital, there are only two midwives conducting average of 80 deliveries per month. Again, the region indicated that the number of Community Health Nurses (CHN) is also limited. They were also concerned about the fact that almost half of their CHNs are either pregnant or nursing their babies at any point in time. This affects the productivity of these staff since they enjoy maternity leaves, sick days off for their children and other leaves. Damango currently have 13 CHNs, 6 are nursing mothers and 1 is pregnant. These 7 CHNs cannot go on outreach activities due to the rough access route and generally bad terrain. The situation was not different in Kumbugu District with 12 CHNs and 5 midwives.

Despite the outlined HR challenges, the region has huge surplus of Health Assistant Clinical (HAC) well over 900 staff. Currently, the region has 2,002 HAC on payroll, however based on their needs, they required less than 1,100. They projected that the HAC training school in the region is likely to produce additional 1,000 by end of 2015 academic year. They have strongly indicated that they will not accept further posting of HAC into the region and are ready to release the excess ones out of the region. Again, they have appealed to national to stop training HACs and deploy more CHNs and Midwives.

Access – unavailability of facility

Geographically, the region has a large landmass to cover with sparsely located health facilities. The access route and inadequate means of transport are challenges in the region. In Kumbugu, the District has no car and all the Nanfan motorbikes are not roadworthy. The DHMT has only one Yamaha motorbike for monitoring and supervision. Funding for community outreach is also a challenge in the region. Communities' access to health services is not the best because the implementation of CHPS in the regions has not been effective.

Non Availability of Data Capturing tools

The region reported a chronic shortage of data capturing tools. This has negative implication for the quality of data reported from the region. Kumbugu indicated that for over a year now, they have to improvise these data capturing tools resulting in a situation where various facilities are not capturing the required data. Some of the forms are:

- EPI tally Books
- Inpatient Morbidity and Mortality Registers
- Child Welfare Clinic (immunization and growth) Registers
- Family Planning Register
- Antenatal Care Register
- Postnatal Care Register

The shortage of the various data forms has been corroborated by the Centre for Health Information (CHIM) which have been making efforts aimed at getting the ministry of Health to print the registers had not been successful. As a matter of urgency efforts must be made to get the data capturing tools printed to avert the deterioration of data quality.

5. Implementation status of the POW 2014

Research

Health research and its use in policy development and evaluation are important for the development of the health sector. It is in this direction that Ministry of Health places so much emphasis in its annual Programmes of Work. The sector wide indicator framework provides for the monitoring of proportion of health budget allocated for operational research. The 2014 Programme provides for the development of a research agenda to guide and enhance research activities in the sector. It also provides for the training and practice of research at all levels of service delivery. The idea of a data repository is to support and augment research activities.

A draft research agenda has been prepared. A stakeholder consultation planned for 2014 could not take place due to funding difficulties. It is hoped that funding would be forthcoming to ensure that the process for development of the research agenda is completed. The review team could not locate any amount allocated for operational research in the 2014 budget. The planned data repository project is yet to take off. The super structure to house the repository is ready and according the directorate responsible, it will need furnishing. The biggest challenge however will be the technical aspect, which will include data definition, warehousing issues, data access issues, which may need some kind of technical assistance.

Four training modules were developed for research capacity strengthening among health staff by the research directorate of the Ghana health Service. The modules cover operational research, scientific writing and publication, data management using EpiData and ethical issues in health research. A total of four trainings were organised in the Greater Accra, Volta, Bong Ahafo and Upper West Regions for the regional teams. Funding for the training activities was from WHO/TDR.

To push the research agenda forward, the Ministry should make conscious efforts in mobilising resources for planned research activities. Creating the enabling environment for research is important. The Ministry should therefore create systems and structures that encourage staff to take to health research.

M-Health

Tele-consultation has been going in four regions throughout the country on pilot bases. The pilot will end by end of 2015. A strategy for national scale-up is under preparation. There is however need to disseminate information about the pilot wider and consult stakeholders on the scale-up.

The Ministry was also expected to review the existing ICT policy and initiate implementation. Though this activity could not be undertaken, an issues paper was developed for consideration by stakeholders. The paper is yet to be shared with stakeholders for their input.

Nutrition Policy

The nutrition policy being led by the National Development Planning Commission has been completed. All stakeholders have been requested to prepare their own appropriate strategic plan in line with the policy. The NDPC will take responsibility for developing the strategies for the cross cutting issues. The development of the strategic plan for the health sector was initiated in the fourth quarter of 2014 and is being led by the Ghana Health Service. The process of developing the nutrition policy and strategic plan seems to have taken too long and it is time to bring closure to the process and begin with implementation.

Decentralisation of the Health sector

As part of the Government's decentralization process, the Ministry of Health was requested to submit proposal on a new Health Sector Institutional Framework (HSIF) that takes into consideration the government's decentralization policy framework which identifies devolution as the preferred system of governance at the district level. A Technical Working Group (TWG) comprising representatives from identifiable bodies was formed to work on a proposal for consideration by the Ministry and onward submission to the Inter Ministerial Coordinating Committee (IMCC) set up by the government to coordinate the decentralization implementation process.

The draft institutional framework was submitted to the Inter Ministerial Coordinating Committee (IMCC) chaired by the His Excellency the President in April 14, 2014. The proposal was accepted to form the bases for a draft bill for consideration by the Ministry and its stakeholders before forwarding it to cabinet for approval.

Consultants led by Professor Kwamena Ahwoi were engaged to assist in the drafting of the Health Bill. The drafting was to be in phases. The first was the drafting and submission of initial draft for consideration by the Ministry. The second phase was to organise a stakeholder consultation to collate views from stakeholders to improve the Bill. The third phase was the submission of final draft and Cabinet Memo to the Minister of Health.

The initial draft bill was submitted on October 2014. A series of initial consultations with managers at the national level to gauge their reaction were organised. Notable groups consulted included Directors of both the Ministry of Health and the Ghana Health Service at a joint session, and members of the Ministerial Advisory Board. A planned nationwide stakeholder consultation could not take place as scheduled and was re-scheduled for February 2015 to be followed by a review of the draft and submitting the final draft by June 2015.

Capitation

Capitation as a provider payment mechanism under which a predetermined fixed rate is paid in advance to health care providers was introduced in the Ashanti region on a pilot basis. Following a successful evaluation of the pilot and subsequent review of the evaluation report by stakeholders, the then Minister of Health based on the outcome of the discussions directed that capitation as a payment mechanism be scaled up throughout the country on an incremental basis starting from the Upper East, Upper West and Volta Regions.

At the time of the directive, the assumptions were that the minimum systems and structures that will enable the successful takeoff of the project were in place. An initial scouting of the three regions revealed that a lot more work need to be done particularly in the area of staffing and infrastructure. Key challenges identified included the non-availability of appropriate numbers of staff and mix that will be needed at existing facilities for a successful takeoff of the project. It was also observed that there were inadequate health facilities in some geographical locations particularly the northern sector of the Volta Region.

Based on the challenges identified and the experience from the pilot in the Ashanti Region, the technical team set up by the NHIS to lead the capitation scale-up decided to re-organise the way service is provided to ensure a successful implementation of capitation in the three regions.

The NHIS thus mapped the regions in terms of service availability, availability of requisite staff and equipment. They also proposed innovative ways of overcoming some of the bottlenecks identified to ensure a successful takeoff.

Based on experience from the pilot, they had to work with stakeholders in the three regions to work out a governance structure so as to minimise some of the challenges identified at the pilot phase. The process of identifying, organising, re-organising and consultations delayed the process of scaling up. However stakeholders believe it is worth the efforts. The NHIS have submitted its proposal on how service delivery should be re-organised to the Ministry of Health for consideration. The Ministry of Health is yet to respond to the proposals.

Procurement

The Ministry of Health routinely procures drugs and non-drug consumables to support service provision. It also procures technical and consultancy services to aid in the management of health services. The procurement of a total of 43 goods items was planned between January and December 2014. As at the end of December, the process for procuring 16 items representing 37% were yet to commence. Similarly 10 items representing 23% had the process initiated and contracts signed and or awarded. Tender process of three (3) goods items were on hold awaiting confirmation of availability of Funds. Goods for which tender was on hold had something to do with the DFID supported programmes and SBS. The procurement process for about 21% of planned procurement for goods were successfully completed with the delivery of the goods on schedule. The procurement of pooled vehicles for MOH HQ was stopped.

The procurement of three technical services was planned for 2014. None these were successfully completed during the year under review. The process is on-going for two whilst one has been put on hold. Regarding consultancy services, five consultancies were provided for with two contracts awarded and activity initiated. Two contracts were signed and there was no activity on one.

A gap of about GH¢ 96 millions exist between estimated expenditure and approved budget for the procurement needs of the sector

Memorandum of Understanding

One of the main outputs of the 2014 POW is the signing of MOUs by the GHS with its service delivery partners such as the Christian Health Association of Ghana (CHAG), the Teaching Hospitals and the private sector to ensure collaboration on several fronts. So far an MOU has been signed with CHAG whilst work is going on to sign MOU with the Teaching Hospitals. Collaboration with CHAG at The Head quarters level following the signing of the MOU is going on well. However, there is the need to operationalise the MOU at the lower levels to ensure improved service provision.

Tertiary services

One of the key strategies in the 2014 POW to reduce maternal and child mortality was the introduction of specialist outreach support services to support Regional and District Hospitals. Komfo-Anokye and Tamale Teaching hospitals initiated outreach services to the lower levels in collaboration with the regional health directorates of health services of the Ghana Health services in the northern and Ashanti regions. KATH supported 20 health facilities with a total of 25 team visits. The team comprised 2 gynaecologists and 1 paediatrician. The Tamale Teaching Hospital has set up Neonatal Intensive Care Units (NICUs) at two strategic locations in the northern region

Herbal Medicine Practice

The centre for scientific research into plant medicine (CSRPM) during the year under review developed four (4) herbal products. Two for diabetes, one each for malaria and prostate. A total of four publications were made.

RATIONAL USE OF MEDICINES AND TRACER DRUG AVAILABILITY(RUM)

Drug availability in our facilities is estimated to be 76.4%. The continuing challenges of timely reimbursement by NHIA to health facilities may have contributed to owing suppliers. This might have contributed to the low availability of drugs in or health facilities.

On the average, each prescription in the public health institutions contain 2.8 items. These ranges from 1 item to 4.6 items. Half of the prescriptions contain at least one anti-biotic and ranges from as low as 12% to as high as 96.7%. The implication is that almost all prescriptions in some hospitals contain at least one antibiotic.

Injection: On the average 17.8% of prescriptions have at least one injection prescribed. This ranges from low 1% prescription to a high of 57.8%.

Generic name. Adherence to essential drug policy if prescribing generic was high. on the average 80.6% medicines were prescribed by generic name. The highest was 98.3% and the lowest 22.8%. Percentage of medicines prescribed from the essential drug list was 84% of all medicines prescribed were from the essential drug list this ranges from 99.9% to 22.8%.

Achievement of Milestones

A total of seven milestones were listed for implementation in the 2014 POW. Only two milestones were achieved. It is clear from this analysis that key activities in the annual Programme of Work are not backed up by sufficient funding and priority during the year.

Health Policy Objective	2014 milestone	Status	Source
HO1 Bridge the equity gaps in geographical access to health services	686 of new functional CHPS Zones established	Not completed	PPME – GHS
	Capital investment plan developed	Not completed	CIMU
HO2: Ensure sustainable financing for health care delivery and financial protection for the poor	Implementation plan for Health Financing Strategy developed	Completed	PBU – MOH
HO3 Improve efficiency in governance and management of the health system	Implementation plan for rolling out decentralization developed	Not completed	PPME – MOH
HO4: Improve quality of health services delivery including mental health services	Hospital strategy reviewed	Not reviewed	PPME – MOH
HO5: Enhance national capacity for the attainment of the health related MDGs and sustain the gains	Road map for reducing institutional mortality developed	Not completed	ICD – GHS
HO6: Intensify prevention and control of non-communicable and other communicable disease	Non communicable disease policy and strategy finalized	Completed	PAU – MOH

6. Capital Investment

Introduction/Background

The 2014 Capital Investment Budget which is part of the 2014 Annual Program of Work (APOW) which builds on the general principles of providing affordable primary health care, developing cost effective health systems, bridging equity gaps in access to health care services and reinforces continuum of care.

The 2014 capital investment plan outlines investments in health infrastructure and equipment with a cautious approach to infrastructure development with specific attention on the completion of ongoing projects with emphasis on projects that are 70% or more completed, equipment replacement and projects with secured external funding as the moratorium on contracting new projects are still in place.

The implementation of the year's capital plan so far has been handicapped due to the fact that 2012-2013 unpaid bills in the amount of GH¢, which are to be paid from the 2014 budget. Unfortunately, only GH¢3,733,208.34 has been released.

The total approved funding for the implementation of the 2014 CIP is GH¢869,845,347.09 with the following breakdown:

Source of Funding	Approved 2013 Budget	Percentage of Budget
GOG	15,443,598.00	1.78
EXTERNAL MIXED CREDITS	659,156,513.09	75.78
GRANTS	0.00	0.00
IGF	159,245,236.00	18.31
TOTAL	869,845,347.09	100.00

Table 9: Sources of 2014 Capital Investment Budget

Funding Source	Approved 2014 Budget (GHC)	Total Actual Disbursements (GHC)	Performance Rate (%)
GOG	15,443,598.00	3,254,143.47	21.07
SBS	0.00	479,064.87	0.00
EM – Loans & Credits	659,156,513.09	544,713,743.45	82.64
GRANTS	0.00	10,057,519.49	100.00
IGF	159,245,236.00	1,525,779.38	0.39
NHIF	0.00	5,888,633.87	0
Grand Total	869,845,347.09	565,918,884.53	65.06

Table 10: Summary of Performance (January - December 2014). Note 1: IGF disbursement captures only amounts paid through HQ

GOG						
S/N	PROJECT DETAILS	CONTRACTOR/CONSULTANT	CONTRACT SUM	PAYMENT (GH¢)	IPC No.	Payment to Date
1	Reactivation and Completion of Shama Health Centre to Polyclinic at Shama, Western Region	Bremu Const. Ltd./Abeiku & Co. Ltd.	548,840.78	215,187.44	7	483,048.85
2	Construction and Completion of New Maternity Block and External Works at the Tema General Hospital, Tema	Proko (GH) Ltd.	1,534,056.80	164,470.83	6	1,050,629.33
3	Water Improvement Programme (Construction of Boreholes) in Brong-Ahafo, Upper East, and Northern Regions	Sambix/Syndicated Capital Finance Ltd.	1,898,600.00	1,185,950.60	2	794,532.00
4	Completion of New Maternity Block at Tafo Hospital-Kumasi	Konneh Ent. Ltd.	804,000.00	364,180.00	2	364,180.00
5	Rehabilitation of Tema Mechanical Workshop	Philiyanco Co. Ltd./Zenith Bank (GH) Ltd.	1,356,773.62	260,845.68	2	667,877.77
6	Construction of 3-Storey Hostel Block for Nurses' Training College at Cape Coast	Kofi Essuman Ent. Ltd.	2,007,113.79	351,428.89	11	2,237,694.98
7	Proposed Construction of Catering & Support Services and External Works at GHS Learning Centre at Pantang Lot 1C	Malsons Ltd.	1,972,984.97	239,533.24	8	2139,075.88
8	Construction Of Conference Facility At Ghs Learning Centre At Pantang – Lot 1a	Rich Bebe Agencies Limited		380,248.85	8	2,998,148.47
9	Proposed Construction of GHS Learning Centre at Pantang	FAB Arch Consult	631,564.92	10,730.99	6	563,350.29
10	Renovation of Infrastructure for Health Assistant Training School at Tapa	Kab Investment & Construction Ltd.	47,808.72	35,097.69	2	270,485.21
11	Provision of Mechanised Bore Hole for Health Assistant Training School, Tapa	Kab Investment & Construction Ltd.		44,078.82	1	
12	Provision of Mechanised Bore Hole for Health Assistant Training School, Tapa	Kab Investment & Construction Ltd.		2,390.44	2	
Total				3,254,143.47		

Table 11: Releases from MOH

SECTOR BUDGET SUPPORT						
1	Rehabilitation of GNDP Offices	Philiyanco Co. Ltd.	772,113.11	138,005.02	4	640499.12
2	Construction of offices for NAS & St. John's Ambulance	Prime Stars	1,660,639.94	341,059.85	15	1885589.5
Total				479,064.87		

Table 12: Sector Budget Support

NHIF					
S/N	PROJECT DETAILS	CONTRACTOR/CONSULTANT	CONTRACT SUM	PAYMENT (GH¢)	IPC No.
1	Construction Of 2-Storey Classroom Block For Midwifery Training School At Hohoe In The Volta Region (Lot 03)	Alnort (Gh) Limited	2,328,316.05	395,048.98	2
2	Construction Of 3-Storey Classroom Blocks For Peri-Operative And Critical Care/Opa At Korle-Bu In The Greater Accra Region (Lot 9)	Philiyanco Company Limited	3,489,298.63	599,716.82	2
3	Construction Of 2-Storey Classroom Block For Health Assistants Training School At Pantang In The Greater Accra Region (Lot 2a)	Asaric Company Lim	1,989,757.62	139,444.38	2
4	Construction Of 2-Storey Classroom Block For Health Assistants Training School At Sampa In The Brong Ahafo Region (Lot 13)	Barnse-Say Enterprise Limited	2,233,449.13	1,308,035.74	3
5	Construction Of 2-Storey Hostel Block for Nursing Training School At Pantang in the Greater Accra Region (Lot 2B)	Hardwick Limited	2,918,227.79	658,210.00	1(Advance Mob.)
6	Construction Of 2-Storey Classroom Block For Health Assistants Training School at Asankrakwa in the Greater Accra Region (Lot 6)	Akalifa Limited	2,385,463.06	520,840.00	1(Advance Mob.)
7	Construction Of 2-Storey Classroom Block For Health Assistant Training School At Kokofu In The Ashanti Region (Lot 03)	Survivor Limited	2,328,316.05	713,972.12	1(Advance Mob.)
8	Construction and Completion of Male and Female Wards, CSSD, and Laundry, Mortuary, Theatre and Block of Flats at Akatsi District Hospital	Maripoma Enterprise	15,520,326.44	1,553,365.83	
Total				5,888,633.87	

Table 13: NHIF

Activity	Actual Total Disbursements (GH¢)
Construction of office complex for NMC	1,387,471.00
Total	1,387,471.00

Table 14: IGF

External Mixed Credits

REFERENCE	DATE	ITEM/PROJECT	EARMARKED USD	EARMARKED EURO	EARMARKED CEDI
MOH/PPME/CIMU/RNMP	10/01/2014	Radiotherapy & Nuclear Medicine Project in KBTH & KATH Payment no. 06 (15% Consultancy-No1) BADEA	54,786.00		121,077.06
MOH/PPME/CIMU/UGTH-14	14/01/2014	Construction of University of Ghana Hospital & Upgrading of Ho Regional & Hohoe District Hospitals. Disbursement No. 5	5,791,599.03		12,799,433.86
MOH/PPME/CIMU/VAMEDIII-14	03/02/2014	Construction of 5 ployclinics in the Brong Ahafo Region, Disbursement Application No. 12		432,500.00	1,401,300.00
MOH/PPME/CIMU/VAMEDIII-14	09/02/2014	Construction of 5 ployclinics in the Brong Ahafo Region, Disbursement Application No. 13		346,000.00	1,121,040.00
MOH/PPME/CIMU/VAMEDIII-14	24/02/2014	Construction of 5 ployclinics in the Brong Ahafo Region, Disbursement Application No. 14		346,000.00	1,121,040.00
MOH/PPME/CIMU/VAMEDIII-14	24/02/2014	Construction of 5 ployclinics in the Brong Ahafo Region, Disbursement Application No. 15		346,000.00	1,121,040.00
MOH/PPME/CIMU/UGTH-14	19/04/2014	Construction of University of Ghana Hospital & Upgrading of Ho Regional & Hohoe District Hospitals. Disbursement No. 6	6,054,853.53		16,348,104.53
MOH/PPME/CIMU/NMS-14	05/04/2014	Construction of 7 District Hosp. & Intergrated IT Sytem by NMS Disbursement Application No. 4	25,806,400.00		69,677,280.00
MOH/PPME/CIMU/OPIC-BEL.S/14	14/04/2014	Contract Agreement for the Supply of Medical Equipment Replacement Pri. b/n Belstar & MOH (OPIC)- Payment No. 6	4,068,114.49		10,983,909.12
MOH/PPME/CIMU/UGTH-14	05/05/2014	Construction of University of Ghana Hospital & Upgrading of Ho Regional & Hohoe District Hospitals. Disbursement No. 7	8,215,295.48		23,002,827.34
MOH/PPME/CIMU/RNMP	27/05/2014	Radiotherapy & Nuclear Medicine Project in KBTH & KATH Payment no. 07 (10% Techfab KBTH Simulator) BADEA	66,211.10		185,391.08
MOH/PPME/CIMU/OPIC-BEL.S/14	28/05/2014	Contract Agreement for the Supply of Medical Equipment Replacement Pri. b/n Belstar & MOH (OPIC)- Payment No. 7	2,699,293.27		7,558,021.16
MOH/PPME/CIMU/OPIC-BEL.S/14	12/06/2014	Contract Agreement for the Supply of Medical Equipment Replacement Pri. b/n Belstar & MOH (OPIC)- Payment No. 8	1,515,512.56		4,470,762.05
MOH/PPME/CIMU/RNMP	05/06/2014	Radiotherapy & Nuclear Medicine Project in KBTH & KATH Payment no. 08 (20% Comical KBTH Cobalt) BADEA	204,572.40		403,007.63
MOH/PPME/CIMU/VAMEDIII-14	10/06/2014	Construction of 5 ployclinics in the Brong Ahafo Region, Disbursement Application No. 16		259,500.00	1,043,190.00
MOH/PPME/CIMU/UGTH-14	16/06/2014	Construction of University of Ghana Hospital & Upgrading of Ho Regional & Hohoe District Hospitals. Disbursement No. 8	8,371,493.15		24,695,904.79
MOH/PPME/CIMU/RHP/BBI	23/06/2014	Major Rehabilitation & Upgrade of the Greater Accra Regional Hospital at Ridge, Disbursement application No. 2	4,081,813.87		12,041,350.92
MOH/PPME/CIMU/RHP/BBI	11/08/2014	Major Rehabilitation & Upgrade of the Greater Accra Regional Hospital at Ridge, Disbursement application No. 3	7,361,207.43		23,482,251.70
MOH/PPME/CIMU/RHP/BBI	11/08/2014	Major Rehabilitation & Upgrade of the Greater Accra Regional Hospital at Ridge, Disbursement application No. 4	7,989,768.15		25,487,360.40
MOH/PPME/CIMU/UGTH-14	01/09/2014	Construction of University of Ghana Hospital & Upgrading of Ho Regional & Hohoe District Hospitals. Disbursement No. 9	14,568,253.97		46,472,730.16
MOH/PPME/CIMU/RHP/BBI	11/09/2014	Major Rehabilitation & Upgrade of the Greater Accra Regional Hospital at Ridge, Disbursement application No. 5	7,935,743.39		25,315,021.41
MOH/PPME/CIMU/TTH-PHII	20/09/2014	Major Rehabilitation and upgrading of Tamale Teaching Hospital phase II. Advance Mobilisation		9,625,000.00	38,885,000.00
MOH/PPME/CIMU/OPIC-BEL.S/14	25/09/2014	Contract Agreement for the Supply of Medical Equipment Replacement Pri. b/n Belstar & MOH (OPIC)- Payment No. 9	2,223,128.74		7,091,780.68
MOH/PPME/CIMU/RHP/BBI	14/10/2014	Major Rehabilitation & Upgrade of the Greater Accra Regional Hospital at Ridge, Disbursement application No. 6	6,813,890.66		21,736,311.21
MOH/PPME/CIMU/NMS-14	31/10/2014	Construction of 7 District Hosp. & Intergrated IT Sytem by NMS Disbursement Application No. 5	17,235,315.58		54,980,656.70
MOH/PPME/CIMU/RHP/BBI	14/11/2014	Major Rehabilitation & Upgrade of the Greater Accra Regional Hospital at Ridge, Disbursement application No. 7	6,965,216.04	11,355,000.00	22,219,039.17
MOH/PPME/CIMU/UGTH-12-14	15/10/2014	Construction of University of Ghana Hospital & Upgrading of Ho Regional & Hohoe District Hospitals. Disbursement No. 10	14,921,076.60		47,598,234.35
MOH/PPME/CIMU/NMS/12-14	17/12/2014	Construction of 7 District Hosp. & Intergrated IT Sytem by NMS Disbursement Application No. 6	2,919,357.52		9,312,750.49
MOH/PPME/CIMU/TTH-PHII/14	17/12/2014	Major Rehabilitation and upgrading of Tamale Teaching Hospital phase II. Disbursement Application No. 2		2,732,000.00	11,037,280.00
MOH/PPME/CIMU/RHP/BBI/12-14	18/12/2014	Major Rehabilitation & Upgrade of the Greater Accra Regional Hospital at Ridge, Disbursement application No. 8	7,210,234.37	2,732,000.00	23,000,647.64
		TOTAL	163,073,137.33	28,174,000.00	544,713,743.45

Table 15: External Mixed Credits

Implementation of 2014 Capital Investment

The execution rate from January to December of the 2014 CIP measured as actual total disbursement against the total budget is 65%.

Even though there is an improvement in the performance rate of GOG is was zero in 2013, it went into the payment of arrears.

On the other hand the performance rate of External mixed credits improved in the 2014's implementation of the budget.

However, the sector still bewildered with the enormous outstanding commitment to contractors in spite of the ministry's adherence to the moratorium of contracting new projects with funding from GOG.

S/N	PROJECT DETAILS	PROJECT LOCATION	CONTRACTOR/CONSULTANT	CONTRACT SUM	REVISED CONTRACT SUM	PAYMENT TO DATE	BALANCE ON CONTRACT SUM	OUTSTANDING BILLS WITH MOF (GH¢)	OUTSTANDING BILLS WITH MDA (GH¢)	IPC No.	TOTAL (GH¢)
1	Completion and Equipping of Maternity and Children's Hospital at the Komfo Anokye Teaching Hospital	Komfo Anokye Teaching Hospital, Kumasi	AESL	1,763,763.32	6,656,761.99	345,855.74	6,310,906.25	456,741.77		18A and unpaid Consultancy Fees	456,741.77
3	Proposed Construction of Catering & Support Services and External Works at GHS Learning Centre at Pantang Lot 1C	Pantang, Greater Accra	Malsore Ltd.	1,972,984.97		1,899,542.44	73,442.53	569,486.98		8	569,486.98
4	Completion and Equipping of Maternity and Children's Hospital at the Komfo Anokye Teaching Hospital	Komfo Anokye Teaching Hospital, Kumasi	S. K. Mainoo Co. Ltd./ Cymain (GH) Ltd.		48,929,986.72	8,479,900.80	40,450,085.92	9,860,428.51		20 (Part payment)	6,497,719.42
5	Rehabilitation Works at HATS at Twifo Praso	Twifo Praso	Big Wills Ent.	103,664.06		38,848.29	64,815.77	106,447.34		2	106,447.34
6	Renovation of Infrastructure for Health Assistant Training School at Tepa	Tepa	Kab Investment & Construction Ltd.	274,985.15		116,200.96	154,784.19	119,186.56		2	119,186.56
7	Provision of Mechanised Bore Hole for Health Assistant Training School, Tepa	Tepa	Kab Investment & Construction Ltd.	44,078.82		Nil	32,279.39	44,078.82		1	44,078.82
8	Refurbishment of a ward at Bole Government Hospital for the proposed Midwifery Training School at Bole, Block A	Bole	Dawdu Moro Ent. Ltd.	47,808.72		Nil	47,808.72	49,029.56		3	49,029.56
9	Completion of 1No. Doctor's Bungalow at Volta Regional Hospital, Ho - (Electrical Works)	Volta Region	MAM Electrical Works			Nil		6,459.39		1	6,459.39
10	Recelling and Renovation of Skills Laboratory for Midwifery Training School at Bolgatanga	Bolgatanga	Steve-Mem Co. Ltd.	79,819.65		Nil	79,819.65	43,583.63		1	43,583.63
11	Recelling and Renovation of Skills Laboratory for Midwifery Training School Bolgatanga	Bolgatanga	Steve-Mem Co. Ltd.	79,819.65		Nil	79,819.65	32,245.04		2	32,245.04
12	Construction of Office Complex and Training Centre for National Ambulance and St. John Ambulance	Greater Accra	Prime Stars Limited	748,937.84	1,660,639.94	1,544,529.65	116,110.29	341,059.85		15	341,059.85
13	Rehabilitation of Tema Mechanical Workshop	Tema, Greater Accra	Phillyanco Co. Ltd./Zenith Bank (GH) Ltd.	1,356,773.62		407,032.09	949,741.53	260,845.68		2	260,845.68
14	Upgrading of Kaneshie Polyclinic Project in Accra	Kaneshie Polyclinic, Greater Accra	Sambros Co. Ltd.	1,238,108.72		144,574.44	1,093,534.47	51,178.42		4	51,178.42
15	Rehabilitation and Construction of Offices for the Ghana National Drugs Programme/Procurement and Supply Unit	Greater Accra	Phillyanco Co. Ltd.	772,113.11	1,770,107.97	675,855.03	96,258.08	138,005.00		3	138,005.00
16	Construction and Completion of New Maternity Block and External Works at the Tema General Hospital, Tema	Tema General Hospital, Tema	Proko (GH) Ltd.	1,534,056.80		886,158.50	647,898.30	154,757.60		6	154,757.60
17	Completion of Community Health Nurses Training School at Fomena	Fomena	M. Barbisotti & Sons Ltd.	2,230,192.80		Nil	2,230,192.80	79,914.08		2	79,914.08
18	Refurbishment of a ward at Bole Government Hospital for the proposed Midwifery Training School at Bole, Block A	Bole,	Dawdu Moro Ent. Ltd.	47,808.72		Nil	47,808.72	9,384.11		3	9,384.11
19	Construction of Hospital for Daabaa	Dabaa, Atwima Nwabiyaga District, Ashanti Region	Messrs Asumadu Construction Works Limited	30,826.40				30,826.40		1	30,826.40
20	Construction of 2-Storey Administration/Pharmacy/Laboratory Block at Ejura Hospital	Ejura, Ashanti Region	Messrs Gyeba Construction Limited	634,261.77	634,261.77	115,648.54	518,613.23		39,042.46	6	39,042.46
21	Construction of CHPS Compound at Kologo Zua in the Kossena Nankana East District	Upper East	Messrs Iddeer Enterprise Limited	49,730.96	62,948.42	27,108.12	35,840.30	35,840.30		2	35,840.30
22	Construction of CHPS Compound and Pavilion at Dublikatanga in the Bolgatanga Municipal	Upper East	Messrs Palizu Ventures Limited	120,158.34	120,158.34	-	120,158.34	74,925.56		1	74,925.56
23	Construction of CHPS Compound at Salaemkom in the Nkoranza South	Brong Ahalo	Messrs Mar-Gustin Enterprise Limited					12,280.00			12,280.00
24	Completion of 1No. Doctors Bungalow for Volta Regional Hospital, Ho	Volta	Messrs Numahum Limited	127,683.64		66,008.57	61,675.07	42,115.22		3	42,115.22
25	Rehabilitation of Maternity, Delivery & Antenatal Block at Vakpo Health Centre	Volta	Messrs Bather Enterprise	149,568.42	241,084.32	187,338.41	53,745.91	53,745.91		4	53,745.91
26	Construction of CHPS Compound at Alavanyo Dzogbedzi in the Hohoe Municipal	Volta	Messrs Lovemark Ventures Limited	135,949.33	135,949.33	-	135,949.33		51,686.73	2	51,686.73
27	Continuation and Completion of the new Regional Health Administration Block	Greater Accra		2,173,285.34		-	2,173,285.34	651,985.60			651,985.60
28	Renovation of 1No. Ward at West Gonja Hospital, Damongo	Northern	Messrs Ibn Zack E	152,330.40	-	73,503.41	78,826.99	42,822.50		2	42,822.50
29	Construction of CHPS Compound at Nyamebekyere in the Amenfi West District	Western	Messrs Yakah Nyas Limited	49,074.66	134,196.57	6,914.70	127,281.87	43,205.71		2	43,205.71
30	Remodeling and Expansion of Charikpong Health Centre in the Nadowli East District	Upper West	Messrs 2-Royal Brothers Company Limited	730,266.05	730,266.05	-	730,266.05		146,276.82	1	146,276.82
31	Construction of CHPS Compound at Suke in the Lambusie-Kamti District	Upper West	Messrs Saidmo Realities	139,718.59	139,718.59	-	139,718.59		46,254.60	1	46,254.60
32	Construction of CHPS Compound at Adubiase in the Akyemansa District	Eastern	Messrs Ad-jolie Ventures	136,006.35	136,006.35	-	136,006.35		43,432.87	1	43,432.87
33	Construction of CHPS Compound at Agordeke in the Kwaku North District	Eastern	Messrs Deikosam Ventures	139,981.71	139,981.71				48,478.02	2	48,478.02
34	Construction of CHPS Compound at Assin Nuanua	Central	Messrs C.K.A Ventures	137,842.29	137,842.29	-	137,842.29		76,157.10	1.00	76,157.10
35	Construction of Nsawora Health Centre	Western	Kendics Const. Ltd.	242,535.58	513,391.25	169,298.53	344,092.72		128,281.30		128,281.30
36	Construction and Completion of 3-storey (2-No. Cluster of Flats) for Ghana Health Service at Takoradi	Western Region	Messrs Heals B Construction Limited	46,000.00	207,587.83	104,086.40	103,501.43		53,315.20	6	53,315.20
37	Renovation of Infrastructure for Health Assistant Training School at Tepa	Tepa	Kab Investment & Construction Ltd.	47,808.72		Nil	3,729.90	9,180.73		2	9,180.73
38	Construction of Theatre and Ward at Effiduase Health Centre	Effiduase, Ashanti Region	Messrs Dymeatro Trading & Const. Limited	40,000.00	20,759.15	18,683.23	2,075.92		2,075.92	4	2,075.92
39	Completion of Rehabilitation of Pudua Health Centre for GHS	Northern	Unass Umaru Enterprise/Wabel ya Company Ltd.	152,851.11	129,075.05	121,921.27	7,153.78		7,153.78		7,153.78
40	Rehabilitation of Daboya Health Centre (LOT1: OPD, Maternity and Staff Quarters Block "A")	Northern	Messrs IM Enterprise Limited	128,887.76	132,310.39	125,866.01	6,444.38		6,444.38	3	6,444.38
41	Construction of Nsawora Health Centre	Western	Kendics Const. Ltd.	242,535.58	513,391.25	169,298.53	344,092.72		128,281.30		20,044.97
TOTAL											10,625,695.33

Table 16: Details of Arrears

RETENTION											
S/N	PROJECT DETAILS	PROJECT LOCATION	CONTRACTOR/CONSULTANT	CONTRACT SUM	REVISED CONTRACT SUM	PAYMENT TO DATE	BALANCE ON CONTRACT SUM	OUTSTANDING BILLS WITH MOF (GH¢)	OUTSTANDING BILLS WITH MDA (GH¢)	IPC No.	TOTAL (GH¢)
1	Water Improvement Programme (Construction of Boreholes) in Atebubu District, Brong-Ahafo Region	Brong-Ahafo Region	Blessedfield Ltd.	856,281.62	972,803.60	116,521.98	61,051.64	6,745.50		Retention	6,745.50
2	Construction of DMOHS Bungalow at Zebilla Hospital	Upper East	Gbaagba Construction Trading Ent.	55,000.00	48,668.92	41,923.42	6,745.50		6,745.50	IPC No. 3 (Retention)	6,745.50
3	Rehabilitation of Kubori Health Centre at Kubori for GHS (Lot III)	Northern	Empopsway Ent.					9,180.73		IPC No. 3 (Retention)	9,180.73
4	Rehabilitation of Daboya Health Centre (LOT1: OPD, Maternity and Staff Quarters Block "A")	Northern		128,887.76	132,310.39	125,866.01	6,444.38		6,444.38		6,444.38
5	Rehabilitation Works at HATS at Twifo Praso	Twifo Praso	Big Wills Ent.	103,664.06		38,848.29	64,815.77	106,447.34		2	7,647.13
TOTAL											36,763.24

Table 17: Retention

CONSULTANCY											
S/N	PROJECT DETAILS	PROJECT LOCATION	CONTRACTOR/CONSULTANT	CONTRACT SUM	REVISED CONTRACT SUM	PAYMENT TO DATE	BALANCE ON CONTRACT SUM	OUTSTANDING BILLS WITH MOF (GH¢)	OUTSTANDING BILLS WITH MDA (GH¢)	IPC No.	TOTAL (GH¢)
1	Proposed Construction of GHS Learning Centre at Pantang	Pantang, Greater Accra	FAB Arch Consult	631,564.92		470,519.62	161,045.30	66,060.53		6	66,060.53
2	Construction and Completion of New Maternity Block and External Works at the Tema General Hospital, Tema (Consultancy Fees)	Tema General Hospital, Tema	Iznatrix Architects & Development Consultant	153,405.68		32,053.60	121,352.08	15,025.13		2	15,025.13
3	Rehabilitation of Bechem Hospital (OPD/Admin Block)	Bechem	North West Consultium Ltd.	74,546.78		Nil		30,015.00		Pre-Contract	30,015.00
4	Rehabilitation of Bechem Hospital (OPD/Admin Block)	Bechem	Sages Consult (GH) Ltd.	745,467.80		Nil		101,654.70		1	101,654.70
5	Renovation of Infrastructure for Health Assistant Training School at Tepa	Tepa	Ocads Consult Ltd	270,985.15		116,200.96	154,784.19	37,121.30		1	37,121.30
6	Construction of 3-Storey Hostel Block for Nurses' Training College at Cape Coast	Cape Coast	Bows Consult		1,496,123.95	Nil	1,496,123.95	95,130.10		1	95,130.10
7	Upgrading of Kaneshie Polyclinic Project in Accra	Greater Accra	Optimum Shelter Partnership		71,779.50	Nil	7,930.51	7,930.51		1A	7,930.51
8	Reactivation and Completion of Shama Health Centre to Polyclinic at Shama, Western Region	Shama, Western Region	Cost Plan Consult	438,201.75		Nil	438,201.75	62,062.63		1	62,062.63
9	Completion of Community Health Nurses Training School at Fomena	Fomena	AESL	2,691,110.80		Nil	2,691,110.80	6,120.01		1	6,120.01
10	Construction of 2-Storey Administration/Pharmacy/Laboratory Block at Ejura Hospital	Ejura, Ashanti Region	AESL		63,426.18	433.85	62,992.33		34,789.82	6	34,789.82
11	Rehabilitation of Flood Damaged Health Facilities at selected sites	Upper East	Messrs Northern Consultants	30,564.00	30,564.00	0	30,564.00		30,564.00	2	30,564.00
12	Rehabilitation of Maternity, Delivery & Antenatal Block at Vakpo Health Centre	Volta	AESL	3,000.40	3,000.40	-	3,000.40		3,000.40	4A	3,000.40
13	Construction of Selected Facilities in the Northern Region	Northern	Ika Consult	15,003.19	15,003.19	9,001.91	6,001.28		6,181.32	3	6,181.32
14	Construction of CHPS Compound at Nyamebekyere in the Amentfi West District	Western Region	Messrs Arch Team-4 Consultancy	10,735.73	10,735.73	614.64	10,121.09		3,840.51	2c	3,840.51
15	Construction of Nsawora Health Centre	Western	Plan development Consultium Ltd.						14,443.40		14,443.40
TOTAL											513,939.36

Table 18: Consultancy

SUMMARY											
1	ARREARS										10,625,695.33
2	RETENTION										36,763.24
3	CONSULTANCY										513,939.36
GRAND TOTAL											11,176,397.93

Table 19: Summary

Achievements

As part of activities to further strengthen the programme for modernizing health care and also improve access to quality health care; the under listed projects will be pursued vigorously and the following successes were chocked;

1. Significant progress made in the management of projects in the sector with secured funding from External Mixed credits and loans.
2. In spite of all limitations to the implementation of this investment plan, the following projects were completed:
 - Construction of 5 Polyclinics in the Brong Ahafo Region
 - 4 of the 8 Housing Component of the Major Rehabilitation and Upgrading of Tamale Teaching Hospital
 - Water Improvement Project in selected Health Facilities in Brong Ahafo, Northern and Upper East Regions.
3. In spite of all limitations to the implementation of this investment plan, the following projects are progressing steadily and on schedule:
 - Expansion of Radiotherapy and Nuclear Medicines Centres in Accra and Kumasi Centres of Excellence
 - 8No. Hospitals project with funding from EUROGET De-Invest S.A.: Construction of Regional Hospital and Staff Housing
 - Construction and Completion of Maternal and Children Block at Komfo Anokye Teaching Hospital (KATH), Kumasi
 - Remaining 4 of the Housing Component of the Major Rehabilitation and Upgrading of Tamale Teaching Hospital
 - Construction of Seven(7) District Hospitals and provision of an integrated IT system in Ghana
 - Construction of University of Ghana Teaching Hospital
 - Supply of Assorted equipment Under the OPIC funding
 - Construction of Bekwai Hospital
 - Construction of Classroom blocks for Pantang HATS, Korle POCCNS, Sampa HATS, Kokofu NMTS
4. Procurement procedure, Value for Money negotiations and statutory approvals of contracts for the following new projects for takeoff in the year 2015:
 - Construction of 5 Polyclinics in the Greater Accra Region; Adentan, Ashaiman, Bortiano, Oduman and Sege;
 - Construction of 5 Polyclinics in the Central Region; Bisease, Gomoa Dawurapong, Biriwa, Etsii Sunkwa, Esikuma Gyamena, Agona Duakwa, Binpong Akunfude, Ekumfi Naakwa, Twifo Atimokwa, Gomoa Potsin;
 - Construction of 1 District Hospital and 5 polyclinics in the western region
 - Construction of Eight (8) No. Prefabricated District Hospitals by TURMAKS
 - E-health Project
 - Reactivation of selected uncompleted projects

- Development of Health facilities (1 District Hospital and 3 No. Polyclinics in the Eastern Region) and rehabilitation of 3 No. Existing hospital (Volta, Eastern and Central region)
- Construction of 6 District hospitals by Alliance International and Partners
- Replacement of Physiotherapy Equipment in Selected facilities

Challenges

1. Significant retarding in progress was registered in the projects in the sector and the capital investment as a whole due to late release of funds and non-release on some part by Ministry of Finance (MOF).
2. No Commencement warrants received from MOF.
3. A total amount of GHC 11,176,397.93 being claims and IPCs on projects have been sent to MoF, however, as at December 2014, only GHC 3,254,143.47 from GOG and GHC 341,059.85 from Sector Budget support has been released.
4. Bureaucracies and delays within the Gifmics payment framework

Conclusions

Due to the above mentioned challenges, the sector would have to carry over an outstanding bill of GHC 7,581,194.61 into 2015 which would negatively affect the GOG component of the Capital Investment budget for 2015 with total allocation of GHC 14,150,598.00.

In spite of all the challenges, significant progresses on works were recorded in the implementation of turnkey projects and in the achievement and attainment of statutory approvals for the implementation of other projects in 2015.

7. Implementation status for Aide Memoire Recommendations

Implementation Status

Date	Number of Aide memoire Recommendations	Number Completed	% Completed
Brought forward from 2013	13	10	76.92
May 2014	17	11	64.71
Aug 2014	16	9	56.25
Nov 2014	5	1	20.00
Total	51	31	60.78

Outstanding recommendations in 2014 Aide Memoire

No.	Recommendation	Remarks
1	FDA to look for GSA's draft Bill, identify areas of duplication that could be potential source of conflict and work with the Parliamentary Select Committee on Health and the MOH to remove such duplications.	The conflict situation between FDA and GSA was reviewed and the document forwarded to Attorney General for advice and Parliamentary Select Committee on Health
2	The ministry of health in consultation with its partners procure independent consultant to assess why DPs are moving away from sector Budget support	This recommendation has been reviewed. Instead, a meeting planned between MOH and DPs to address the issues
3	Ghana Health Service to report on the ICCs progress on the implementation of the free family planning services at the next sector working group meeting. Based on update, the sector-working group will discuss way forward.	Report has been submitted to Honourable Minister of Health for further action
4	Launch the nutrition policy	Awaiting the costing of the implementation plan

No.	Recommendation	Remarks
5	Disseminate the nutrition policy	Awaiting the costing of the implementation plan
6	MOH to work and complete the LI for HIFRA by end of year 2014	Awaiting the inauguration of the HIFRA board to move the process forward
7	MOH to organize a meeting in September to brainstorm on ways of mobilizing financial resources internally. This will be presented at the September HSWG meeting	This will be considered further during the planned Health Financing conference
8	This guideline will also be included in the revised Accounting Treasury and Financial Reporting (ATF) rules and regulations.	Work has started. Awaiting CAGD to finish work on GIFMIS system.
9	MOH and heads of service delivery agencies will meet to prioritise the available resources for 2015 to address critical areas of challenging performance and increase priority of preventive care services. This will be presented to the sector working group meeting in September.	This activity was undertaken on November 2014
10	The Ministry of Health should develop mechanisms for capturing all investments in the sector in the 2015 POW according priority areas	This activity has been pushed to 2015 due to personnel changes
11	MOH will review the budget allocation criteria to improve the alignment with sector priorities and make it more transparent. MOH will make the criteria available to the sector working group meeting in July 2014.	Work started in 2014 and will continue in the half of 2015
12	MOH to constitute the adjudication committee for the National Health Insurance Scheme by end of December 2014	This activity has been pushed to 2015
14	MOH to work with NHIA and make provision for funding	Discussions ongoing

No.	Recommendation	Remarks
	preventive health care- CHPS	
15	MOH to work with MOF to secure Financial Clearance for the training of 200 EMTs by January 2015.	Several attempts made. Yet to get positive response from MOF
16	Call for Steering Committee Meeting on MAF to take decisions on HR, CHO's to address the root causes	Decision to implement phase one of the staffing norm was taken at the 2015 business meeting.
18	FDA and TMPC to sign MOU in areas of safety testing and safety monitoring especially for herbal preparations. The two agencies will also jointly develop a framework for safety testing and monitoring of such products. MOH will facilitate the process	Discussions started. Not gone far
20	DG - GHS to develop a re-deployment plan for the re-distribution of health staff throughout the country.	Dependent on the completion of staffing norm
24	GHS will restructure the regional and district reviews to improve the level of critical analysis of data and improve data quality, e.g. holistic assessment of regions and districts. GHS will also ensure the use of data at the lower levels to improve service delivery. New guidelines will be applied to the annual review of 2014.	Plans are far advanced to introduce new formats for reviewing regional and district performance

8. Conclusion and recommendations by the review team

Conclusion to be completed after the summit.

List of recommendation by the review team

1. The review team recommends that NHIA develops tools to continuously monitor per capita utilisation of OPD and reduction in frivolous use.
2. The National Health Insurance Scheme and its sponsors develop more innovative way of mobilising the additional resources to keep pace with the rate of expansion of the scheme
3. An analysis should be carried out to establish the socioeconomic status of those who benefit from the schemes exemptions policy, the findings of which could inform the debate about exemptions, leakage and financial sustainability of NHIS, and perhaps lead to decisions about reform of the exemption schemes.
4. Effort should be made to reconcile figures for capital expenditure for loans and mixed credits in the capital investment report and financial report.
5. The reason for the observed reduction in pregnant women's exemption is not clear and further analysis will be needed to understand this declining trend.
6. GHS should assess productivity of midwives and identify reasons for productivity variances between regions.
7. Facilities with experienced midwives should prioritise transfer of skills in order to mitigate the negative effect of retiring experienced midwives. Regions in their redistribution should also prioritise this to ensure that skills are transferred.
8. The Ministry of Health should estimate the medium to long term midwife needs, and align the production to this need, so that the sector does not train too many midwives.
9. The new procedure of advertising by location being implemented for Deputy Directors of Nursing Services (DDNS) where money is earmarked for the post at a certain location should be followed closely and considered for scale-up based on the lessons learned.
10. Given that the number of midwives is building up in Ashanti and Greater Accra Regions, the ministry should set up a team to look into redistribution of midwives to less endowed regions.
11. In order to increase government investment into preventive/public health care, the ministry should establish a working ratio regarding what is spent on compensation, investment and goods and service and work towards achievement of such a target.
12. In the light of dwindling donor support, there is the need to accelerate the implementation of the sector's health financing strategy.
13. All cause mortality trend in Upper East Region should be followed closely in 2015.
14. All stillbirths should be audited at regional and teaching hospital level in order to identify the underlying reasons and address these.
15. For equity to improve, resources and effort must be invested into solving infrastructural and human resource challenges and expand service delivery at sub-district level in Volta Region.
16. The Ministry must increase its focus on Northern Region despite relatively good performance based on routine information. The DHS points to a different direction.

17. The Ministry of Health should review the staffing situation particularly in the northern Region and address the disparities. The excess numbers of health assistant clinical in the region and possibly the whole country has been mentioned .
18. Population figures for Northern Region should be adjusted, so the routine health information system will be provide a better reflection of performance in this region.
19. The shortage of the various data capturing forms which has been corroborated by the Centre for Health Information (CHIM) need to be addressed as a matter of urgency.

20. Annex 1: Sector Wide Indicators and Targets – HSM TDP 2014-2017

No.	Indicator	Targets			
		2014	2015	2016	2017
Objective 1: Bridge the equity gaps in geographical access to health services					
1.1	Number of functional ambulance service centers	140			
1.2	Number of functional CHPS zones	2,450	2,595	2,753	2,918
1.3	Per capita OPD attendance	1.17	1.21	1.27	1.3
1.4	Equity poverty: U5MR	<1.9	N/A	N/A	N/A
1.5	Equity geography: Supervised deliveries	<1.5	<1.4	<1.3	<1.2
1.6	Equity geography: Doctor to population	13	12	11	10
1.7	Equity geography: Nurse to population	<1.9	<1.85	<1.8	<1.75
1.8	Equity gender: Female/ male NHIS active membership	N/A			
Objective 2: Ensure sustainable financing for health care delivery and financial protection for the poor					
2.1	Proportion of total MTEF allocation to health	≥15%	≥15%	≥15%	≥15%
2.2	Per capita expenditure on health (USD)	>44	>44	>45	>45
2.3	Budget execution rate (Goods and Service as proxy)	>80%	>85%	>87%	>90%
2.4	Proportion of population with active NHIS membership	>39%	>40%	>41.5%	>43%
2.5	Proportion of NHIS members in exempt categories	>63%	>64%	>64%	>65%
2.6	Proportion of population covered by NHIS as indigents	5%	5.75%	6.6%	7.6%
2.7	Proportion of NHIS expenditure on claims reimbursement	>80%	>81%	>83%	>85%
2.8	Equity poverty: NHIS members	>0.7	N/A	N/A	N/A
Objective 3: Improve efficiency in governance and management of the health system					
3.1	Doctor : Population ratio	1:10,000	1:9,900	1:9,750	1:9,500
3.2	Nurse : Population ratio including CHNs	1:1,000	1:1,000	1:1,000	1:1,000
3.3	Midwife : WIFA Population ratio	1:1,400	1:1,350	1:1,300	1:1,250
3.4	Proportion of health facilities in current registration	>22%	>23%	>24%	>25%
3.5	Proportion of receivable funding for NHIS received from MOF	>75%	>80%	>85%	>90%
3.6	Proportion of NHIS claims settled within 12 weeks	>5%	>10%	>15%	>20%
3.7	Proportion of GOG spent on goods and services	>12%	>13%	>14%	>15%
3.8	Proportion of GOG spent on assets	>2%	>3%	>4%	>5%
3.9	Proportion of health budget (goods and services) allocated to research activities	>0.8%	>1%	>1.2%	>1.5%
Objective 4: Improve quality of health services delivery including mental health services					
4.1	Institutional all cause mortality	<35	<33	<30	<28
4.2	Proportion of regional and district public hospitals offering Traditional medicine practice	>5%	>8%	>10%	>13%
4.3	Proportion of public hospitals offering mental health services	No b.l.			
4.4	Institutional Malaria Under 5 Case Fatality Rate	<6	<0.57	<0.53	<0.50
4.5	Surgical site infection rate	<5%	<5%	<4%	<4%
4.6	Percentage of public hospitals with functional emergency team	No b.l.			
Objective 5: Enhance national capacity for the attainment of the health related MDGs and sustain the gains					
5.1	Unmet need for contraception	<23%	N/A	N/A	N/A
5.2	Couple Year Protection (CYP), All sources incl. the private sector	>2.30 mill	>2.45 mill	>2.55 mill	>2.70 mill
5.3	Infant Mortality Rate	<50	N/A	N/A	N/A
5.4	Institutional Neonatal Mortality Rate	<5.5	<5.3	<5.0	<4.5
5.5	Neonatal Mortality Rate	<30	N/A	N/A	N/A
5.6	Under-5 Mortality Rate	<75	N/A	N/A	N/A
5.7	Maternal Mortality Ratio	<300	N/A	N/A	N/A
5.8	Institutional Maternal Mortality Ratio	<145	<140	<137	<135
5.9	HIV prevalence rate	<1.1%	<1.0%	<0.9%	<0.8%
5.10	Proportion of infected pregnant women who received ARVs for PMTCT	>40%	>44%	>48%	>50%
5.11	Proportion of babies born to HIV mothers being HIV negative after 18 months	>93%	>94%	>95%	>96%
5.12	Proportion of children U5 who are stunted	<16%	N/A	N/A	N/A
5.13	Proportion of children fully immunized (proxy Penta 3 coverage)	>88%	>90%	>90%	>90%
5.14	Proportion of mothers making fourth ANC visit	>75%	>78%	>80%	>83%
5.15	Exclusive breast feeding for six months	>50%	>53%	>55%	>57%
5.16	Proportion of deliveries attended by a trained health worker	>58%	>60%	>62%	>65%
5.17	Still birth rate	<20	<18	<17	<16
5.18	Postnatal care coverage for newborn babies	>50%	>55%	>60%	>65%

5.19	Proportion of children under 5 years sleeping under ITN	>65%	N/A	N/A	N/A
5.20	TB treatment success rate	>88%	>88%	>88%	>88%
Objective 6: Intensify prevention and control of non-communicable and other communicable diseases					
6.1	Non-AFP polio rate	>2	>2	>2	>2
6.2	Population prevalence of hypertension				
6.3	Number of deaths attributable to selected cancers				

Annex 2: Holistic Assessment Tool

1. Introduction

The holistic assessment tool was developed during the 5YPOW 2007-2011 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 holistic assessment tool provides a framework for assessing the health sector comprehensively and holistically. It makes use of various instruments to determine progress of the sector towards the achievement of set objectives. The holistic assessment report thus generated is a representation of sector performance for the period and provides the basis for a wider sector analysis.

While the *Holistic Assessment tool* serves as an algorithm translating performance of every sector wide indicator and milestone into a measure of overall sector performance, *Holistic Assessment* of the sector requires a combination of quantitative and qualitative method of assessment. The quantitative assessment includes analysis of indicators and milestones while the qualitative assessment involves the determination of the extent to which planned programmes and agreements, such as annual programme of work, aide memoires recommendations and agency reports, are implemented.

The Holistic Assessment increasingly serves to inform and guide policies to improve service delivery and improve health outcome. It also serves as an important feedback mechanism to Development Partners and other key sector stakeholders at the national level. With dwindling budget support, domestic accountability becomes ever more important. Therefore, the holistic assessment will also be of interest to Ghanaian Society at large.

Since the holistic assessment tool was first used to assess sector performance, a number of critical issues with the methodology have been identified:

- Concern that the holistic assessment is not a true reflection of sector performance
- The analysis is skewed towards performance of selected service providers
- The analysis is skewed towards primary health care
- The assessment is not significantly influencing policy or strengthening sector management

The purpose of this revision of the tool is to address these issues and improve the credibility of the holistic assessment.

2. Purpose

The primary objective of the holistic assessment of the health sector is to provide a very brief but well-informed, balanced and transparent assessment of the sector's performance and factors that likely influenced this performance. Furthermore, the objective is to assess the progress towards meeting the objectives of HSMTDP 2014-2017. The holistic assessment should also lead to a suggestion of corrective measures when performance is less than anticipated. Its purpose is to facilitate and to structure the dialogue between DP's and the GoG at sector level or management and workers at the agency level. This will feed into the discussion at MDBS and at CG level. At the agency level, this will feed into discussions at directors' meetings and board level

3. Tools

A number of tools are needed to support a holistic assessment. The operational annual POW, derived from the strategic HSMTDP 2014-2017, which is linked with the Ghana Shared Growth and Development Agenda II (GSGDA), 2014-2017, is the point of departure. In the annual POW, annual priorities and targets have been identified and translated into budgetary allocations. More specifically, the analysis underlying the holistic assessment will be based on the following elements:

- Milestones table in the HSMTDP 2014-2017
- HSMTDP 2014-2017 Sector Wide Indicators (Refer to revised Holistic Assessment SWI in Annex 1)
- Annual POW including indicator targets and the capital investment plan
- Annual budget
- Annual MoH Financial Statement
- Aide Memoire Recommendation Matrix
- Corresponding documents would be needed at agency level

To guide the holistic assessment the following elements are important:

- Annual review process from BMC level through district and regional level to national level
- Annual Review Health Summit (April)
- April Health Summit Business meeting and Aide Memoire

Similar elements could be generated at agency level to guide the assessment process

4. Process

In the first quarter, a review team will compile a preliminary holistic assessment report, which comprises elements listed above and applies the holistic assessment tool onto sector wide indicators and milestones. This report will be presented and discussed at the April Performance Review Health Summit. The analysis and suggested recommendations in the review report will be discussed at the business meeting, taking into consideration factors, which may have influenced performance. The finalisation of the holistic assessment will be influenced by these discussions.

5. Assumptions

For the assessment of indicators and milestones, three important assumptions were made:

1. Objectives are not equal in weight in their contribution towards achieving the overall goal of the sector.
2. Indicators are not equal in weight in their contribution towards achieving the objective.
3. For each objective, all indicators collectively contribute 75% of total objective weight towards achieving the objective.
4. For each objective, all milestones collectively contribute 25% of total objective weight towards achieving the objective.

Weighting of objectives and indicators

All indicators and milestones were weighted based on predetermined criteria by an expert group comprising MoH, Agencies (incl. GHS and NHIA) and Development Partners.

The objectives were weighted based on four broad principles; they include the objective's contribution towards

1. Improving health status
2. Improving client satisfaction
3. Improving financial risk protection
4. Improving efficiency of service delivery

The table below presents the agreed weight for each objective under the HSMTDP 2010-2017.

No.	OBJECTIVES	WEIGHTS
1	Bridge the equity gaps in geographical access to health services	1.24
2	Ensure sustainable financing for health care delivery and financial protection for the poor	1.24
3	Improve efficiency in governance and management of the health system	1.11
4	Improve quality of health services delivery including mental health services	1.23
5	Enhance national capacity for the attainment of the health related MDGs and sustain the gains	1.16
6	Intensify prevention and control of non-communicable and other communicable diseases	1.00

The indicators were weighed according four principles; the include the indicator's contribution to:

1. Achieving its objective
2. Improving Health status
3. Strengthening the health system, and
4. Level of Indicator (Input, process, Output, Outcome and impact)

A detailed overview of indicator weighting can be found in the annexes.

6. Assessment

The holistic assessment tool is applied to routinely collected data and periodically available survey data. Each indicator is ideally progressing towards the HSMTDP targets.

The HSMTDP health objectives are assessed based on the trend of related indicators compared to the previous year, attainment of set targets and the realization of the related milestones indicated in the annual POW. Indicators measured exclusively through household surveys such as DHS and MICS are added to the analysis as and when they are available (periodically).

The assessment is in three steps: First the individual indicators and milestones are assessed; this then feeds into the appraisal of the health objectives, which provides the basis for the overall health sector performance assessment.

6a. Step One: Assessment of indicators and milestones

Analysis: 1st stage

Each indicator and milestone is assigned a numerical value of -1, 0 or +1 depending on realization of milestones and trend of indicators.

Milestones are assigned the value +1 (colour coded green) if the review team is provided with evidence from the relevant authority on the complete realization of the milestone; otherwise it is assigned the value -1 (colour coded red).

Indicators are 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

Indicators are assigned the value -1 (colour coded red) if

- The indicator is below the annual target and has experienced a relative deterioration by more than 5%, or
- No data is available (only applies to annually measured indicators and not to survey indicators)

Indicators are 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 was not reported the previous year (for annually measured indicators) or the previous survey (for survey indicators)

Analysis: 2nd stage

- The relative indicator score is determined by multiplying the assigned value by the indicator's individual weight. For more details see Annex 4: Indicator Weighting
- The relative score of the milestone is determined by calculating the average score for all milestones and multiplying the result by the assigned weight for milestones.

Assessment of indicators, 1st stage:

Example 1: If skilled delivery for 2012 was 55.0% and 55.3% in 2013, this represents an improvement of 0.6%. This is within the 5 percentage-point range for neutral performance, and the value is 0.

Example 2: If percentage of MTEF allocated to the health sector for 2012 was 15.4% and 15.2% in 2013, this represents a deterioration of 1.6%. This is again within the 5 percentage-point range for neutral performance, but since the target was $\geq 15\%$, the value is +1.

Example 3: If NHIS membership for 2012 was 33.3% and 36.8% for 2013, this represents an improvement of 10.4%. Since the improvement is more than the 5 percentage-point range, the trend is interpreted as improving and the value is +1.

Example 4: If geography equity for nurse:population ratio between regions for 2012 was 1.86 and 1.99 for 2013, this represents a deterioration of 6.6%. Since this is more than the 5 percentage-point range, the trend is interpreted as worsening and the value is -1.

6b. Step Two: Assessment of the Health Objectives

The indicators and milestones are grouped under Health Objectives as defined in the

Assessment of indicators, 2nd Stage:

Example 1 – Skilled delivery: Indicator value (0) x weight (1.56) = 0

Example 2 – MTEF allocated to health: Indicator value (+1) x weight (1.17) = +1.17

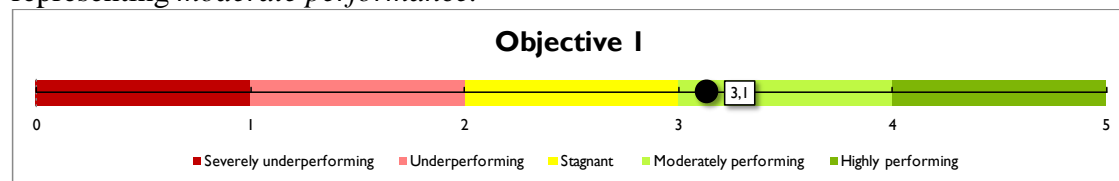
Example 3 – NHIS membership: Indicator value (+1) x weight (4.0) = +4.0

Example 4 – Nurse:population equity: Indicator value (-1) x weight (2.63) = -2.63

HSMTDP and the sub total of indicators and milestone values are calculated for each group. The objective score is then projected to a scale with a range from the negative to the positive value of the objective weight, i.e. for objective one the scale is from -1.24 to

Assessment of Health Objectives:

Example – objective 1: The sum of all weighted indicator and milestone scores for 2013 was 5.5 out of a possible score between -22.1 to +22.1. Adjusted to the objective weight of **1.26**, and projected to a scale from 0-5, the objective score is 0.32. On a scale from -1.26 to +1.26 the performance falls into second highest quintile representing *moderate performance*.



1.24. The range is divided into five quintiles, and the performance of each objective is interpreted within these quintiles.

1. *If objective score is within the highest quintile, then the objective is highly performing and assigned a colour code dark green.*
2. *If the objective score is within the second highest quintile, the objective is moderately performing and assigned a colour light green*
3. *If the objective score is within the middle quintile, the objective has stagnated and assigned a colour code yellow.*
4. *If the objective score is within the second lowest quintile, the objective is underperforming and assigned a colour code light red*
5. *If the objective score is within the lowest quintile, the objective is severely underperforming and assigned a colour code dark red*

6c. Step Three: Assessment of the whole health sector

After calculating the score for each of the Health Objectives the scores are added and projected to a scale from 0-5 to determine the sector's score. The overall sector performance is also assessed on a scale with 5 quintiles.

As with step two:

1. *If the overall sector score is within the highest quintile, then the sector is highly performing*
2. *If the overall sector score is within the second highest quintile, then the sector is moderately performing*
3. *If the overall sector score is within the middle quintile, then the sector performance stagnant*
4. *If the overall sector score is within the second lowest quintile, then the sector is underperforming*
5. *If the overall sector score is within the lowest quintile, then the sector is severely underperforming.*

7. Output:

The output of the holistic assessment process is a holistic assessment report indicating:

1. An analysis of the progress of each indicator over the past three years.
2. An assessment of each Health Objective and of the overall sector performance.
3. The extent to which sector priority activities and agency plans and programmes have been implemented
4. The extent to which other agreements in the sector have been implemented

For each health objective, the following will be discussed in the analysis:

- The factors which most likely have contributed to the progress and/or regression
- If necessary, corrective measures to be considered
- If necessary, issues which should be brought up to Business meeting of the health sector
- The level of implementation of planned programmes and activities in the sector

The holistic assessment will also result in a short paper on progress of the sector including analysis on key performance indicators agreed on at MDBS level.

Annex 3: Objective weighting

Method 1: Cumulative scoring of each objective's impact on WHO goals (score 0-3)

	Scores				
	Health Status	Client satisfaction	Financial risk protection	Efficiency	Weight
Objective 1	26	21	20	14	1.00
Objective 2	18	21	33	22	1.16
Objective 3	14	17	23	33	1.07
Objective 4	27	33	14	18	1.14
Objective 5	33	24	16	19	1.14
Objective 6	28	21	16	17	1.01

Method 2: Ranking of objectives (score 1-6)

	Health Status	Client satisfaction	Financial risk protection	Efficiency	Weight
Objective 1	41	47	44	37	1.54
Objective 2	19	29	59	41	1.35
Objective 3	18	23	34	54	1.17
Objective 4	43	53	27	26	1.35
Objective 5	50	31	23	28	1.20
Objective 6	39	26	26	19	1.00

Average of method 1 and 2:

	Method 1	Method 2	Average	Adjusted weight
Objective 1	1.00	1.54	1.27	1.26
Objective 2	1.16	1.35	1.25	1.25
Objective 3	1.07	1.17	1.12	1.12
Objective 4	1.14	1.35	1.25	1.24
Objective 5	1.14	1.20	1.17	1.16
Objective 6	1.01	1.00	1.01	1.00

Annex 4: Indicator Weighting

		Contribution to objective (score 0-3)	Contribution to improved health status (score 0-3)	Contribution to strengthening systems (score 0-3)	Input, Process, Output, Outcome, Impact (score 1-5)	Score
Objective 1: Bridge the equity gaps in geographical access to health services						
1.1	Proportion of functional ambulance service centres	2	2	3	3	2.63
1.2	Proportion functional CHPS zones	3	3	3	3	3.38
1.3	Per capita OPD attendance	1	2	1	2	1.00
1.4	Equity poverty: U5MR	3	3	2	5	5.00
1.5	Equity geography: Supervised deliveries	3	3	2	4	4.00
1.6	Equity geography: Doctor to population	3	3	2	3	3.00
1.6	Equity geography: Nurse to population	3	2	2	3	2.63
1.7	Equity gender: Female/ male NHIS active membership	1	1	1	3	1.13
MS	Milestone (25%)					7.58
Objective 2: Ensure sustainable financing for health care delivery and financial protection for the poor						
2.1	Proportion of total MTEF allocation to health	3	1	3	1	1.17
2.2	Per capita expenditure on health (USD)	3	1	2	1	1.00
2.3	Budget execution rate (Goods and Service as proxy)	3	2	3	2	2.67
2.4	Proportion of population with active NHIS membership	3	2	3	3	4.00
2.5	Proportion of NHIS members in exempt categories	2	2	1	3	2.50
2.6	Proportion of population covered by NHIS as indigents	2	2	1	3	3.00
2.7	NHIS Expenditure over Receipts (to be detailed)	3	1	3	2	2.33
2.8	Equity poverty: NHIS members	3	2	1	3	3.00
MS	Milestone (25%)					6.56

Objective 3: Improve efficiency in governance and management of the health system						
3.1	Doctor : Population ratio	3	3	3	1	1.29
3.2	Nurse : Population ratio including CHNs	3	3	3	3	3.86
3.3	Midwife : WIFA Population ratio	3	3	3	3	3.86
3.4	Proportion of health facilities in current registration	2	2	2	3	2.57
3.5	Proportion of NHIF budget released to NHIS	3	2	2	1	1.00
3.6	Proportion of NHIS claims settled within 12 weeks	3	3	3	3	3.86
3.7	Proportion of health budget (goods and services) allocated to research activities	2	1	2	2	1.43
2.8	Proportion of GOG spent on goods and services (move to 3)	3	2	2	2	2.00
2.9	Proportion of GOG spent on assets (move to 3)	2	2	2	2	1.71
MS	Milestone (25%)					7.19
Objective 4: Improve quality of health services delivery including mental health services						
4.1	Institutional all cause mortality	3	3	2	4	3.56
4.2	Proportion of regional and district public hospitals offering Traditional medicine practice	1	1	1	3	1.00
4.3	Proportion of public hospitals offering mental health services	3	3	2	3	2.67
4.4	Institutional Malaria Under 5 Case Fatality Rate	3	3	2	4	3.56
4.5	Surgical site infection rate	3	2	1	3	2.00
4.6	Percentage of public hospitals with trained emergency team	2	2	2	2	1.33
MS	Milestone (25%)					4.70
Objective 5: Enhance national capacity for the attainment of the health related MDGs and sustain the gains						
5.1	Unmet need for contraception	3	2	1	4	1.33
5.2	Couple Year Protection (CYP), All sources incl. the private sector	3	2	1	3	1.00
5.3	Infant Mortality Rate	3	3	1	5	1.94
5.4	Institutional Neonatal Mortality Rate	3	3	1	5	1.94
5.5	Neonatal Mortality Rate	3	3	1	5	1.94
5.6	Under-5 Mortality Rate	3	3	1	5	1.94
5.7	Maternal Mortality Ratio	3	3	1	5	1.94
5.8	Institutional Maternal Mortality Ratio	3	3	1	5	1.94
5.9	HIV prevalence rate	3	2	1	5	1.67
5.10	Proportion of infected pregnant women who received ARVs for PMTCT	3	3	1	3	1.17
5.11	Proportion of babies born to HIV mothers being HIV negative (refine)	3	3	1	3	1.17
5.12	Proportion of children U5 who are stunted	3	3	1	5	1.94
5.13	Proportion of children fully immunized (proxy Penta 3 coverage)	3	3	1	4	1.56

5.14	Antenatal Care Coverage 4+	3	2	1	4	1.33
5.15	Exclusive breast feeding for six months	3	3	1	3	1.17
5.16	Proportion of deliveries attended by a trained health worker	3	3	1	4	1.56
5.17	Still birth rate	3	3	1	5	1.94
5.18	Postnatal care coverage for newborn babies	3	2	1	4	1.33
5.19	Proportion of children under 5 years sleeping under ITN	3	2	1	3	1.00
5.20	TB treatment success rate	3	2	1	4	1.33
MS	Milestone (25%)					9.74
Objective 6: Intensify prevention and control of non-communicable and other communicable diseases						
6.1	Non-AFP polio rate	3	2	1	3	1.00
6.2	Population prevalence of hypertension	3	3	1	4	1.56
6.3	Number of deaths attributable to selected cancers	3	3	1	5	1.94
MS	Milestone (25%)					1.50

Annex 5: Assessment of indicators

1.1 Number of functional ambulance service centres

2014 Performance: 128

2014 Target: 140

Source: NAS

Trend: Neutral (<5%)

Target: Not achieved

Outcome: 0

Result: In 2014, NAS created six new functional ambulance service centres. This is short of the target for 2014 but relative improvement over 2013 of close to 5%.

Discussion: With six new centres, National Ambulance Service continued to expand the number of ambulance service centres in 2014. Close to 60% of all Ghana's 216 districts are covered by ambulance services. The lowest coverage is in Brong-Ahafo, Ashanti and Western Regions with 47%, 44% and 45% of districts covered, respectively, while Upper West Region has the highest coverage with 9 out of 11 districts (80%) covered. In 2013 NAS responded to a total of 12,251 calls compared to a total of 16,258 calls in 2014. Out of this number comprised both Emergency and Non-Emergency cases (mostly inter-hospital transfers). The largest group of cases were women between 15 and 44 years, possibly due to deliveries and related obstetric complications. The average case-response-time has increased over the past years (from about 12 minutes in 2007 to 19 minutes in 2014) together with the vehicle-engaged-time (from 2:44 hours in 2007 to 3:13 hours in 2014).

2010	2011	2012	2013	2014
N/A	24	121	122	128

1.2 Number of functional CHPS zones

2014 Performance: 2,948

2014 Target: 2,450

Source: GHS-PPME

Trend: Improving (27%)

Target: Achieved

Outcome: +1

Result: The number of functional CHPS zones continued previous years' increase to 2,948 zones and met the target for 2014.

Discussion:

- Update figures from PPME-GHS
- No clear definition and standard for reporting
- Currently revising CHPS policy
- CHPS presidential priority
- CHPS driver of maternal and child health services

2010	2011	2012	2013	2014
1,241	1,659	2,175	2,315	2,948

1.3 Per capita OPD attendance

2014 Performance: 1.15

2014 Target: 1.17

Source: DHIMS + KATH + KBTH

Trend: Neutral (-1%)

Target: Not achieved

	2010	2011	2012	2013	2014
# OPD (mill.)	22.3	26.5	30.3	30.8	31.4
Population (mill.)	24.7	25.3	25.9	26.6	27.3
Ratio	0.92	1.05	1.17	1.16	1.15

Outcome: 0

Result: The number of OPD visits continues to increase but not as fast as population growth. Therefore the OPD per capita ratio is slightly declining.

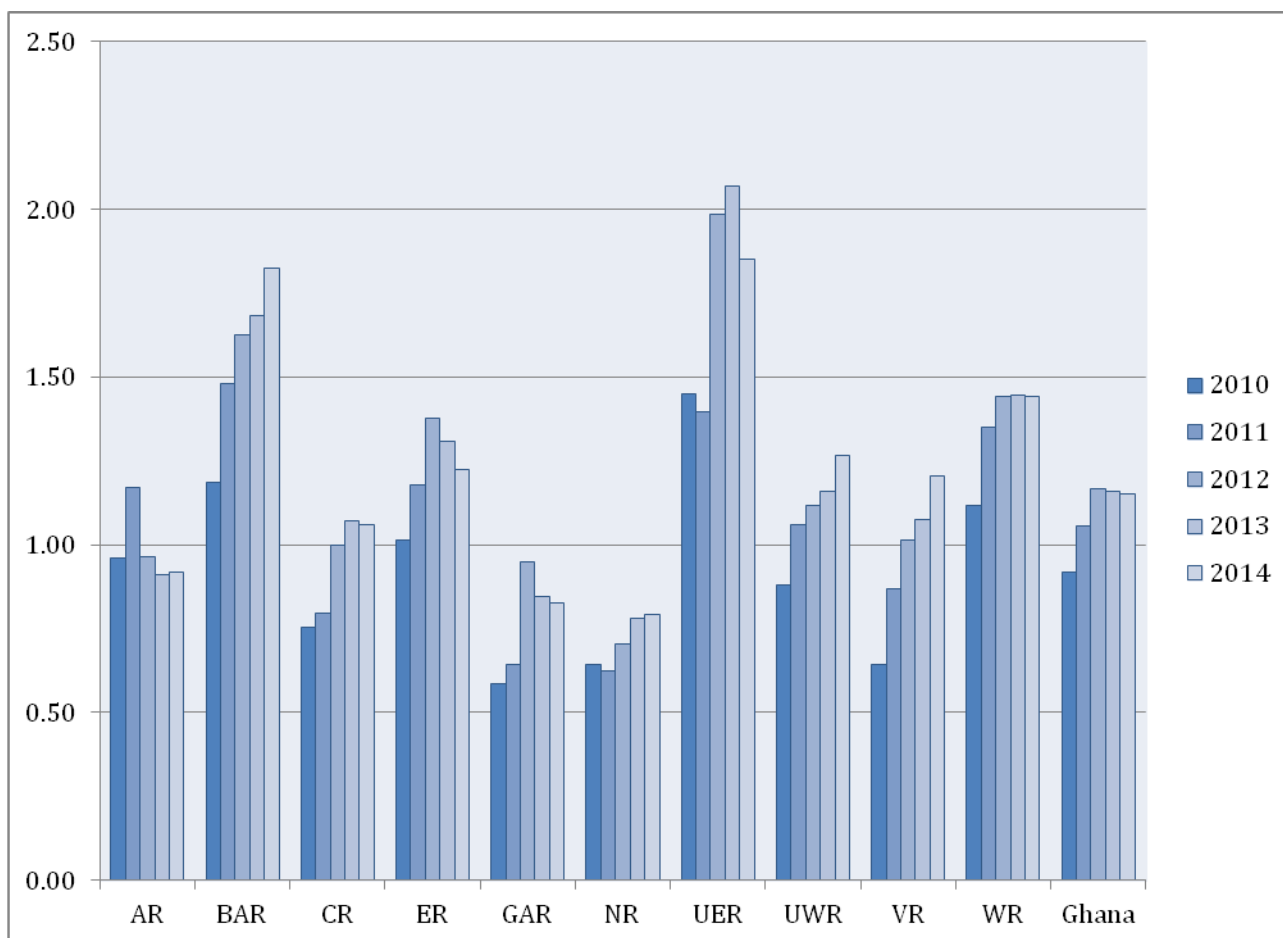
Discussion: The number of OPD visits per capita can be seen as a proxy measure for patients' access to health care. Since the introduction of National Health Insurance, the OPD per capita increased considerably from 0.55 in 2006 to 1.17 in 2012. Since 2012, the performance has been stable around 1.15 visits per person per year. This figure does not include services provided by quasi-governmental providers like 37-Military Hospital, Police Hospitals and Legon Hospital, since these facilities do not currently report to MoH.

Patients insured by NHIS make about three quarters of all new OPD visits. The proportion of insured patients is higher for subsequent visits, up to almost 90%. This indicates that insured patients in average make more OPD visits than non-insured patients.

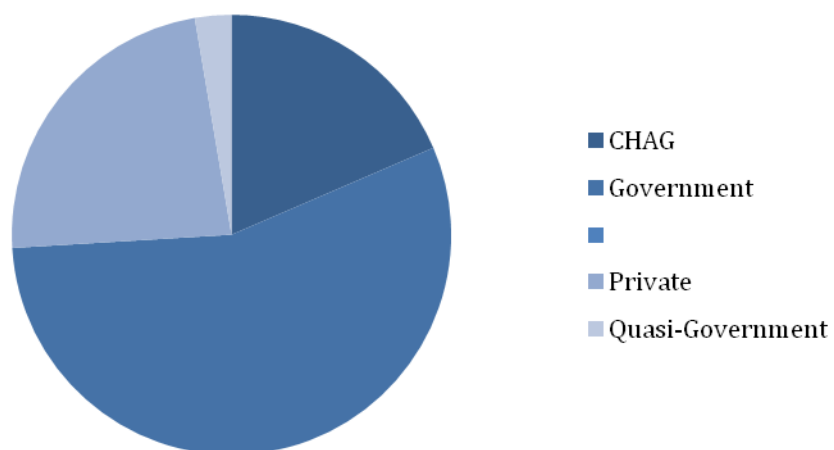
The largest provider of OPD services are government facilities with about 55%, followed by private providers and CHAG with 23% and 19%, respectively.

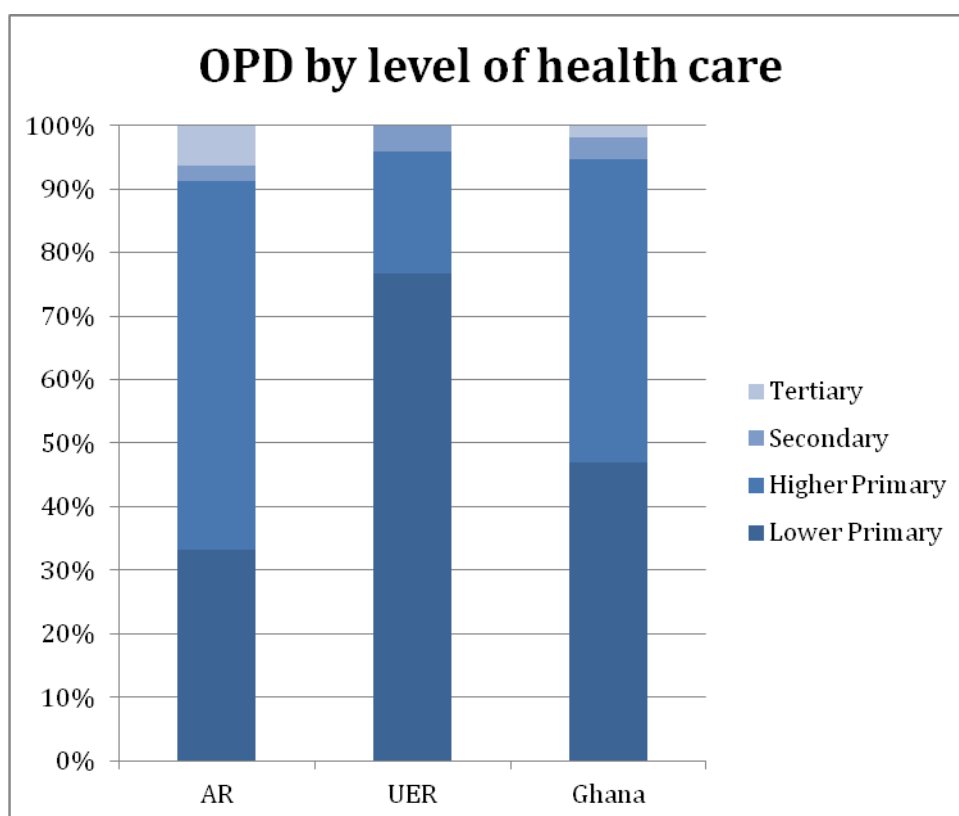
The national average hides large regional variations in performance and trends. The region with highest use of OPD services is Upper East, while the lowest is Northern Region. Since the introduction of capitation in Ashanti Region, the use of OPD services seems to have stagnated around 0.9 visits per year. In order to assess whether this represents a successful reduction in frivolous use or deteriorated access to health service for those in need would require more in-depth analysis. Analysis shows that about a third of OPD services are provided at the lowest level of the health system, i.e. sub-district clinics and CHPS in Ashanti Region compared to national average about 50% and about three quarters in UER. This finding indicates that patients in Ashanti Region generally choose their preferred primary provider from higher levels of the health care system, which again supports concerns raised that capitation in its current design unintentionally could lead to financial deprivation of the sub-district health centres and CHPS clinics.

Since 2012, Eastern Region has experienced a worrying negative trend in OPD utilisation. Since there are no obvious explanations for this trend, the determinants of this trend need to be further investigated. In the same period Brong-Ahafo, Upper-West and Volta Regions have improved considerably; especially Volta Region has managed to improve OPD utilisation to a level above the national average.



Total OPD





1.4 Equity poverty: U5MR

2014 Performance: N/A

2014 Target: No target

Source: N/A

Trend: N/A

Target: N/A

Outcome: N/A

Result:

Discussion:

	2003	2008	2011	2014
Lowest wealth quintile	128	103	106	N/A
Highest wealth quintile	88	60	52	N/A
Ratio	1.5	1.7	2.0	-

1.5 Equity geography: Skilled deliveries

2014 Performance: 1.6

2014 Target: < 1.5

Source: DHIMS

Trend: Neutral (4.4%)

Target: Not achieved

Outcome: 0

	2010	2011	2012	2013	2014
UER	54%	65%	69%	68%	74%
VR	33%	40%	45%	43%	45%
Ratio	1.6	1.6	1.5	1.6	1.6

Result: There were improvements in both worst and best region in 2014. The relative improvements were of same extent and the equity ratio is unchanged at 1.6.

Discussion: Based in the routinely reported information, equity in access to skilled delivery is unchanged between 2013 and 2014. The poorest performance continues to be in Volta Region while Upper East Region has the highest coverage. The probability for a woman in Volta Region to deliver at a health facility is 45% compared to 74% in Upper East Region. Underlying the

unchanged equity index, there were improvements in skilled delivery coverage in both poorest and best performing regions.

A recent field visit by Moh to Volta Region showed that the region has 191 CHPS compounds, but inadequate provision of basic equipment and appropriate staff for providing skilled delivery services. Only about 11% of deliveries occur in sub-district clinics and CHPS in Volta, this is the lowest in Ghana. The average in Ghana is 20% and highest is 47% in Upper East Region. Another major challenge is the mal-distribution of Health infrastructure. The southern and middle belt seem to be more endowed with health infrastructure compared to the north.

Volta Region is averagely staffed with respect to midwives compared to other regions in Ghana, but midwives are mal-distributed with some parts of the region being more endowed than others. Midwives in Volta Region have on average 109 deliveries a year compared to 132 in Ghana and 190 in Northern Region. Productivity of some midwives is very low, and some conduct as low as 7 deliveries in a month. There is weak supervision and monitoring at the lower levels. A monitoring team from the regional directorate, which went round recently, noted that some district management teams had never visited their CHPS zones. The region has identified this as a challenge and is working out a strategy to ameliorate the situation. They however complain of limited funds since monitoring and supervisory visits tend to be very costly. One of the biggest challenges in Volta Region is geographical access to services since the region has 6 island districts and about 1/3 of the people stay in the island communities. Staffs are reluctant to work in these island communities and some are unwilling to ride in the boats due to safety concerns. Volta Region has also identified poor staff attitude as a challenge.

For the equity to improve, resources and effort must be invested into solving infrastructural challenges and expand service delivery at sub-district level in Volta Region.

shows the relation between skilled delivery coverage and midwife staffing strength by regions. The size of the bubble represents the total number of skilled deliveries in the region. The figure shows that Upper East Region is well staffed and has a high coverage of skilled deliveries, while Northern Region has low staffing strength and low coverage. Volta Region has average staffing but relatively low coverage as discussed above. The low performance of Ashanti and Greater Accra Regions can possibly be explained by underreporting from quasi-governmental and private providers, predominant in these two regions.

The Ghana Demographic and Health Survey also studied coverage of skilled delivery. Survey based figures are normally higher than routine based figures due to incomplete reporting, inadequate coverage of non-governmental providers and inaccurate population estimates in the routine reporting system (DHIMS). Figure XX illustrates this difference, and shows that the average difference for Ghana has halved from over 30% in 2008 to about 16% in 2014. This indicates that the routine health information system has improved. The figure also illustrates large differences in Ashanti and Greater Accra Regions. This is possibly due to inadequate coverage of skilled deliveries performed outside government facilities. Moreover, it is evident that the routine health information system in Northern Region is challenged by underestimated population figures leading to overestimated coverage.

Based on analysis of the survey based information, Volta Region is still ranking among the lowest regions with 66.3% skilled delivery coverage, but Northern Region is performing significantly worse with only 36.4%. This indicates that the sector must increase its focus on Northern Region despite relatively good performance based on routine information.

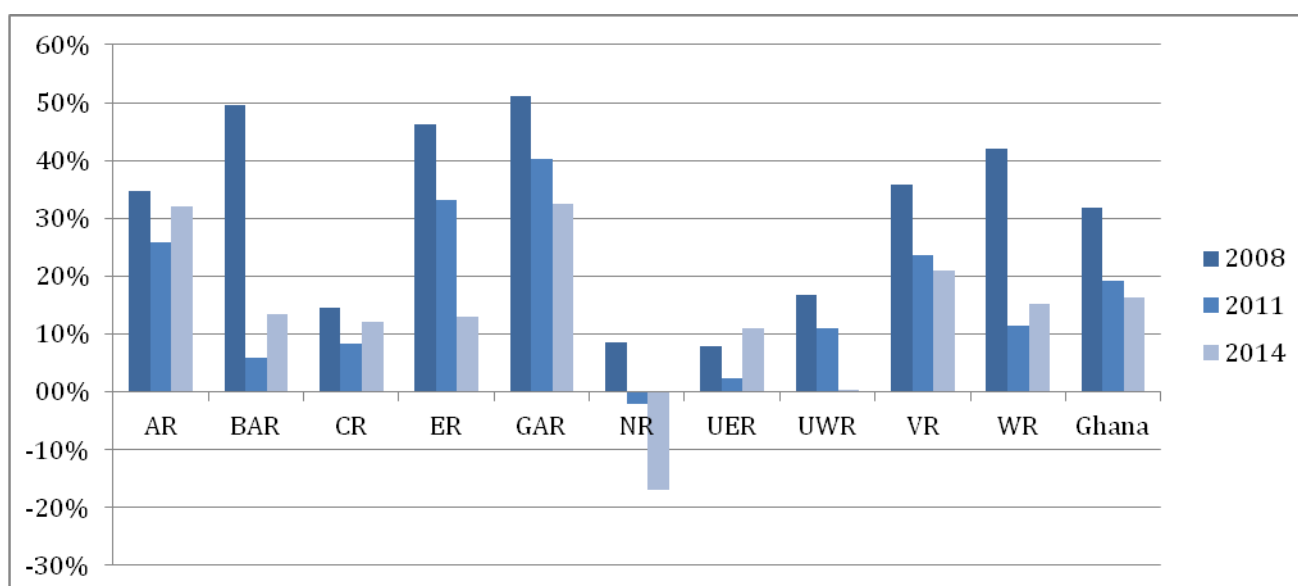


Figure 22: Differences in coverage between survey and routing reporting by region. Source DHIMS, DHS and MICS

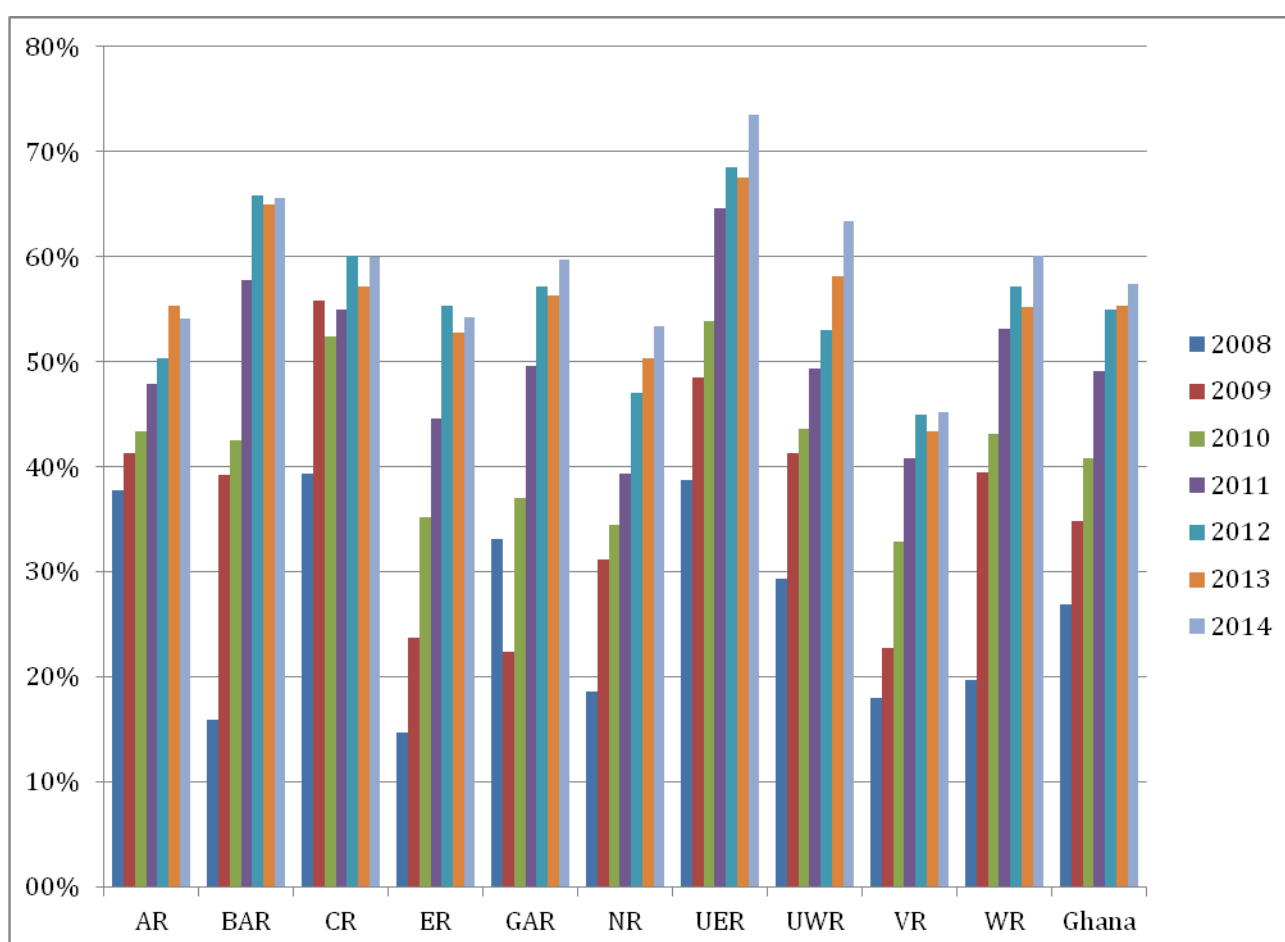


Figure 23: Routine based skilled delivery coverage by region, source DHIMS

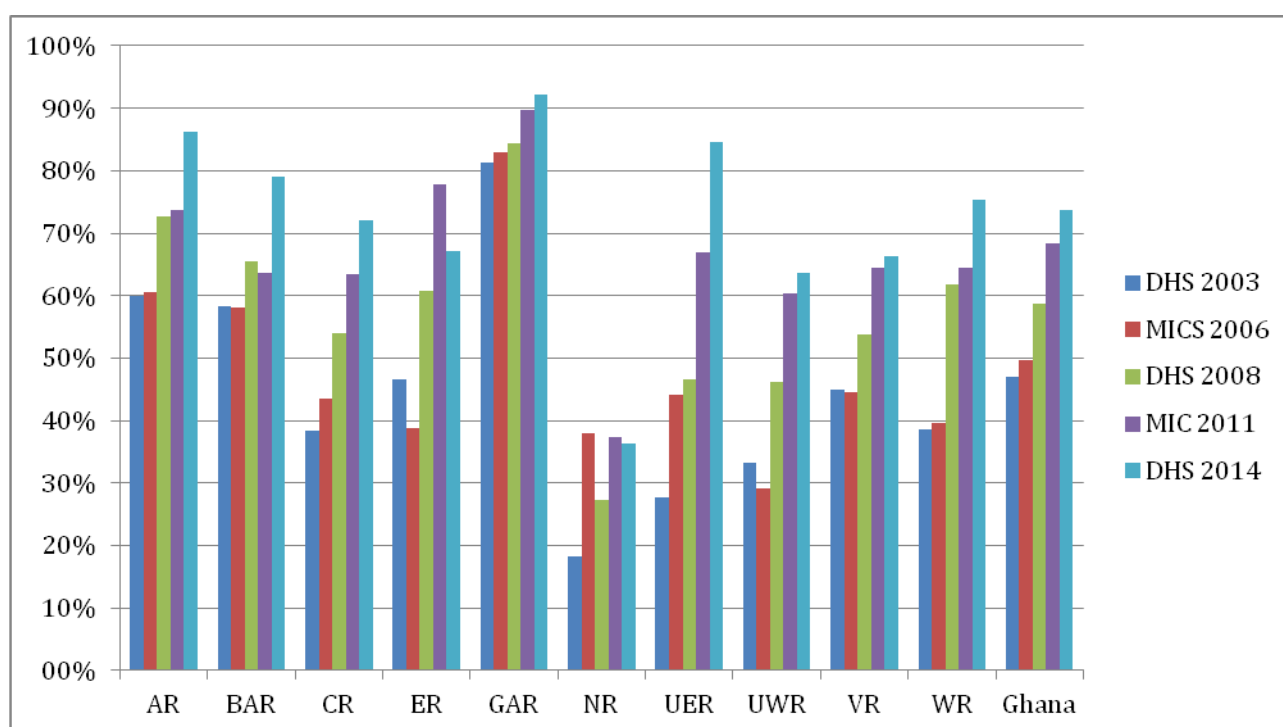


Figure 24: Survey based skilled delivery coverage by region. Source DHS and MICS

1.6 Equity geography: Equity geography: Doctor to population

2014 Performance: 13.1

2014 Target: <13

Source: IPPD

Trend: Improving (-21%)

Target: Not achieved

Outcome: +1

	2011	2012	2013	2014
GAR	1:3,871	1:4,246	1:3,178	1:2,744
UER	1:42,364	-	-	-
UW	-	1:45,464	1:53,064	1:36,048
R				
Rati	10.9	10.7	16.7	13.1
o				

Result: With 7 new doctors in UWR, the equity in distribution of doctors in Ghana has improved.

Discussion: With about 400 additional doctors employed by MoH in 2014, the doctor to population ratio improved from one doctor to 10,170 persons in 2013 to one doctor to 9,043 in 2014. There are large interregional variations with 13 times more doctors to the population in Greater Accra compared to Upper West Region, but with an increase of 50% more doctors in Upper West, this inequity gap reduced in 2014. Upper West Region was able to achieve this by attracting more doctors using personal contacts, improved incentive packages (remuneration, accommodation etc.) and collaboration with the District Assemblies. The large inequities can to some extent be explained by newly trained doctors working as house officers and attached to Medical and Dental Council in Accra (table XX). If house officers are excluded from the equation Greater Accra still has about 9 times more doctors than Upper West.

Doctors by department

Ghana Health Services	1,362
CHAG	354
Training Institutions	2
Tertiary Health Services	730

Tertiary Health Services: Psychiatric Hospitals	12
Min Of Health HQ	7
Medical and Dental Council†	549
Total	3,016

Table 20: Doctors by department in 2014, source IPPD.† House Officers

Total no. of doctors	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2009	600	140	87	157	839	50	34	17	78	80	2,082
2010	562	141	88	155	876	72	29	14	80	91	2,108
2011	624	143	103	161	1068	114	25	17	88	88	2,431
2012	513	145	100	141	1004	130	28	16	90	85	2,252
2013	493	141	101	147	1383	118	32	14	98	88	2,615
2014	541	145	114	171	1651	117	34	21	114	108	3,016

Table 21: Number of doctors by region 2009-2014. Source IPPD

Figure XX illustrates inequality in distribution of doctors, nurses and midwives. The solid, black line represents equal distribution, while any curve under this line represent inequality. The size of the area under the curve represents the extent of inequality. Despite exclusion of house officers in this analysis, it is visible from the graph that the largest inequality is with respect to distribution of doctors. Nurses and midwives almost follow the same curve with a slightly more unequal distribution of midwives.

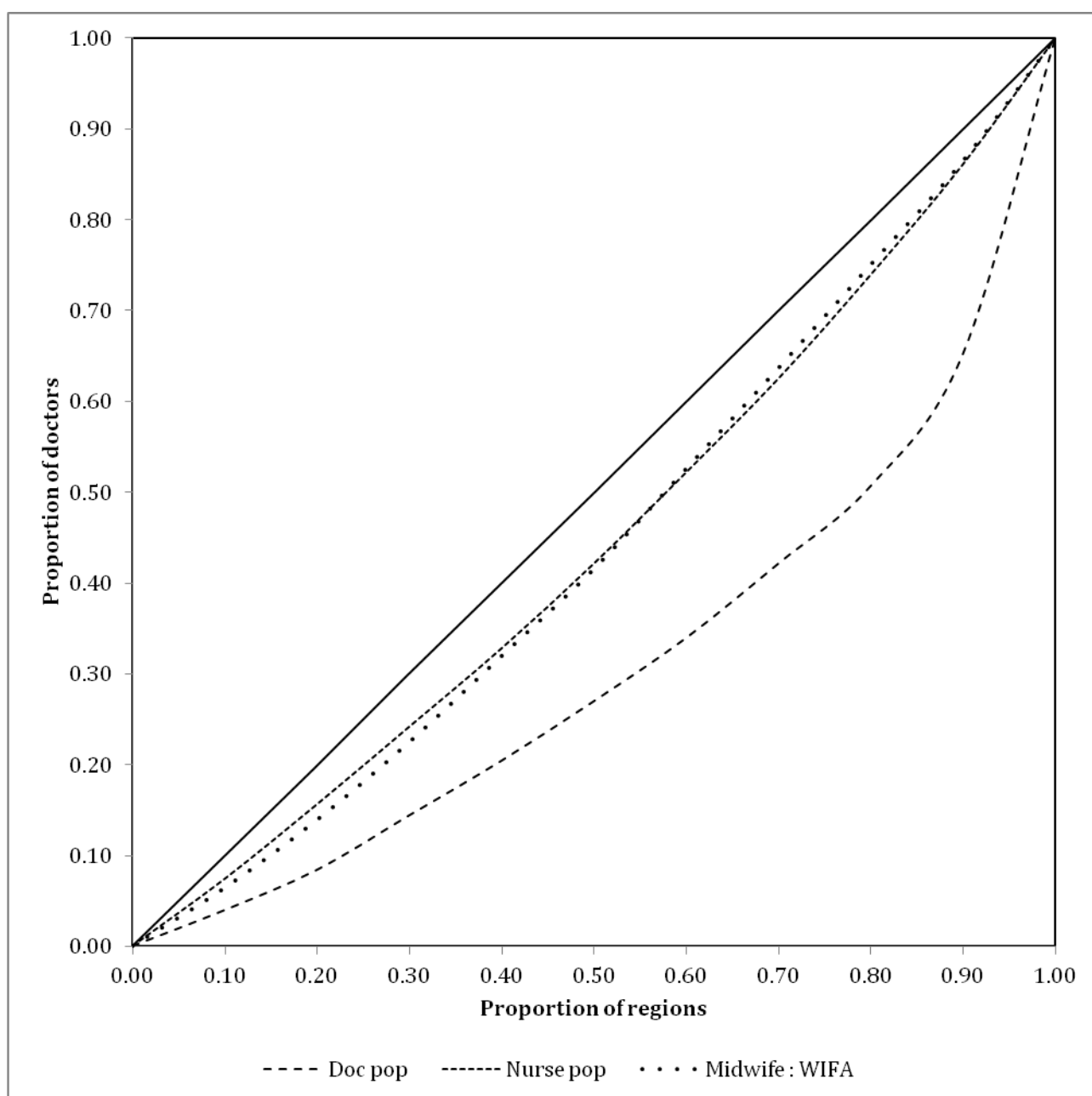


Figure 25: Equity in distribution of doctors, nurses and midwives. Source IPPD

1.7 Equity geography: Nurse to population

2014 Performance: 1.9

2014 Target: <1.9

Source: IPPD

Trend: Improving (-6%)

Target: Target achieved

Outcome: +1

Result: The equity of nurse distribution improved in 2014 and met the target of a

	2011	2012	2013	2014
UWR	1:1,160	-	-	-
GAR	-	1:960	-	-
UER	-	-	1:715	1:669
AR	1:2,023	-	-	-
NR	-	1:1,791	1:1,423	1:1,255
Ratio	1.7	1.9	2.0	1.9

maximum of 1.9 ratio.

Discussion: The nurse to population ratio improved across all regions and the distribution became more equitable, but Northern Region continues to lack behind the rest of the country.

Nurses:population	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2009	1:2,100	1:1,868	1:1,400	1:1,197	1:1,158	1:1,960	1:1,138	1:1,145	1:1,264	1:1,797	1:1,494
2010	1:1,994	1:1,915	1:1,607	1:1,376	1:1,043	1:2,077	1:1,158	1:1,204	1:1,434	1:1,727	1:1,516
2011	1:2,023	1:1,850	1:1,700	1:1,565	1:1,192	1:1,942	1:1,161	1:1,160	1:1,570	1:1,777	1:1,599
2012	1:1,699	1:1,671	1:1,412	1:1,303	1:960	1:1,791	1:1,045	1:1,036	1:1,470	1:1,448	1:1,362
2013	1:1,296	1:1,245	1:1,185	1:1,041	1:826	1:1,423	1:715	1:855	1:1,135	1:1,142	1:1,084
2014	1:1,088	1:1,132	1:996	1:900	1:764	1:1,255	1:669	1:813	1:925	1:1,077	1:959

Table 22: Nurse to population ratio 2009-2014. Source IPPD

1.8 Equity gender: Female/ male NHIS active membership

2014 Performance: N/A

2014 Target: N/A

Source: NHIA

Trend: N/A

Target: N/A

Outcome: N/A

Result:

Discussion:

	DHS 2008	MICS 2011	2014
Female	34.1%	41.6%	-
Male	26.9%	33.7%	-
Ratio	1.27	1.23	-

2.1 Proportion of total MTEF allocation to health

2014 Performance: 11%

2014 Target: ≥ 15%

Source: MOH

Trend: Improving (7%)

Target: Not achieved

Outcome: +1

	2010	2011	2012	2013	2014
MTEF for health (mill GHc)	792	1,183	1,333	2,789	3,354
Total MTEF (mill GHc)	10,778	12,671	17,515	28,163	31,750
Proportion	7.4%	9.3%	7.6%	9.9%	10.6%

Result: The proportion of the national budget allocated to health increased from 9.9% in 2013 to 10.6% in 2014. This is an improvement of 6.7%.

Discussion: The calculation of this indicator was revised in connection to the updated indicator framework for the HSMTDP II. Health sector budget figures are extracted from the annual POW and excludes earmarked funds, while the national budget figure is taken from the annual national budget. The new calculation shows that the relative allocations to the health sector is significantly lower than previously presented. Nevertheless, the analysis shows that government's commitment to health is increasing.

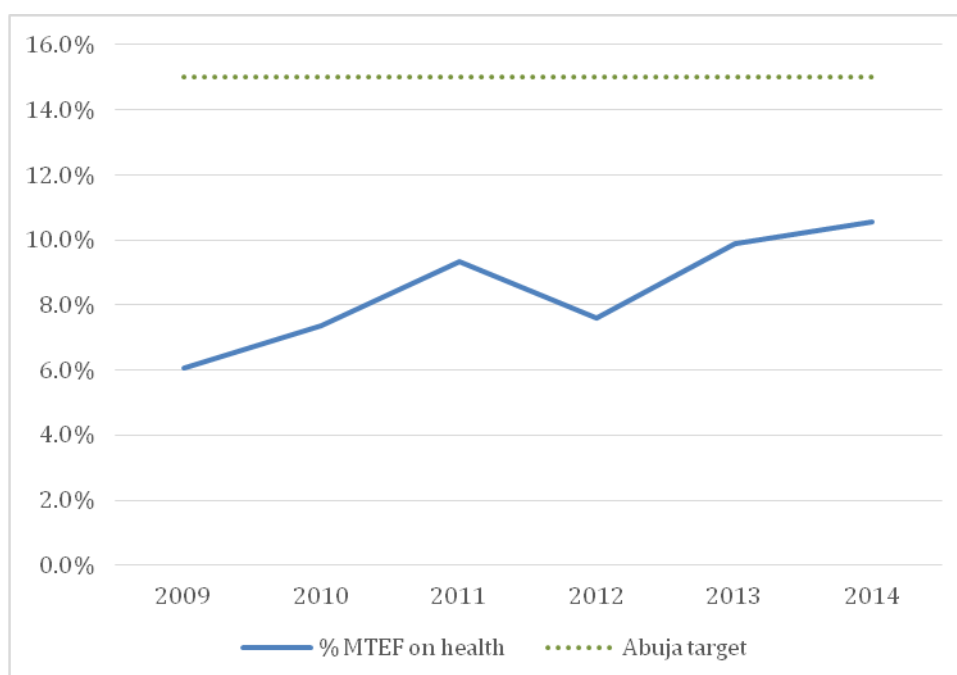


Figure 26: Proportional allocations of national budget to health. Source POW 2009-2014 and National budgets 2009-2014.

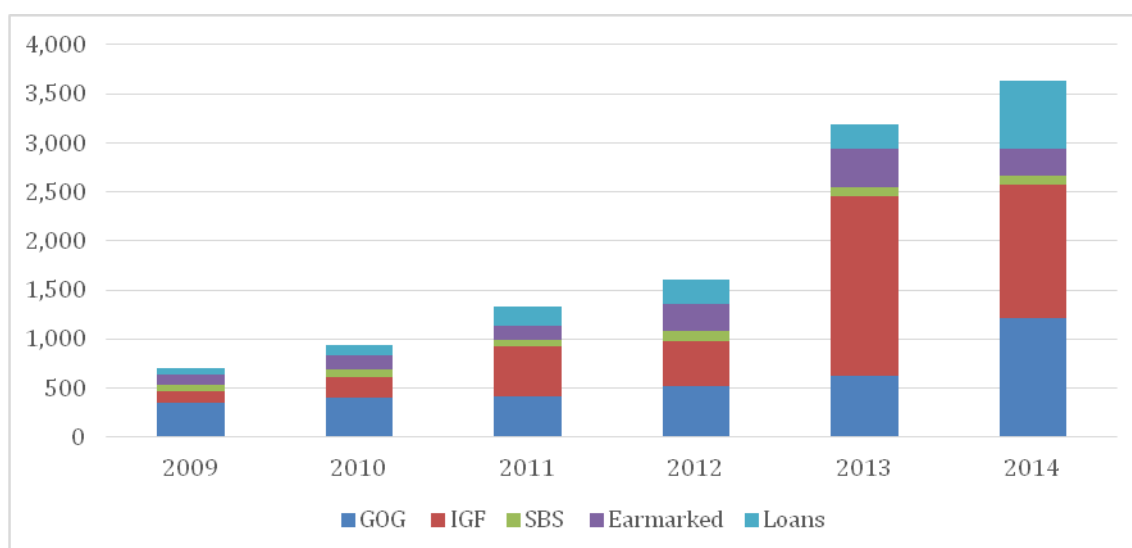


Figure 27: Annual budget allocations for health by funding source. Source POW 2009-2014

2.2 Per capita expenditure on health (USD)

2014 Performance:

2014 Target: > USD 44

Source: MOH

Trend: Worsening (-30%)

Target: Not achieved

Outcome: -1

		2010	2011	2012	2013	2014
Expenditure (mill. USD)	(mill. USD)	-	-	-	1,253	895
Population (mill)		24.7	25.3	25.9	26.6	27.3
Ratio		28.7	35.0	50.7	47.1	32.8

Result: The amount in USD spent on health dropped by over 30% from 47 USD in 2013 to 33 USD in 2014.

Discussion: The health expenditure in GHC increased in nominal terms from 2,709 million GHC in 2013 to 2,866 million GHC in 2014. Due to population increase and substantial inflation of the GHC to the USD, the per capita expenditure in USD experienced a dramatic decrease by over 30% from 47 USD in 2013 to 33 USD in 2014.

2.3 Budget execution rate (Goods and Service as proxy)

2014 Performance: 61%

2014 Target: > 80%

Source: MOH

Trend: Improving (9%)

Target: Not achieved

Outcome: +1

	2010	2011	2012	2013	2014
Disbursed (mill GHc)	452.1	-	-	998.9	998.4
Budget (mill GHc)	480.8	-	-	1,770.5	1,630.4
Rate	94%	82%	87%	57%	61%

Result: While a budget execution rate for Goods and Services at 61% is low and far from the target of above 80%, the trend increased by 9% from 57% in 2013.

Discussion: For the past two years, the budget execution for Goods and Services has been very low. In 2014, the sector spent less than two thirds of the budget. One possible contributing factor to low execution rate is difficulties in accessing the funds through the GIFMIS. Procedures are cumbersome and funds get locked up in the system inaccessible to the recipient.

2.4 Proportion of population with active NHIS membership

2014 Performance: 38%

2014 Target: > 39%

Source: NHIA

Trend: Neutral (2.2%)

Target: Not achieved

Outcome: 0

	2010	2011	2012	2013	2014
# Active members (mill)	8.2	8.3	8.6	9.8	10.3
Population (mill)	24.7	25.3	25.9	26.6	27.3
Proportion	33%	33%	34%	37%	38%

Result: The number of active NHIS members increased with 5% to over 10 million Ghanaians. Due to increases in population size the proportion of the population covered by NHIS only increased with 2% and did not reach the target of over 39%.

Discussion: National Health Insurance continued to increase the number of active members from 9.8 million in 2013 to 10.3 million in 2014. Due to an increase in population size in the same period, the proportion of the population covered by NHIS increased only slightly. In 2014, the biometric registration of members was rolled out in six regions, which in some cases slowed down registration due to unstable supply of power and network. While a faster increase in coverage would be desired from the perspective of improved access to health care, this would also increase the financial pressure on NHIS and challenge the sustainability of the scheme.

2.5 Proportion of NHIS members in exempt categories

2014 Performance: 66%

2014 Target: >63%

Source: NHIA

Trend: Neutral (<5%)

Target: Achieved

Outcome: +1

	2011	2012	2013	2014
# Exempt members (mill.)	5.3	5.5	6.1	6.7
# Active members (mill.)	8.3	8.6	9.8	10.3
Proportion	63%	63%	63%	66%

Result: The proportion of active members in the exempt categories increased from 6.1 million in 2013 to 6.7 million in 2014, and the proportion came to 66% of all members.

Discussion: The goal of providing free NHIS membership to certain population groups is to improve financial access for the poorest and most vulnerable populations. The exempt categories include SSNIT pensioners, elderly above 70 years, pregnant women, children under 18 and indigents. Currently two thirds of all active NHIS members belong to the exempt categories, i.e. they receive benefits but do not pay any premium (figure XX). This finding illustrates on of the factors leading to increased financial pressure on the scheme, and raises the important question of whether these members are all poor and vulnerable or whether there is too much “leakage” of free benefits into the population who could pay for their membership. Analysis of the socioeconomic status of those who benefit from exemptions could inform the debate about exemptions, leakage and financial sustainability of NHIS, and perhaps lead to political decisions about reform of the exemption schemes.

Figure XX and table XX show that the number of pregnant women exempt under the free maternal health policy decreased substantially between 2012 and 2013 and remained low in 2014. In 2014 only 34% of all women with expected pregnancy were registered under the free maternal health care policy initiative. Further analysis will be needed to understand this declining trend. In the same period the number of exempt indigents increased by a similar magnitude.

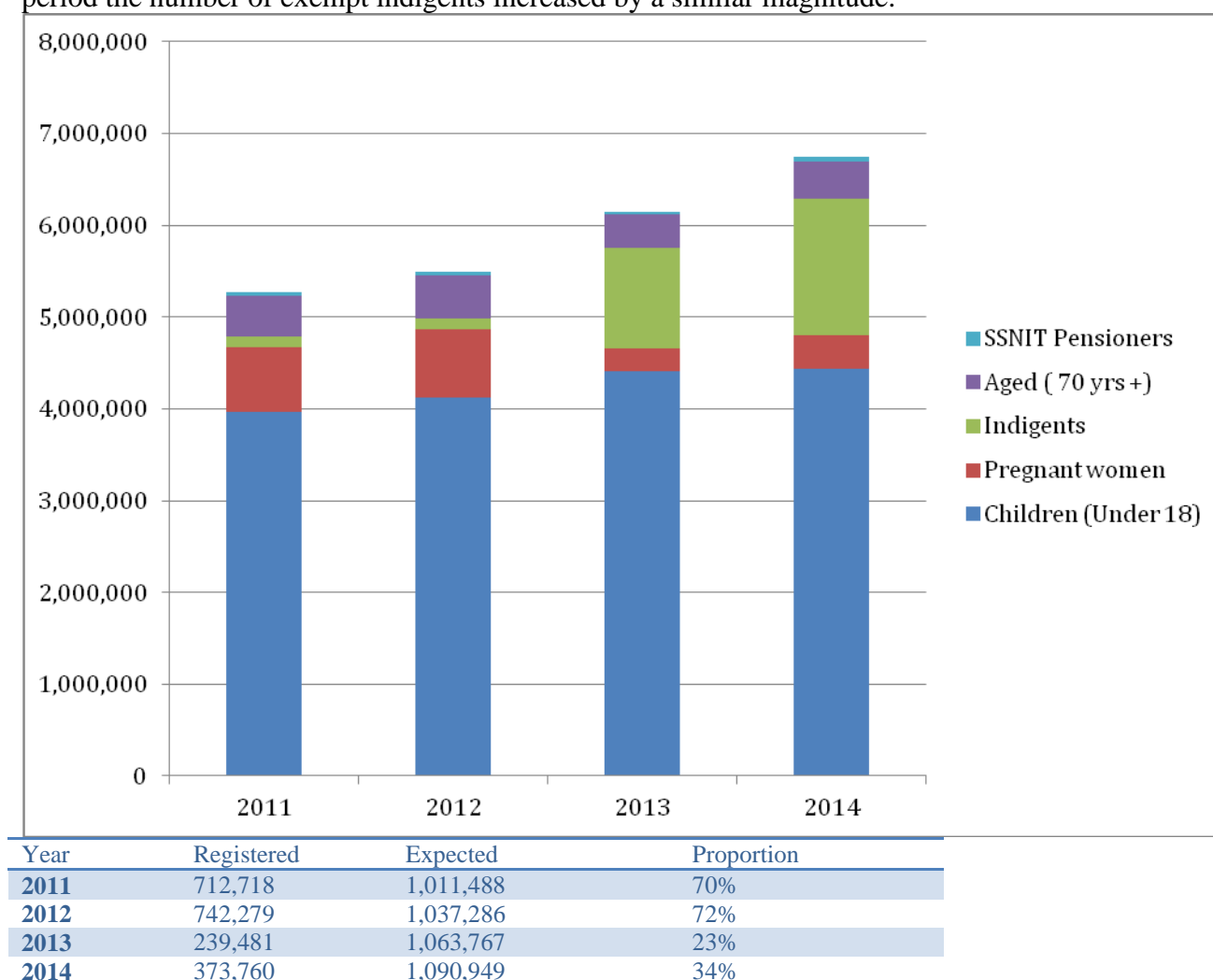


Table 23: Proportion of expected pregnant women exempted under NHIS

2.6 Proportion of population covered by NHIS as indigents

	2011	2012	2013	2014
--	------	------	------	------

2014 Performance: 5.5%

2014 Target: 5%

Source: NHIA

Trend: Improving (32%)

Target: Achieved

Outcome: +I

# Exempt Indigents (mill.)	0.1	0.1	1.1	1.5
Population (mill.)	25.3	25.9	26.6	27.3
Proportion	0.5%	0.5%	4.1%	5.5%

Result: The number of indigents exempt under NHIS continues to increase and reached 1.5 million in 2014. 5.5% of the population is now covered as indigent under the scheme.

Discussion: In 2013, NHIS increased the share of active members exempted as indigents from 0.5% to 4.1% of the total population. NHIA estimates that about 8% of the population are eligible for exemption as indigent, and the target is to increase the share annually with 15% until this target is reached. The strategy to increase inclusion of the poorest is by linking NHIS membership to the LEAP (Livelihood Empowerment Against Poverty) programme. Moreover, NHIA has increased enrolment of persons in prisons and patient in mental health institutions.

2.7 Proportion of NHIS expenditure on claims reimbursement

2014 Performance: 100%

2014 Target: >80%

Source: NHIA

Trend: Neutral (-4.7%)

Target: Achieved

Outcome: +I

	2011	2012	2013	2014
Claims exp. (mill. GHc)	548.7	616.2	783.3	968.5
Total exp. (mill. GHc)	762.9	798.3	987.1	1,280.8
Proportion	72%	77%	79%	76%

Result: In 2014, all NHIS income was spent on reimbursement of claims. In the previous three years, between 78% and 89% was spent on claims.

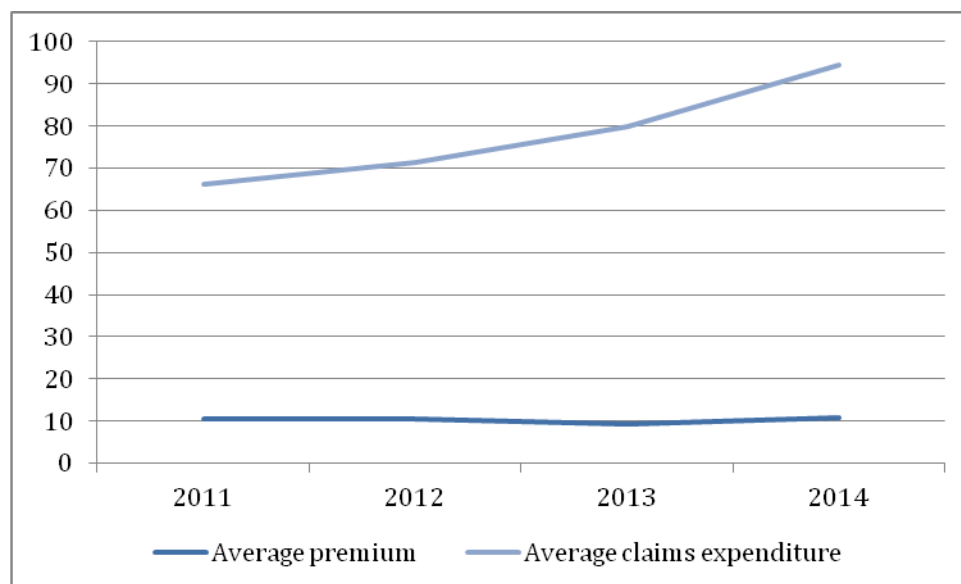
Discussion: The expenditure on claims has increased steadily since 2011, and with a total of 968.5 million GHc spent on claims in 2014, the amount has increased by more than 75% over four years. Part of the amount reported in 2014 was spent on claims submitted in 2013. One reason for the increase in claims expenditure is the introduction of VAT on medicines that government introduced in 2014.

With 10.3 million active members, the average annual claims expenditure per member is calculated to 94.4 GHc in 2014 while the average premium paid by active members from the informal sector is calculated to 10.7 GHc. The majority of active members belong to the exempt categories, and most of these members have a need of health care, which is higher than the average Ghanaian, e.g. pregnant women, children and elderly. If more Ghanaians from the non-exempt population groups would join the NHIS, the average cost of claims per member could possibly decrease. But with the observed annual increase in individual claims expenditure and constant premium, expanding coverage of the informal population could pose a financial risk to the scheme. More comprehensive actuarial analysis would be required to assess this risk.

The high proportion of claims expenditure also limits the options for expanding coverage of the exempt groups, increasing service uptake and expanding benefit package. There is a pressing need to reduce claims expenditure by scaling up capitation, capping frivolous use of services (e.g. by introduction of co-payment), reducing the benefit package, curbing adverse selection (by introducing barriers to enrol and leave scheme, grace-period etc.) and scale up initiatives to reduce fraud (e.g. clinical audit unit).

	2010	2011	2012	2013	2014	% 2014
Claims	395.06	548.71	616.21	783.36	968.48	75.6%
Admin and logistic support	12.04	17.2	6.93	4.31	4.48	0.3%

Support to MOH	75.52	147.33	74.67	31.68	29.16	2.3%
Operating	31.26	36.75	71.35	140.02	128.46	10.0%
NHIS ID card	23.69	9.62	20.05	27.69	76.57	6.0%
IDA project (WB)	0.25	3.29	9.07	0	0	0%
Loan payment	0	0	0	0	73.61	5.7%
Total	537.82	762.9	798.28	987.06	1,280.76	



2.8 Equity poverty: NHIS members

2014 Performance: N/A

2014 Target: N/A

Source: N/A

Trend: N/A

Target: N/A

Outcome: -

Result:

Discussion:

	DHS 2008	MICS 2011	2014
Valid members – poorest quintile	27.9%	28.7%	-
Valid members – whole population	34.1%	41.6%	-
Ratio	0.8	0.7	-

3.1 Doctor : Population ratio

2014 Performance: 1:9,043

2014 Target: 1:10,000

Source: IPPD - MOH

Trend: Improving (-11.1%)

Target: Achieved

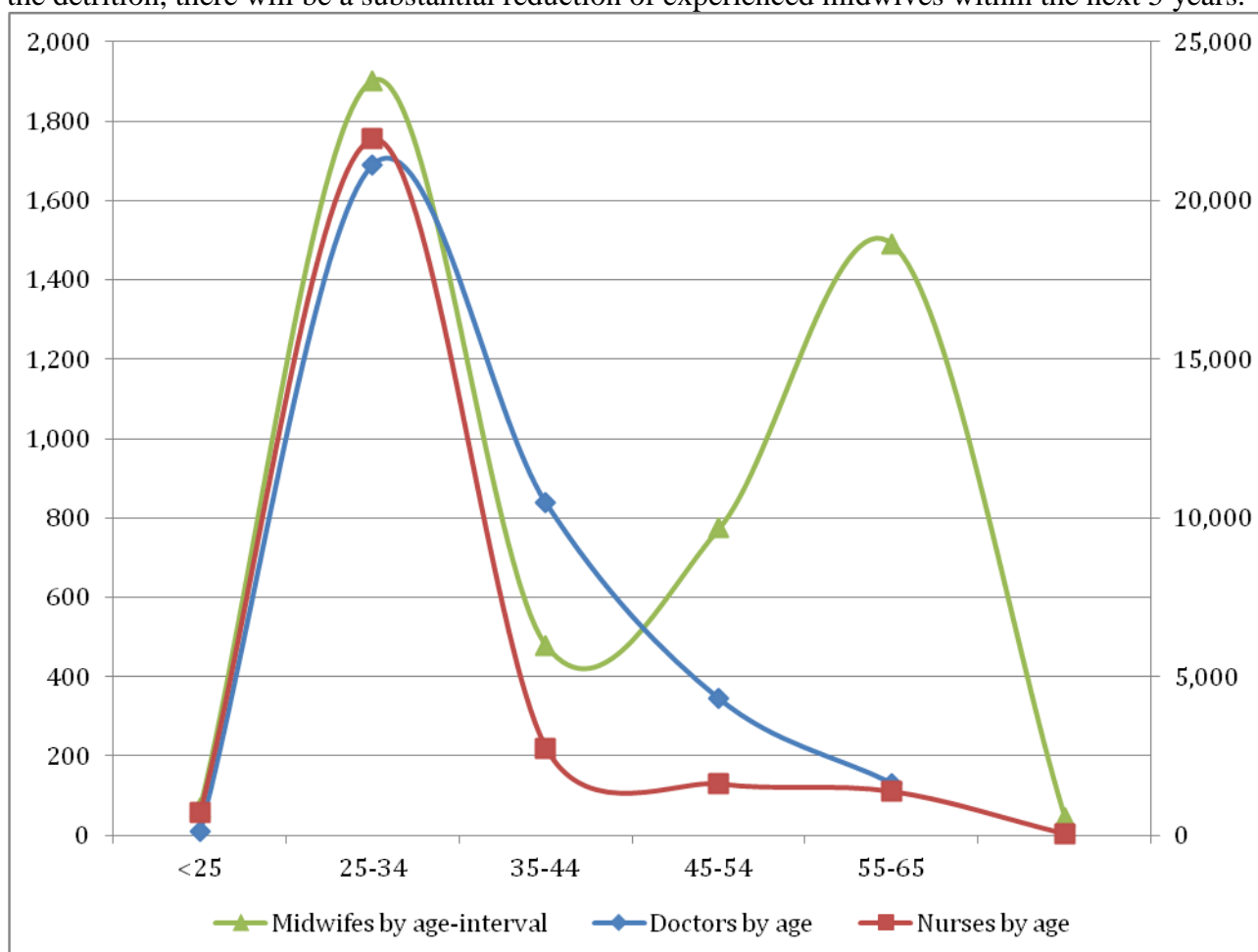
Outcome: +1

	2010	2011	2012	2013	2014
Population	24,658,823	25,287,191	25,932,162	26,594,184	27,273,725
# Doctors	2,108	2,431	2,252	2,615	3,016
Ratio	1:11,698	1:10,402	1:11,515	1:10,170	1:9,043

Result: Doctor to population ratio improved in 2014 and went below 10,000 persons per doctor for the first time.

Discussion: Ghana has successfully educated and employed a large number of additional doctors in 2014. For the first time, the doctor/population ratio has passed the mark of 1 doctor to less than 10,000 persons. Figure XX illustrates the age distribution of selected categories of health staff. For doctors and nurses, the curve is strongly skewed toward left, which means that the majority of these working populations are young. The curve for midwives is “camel-shaped” with a peak of 25-34

year olds and a peak of 55-65 year olds. While it looks like the production of midwives can match the detrition, there will be a substantial reduction of experienced midwives within the next 5 years.



3.2 Nurse : Population ratio

2014 Performance: 1:959

2014 Target: 1:1,000

Source: IPPD - MOH

Trend: Improving (-11.5%)

Target: Achieved

Outcome: +1

	2010	2011	2012	2013	2014
Population	24,658,823	25,287,191	25,932,162	26,594,184	27,273,725
# Nurses	16,268	15,816	19,033	24,533	28,437
Ratio	1:1,516	1:1,599	1:1,362	1:1,084	1:959

Result: Nurse population rate improved and exceeded the target of one nurse per 1,000 persons.

Discussion: The nurse to population rate continued previous years' improvements and met the target of less than 1,000 persons per 1 nurse. As for the doctors, the population of nurses is young. About half of all nurses are community health nurses.

CHNs/CHOs

Community Health Nurses	9,986
Senior Community Health Nurses	2,744
Principal Community Health Nurses	453
Supt. Community Health Nurses	476
Total	13,659

Professional nurses	
Staff Nurse	5,993
Senior Staff Nurse	4,708
Nursing Officer	1,485
Senior Nursing Officer	996
Principal Nursing Officer	1,145
Chief Nursing Officer	2
Deputy Director of Nursing Services	446
Director of Nursing Services	3
Total	14,778

3.3 Midwife : WIFA population ratio

2014 Performance: 1:1,374

2014 Target: 1:1,400

Source: IPPD - MOH

Trend: Improving (-9.9%)

Target: Achieved

Outcome: +1

	2010	2011	2012	2013	2014
WIFA population	570,245	581,650	593,283	605,148	617,251
# Midwives	3,780	4,033	3,863	4,185	4,763
Ratio	1:1,566	1:1,505	1:1,611	1:1,525	1:1,374

Result: With almost 600 additional midwives in 2014, the midwife to WIFA population rate improved. Large differences in average number of deliveries per midwife between the regions. Highest rates were in NR with 190 deliveries per midwife and lowest in AR and VR with 108 and 109, respectively.

Discussion: The staffing strength of midwives improved substantially in 2014. Analysis shows that there are large regional variations in midwife productivity. In Volta and Ashanti Regions, a midwife has about 110 deliveries per year compared to Northern Region, where a midwife in average has about 190 deliveries (70% more). The question is what the reasons are for this variation. Could it be due to variations in distribution of health facilities, availability of equipment, differences in local leadership and accountability structures, cultural factors or something else? More analysis is required to answer these important questions in order to improve productivity in all regions.

The standard set by WHO is 175 deliveries per midwife per year. Based on this figure and the expected number of deliveries per region and given 60% skilled delivery rate, we could estimate the midwife-gap by region (table XX). The analysis shows that the mid-wife gap is negative for Ghana, i.e. according to WHO standards, there are enough midwives in the country. Especially Greater Accra Region has a “negative gap”. Northern Region has the largest midwife gap and need about 110 additional midwives to close this gap. Western and Central Regions also have a substantial need for additional midwives. The analysis shows that Ghana may not need additional midwives but instead need to implement more equitable distribution and improve the environment for increased productivity in certain regions. More comprehensive analysis is required to estimate the gaps more precisely, but these rough estimates could be seen as a warning against sustained high production of midwives, since this in the medium to long term could lead to surplus of midwives and reduced productivity and efficiency.

Current no. of del. per Midwife per year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2009	133	104	147	47	48	104	100	72	46	146	89
2010	132	110	162	80	76	114	119	84	79	148	106
2011	125	148	162	98	98	135	138	96	99	185	123
2012	138	181	194	132	118	183	153	117	128	197	148

2013	134	168	185	124	113	199	126	144	116	172	141
2014	108	156	182	112	122	190	124	126	109	160	132

Table 24: Current average number of deliveries per midwife by region. Source DHIMS and IPPD.

Midwives gap	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	67	-17	20	-109	-225	71	-52	-55	-83	56	-326
2012	61	-24	37	-86	-199	61	-43	-45	-48	62	-224
2013	-44	-30	23	-105	-230	72	-49	-45	-45	67	-386
2014	-7	-6	51	-69	-208	111	-41	-28	8	66	-123

Table 25: Estimation of midwife gap by region. Assumptions: 175 deliveries per midwife per year, 60% coverage of skilled delivery. Source DHIMS, IPPD and WHO

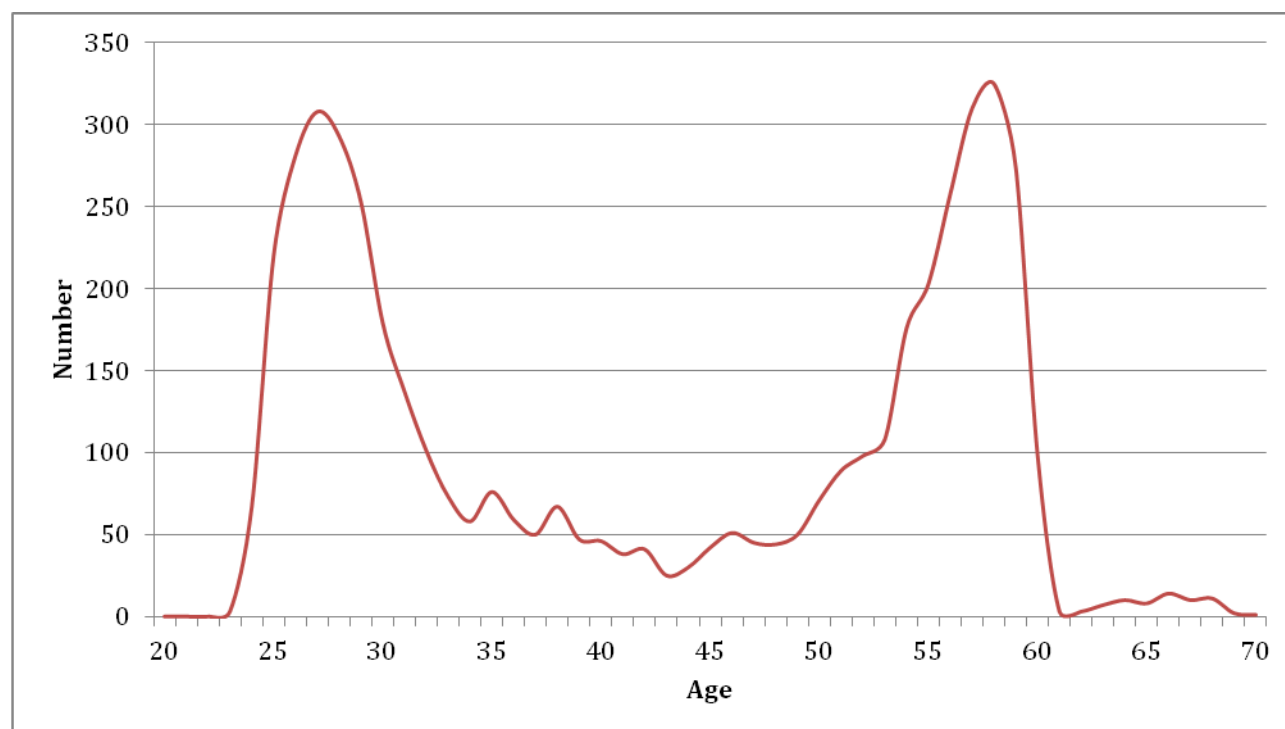


Table 26: Number of midwives by age. Source IPPD.

3.4 Proportion of health facilities in current registration

2014 Performance: 22%

2014 Target: >22%

Source: HEFRA and DHIMS

Trend: Improving (6%)

Target: Not achieved

Outcome: +1

	2010	2011	2012	2013	2014
# Facilities in registration	1,102	1,159	1,216	1,279	1,358
# Facilities	6,042	6,042	6,042	6,042	6,042
Ratio	18%	19%	20%	21%	22%

Result: The number of registered and accredited facilities has increased by 60-80 every year since 2010. All accredited facilities are private. No public facilities have been licensed by HEFRA.

Discussion: HEFRA has registered and accredited between 50 and 80 additional facilities every year. Unfortunately, there is no historic register of facilities so our analysis is based on the current number of facilities recorded in DHIMS. About 22% of all facilities are currently registered and accredited by HEFRA. These facilities are all private since HEFRA has not yet started to register

and accredit public facilities. Given an estimated 3,000 private facilities in Ghana, HEFRA has registered about 45% of them.

It was challenging to the review team to assess whether the registrations were all new registrations or some were re-registrations. Moreover, the review team were not presented with systematic information about facilities no longer in operation.

3.5 Proportion of receivable funding for NHIS received from MOF

2014 Performance: 79%

2014 Target: > 75%

Source: NHIA

Trend: Improving (45%)

Target: Achieved

Outcome: +1

	2011	2012	2013	2014
Total received (mill. GHc)	-	-	498.5	731.0
Total receivables (mill. GHc)	-	-	917.9	926.6
Ratio	-	-	54.3%	78.9%

Result: In 2014, NHIS received 78.9% of expected funds from MOF. This represents a substantial increase from just over 50% in 2013.

Discussion: Predictability and adequacy of funds for NHIS is required for timely reimbursements. In 2013, NHIS only received about half of the expected funds, while this improved to about 80% in 2014.

3.6 Proportion of NHIS claims settled within 12 weeks

2014 Performance: No data

2014 Target: >5%

Source: NHIA

Trend: No data

Target: Not achieved

Outcome: -1

	2011	2012	2013	2014
# Claims settled within 12 weeks	-	-	-	-
# Claims	-	-	-	-
Ratio	-	-	-	-

Result: No data.

Discussion:

3.7 Proportion of GOG spent on goods and services

2014 Performance: 11.5%

2014 Target: >12%

Source: MOH

Trend: Improving (170%)

Target: Not achieved

Outcome: +1

	2011	2012	2013	2014
GOG exp. on goods and services (mill. GHc)	-	261.3	68.6	199.2
Total GOG exp. on health (mill. GHc)	-	1,917.2	1,611.6	1,731.7
Ratio	-	13.6%	4.3%	11.5%

Result: The proportion of GOG spent on goods and services increased by 27% to reach 39% of total GOG expenditure. 97% of GOG expenditure on goods and services was categorised as IGF while the remaining 3% went through MOH as GOG. Excluding IGF, the proportion of GOG spent on goods and services is only 1.5%.

Discussion: Of the total GOG expenditure including SBS, about 40% was spent on goods and services. Almost all of this was categorised as IGF, i.e. payment of claims by NHIS. Only about 12% of the total goods and services expenditure went to MoH. If contributions from IGF including NHIF and SIP are deducted from the total amount, then what is left for public health services and administration is minimal. If we further remove donor funding from the total goods and services then practically there will be nothing left for public health services.

3.8 Proportion of GOG spent on assets

2014 Performance: 1.6%

2014 Target: > 2%

Source: MOH

Trend: Improving (6%)

Target: Not achieved

Outcome: +1

Result: 1.6% of GOG expenditure goes into assets.

Discussion:

	2011	2012	2013	2014
GOG exp. on assets (mill. Ghc)	-	42.5	24.5	27.9
Total GOG exp. on health (mill. GHc)	-	1,917.2	1,611.6	1,731.7
Ratio	-	2.2%	1.5%	1.6%

3.9 Proportion of health budget (goods and services) allocated to research activities

2014 Performance:

2014 Target: > 0.8%

Source: MOH

Trend:

Target:

Outcome: -1

Result:

Discussion:

	2011	2012	2013	2014
MOH budget on research (mill. Ghc)	-	-	-	-
MOH budget on goods and services (mill. GHc)	-	-	-	-
Ratio	-	-	-	-

4.1 Institutional all cause mortality

2014 Performance: 19.8

2014 Target: < 35 per 1,000 admissions

Source: DHIMS

Trend: Improving (-16%)

Target: Achieved

Outcome: +1

Result: Institutional all-cause mortality declined from 25.5 deaths per 1,000 admissions in 2013 to 21.3 in 2014.

Discussion: Over the past three years, the number of in-patient deaths has declined and the number of admissions has increased. This has led to substantial improvement in the institutional all-cause mortality rate from 27.8 deaths per 1,000 admissions in 2012 to 21.3 in 2014. Upper East Region experienced a worrying increase in all-cause mortality rate due to steep decline in number of admissions, and the trend should be followed closely in 2015.

	2011	2012	2013	2014
# In-patient deaths	-	41,522	38,155	33,498
# Admissions (thousands)	-	1,496	1,498	1,572
Ratio	-	27.8	25.5	21.3

4.2 Proportion of regional and district public hospitals offering Traditional medicine practice

2014 Performance:

2014 Target: > 5%

Source: TAM-C

Trend:

Target:

Outcome: 0

Result:

Discussion:

	2011	2012	2013	2014
# Hospitals offering traditional medicine	-	-	-	13
# Hospitals	-	-	-	352
Ratio	-	-	-	4%

4.3 Proportion of public hospitals offering mental health services

2014 Performance: 0

2014 Target: No b.l.

Source: Mental Health Authority

Trend: No trend

Target: No target

	2011	2012	2013	2014
# Hospitals offering mental health services	-	-	-	7
# Hospitals	-	-	-	352
Ratio	-	-	-	2%

Outcome:

Result: Three regional hospitals are offering mental health service: BA, ER, VR. Four regions already have mental health facilities: AR, TTH, CR and GAR. All regions provide mental health service at the OPD.

Discussion:

- No psychiatrists in GHS
- 21 clinical psychiatry officers trained
- 5 are with GHS, 16 in the three psychiatric hospitals

4.4 Institutional Malaria Under 5 Case Fatality Rate

2014 Performance: 5.3

2014 Target: < 6

Source: DHIMS

Trend: Improving (-21%)

Target: Achieved

	2011	2012	2013	2014
# Hospital under-5 deaths from malaria	-	1,524	1,373	1,146
# Under-5s admitted with malaria	-	200,624	205,766	217,044
Ratio per 1,000 admissions	-	7.6	6.7	5.3

Outcome: +1

Result: The institutional under 5 malaria case fatality rate improved from 6.7 in 2013 to 5.3 in 2014.

Discussion: About 1 child for every 200 admitted with malaria dies from the infection. This is a reduction of over 20% compared to previous years. The highest case fatality is observed in Central and Northern region with 1.38 and 1.06 deaths per 100 admissions, respectively. The number of children admitted with malaria has surprisingly continued to increase over the past years. This indicates that efforts to prevent severe malaria are not effective or that other infectious conditions are misclassified as malaria. The proportion of outpatient cases suspected for malaria who are tested by either microscopy or rapid diagnostic testing has increased from about 30% in 2010 to about 75% in 2014, which reduces the probability of misclassification.

4.5 Surgical site infection rate

2014 Performance: 5.3%

2014 Target: <5%

Source: ICD - GHS

Trend: Neutral

Target: Not achieved

	2011	2012	2013	2014
# Surgical site infections	-	-	-	-
# Surgical interventions	-	-	-	-
Ratio	-	-	-	5.3%

Outcome: 0

Result:

Discussion

4.6 Percentage of public hospitals with functional emergency team

2014 Performance:

2014 Target:

Source: ICD - GHS

Trend:

Target:

Outcome: -1

	2011	2012	2013	2014
# Hospitals with functional emergency team	-	-	-	-
# Hospitals	-	-	-	-
Ratio	-	-	-	-

Result: No information

Discussion: There has been no effort to increase the number of hospitals with functional emergency teams.

5.1 Unmet need for contraception

2014 Performance: 30%

2014 Target: <23%

Source: DHS 2014

Trend: Worsening

Target: Not achieved

Outcome: -1

DHS 2008	MICS 2011	DHS 2014
35.3%	26.4%	29.9%

Result: Total unmet need for family planning worsened from 26.4% in 2011 to 29.9% in 2014.

Discussion: Total unmet need for family planning increased to almost 30%, which represents a worsening since the MICS in 2011. In the same period the contraceptive prevalence rate for any modern method dropped from 23.4% to 22.2%, while CYP continued to increase.

5.2 Couple Year Protection (CYP)

2014 Performance: 2.61

2014 Target: > 2.3 mill.

Source: FHD – GHS and DHIMS

Trend: Improving (26%)

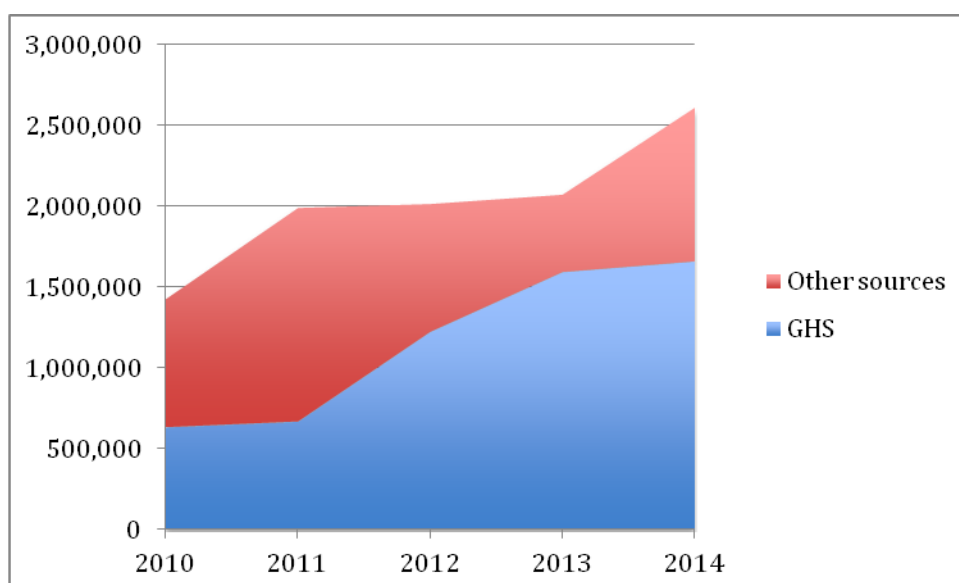
Target: Achieved

Outcome: +1

	2010	2011	2012	2013	2014
GHS - DHIMS	0.63	0.67	1.22	1.59	1.66
Others	0.79	1.32	0.79	0.48	0.95
CYP (mill.)	1.42	1.99	2.01	2.07	2.61

Result: CYP increased by 26% to 2.61 million. The largest increase was observed among private providers and NGOs.

Discussion: CYP increased by over 25% from 2.07 million in 2013 to 2.61 million in 2014. Government provides the majority of family planning and the volume of public family planning services has been rapidly increasing, with over 150% increase since 2010. All non-public providers submit reports on family planning service delivery directly to the national level and their information is not recorded in the DHIMS.



5.3 Infant Mortality Rate

2014 Performance: 41

2014 Target: <50

Source: FHD - GHS

Trend: Improving

Target: Achieved

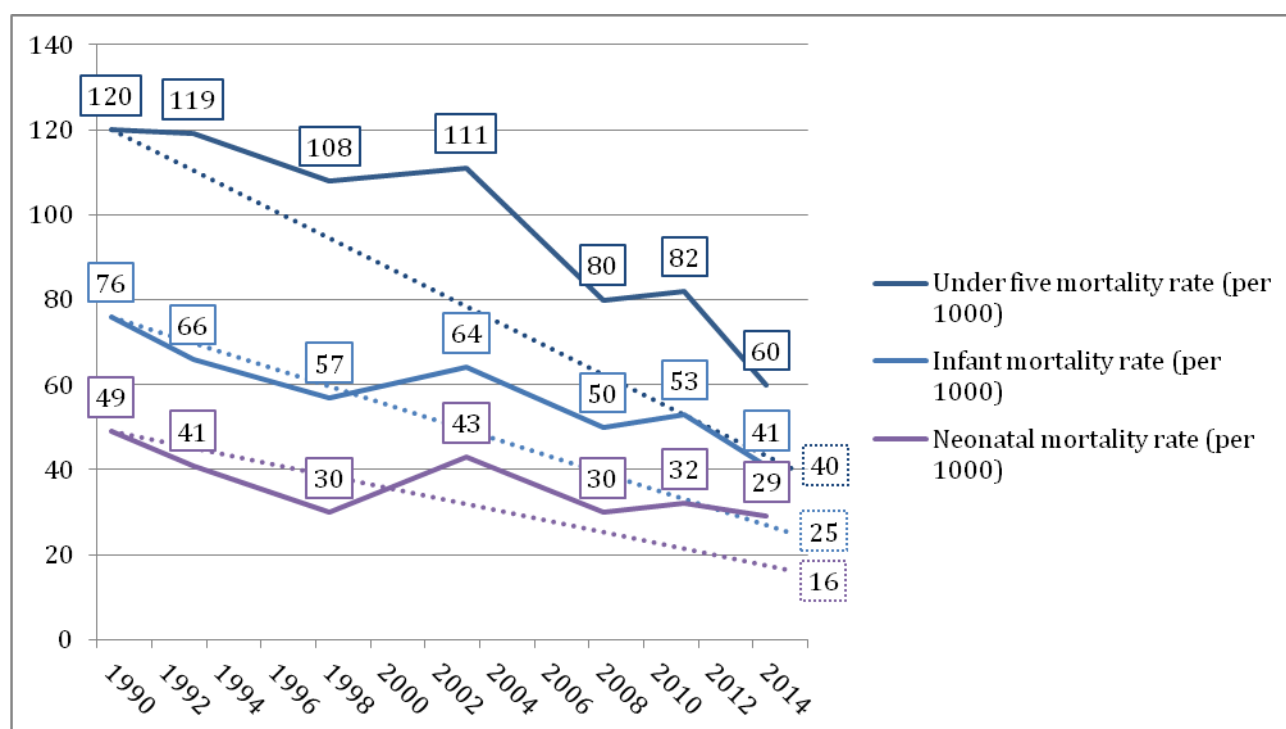
Outcome: +1

DHS 2003	MICS 2006	DHS 2008	MICS 2011	DHS 2014
64	71	50	53	41

Result: Infant mortality decreased with 20% from the MICS survey in 2011 to the DHS in 2014.

Discussion: Child and infant mortality halved between 1990 and 2014 while neonatal mortality reduced by about 40% in the same period. The decline in mortality rates is especially pronounced over the past 10 years. Childhood mortality is strongly correlated to structural factors like economic development, general living conditions, social wellbeing, and the quality of the environment, that affect the health of entire populations. Therefore, childhood mortality indicators reflect both the economic and social conditions for the health of mothers and newborns, and the accessibility, quality and effectiveness of the health system. Over the past decade, the health system in Ghana has been strengthened with large increases in health personnel and improvements in infrastructure, leading to better geographical access to health services. In the same period, financial access has been improved with the scale up of health insurance coverage and exemptions for the poorest and most vulnerable. The stagnant neonatal mortality rate indicates that more focus is needed to improve quality of the perinatal and postnatal health services. GHS and MoH launched a newborn health care strategy in 2014 to address these challenges.

Since only the preliminary report of the DHS 2014 has been published, it has not been possible to assess differences in mortality reduction between socioeconomic quintiles, NHIS members vs. non-members, urban/rural populations, regional variations etc. These analyses should be completed as soon as possible to provide basis for the policy debate and adjust sector priorities.



5.4 Institutional Neonatal Mortality Rate

2014 Performance: 4.21

2014 Target: < 5.5

Source: DHIMS

Trend: Improving (-28%)

Target: Achieved

Outcome: +1

	2010	2011	2012	2013	2014
# Neonatal deaths	1,958	2,992	3,229	3,897	2,807
# Institutional live births (thousands)	552	612	586	657	655
	3.5	4.9	5.5	5.9	4.3

Result: Institutional neonatal mortality decreased with over 25% from 5.9 deaths per thousand live births on 2013 to 4.3 in 2014.

Discussion: The institutional neonatal mortality rate was increasing from 2010 to 2013, but since 2014 the rate has improved with over 25%. During 2014 there was an increased focus in new-born care and a GHS and MoH published a new-born care strategy with the support of DPs including UNICEF.

5.5 Neonatal Mortality Rate

2014 Performance: 29

2014 Target: <30

Source: DHS 2014

Trend: Improving

Target: Not achieved

Outcome: +1

DHS 2003	MICS 2006	DHS 2008	MICS 2011	DHS 2014
43	-	30	32	29

Result: Despite improvement since last survey in 2011, the survey based neonatal mortality rate has been relatively stagnant since 2008 hovering around 30 neonatal deaths per 1,000 live births

Discussion: Based on findings in the latest DHS report, the chance of surviving life's first 28 days has not improved dramatically in Ghana since 2008. In the same period, survival of children between 29 days and 5 years improved substantially. Routine information about neonatal mortality does indicate, that neonatal mortality after several years of worsening, started to improve in 2014.

This could be a reflection of the increased focus on neonatal mortality with launching of a newborn strategy.

5.6 Under-five Mortality Rate

2014 Performance:

2014 Target: <60

Source: DHS 2014

Trend: Improving

Target: Achieved

Outcome: +1

DHS 2003	MICS 2006	DHS 2008	MICS 2011	DHS 2014
111	111	80	82	60

Result: U5MR declined with over 25% from the MICS survey in 2011 to the DHS in 2014.

Discussion: See indicator 5.3

5.7 Maternal Mortality Ratio

2014 Performance:

2014 Target: <300

Source: Trends in Maternal Mortality (WHO et. Al.)

Trend: No data

Target: No data

Outcome:

1990	1995	2000	2005	2013	2014
760	650	570	470	380	-

Result: No data

Discussion: No data

5.8 Institutional Maternal Mortality Ratio

2014 Performance: 144

2014 Target: < 145

Source: DHIMS

Trend: Improving (-7%)

Target: Achieved

Outcome: +1

	2010	2011	2012	2013	2014
# Inst. maternal deaths	905	1,067	889	1,016	941
# Inst. live births (hundred thousands)	5.5	6.1	5.9	6.6	6.5
Ratio	164	174	152	155	144

Result: Institutional Maternal Mortality Ratio improved in 2014 to 144 institutional maternal deaths for 100,000 institutional live births.

Discussion: Institutional maternal mortality was as high as 174 deaths per 100,000 live births in 2011 but has since then dropped to 144. There are large regional variations in iMMR. The highest is in Greater Accra Region (185) followed by Volta Region (179) and Easter Region (176).

In 2010, the MOH/GHS and development partners developed an MDG5 Acceleration Framework (MAF). The MAF showed that additional investment focusing on skilled attendance at birth, emergency obstetric care and family planning would accelerate Ghana's move towards achieving MDG5 and also contribute significantly to the attainment of MDG 4 target. Erratic funding by both government and development partners has challenged implementation of MA, but recently some DPs have shown renewed interest in providing direct support to MAF activities and procurements. As part of the MAF strategy, the MOH is planning a follow-up to the Maternal Health Survey of 2007. The survey is planned to take place in 2016 and will assess maternal mortality as well as status for Emergency Obstetric and Neonatal Care (EmONC).

iMMR	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2010	152	142	149	192	207	140	138	158	219	137	164

2011	197	127	124	207	242	171	127	160	201	101	174
2012	77	167	113	173	205	212	136	146	174	132	152
2013	125	138	122	200	198	174	108	193	161	153	155
2014	115	134	105	175	185	108	139	161	179	149	144

Table 27: Institutional Maternal Mortality Ratio by region. Source DHIMS.

5.9 HIV Prevalence Rate

2014 Performance:

2014 Target:

Source: NACP - GHS

Trend:

Target:

Outcome: -1

Result: No data

Discussion: No data

2010	2011	2012	2013	2014
1.5%	1.7%	1.3%	1.2%	-

5.10 Proportion of infected pregnant women who received ARVs for PMTCT

2014 Performance: 66%

2014 Target: > 40%

Source: NACP - GHS

Trend: Worsening (-14%)

Target: Achieved

Outcome: +1

	2010	2011	2012	2013	2014
# pregnant women who receive ARVs	-	-	7,781	7,266	8,299
# HIV positive pregnant women	-	-	11,145	9,508	12,583
	-	-	70%	76%	66%

Result: The proportion of HIV positive pregnant women who received ARVs for PMTCT declined to 66% in 2014 from 76% in 2013.

Discussion: Mother to child transmission is by far the most common way that children become infected with HIV. Without treatment, the likelihood of HIV passing from mother-to-child is 15-45%. However, antiretroviral treatment for the prevention of mother-to-child transmission (PMTCT) can reduce this risk. The declining trend is therefore worrying. The number of pregnant women who received ARV for PMTCT has increased since 2013, but in the same period, the number requiring ARV for PMTCT increased at a higher rate. This issue should be analysed in more detail to address the challenges.

5.11 Proportion of babies born to HIV mothers being HIV negative after 18 months

2014 Performance: 92%

2014 Target: > 93%

Source: NACP - GHS

Trend: Neutral

Target: Not achieved

Outcome: 0

	2010	2011	2012	2013	2014
# HIV negative babies	-	-	-	-	-
# Babies born to HIV positive mothers	-	-	-	-	-
	-	-	93%	93%	92%

Result:

Discussion: According to the UNAIDS report on the global AIDS epidemic 2013, the risk that a woman living with HIV would transmit the virus to her child was 31% in 2009. This risk declined to only 7% in 2012, but has since been stagnant at this level. With the observed worsened access to PMCTC, there is a risk that again more babies will become infected from their mothers. A new

programme to screen infants exposed to HIV with PCR techniques was started up in 2014 and about 8% of all exposed infants were screened.

5.12 Proportion of children U5 who are stunted

2014 Performance: 19%

2014 Target: <16%

Source: DHS 2014

Trend: Improving (-17%)

Target: Not achieved

Outcome: +1

MICS 2006	DHS 2008	MICS 2011	DHS 2014
22.4%	28.0%	22.7%	18.8%

Result: Nineteen percent of Ghanaian children are chronically malnourished with a height-for-age (stunting) below 2 standard deviations (SD) under national average, and 5 percent are severely stunted (below -3 SD). This is a reduction of about 17% since the MICS in 2011.

Discussion: According to the preliminary findings of the 2014 DHS, stunting increases with age, peaking at 28% among children age 24-35 months. A slightly higher proportion of male (20%) than female (17%) children are stunted, and stunting is greater among children in rural areas (22%) than urban areas (15%). By region, stunting ranges from 10% in Greater Accra to 33% in the Northern region. Stunting is inversely correlated with education and wealth. For example, 25% of children in the lowest two wealth quintiles are stunted, as compared with 9% of children in the highest quintile.

5.13 Proportion of children fully immunized (proxy Penta 3 coverage)

2014 Performance: 90%

2014 Target: > 88%

Source: DHIMS

Trend: Neutral (<5%)

Target: Achieved

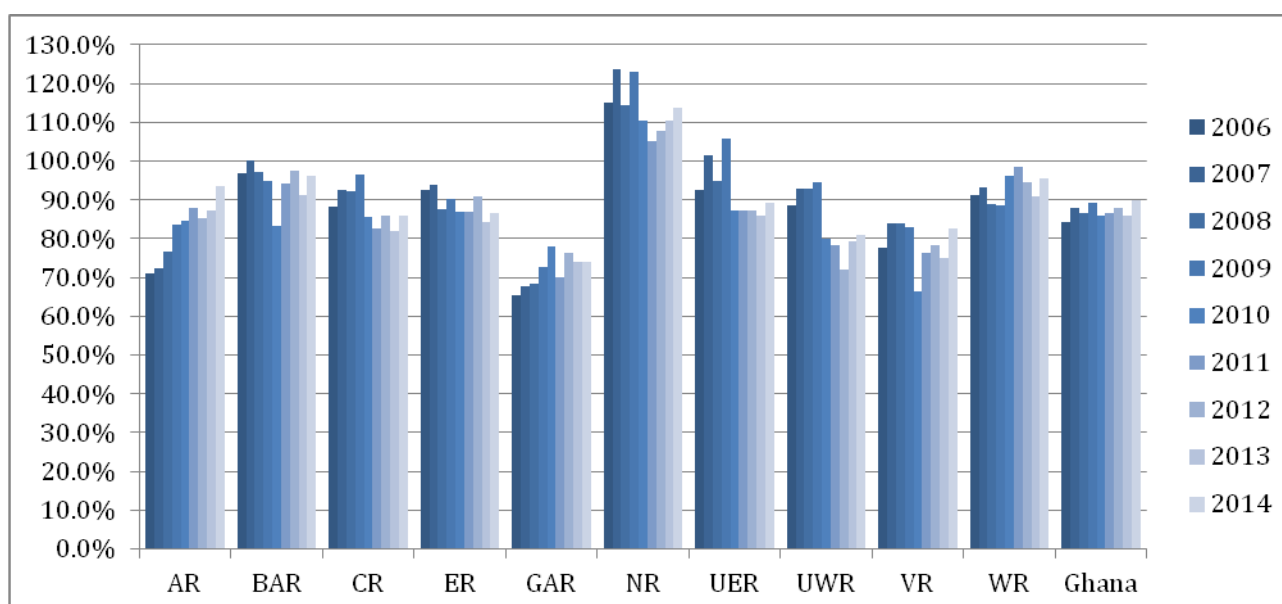
Outcome: +1

	2010	2011	2012	2013	2014
# Penta 3 doses administered (thousands)	847	875	912	915	981
Population under 1 years (thousands)	986	1,011	1,037	1,064	1,091
	86%	87%	88%	86%	90%

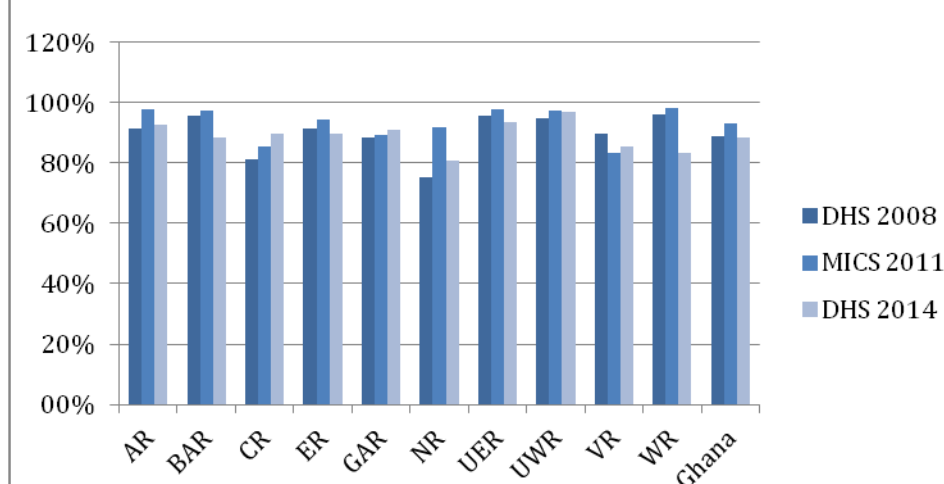
Result: The proportion of children who received third dose of the pentavalent vaccine increased to 90% in 2014 and exceeded the target of 88%.

Discussion: The EPI coverage has fluctuated between 85% and 90% over the past eight years (figure XX). The national coverage reported in the routine health information system corresponds well with the survey result of 2014, which is 88.5%. There are, however, issues with some regions especially Northern Region that constantly has reported coverage above 100% in the routine system but only 81% in the latest DHS, which is also the poorest performance among Ghana's ten regions. The "high" coverage in Northern Region is probably due to underestimation of the population base, which is also reflected by suspected overestimation of other maternal and child health indicators, e.g. antenatal care and supervised deliveries. Despite some variations, analysis of the latest three population based surveys confirms the stagnation of EPI coverage and for many regions a reduction compared to 2008 figures. This is a worrying trend since Ghana continues to observe measles. A total of 1,039 cases were suspected for measles from 179 (82.8%) out of the 216 districts in the country. Of these suspected cases, 121 (11.6%) were confirmed positive for measles.

- GAVI graduation and sustainability and new vaccines



Penta 3



5.14 Proportion of mothers making fourth ANC visit

2014 Performance: 67%

2014 Target: > 75%

Source: DHIMS

Trend: Neutral (1%)

Target: Not achieved

Outcome: 0

	2010	2011	2012	2013	2014
# Mothers making 4 th visit (thousands)	423	537	750	705	730
# Expected pregnancies (thousands)	986	1,011	1,037	1,064	1,091
	43%	53%	72%	66%	67%

Result: The proportion of mothers making 4th ANC visit remained stagnant at about 67% and did not meet the target of 75%.

Discussion: Only about two thirds of all pregnant women make four or more ANC visits. A recent data validation exercise by MoH revealed several challenges with the current system for reporting on this indicator. Due to the current data and reporting structure, it is required to thoroughly review antenatal care registers dating several months prior to the reporting period. This introduces risk of poor data quality and underreporting. This is illustrated by comparing the routine information with the survey based information, where the preliminary findings from the 2014 DHS gives a

proportion of mothers making fourth ANC visit of 87.3%. The lowest performing regions are Volta (77.3%), Eastern (77.4%) and Northern (73.0%) Regions, while the remaining 7 regions all have coverage about 90%. GHS has identified late registration of pregnant women as one of the main challenges to achieve higher coverage. When a woman is registered and makes her first ANC visit late in pregnancy, there is not enough time to make all four visits before delivery.

5.15 Exclusive breast feeding for six months

2014 Performance: 52%

2014 Target: >50%

Source: DHS 2014

Trend: Improving (14%)

Target: Achieved

Outcome: +1

Result: The proportion of babies exclusively breastfed for the first six months increased to 52.3%

Discussion: Between the MICS survey in 2006 and the MICS survey in 2011, there was a declining trend in the proportion of babies exclusively breastfed for the first six months. The recent DHS from 2014 shows a positive trend with an increase of 6.6 percentage points since 2011.

5.16 Proportion of deliveries attended by a trained health worker

2014 Performance: 57%

2014 Target: > 58%

Source: DHIMS

Trend: Neutral (4%)

Target: Not achieved

Outcome: 0

Result: The skilled delivery rate increased by 3.8% from 55% in 2013 to 57% in 2014. The increase is within the 5% margin of sustained or neutral performance.

Discussion: See indicator 1.5

5.17 Still birth rate

2014 Performance: 18

2014 Target: <20

Source: DHIMS

Trend: Neutral (0.3%)

Target: Achieved

Outcome: +1

Result: The still birth rate was 18 stillbirths per 1,000 live births in 2014 and did not change significantly from 2013.

Discussion: In 2014, 11,000 fetuses died before birth in Ghana. This corresponds to over 30 fetuses every day. About 41% were intrapartum stillbirths while the remaining showed signs of maceration indicating antepartum death. Stillbirths can to a large extent be prevented by high quality antenatal care and safe delivery practices. The stillbirth rate seems to have stagnated at a high level, which calls for more action.

MICS 2006	DHS 2008	MICS 2011	DHS 2014
54.4%	49.4%	45.7%	52.3%

	2010	2011	2012	2013	2014
# Mothers delivering in inst. (thousands)	403	497	571	589	627
# Expected pregnancies (thousands)	986	1,011	1,037	1,064	1,091
	41%	49%	55%	55%	57%

	2010	2011	2012	2013	2014
# Still births	-	-	11,701	11,975	11,958
# Live births (thousands)	-	-	586	657	655
	-	-	20	18	18

5.18 Postnatal care coverage for newborn babies

2014 Performance: 44%

2014 Target: >50%

Source: DHIMS

Trend: Improving (19%)

Target: Not achieved

Outcome: +1

	2012	2013	2014
# Mothers making PNC within 48 hours (thousands)	192	395	480
# Expected deliveries (thousands)	1,037	1,063	1,090
	19%	37%	44%

Result: Postnatal care coverage increased significantly from 19% in 2012 to 37% in 2013 and 44% in 2014.

Discussion: The proportion of mothers making first PNC visit within 48 hours after delivery has more than doubled since 2012, but a performance of 44% is still relatively low when the skilled delivery coverage of 57% is taken into account. As a minimum, all newborn babies delivered by a skilled health worker should receive a postnatal check-up within 48%.

5.19 Proportion of children under 5 years sleeping under ITN

2014 Performance: 47%

2014 Target: 65%

Source: DHS 2014

Trend: Improving (12%)

Target: Not achieved

Outcome: +1

MICS 2006	DHS 2008	MICS 2012	DHS 2014
21.2%	28.2%	41.5%	46.6%

Result: According to preliminary findings of the 2014 DHS report, 46.6% of all children under 5 slept under an insecticide treated mosquito net the previous night.

Discussion: The use of long lasting insecticide treated nets (LLINs) is one of the most effective ways to prevent malaria infections and deaths. Since 2006, the proportion of children sleeping under LLINs has doubled and in 2014 almost half of all children slept under an LLIN the previous night. In 2014, 552,100 LLINs were distributed to pregnant women (through ANC) and children (through CWC) in Upper East, Eastern, Volta, Western and Central Regions. Moreover 1,374,200 LLINs were distributed through basic schools (both public and private) for school children.

5.20 TB treatment success rate

2014 Performance: 87%

2014 Target: > 88%

Source: NTP - GHS

Trend: Neutral (1%)

Target: Not achieved

Outcome: 0

	2010	2011	2012	2013
# Successful treatments	-	-	-	-
# Treatments	-	-	-	-
	87%	85%	86%	87%

Result: TB treatment success rate remained stable around 87% in 2013.

Discussion: TB treatment success rate is a survey based indicators and is therefore reported with a 1-year lag. About 87% of all diagnosed TB patients complete their treatment successfully, while the remaining 13 either drop out of treatment or die before treatment is complete. The National TB Programme (NTP) completed a national TB prevalence survey in 2014. The survey results are not yet published, but preliminary findings indicate a correction of the national TB prevalence from 71 to 264 persons with TB per 100,000 Ghanaians. The NTP is concerned with inadequate screening

and missed opportunities for diagnosing TB patients at facilities, leading to a too low number of presumed cases. TB diagnoses is further complicated by sub-optimal diagnostic test.

6.1 Non-polio AFP rate

2014 Performance: 2.4

2014 Target: >2

Source: DHIMS

Trend: Improving (11%)

Target: Achieved

Outcome: +1

	2012	2013	2014
# Detected cases	199	334	376
# Children under 15 (hundred thousands)	127	123	127
	1.6	2.7	3.0

Result: The non-polio acute flaccid paralysis (AFP) rate increased from 2.7 per 100,000 children under 15 years in 2013 to 3.0 in 2014.

Discussion: Non-polio acute flaccid paralysis (AFP) rate is an indicator of surveillance sensitivity. The global target is at least one case of non-polio AFP should be detected annually per 100,000 population aged less than 15 years, while Ghana's target is more ambitious of over two cases. In 2014 that target was met with 2.4 cases detected. There seems to be issues with parallel reporting of suspected non-polio AFP cases since figures differed between the DHIMS and the Public Health Report. Moreover, the source of the population figures used by GHS to calculate this indicator is unclear.

6.2 Population prevalence of hypertension

2014 Performance:

2014 Target: No target

Source: DHS 2014

Trend: No information

Target:

Outcome:

Result:

Discussion:

MICS 2012	DHS 2014
-	-

6.3 Number of deaths attributable to selected cancers

2014 Performance:

2014 Target: No target

Source: NCD - GHS

Trend: No information

Target: No target

Outcome: -1

	2012	2013	2014
# Deaths attributable to selected cancers	-	-	-
# Deaths	-	-	-
	-	-	-

Result: No information

Discussion: The NCD does currently not collect information on cancers. The cancer registry has become non functional.

Annex 6: Analysis framework for POW 2014 implementation

OBJECTIVE	PROGRAMME	SUB PROGRAMME	OPERATIONS	MAIN OUPUTS	STATUS OF IMPLEMENTATION
HO1 & HO2	1 Management and Administration	1.1 General Management	Build Leadership capacity	Number of senior staff participating in advance Leadership course by MoH	The Ministry of Health sponsored the training of 24 directors and deputy directors for training in leadership and management. Four senior officers were sponsored to the civil service training centre for training on scheme of service. Performance contract was signed with all heads of agencies.
			Improve Performance management in the sector	performance contract signed with all agencies and MOH directors	Performance contract was signed with all heads of agencies. A consultant was contracted for the JOB a has since submitted his report after engaging with all agencies.
			Strengthen support services	Plan preventive maintenance scheme developed and adopted	Equipments: 1. Planned preventive schedule are based on the original equipment manufacturers recommendations 2. In-house: limited due to lack of logistics 3. Third party: For equipment under extended warranty (philips, medical imaging; Dental equipment by universal Hosp, suppliers
				proposal and contract review team established and made functional	Proposal and contract review team has not been established. However the ministry relies on the entity tender committee and ministerial tender review board. The ministerial tender review board reviews all proposals and contracts and refers those that are above the ministry to the entity tender committee
			Review and implement ICT policy	Research agenda finalized and adopted	Draft research agenda has been developed. What is outstanding is a stakeholder consultation. This has delayed due to funding challenges
		Scaling up the M-Health pilot programme	Operationalise Data repository framework	ICT Policy reviewed and disseminated	Issues paper has been developed. It however yet to shared for comments by stakeholders
			Data repository framework	Number of district wide M-Health programme.	Tele consultation is ongoing in four districts on pilot basis. The pilot will end in 2015. An exit strategy for national scale-up is being put together
				Data repository established with evidence of reports generated	Structure for housing the repository is ready. It will howver need furnishing
		1.3 Health Financing, Policy Formulation, Planning, Budgeting, Monitoring and Evaluation	Build capacity in HMIS and finalize Research agenda	Number of data management steering committee meetings held	Review of data repository framework is on hold. The document was shared but thre was no response
			Finalize, disseminate and implement new health sector policies and strategies		
			- Health financing strategy	Health financing strategy document finalized	The health financing strategy has been has been finalised and circulated
			- HSMTDP	HSMTDP finalised and disseminated	HSMTDP finalised. Yet to be printed
			- Private Health Sector strategy	Private sector strategy finalized and disseminated	The private sector strategy was finalised and circulated
			- LIs (Tobacco Control, mental health and health facility regulatory authority)	Tobacco Control, mental health and health facility regulatory authority LIs drafted and passed by parliament	
			- New born care strategic Plan	New born care strategic document finalized and	The newborn care strategy was finalised and disseminated.

			disseminated	
		- Health Sector Staffing norms	Staffing norms finalized and implemented	
		- Nutrition policy	Nutrition policy submitted by NDPC to MOH for dissemination and implementation	The nutrition policy has been completed. The strategic plan is outstanding. It is expected that the strategic will be completed in the first quarter of 2015
		Revise relevant Acts in line with National Decentralization programme	ACT 525 revised	The initial draft Bill was drafted and presented to the Ministry of Health. A planned stakeholder meeting to offer stakeholders to contribute towards the improvement of the bill could not come on. The meeting was rescheduled for February 2015
		Develop health sector framework for decentralization	Number of stakeholder consensus meeting organized	The framework for decentralisation was developed and submitted to the Inter ministerial coordinating committee. The framework was approved and formed the basis for the draft Bill that was developed
		Scale up implementation of enhanced NHIS membership authentication and the claim system	Number of NHIS members with new biometric cards	The total number of people that have been registered with the enhance claims systems increased by 173% from 3,608,865 to 10,258,862. Zonal Claims Processing Centres are being established to enhance claims processing. Four centres have established 1. Tamale centre to cater for the Northern, Upper east, Upper West and the Brong Ahafo regions. 2. Kumasi, to cater for the eastern and Ashanti regions 3. Cape Coast to cater for the central and Western Regions 4. Accra to cater for the Greater Accra and Volta regions.
		Expand NHIS coverage of the poor and vulnerable	Proportion of the various vulnerable groups with active NHIS membership	The NHIA worked with the Ministry of women, Children and social protection to register leap beneficiaries. Coverage for the poor and vulnerable rose by ..from 1.26 Million to 1.46 million. Coverage Target for the poor and vulnerable is 8% of total population. The NHIA plans a 15% yearly improvement. This is contradicted with the realisation that identifying the poor and vulnerable is difficult. access to the such group of the population is difficult especially for those in the hard to reach areas. The enhanced registration system requires the physical presence of client for the registration. Most hard to reach areas do not internet connection
		Scale up Preferred Primary Provider (PPP) under capitation to three more regions	Number of regions that have implemented PPP under capitation	
		Implement the national M&E framework	M&E units established in all agencies	Training for M&E officers took place in October 2014. The training was conducted by GIMPA on behalf of the Ministry of Health. Desk top computers acquired to support agencies to kick start their M&E Units
	1.4 Finance and Audit	Implement the PFM action plan	Proportion of budget disbursed to agencies	
			Monthly updates on financial disbursements to MoH and agencies	
			Quarterly audit reports by Audit Review Implementation Committees	Quarterly audit reports are supposed to be submitted to the Internal Audit Agency. The internal auditor has difficulty monitoring rate of reporting. However, The MOH submits quarterly and on time to the Internal Audit Agency. Key issues identified in the audit reports include; 1. Financial acquittals

HO 1,3,4,5& 6	2 Health Service Delivery	2.1.Strategy formulation and operational coordination	Coordinate implementation of health policies and provide guidance to regional and district levels		i.e. delayed submission of financial returns. 2. Some disbursements are made without authorisation, 3. Most agencies and or facilities do not have fix assets register and those that have do not update them regularly. 4. Procure is mostly done through single sourcing. About 70% of all procurement are done via single sourcing. 5. Financial misapplication. The audit report implementation committee (ARIC) sits regularly to find solutions to the issues identified. Every agency has an ARIC that sits to find solutions to audit queries. Under normal circumstances ARIC reports from the agencies should be submitted to the Ministerial ARIC to enable them make follow-ups. Despite this short comings, The Internal audit directorate organises audit conferences in BMCs audited by an external auditor. this enables the Ministerial ARIC to have access to audit queries. The main challenge is the inadequacy of funds and logistics to enable the internal auditors to follow-up on ARIC recommendations.
				Proportion of budget disbursed to service implementation levels (Primary/Secondary/Tertiary)	
				Timeliness in financial and audit reporting	
				1.5 Procurement, Supply and Logistics	Finalize and implement the supply chain management strategy
				Proportion of expired medicines at CMS	The supply Chain Master plan was completed and a steering committee formed to oversee the implementation of the plan.
				Stock out rate for tracer medicines at CMS and RMS	
				GHS strategic plan formulated	The GHs strategic plan was developed. It exists in electronic form
				Number of Inter Agency Coordinating Committees meetings held	Two Interagency leadership committee meetings were held. The Ministry had challenges in organising meetings of this nature due to the frequent changes of ministers.
				Number of national steering committee meetings held	
				MOU developed and signed between GHS and other stakeholders (private sector and teaching hospitals)	GHS has signed MOU with CHAG and negotiating the private providers and teaching hospitals.
			Strengthen policy analysis, micro- and strategic planning, information systems, monitoring and evaluation.	Number of integrated joint monitoring visits	Two joint monitoring visits were organised. The first examined the district health structure and how it contributes to service delivery and second looked at resource flow in the sector. The findings indicated that resource flow to the lower levels by various stakeholders are not coordinated and sometimes duplicate programmes
				MTEF plans and budget for 2015 -2017 developed and submitted to MOH	Desk research was conducted by the GHS. Field trips are planned in early 2015. Over 50 Health policies uploaded unto the GHS website. This provides a quick reference to health policies and guidelines. Developed draft consolidated 2015 – 2025 Strategic plan for GHS There were challenges with obtaining feedback on Plans from Divisions and Regions; withholding finalization of the Strategic Plan Revised 2014 MTEF Plans and budget submitted to MoH/MoFEP
				GIS coordinates from all facilities included in DHIMS II	All Regions except the northern region coordinates have been collected and included in the DHIMS. Collection of coordinates from the northern region is about 85% complete. The GIS coordinates have been linked to diseases. Geographical data is being generated as a result of the success of the programme
				Completeness and timeliness of	Data completeness averages about 81% It ranges from about 2.6% for diseases

				reporting into DHIMS II	such as Yaws to 100%. Timeliness of data upload is about 64.8% with the upload of form A being the most timely (74.4%)
				Number of steering committee meetings organized	Two MAF steering committees were held.
			Coordinate implementation of maternal, neonatal, child health and nutrition plans	Number of technical support visits organized	The implementation plans developed. Implementation to begin 2015. Nutrition plan completed. NDPC has requested stakeholders to develop their implementation plans. Implementation plan developed. However, the policy is yet to be approved by the Cabinet.
			Provide quality Logistics, financial, human resource management, administrative and other services	Timeliness of procurement of equipment and logistics (MAF, HIV/AIDS)	Equipments have not been procured as at December 2014.
				Availability of Tracer medicines and equipment at RMS	Tracer medicine availability is estimated at 76.4%. Delayed reimbursement from the NHIA might have contributed to the low drug availability in our facilities
				Proportion of total health sector goods and services budget allocated to districts	
				Doctor population ratio(by region)	1:9,043
			Undertake capacity building and training activities	Nurse population ratio (by region)	1:959
				Midwives population ratio (by region)	1:1,374
				Equity : geography – resources (nurse population)	1:1.9
				Number of persons trained in Leadership Development Programs (LDP)	
			Improve research capacity and development	Number of health workers trained in Life Saving Skills (LSS)	
				Number of health workers trained in Integrated Management of Neonatal and Childhood Illness	18 service providers trained as trainers on maternal and newborn care job aids and 5000 copies of job aids distributed to regions. Home-based maternal and newborn care training manual was also finalised and printed (1000 copies)
				Number of districts trained in operational research	<ul style="list-style-type: none">• Four (4) training modules have been developed for research capacity strengthening among health staff as follows:• Operational Research (3 days)• Scientific Writing and Publication (2 days)• Data management using EpiData (1 day)• Ethical Issues in Health Research (1 day)• Research Capacity Strengthening was carried out for 4 Regional Health Teams and one hospital team in the use of their routine data (DHIMS) for Operational Research• They include GAR, VR, BAR, UWR and Ridge Hospital• Funding support from WHO/TDR
			2.2 Population-based services	Increase CHPS coverage and quality of community-	Number of functional CHPS zones established

		based services		No report of a new CHPS compound completed
		Scale up community new born and child and adolescent health interventions	Number of newly constructed CHPS (presidential-ministerial initiatives)	To contact Nic.
			Percentage of children immunized by age 1-Penta3	A total of 981,952 children under one were vaccinated against penta 3 representing 90% of targeted children.
			Percentage of children immunized by age-Rotarix3	971,357 children received rotarix vaccination representing 89% coverage.
			Proportion of infant 0-5 months of age who are exclusively breast fed in the last 24 hours	52 percent were exclusively breastfed (DHS, 2014)
			Proportion of pregnant women with anemia	According to the DHS 2014, 42 percent of women aged 15-49 years were anaemic
		Implement MAF	Percentage of pregnant women attending at least 4 antenatal visits	The proportion of pregnant women attending antenatal c are increased from 72.7% in 2013 to 76%
			Number of adolescent teenage pregnancies	about 12.1% of all pregnancies were due to adolescents
			Total couple years of protection (CYP) Short Term	Total couple year [protection for 2014 was 255,245. this represents an improvement of 23.3% over the 2013 figure of 2070631.
		Strengthen family planning	Health promotion strategy developed and implement	
		Develop and implement the national health promotion strategy		The national health promotion strategy was finalised during the year
		Scale up public health interventions and programmes - Malaria, HIV/AIDS, TB,	Proportion of malaria diagnosis laboratory confirmed	76.5% of all malaria diagnoses were confirmed by laboratory and or RDT.
			Proportion of deaths due to malaria (all ages)	A total of 33,372 inpatient malaria cases were recorded out of which 2821 deaths representing 8.45% of the total.
			TB case notification rate	TB case notification rate was 57/100,000 population. Case notification has been very low and is a major challenge to the programme.0
			Percentage of children under 5 using ITN	59 percent of children under five slept in ITNs the night before the DHS, 2014 survey.
			Number of new HIV positive cases diagnosed	
		Other communicable diseases including NTDs - Non communicable diseases	Proportion of districts achieving leprosy elimination target (1/10000)	214/216 have achieved target
			Number of school girls immunize against Human Papiloma Virus (cervical cancer)	HPV was conducted in 13 pilot districts. 7 in Central region and 6 in Northern region. In all, there were three rounds. Coverage is 94.4, 89.8 and 76.7 percent in first, second and third rounds respectively.
		Intensify efforts for the certification of eradication of guinea worm and polio	Number of guinea worm cases seen	No guinea worm case was seen during the year
			Non Polio AFP rate	Non polio AFP rate was 2.95% an increase from. Sixty percent (60%) of AFP cases were followed up, 3% of cases were not due whilst 37% have not been followed were overdue. Central followed up only one out of the AFP cases detected. Posters on AFP were printed and distributed to all regions. AFP specimen collection kit were also distributed to regions during the year.
		Implement	Number of tobacco control	Mr. Owusu Ansah

		recommendations of Framework Convention for Tobacco Control(FCTC)	(TC) IACC meetings held	
			Availability of TC reports including surveys	Mr. Owusu Ansah
	2.3 Institutional-based Services	Strengthen accident and emergency services including referral	Number of hospitals with their emergency care teams trained	No activity was organised for lack of funds
		Strengthen QA/QI and patient safety systems	Number of regions that conducted clinical care peer review	QA policies and documents were disseminated. They include referral policy, referral forms, referral feedback forms, guidelines for complaints management for all levels of health facilities, informed consent forms, quality & patient safety books, customer care manual, patients' charter and code of ethics posters, who pocket book for managing sick children patient safety situational analysis were conducted. It include baseline assessment in 16 hospitals in 4 regions (gar,vr, bar, nr)
		Expand specialist outreach services	Number of specialist outreach services conducted from headquarters and regions	ICD
			Number of specialist outreach services conducted using fully equipped MOH mobile vans	BEU
		Strengthen family planning, maternal (MAF), new born and child health services	Proportion of skilled delivery	The proportion of skilled delivery has increased from 55% in 2013 to 57% in 2014; an improvement of 3.6 percent over 2013 performance
			Institutional maternal deaths	Institutional maternal mortality ratio has declined from 155 per 100,000 in 2013 to 144 per 100,000 live births in 2014.
			Institutional neonatal deaths	The year 2014 ended with improved outcome for neonatal mortality of 4.3 death down from 5.9 deaths per 1,000 live births. During the period under review some newborn interventions were implemented notable among there were the rollout of the Newborn Care strategy and UNICEF program to improved newborn survival
			Under 5 malaria case fatality rate	Institutional Malaria Under 5 Case fatality rate has improved 0.69 in 2013 to 0.54 percent in 2014, an improvement of 21% compared to 2013. The rate varied across regions with the central regions recording the highest case fatality rate of 1.38%, more than double the national rate.
			Proportion of health facilities providing BEmONC	FHD
			Proportion of hospitals providing CEm ONC	FHD
		Expand screening services for NCDs	Number. of hospitals that provide screening services	ICD
		Implement mental health strategy	Number of regional hospitals with mental health wards/ beds	Mr. Owusu Ansah
	2.4 Regional and District Health Services	Strengthen monitoring and facilitative support visits to all levels	Number of integrated monitoring visits conducted by regions	Two (2) monitoring visits were conducted. Key issues were identified and being handled including District Health Management teams and sub-district teams.
			Number of integrated monitoring visits conducted by districts	30.51948052
			Timely reporting of epidemic prone diseases (cholera ,CSM, YF)	The timely reporting rate for epidemic prone diseases was 60.3%, based on "IDSR Weekly Summary Reporting Form" for 2014. An appreciable improvement of 30.5% over 2013 (46.2%) nperformance. There were vast variations in the regional performance which ranged from 38.4% in Northern

			Improve systems for disease, prevention, control and surveillance	Proportion of district/regions with functional emergency response teams	region to 88.2% in Eastern region.
			Improve financial, logistics, human resource management and other support services	Timeliness in financial and audit reporting	
			Improve performance managements systems	Doctor population ratio(by Districts)	The Doctor to population ratio improved in 2014 and went below 10,000 person per doctor
				Nurse population ratio(by Districts)	
				Midwives population ratio (by Districts)	
				Number of persons trained in LDP	
				Proportion of district with performance contract signed with the region	
				Proportion of hospitals with performance contract signed	
HO 1,3,4,5 & 6	3 Tertiary and Specialised Health Services	3.1 Tertiary Health Services	Expand access to pre hospitals emergency services	Number of new ambulance stations established	A total of 6 ambulance stations were established. Atomic junction, Pantang, Kasoa, Atoaba Gas, AkyemTafo, Kpone,
				Case Response Time	
			Increase specialist outreach services	Number. of specialist outreach services conducted	
			Improve financial, logistics, human resource management and other support services	Availability of Tracer medicines, amount of IGF generated	
			Strengthen family planning, maternal, (MAF) new born and child health services and referral services	Number of institutional maternal deaths	941 deaths
				Number of institutional neonatal death	
				Number and % of Voluntary Non-Remunerated Blood Donations	
				Number of maternal deaths audited	
		3.2 Specialised Hospitals and Services	Establish additional specialized units	Number of additional specialized units established	
			Expand mental health services	Total specialist OPD attendance	
		3.3:Research	Improve capacity for clinical , operational research and herbal product development	Number of new herbal products developed	
				Number of research publications	
			Draft LI	CPMR LI drafted	
HO 1,4&5	4 Human Resource for	4.1: Pre-Service Training	Increase numbers of newly qualified health	Number of health professionals who qualify from the pre	

HO1, 3,4&5	Health Development		professional from pre service health institutions	service schools (2014)	
		4.2: Post-Basic Training	Increase numbers of newly qualified health professional from post basic health institutions	Number of health professionals who qualify from the post basic health institution (2014)	
		4.3: Specialized Training	Increase numbers of newly qualified specialist health professionals, consultants etc	Number of specialist health professionals, consultants who qualify from the specialized training colleges (2014)	
	5: Health Sector Regulation	5.1: Regulation of Health Facilities	Ensure compliance and maintenance of agreed standards for public and private health facilities	Health Facilities Regulatory Authority established	
		5.2: Regulation of Health Professionals	Provide quality services through adherence to agreed standards for practising health professionals	Percentage of health professionals in current register	
				Percentage of health professionals re-licensed	
		5.3: Regulation of Pharmaceutical and Medicinal Health Products	Ensure consumer safety through regulation of pharmaceuticals, foods and medicinal products	Number of manufacturers licensed under food and drugs	1. FOOD:- A total of 385 applications were received during the year under food. two hundred and seven (207) representing about 54% were successful with their application and were duly registered. 2. Drugs:- thirty Application were received. Twenty seven companies were inspected and recommendations given for implementation. two (2) companies have closed down and one has entered into contract manufacturing.
				Number of health and food products certified	Fifty local herbal and food supplement manufacturing plants were earmarked for inspection out of which forty one (41) were inspected. All the inspected companies were given recommendations to implement. Nine were not inspected, five could be reached and three stopped manufacturing. one had entered into contract manufacturing.
			Strengthen Pharmacovigilance system	Percentage of Reported product with adverse reaction investigated	Three hundred and eighty two (382) Adverse Drug Reaction (ADR) complaints were received out of which 13 (3.4%) Adverse Event Following Immunisation (AEFI) were identified. Eighteen (18) representing 4.7%. had quality issues and were referred to the laboratory for validation.
		5.4: Regulation of Food and Non Non Medicinal Products	Strengthen monitoring and inspection of manufacturing industries	Number of food manufacturing industries inspected and	
			Improve quality and safety of food and non-medicinal products	Monitored Number of food and non-medicinal products certified	The FDA estimated to received for registration 2600 food and non medical products in 2014. Two thousand three hundred and thirty one (2331) applications were received. The Applications are awaiting certificate of analysis .

Annex 7: Procurement in 2014

MOH 2014 Consultancy Services										
Consultancy										
Ref. No.	Procurement package (Description)	Estimated Cost (GHS)	Approved Budget	Actual Contract Amount (GHS)	Source of Funds	Proc Method	Start Date	Expected Contract completion date	Status	
1	Engagement of Consulting Firm to undertake financial Audit for 2013 to 2016	736,000.00	800,000.00	531,311.25	SBS	QCBS	Jan-14	Jun-14	Work IN Progress	
2	Procurement Audit 2012/2013	400,000.00	0.00		Health Fund	QCBS	Mar-14	Sep-14		
3	Extension of Contract for Development and flighting of Adverts on selected Radio and Television Stations for Affordable Medicines facility Malaria (AMFm)	2,640,000.00			Global Fund	QCBS	Mar-14	Sep-14	Work IN Progress	
4	Engagement of a Consulting Firm to undertake Behaviour Change Campaign for Malaria Interventions using Radio and Television	3,100,000.00					Jan-14	May-14	Seeking Approval from Global Fund and PPA	
5	Engagement of a Communication Firm to raise funds for National Health Awards Scheme	500,000.00	0.00	342,511.52	GoG	RT	Jan-14	May-14	Work IN Progress	
6	Engagement of a Firm to Develop and administer an Online Admission System for Health Training Institutions in Ghana	400,000.00		350,032.52	GoG	RT	Jan-14	May-14	Completed	

	Engagement of a Consulting Firm to undertake Public Expenditure Review	1,000,000.00			SBS		Jul-14	Dec-14	Work IN Progress
	Engagement of a Consultant to develop Financial Disbursement Plan	35,000.00			GOG		Jul-14	Sep-14	Work IN Progress
	TOTAL	8,811,000.00		873,822.77					

MOH 2014 Technical Services									
Technical Services									
Ref. No.	Procurement package (Description)	Estimated Cost (GHS)	Approved Budget	Actual Contract Amount (GHS)	Source of Funds	Proc Method	Start Date	Expected Contract completion date	Status
1	Engagement of Firm to undertake port Clearance	1,100,000.00	520,000.00		GOG	RT	Jun-14	Oct-14	Preparation of Letter to PPA seeking approval to used Restricted Tendering Procedures for this activity
2	Engagement of Security Services for MOH and Allied offices	500,000.00			GoG	CQ	Jan-14	Jun-14	Activity ongoing
3	Engagement of Firm for the Application of Bio-Larvicides to control Mosquitoes Borne Disease	529,734.30			GOG	SS	Jun-14	Oct-14	Contract issued
	Total	2,129,734.30	520,000.00	-					

BMC'S	SECTORWIDE ALLOCATIONS	% total allocations
MOH HQ'S	19,232,465.53	24.5
GHS-HQ	2,579,700.89	3.3
REGIONAL HEALTH ADMIN-(RHA)	3,370,133.49	4.3
REGIONAL HOSPITALS-(RHO)	12,672,887.29	16.2
DISTRICT HEALTH ADMINISTRATION	4,493,511.32	5.7
SUB DISTRICT HOSPITALS	20,288,206.59	25.9
PSYCHIATRIC HOSPITALS	2,239,188.30	2.9
TEACHING HOSIPALS	3,658,443.78	4.7
GLOBAL FUND	9,901,398.19	12.6
TOTAL	78,435,935.38	100

5