MINISTRY OF HEALTH, GHANA

HOLISTIC ASSESSMENT OF 2017 HEALTH SECTOR PROGRAMME OF WORK

JULY, 2018

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1.0 INTRODUCTION

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

The year 2017 represents the fourth and final year of implementation of the Health Sector Medium Term Development Plan II (HSMTDP II) 2014-2017. This is also the fourth time the revised holistic assessment tool is being applied. Some of the indicators in the sector-wide indicator set rely on population surveys such as the Multiple Indicator Cluster Survey (MICS) and the Demographic and Health Survey (DHS). Survey data are included in the annual assessment as and when they are available. The 2017 assessment therefore does not include survey data. The assessment report relied almost entirely on routine administrative data.

The report is organized into 9 chapters. Chapter 1 provides a background to this report. Chapter 2 deals with assessment results, and Chapter 3 discusses sector trends Chapter 4 deals with implementation of the Programme of Work (POW); Chapter 5, achievement of milestones; Chapter 6, implementation of Capital Investment Plan; Chapter 7 status of implementation of the Aide Memoire and conclusions and recommendations are presented in Chapter 8.

Chapter 3 is the most extensive and provides an overview of the extent to which sector wide indicators were achieved. It is organized under the six (6) sector policy objectives. These are;

1. Bridging the equity gaps in geographical access to health services
2. Ensuring sustainable financing arrangement and financial protection for the poor
3. Efficiency in governance
4. Improving service delivery quality
5. Enhancing capacity to attain the health-related MDGs
6. Intensifying prevention and control of non-communicable and other communicable diseases

2.0 ASSESSMENT OF HEALTH SECTOR PERFORMANCE

2.1 The Holistic Assessment Tool

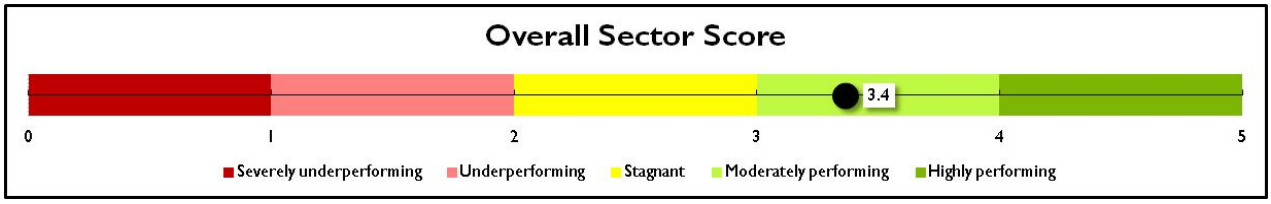
The Holistic Assessment Tool was designed to offer stakeholders the opportunity to dialogue on sector performance within an agreed framework. It is a departure from assessing a basket of few indicators and generalizing such performance as representative of the whole sector. The tool provides a broader framework for assessing the health sector in a more comprehensive and holistic manner. 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 are likely to influence this performance. The outcome of the assessment should lead to proposals for remedial measures to be put in place. The rationale is to encourage incremental improvement in service delivery outcomes over a specified period.

The tool was revised in 2014 to address issues of weights and to allow for balanced and credible assessment. Compared to the assessment of previous Medium Term Plans, the revised tool applies weights to all indicators and objectives. Milestones have been given substantially more weight and carry 25% of the total weight for each objective. Each indicator and milestone is assigned a numerical value of -1, 0 or +1 depending on realization of milestones and trend of indicators. If there was an improvement of a minimum of 5%, it was scored positive. If there was a deterioration of a minimum of 5% or the data to be assessed was not available, it was scored negative. Data is said to be stagnating at a score of 0. Thus the assessment provides for punitive score when data cannot be provided for any reason. The tool further graphically presents performance for each objective on a scale of 0 to 5 with five colour codes. Annex 2 contains detailed information about the tool and Annexes 3 and 4 contain the bases for weighting of objectives and indicators. Annex 5 presents a detailed analysis of each of the indicators in the HSMTDP indicator framework.

During the period under review, indicators for which survey results (mainly DHS and MICS) are required for assessment were excluded because there was no survey results available for 2017.

2.2 Over All Sector Score

The overall sector score for 2017 is 3.4 on a scale of 0-5. This is categorized as Moderate performance and represent an improvement when compared with the past three years (2014, 2015 and 2016) performances.

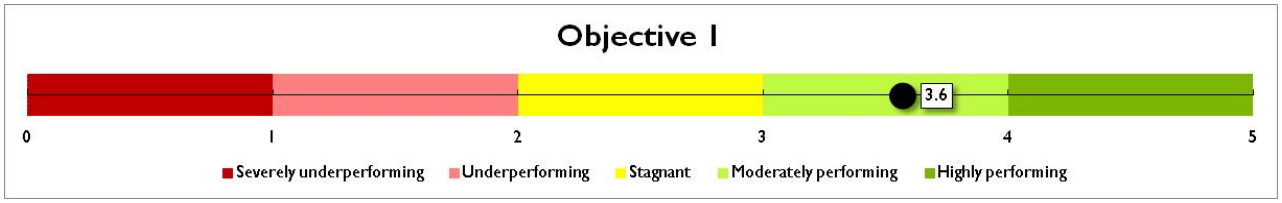


OBJECTIVE 1

There are eight (one survey) indicators under objective 1. Two of these indicators (proportion of CHPS zones that are functional and equity in geographical access to doctors) had positive scores. One indicator, Outpatient (OPD) attendance per capita, had a negative score because this indicator worsened by more than 5%. The remaining four indicators stagnated which means there was no significant progress and or deterioration regarding these indicators. They were therefore scored zero. These are;

- Proportion of functional ambulance service centres
- Equity geography: Supervised deliveries
- Equity geography: Nurse to population ratio
- Equity gender: Female/Male NHIS active membership

The milestone under this objective was scored positive. The Ministry of Health was expected to develop a Health Financing Strategy for the sector and establish Telemedicine Centres to help increase access to health care services. These two milestones were achieved.

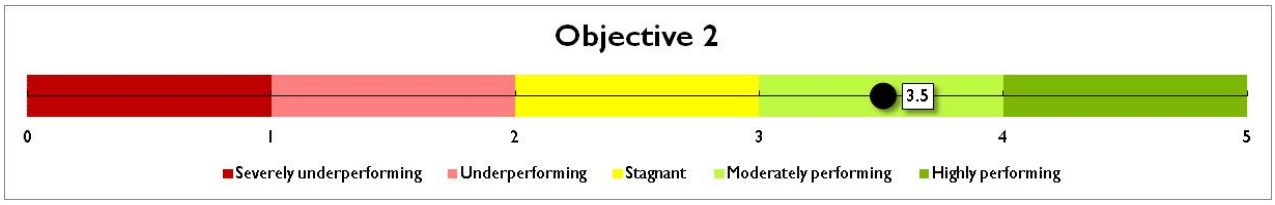


OBJECTIVE 2

Objective 2 has eight indicators. One that looks at NHIS membership according wealth quintiles was not assessed because it is a survey indicator and no survey result is available for the year under reference. Three of the remaining seven indicators were scored positive. These are, per capita expenditure on health (USD), budget execution rate (Goods and Service as proxy) and proportion of NHIS expenditure on claims reimbursement.

Two indicators scored negative, since progress deteriorated. These are, proportion of population with active NHIS membership and proportion of population covered by NHIS as indigents. The last two indicators under this objective were scored zero because they stagnated in performance during the period. These are proportion of total MTEF allocation to health and proportion of NHIS members in exempt categories.

There were two milestones under objective 2 for 2017. The Ghana Health Service was to ensure that districts prepare composite plans in collaboration with the local government in the districts for service delivery and programme implementation. The Ministry of Health was also to ensure the inclusion of client satisfaction questions into the Demographic and Health Survey (DHS). These milestones were achieved and therefore scored positive. Although districts developed composite plans, adherence to the plans were not consistent due to erratic flow or sometimes non availability of funds. The 2014 DHS which is the most recent survey included questions on client satisfaction to health services.



OBJECTIVE 3

There are nine (9) indicators under objective 3. Four out of the nine scored positive. These indicators are, doctor to population ratio, nurse to population ratio (including CHNs), midwife to WIFA population ratio and proportion of GOG spent on goods and services. One indicator (proportion of health facilities in current registration) scored zero because HeFRA could not report for the period 2015 to 2016. The evidence of performance 2017 therefore served as the 'new' based for this indicator.

The remaining 4 indicators were scored negative for either deteriorating performance or the absence of data as detailed below;

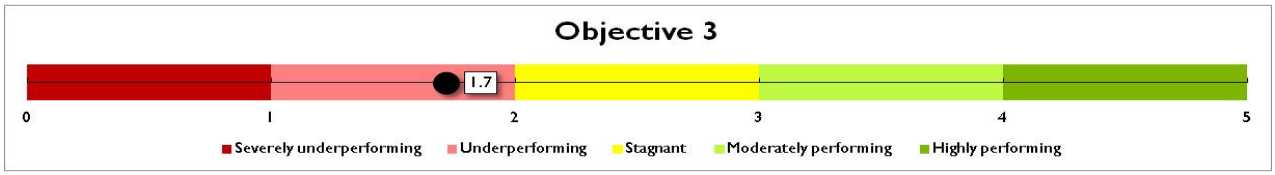
- Proportion of NHIF budget released to NHIS. This indicator deteriorated compared with 2016 performance

- Proportion of NHIS claims settled within 12 weeks. This indicator was assigned a negative score for absence. This indicator has never been measured since the inception of the assessment although there is a legal provision that provide the basis for this indicator. The NHIA has not reported level of performance for this indicator.

- Proportion of GOG budget spent on assets: Performance of this indicator worsened.

- Proportion of health budget (goods and services) allocated to research activities. This indicator was assigned a negative score for absence. No budgetary allocation has ever been made since a decision was made to assign a certain proportion of the health budget to support research activities.

The milestone for objective 3 required the Ministry to institutionalize performance contracting and fully integrate private sector data into the public sector data platform. This milestone was adjudged uncompleted, although a substantial proportion of private sector data is being collected through the DHIMS2 platform. Secondly, the institutionalisation of performance contract is to be done by all agencies in the sector.



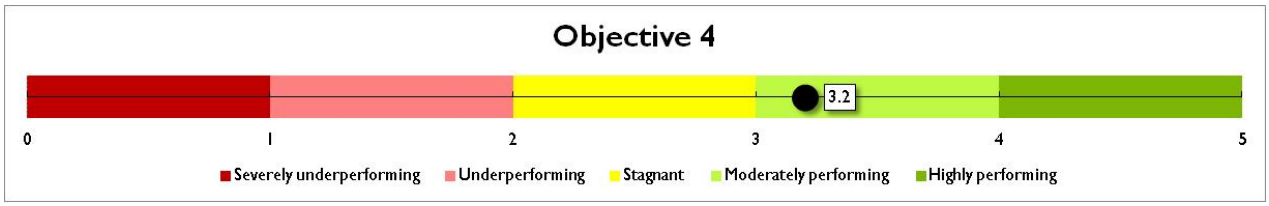
OBJECTIVE 4

Objective 4 has six indicators. Four indicators showed improved performance and therefore scored positive;

- Institutional all cause mortality;
- Proportion of public hospitals offering mental health services;
- Institutional Malaria Under 5 Case Fatality Rate
- Proportion of public hospitals with trained emergency teams

The indicator measuring proportion of public health facilities offering traditional (Herbal) medicine practice stagnated and was scored zero while the remaining one (Surgical site infection rate) indicators was scored negative for non availability of data.

The milestone under objective 4 was scored negative for incomplete implementation. The Ministry of Health through its agencies was expected (i) to equip 90% of District Hospitals and 70% of Health Centres with comprehensive and basic emergency obstetric and newborn care equipment respectively, (ii) establish adolescent corners in 30 hospitals throughout the country and (iii) provide specialist mentorship programs to the lower level health facilities. The health facilities were not equipped as required in (i). Adolescent corners were established in 76 hospitals thereby exceeding the target and provision of specialist mentorship programs to the lower level is also ongoing.



OBJECTIVE 5

Objective 5 has 20 indicators, eight of which are population-based survey indicators and were therefore not assessed. Seven indicators scored positive because their performances improved relative to 2016. These indicators are:

- Couple Year Protection (CYP)
- Proportion of infected pregnant women who received ARVs for PMTCT
- Proportion of children fully immunized (proxy Penta 3 coverage)
- Still birth rate (/1000 LB)
- Postnatal care coverage for newborn babies
- HIV prevalence rate
- TB treatment success rate

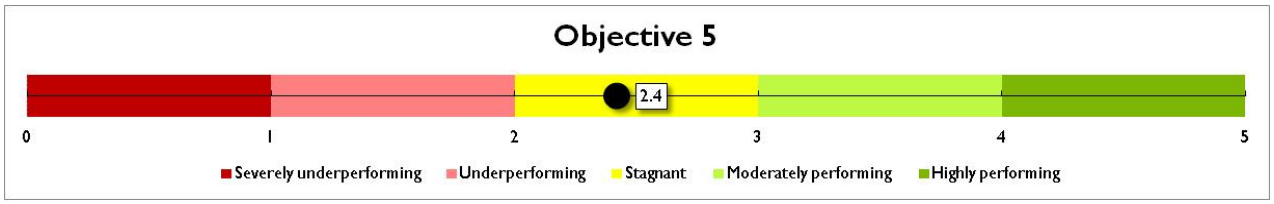
Four indicators listed below scored zero because performance stagnated;

- Institutional Maternal Mortality Ratio
- Proportion of deliveries attended by a trained health worker

- TB treatment success rate
- Proportion of babies born to HIV mothers being HIV negative after 18 months

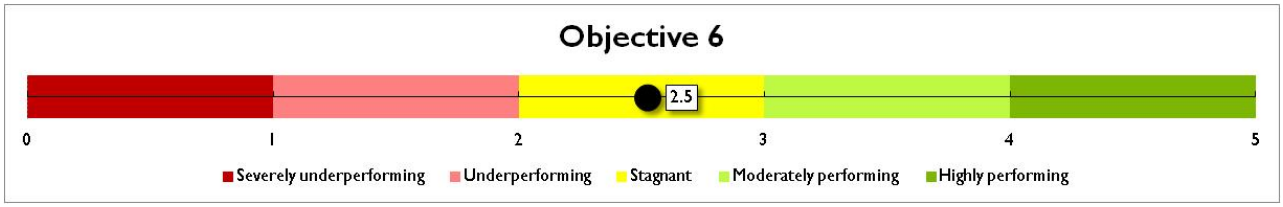
Two indicators, institutional neonatal mortality rate and proportion of pregnant women making four or more ANC visit, scored negative because their performance deteriorated in 2017.

The milestone for required the Ministry to carry out Maternal Health Survey and it was scored positive because the maternal health survey was carried out successfully and preliminary report published.



OBJECTIVE 6

Objective 6 scored 2.5 on a scale of 5. It has only three indicators. The indicator on prevalence of hypertension is a population-based survey indicator and therefore was not assessed. AFP polio rate was scored positive because target was achieved whilst data on number of deaths attributable to selected cancers was scored negative because data is not .



2.3 Trends of Sector Wide Indicators, 2014 to 2017

Table 1: Trends of Sector Wide Indicators, 2014 to 2017

No.	Indicator	Trend				Performance Code
		2014	2015	2016	2017	
Objective 1: Bridge the equity gaps in geographical access to health services						
1.1	Proportion of functional ambulance service centre's	128	127	133	133	
1.2	Proportion functional CHPS zones	2,948	3,951	4,034	5,100	
1.3	Per capita OPD attendance	1.17	1.08	1.06	0.98	
1.4	Equity poverty: U5MR	1.4	N/A	NA	NA	N/A
1.5	Equity geography: Supervised deliveries	1.38	1.7	1.7	1.63	
1.6	Equity geography: Doctor to population	13.1	9.6	7.1	8.10	
1.7	Equity geography: Nurse to population	1.88	2.1	2.1	2.10	
1.8	Equity gender: Female/ male NHIS active membership	1.38	1.37	1.43	1.44	
Objective 2: Ensure sustainable financing for health care delivery and financial protection for the poor						
2.1	Proportion of total MTEF allocation to health	10.6%	7.0%	6.8%	6.5%	
2.2	Per capita expenditure on health (USD)	32.8	37.6	24.8	43.0	
2.3	Budget execution rate (Goods and Service as proxy)	61.0%	503.0%	46.1%	55.1%	
2.4	Proportion of population with active NHIS membership	38.0%	40.0%	38.4%	35.3%	
2.5	Proportion of NHIS members in exempt categories	66.0%	66.9%	71.6%	70.1%	
2.6	Proportion of population covered by NHIS as indigents	5.5%	530.0%	5.4%	2.3%	
2.7	Proportion of NHIS expenditure on claims reimbursement	69.5%	76.1%	68.2%	81.1%	
2.8	Equity poverty: NHIS members	1.04	N/A	N/A	NA	N/A
Objective 3: Improve efficiency in governance and management of the health system						
3.1	Doctor : Population ratio	1:9,043	1:8,934	1:8,301	1:8098	
3.2	Nurse : Population ratio including CHNs	1:959	1:865	1:834	1:799	
3.3	Midwife : WIFA Population ratio	1:1,374	1:1,175	1:943	1:720	
3.4	Proportion of health facilities in current registration	22%	-	-	1%	
3.5	Proportion of receivable funding for NHIS received from	79%	100%	85.6%	69%	

No.	Indicator	Trend				Performanc
	MOF					
3.6	*Proportion of NHIS claims settled within 12 weeks*	*-*	*-*	*-*	*-*	
3.7	*Proportion of GOG spent on goods and services*	*11.50%*	*8.00%*	*8.0%*	*34.80%*	
3.8	*Proportion of GOG spent on assets*	*18.40%*	*0.50%*	*12.0%*	*0.06%*	
3.9	*Proportion of health budget (goods and services) allocated to research activities*	*-*	*-*	*-*	*-*	
Objective 4: Improve quality of health services delivery including mental health services						
4.1	*Institutional all cause mortality (per 1,000 Admissions)*	*21.3*	*23.1*	*22.8*	*23.60*	
4.2	*Proportion of regional and district public hospitals offering Traditional medicine practice*	*9%*	*11.2%*	*13.2%*	*13.1%*	
4.3	*Proportion of public hospitals offering mental health services*	*2.00%*	*19.3%*	*98.8%*	*100.0%*	
4.4	*Institutional Malaria Under 5 Case Fatality Rate (/1,000)*	*0.54*	*0.51*	*0.32*	*0.20*	
4.5	*Surgical site infection rate*	*5.30%*	*4.60%*	*N/A*		
4.6	*Percentage of public hospitals with functional emergency team*	*-*	*6.7*	*18.50%*	*25.5%*	
Objective 5: Enhance national capacity for the attainment of the health related MDGs and sustain the gains						
5.1	*Unmet need for contraception*	*30%*	*N/A*	*N/A*	*NA*	N/A
5.2	*Couple Year Protection (CYP), All sources incl. the private sector*	*2,608,352*	*2,758,970*	*2,331,449*	*3,039,413*	
5.3	*Infant Mortality Rate*	*41*	*N/A*	*N/A*	*NA*	N/A
5.4	*Institutional Neonatal Mortality Rate (/ 1,000)*	*4.3*	*5.3*	*6.3*	*8.36*	
5.5	*Neonatal Mortality Rate*	*29*	*N/A*	*N/A*	*NA*	N/A
5.6	*Under-5 Mortality Rate*	*60*	*N/A*	*N/A*	*NA*	N/A
5.7	*Maternal Mortality Ratio*	*319*	*N/A*	*N/A*	*NA*	N/A
5.8	*Institutional Maternal Mortality Ratio (/100,000 LBs)*	*144*	*142*	*151*	*147*	
5.9	*HIV prevalence rate*	*1.60%*	*1.80%*	*2.40%*	*2.10%*	
5.10	*Proportion of infected pregnant women who received ARVs for PMTCT*	*66%*	*64%*	*50.00%*	*67.00%*	
5.11	*Proportion of babies born to HIV mothers being HIV negative after 18 months*	*92.00%*	*91%*	*91.70%*	*92.00*	

No.	Indicator	Trend				Performanc
5.12	Proportion of children U5 who are stunted	19%	N/A	N/A	NA	N/A
5.13	Proportion of children fully immunized (proxy Penta 3 coverage)	90%	90%	94.6%	97.80%	
5.14	Proportion of mothers making fourth ANC visit	67%	63%	63.2%	60.50%	
5.15	Exclusive breast feeding for six months	52%	N/A	N/A	NA	N/A
5.16	Proportion of deliveries attended by a trained health worker	57%	55.10%	55.5%	57.10	
5.17	Still birth rate (/1,000 LBs)	17.9	17	19	15.01	
5.18	Postnatal care coverage for newborn babies	44.00%	45%	47%	49.80	
5.19	Proportion of children under 5 years sleeping under ITN	47%	N/A	N/A	NA	N/A
5.20	TB treatment success rate	87.00%	85%	86%	87%	
Objective 6: Intensify prevention and control of non-communicable and other communicable diseases						
6.1	Non-AFP polio rate	2.95	7.1	3.5	4.28	
6.2	Population prevalence of hypertension	13%	N/A	N/A	NA	N/A
6.3	Number of deaths attributable to selected cancers	-	-	-	-	

3.0 ASSESSMENT OF SECTOR TRENDS

3.1.0 Objective 1: Bridge Equity gap in geographic access to health Services

The expansion of essential health services to all populations in the country has been an important objective of the Ministry of Health. This objective therefore seeks to bridge access to basic health services irrespective of where one resides. This objective has, eight (8) indicators carefully selected to measure how well the Ministry of Health is doing to remove barriers and bridging gaps in geographical access to health services. It uses proxy indicators such as OPD attendance, supervise delivery and functionality of CHPS zone for instance to measure the extent to which services are being extended to all corners of the country. It also uses availability of critical health staff such as doctors and nurses to determine if such basic health services are deliverable at such locations where services are needed. The objective basically measures how equitable services and resources are distributed. One of the indicators, equity for under 5 mortality rate is assessed periodically whenever a survey data such as Ghana Demographic Health Survey (GDHS) and Multiple Indicator Cluster Survey MICS results are available.

3.1.1 Ambulance Services

Rising medical emergencies and disasters over the past years necessitated the need for Ghana to initiate an Emergency Medical Service. The Ministry of Health in 2004 in collaboration with the Ministry of Interior established seven pilot ambulance stations. The National Ambulance Service has since then established 133 stations as at December 2017. The core mandate of the ambulance service is to provide efficient and timely pre-hospital emergency medical care to the sick and the injured and transport them safely to nearby health facilities.

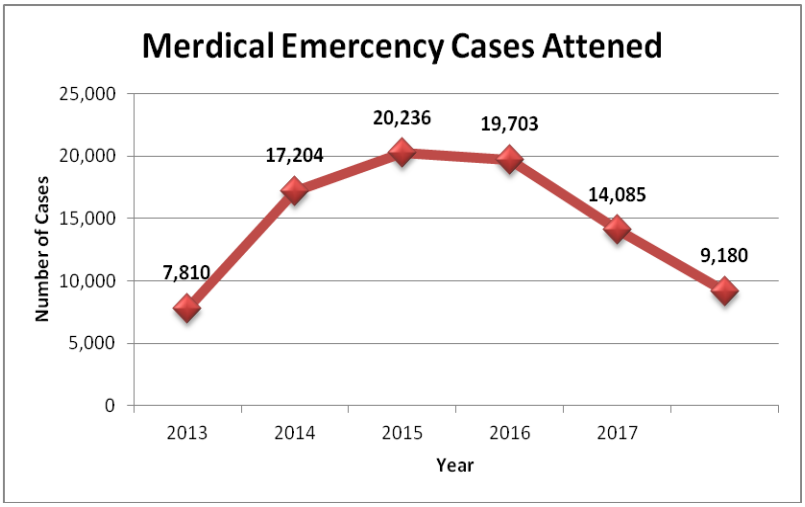
No new ambulance stations were opened during the year under review whilst the current fleet of ambulances were procured in 2011. Out of the 133 ambulance stations across the country, only 45 (34%) are functional. Vehicle availability stands at 50% for the functional ambulance stations. The service has challenges running and maintaining their old fleet of vehicles contributing to vehicle down time and frequent breakdown leading to higher transactional cost.

Currently there are three garages located in the Greater Accra, Central and Ashanti regions which are responsible for major repairs of the fleet. The service has also identified and entered into agreement with some private garages to provide maintenance services. The main challenges confronting the service include fund inadequacy, unavailability of spare parts for the ambulance on the local market and the difficulties in monitoring of fleet movement.

If the gains of the service are to be sustained, the funding issue should be assessed and appropriate solution proffered. The issue of dedicated funding has been raised in the past without any critical appraisal of the options available. Possible sources of dedicated funding identified in the past included proportion of Health Insurance Fund, proportion of Vehicle Insurance fund , Road fund and ambulance service levy on cost of Road Worthy certificate. There are also opportunities in allowing the private sector to invest and operate ambulance services under regular monitoring and

supervision. The service has a training centre which has been recognised in the sub-region which could be a potential source of revenue. The legal status of the National Ambulance Service renders it impotent in finding solutions to some of the challenges identified. The law that should establish the service as a legal entity has not been passed yet.

Figure 1 Medical Emergency cases



Vehicle response time has been deteriorating over the past two years. The response time increased from 17.4 minutes in 2015 to 30.44 minutes in 2017. A total of 9180 cases were seen during the year, down by 53% from14,085 cases in 2016. About 49% of the cases were medical, 28% trauma and 19% gynaecological cases. Clearly service coverage is on the decline.

Recommendations

- ***The Ministry of Health should consider establishing a fund with clear modalities for payment of services and operational cost of the National Ambulance Service***

- ***The source of funding could come from surcharges on vehicle licensing, Insurance and road worthy certificates.***

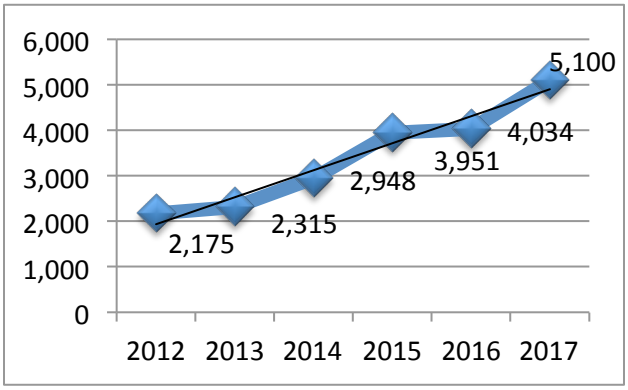
- ***Ministry of Health should explore the prospect of opening up the ambulance service provision to the private sector within a regulated regime***

- ***The national system for vehicle maintenance should be revisited to reduce maintenance cost. It may not be economical if all agencies own garages for the purpose of maintaining vehicles. The Ministry of Health used to have base workshops for repairing vehicles across the country. This could further be explore for all agencies.***

3.1.2 Community-based Health Planning and Services (CHPS)

The CHPS programme was launched against the realisation that a large proportion of Ghanaians lived over 8 kilometers from the nearest health care provider compounded by inaccessible road and transport networks. The CHPS concept is a community-based programme where trained health staff are expected to live in and among communities and work with their leaders to provide a defined minimum package of health services. Implementation of the CHPS programme in the past was faced with a lot of challenges which called for various reviews and reforms to ensure CHPS contribution to service delivery improves. Key reforms carried out include policy review, increased training of CHO's, development of prototype Compounds and provision of financial support through the World Bank and DFID assisted Maternal and Child Health & Nutrition Improvement Project (MCHNP).

Figure 2 Number of Functional CHPS Zones



Key indicator for measuring the extent to which the CHPS concept has improved access to healthcare in the country is the proportion of CHPS zones that are functional. CHPS functionality has been simply defined as presence of CHOs in communities providing defined health services through appropriate community entry techniques. The proportion of CHPS zones that are functional increased by 28% from 4,034 in 2016 to 5,100 in 2017. CHPS zones functionality has made tremendous progress since 2013 increasing by 124%. CHPS implementation continue to face challenges prompting the Ghana Health Service to initiate a validation exercise to ascertain if guidelines to implementation are being adhered to and whether data received are true reflection of happenings on the ground. The Ghana Health Service is concerned about CHPS functionality in its real sense. One of the main bottlenecks is the deployment of health staff to the zones and CHOs staying and working in the communities.

Recommendations:

- ***The District Health Management Teams (DHMTs) should work closely with the Assemblies and other stakeholders to solve challenges of infrastructure, logistics and other bottlenecks that hinder the work of the CHOs.***

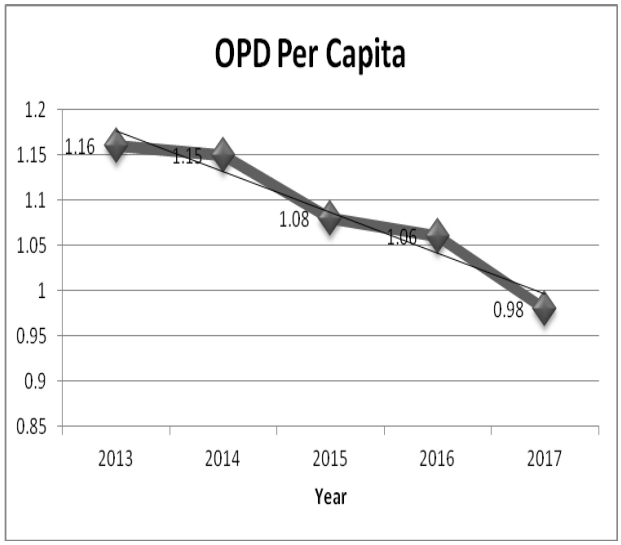
- ***The possibility of recruiting trainees from CHPS zones for training should also be explored whilst heads of Districts should make efforts to ensure effective deployment of CHOs.***

- ***The Ministry of Health should identify sustainable funding for CHPS beyond current financing arrangements.***

3.1.3 Out-Patient Service Utilization

The number of outpatient visits to health facilities in a year relative to the total population are indicators of higher availability and utilization of health services. When barriers to services are removed, this indicator tends to increase. It could be used to examine trends and variation of use of services by geographical locations and type of facilities leading to appropriate policy formulation to increase access.

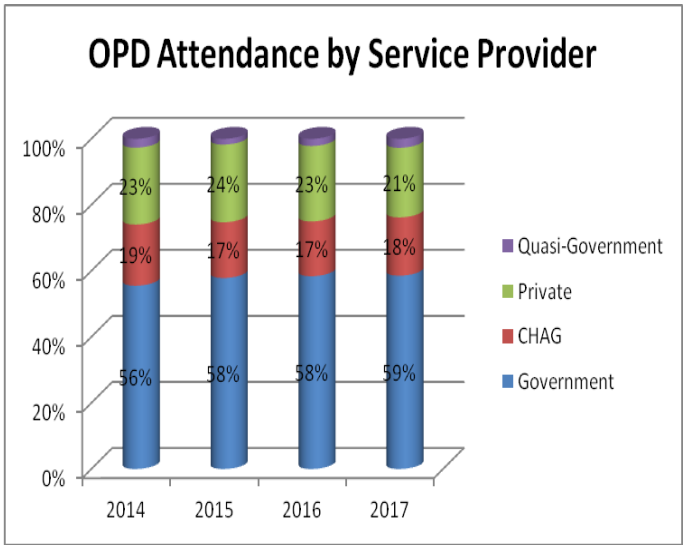
Figure 3 OPD per Capita



OPD attendance per capita continue to decline. It declined by about 8% over the 2016 performance and by 18.4% since 2013. Various factors have been attributed to this decline.

This could be due to cash flow challenges of service providers as a result of the NHIS indebtedness necessitating the providers to impose additional charges to be paid at point service, clients perception of quality of services provided, staff attitude, increased use of traditional and alternate medicine, and increased use of Pharmacy outlets without prescriptions.

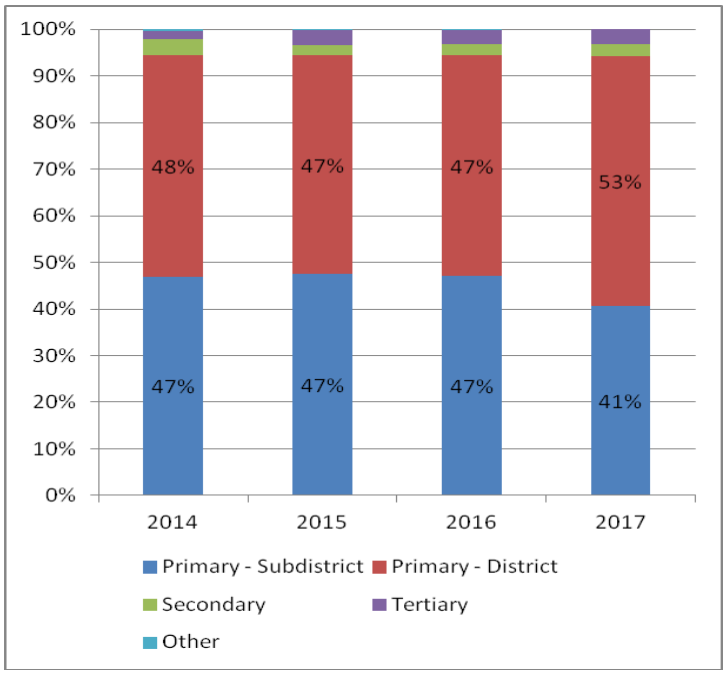
Figure 4: OPD attendance by Service Provider



Government of Ghana remains the dominant provider of health care services, providing about 59% of total OPD services. The private sector were the next most significant provider of OPD services. The could be more if the Ministry is able to get all provider health service providers to report service delivery data on the common platform. It is estimated that about 80% of all private sector are reporting onto the DHIMS platform. It is also expected that when fully operational, the Health Facilities Regulatory Agency (HeFRA) would use private sector reporting as a requirement for licensing and remaining in good standing. This would encourage private sector operators to submit data regularly.

Persistently, the issue of non availability of data capture tools remain a challenge to ensuring data quality and a sustainable solution would have to be found to ensure data is not lost due to staff inability to capture data appropriately.

Figure 5 OPD Attendance by Levels



About 95% of all OPD services are provided at the primary level, that is, District hospital level and below. This has implication for policy in terms of financing arrangements, personnel and equipment. Considering that the NHIS benefit package is too large and larger proportion of the population use services at the lower levels, it makes sense to review the benefit package to put emphasis on package of Primary Care Services at such levels. Again one of the major complaints of specialised facilities in the country is the poor referral practices from the lower levels. It therefore makes sense to improve the capacity of personnel at such levels to deliver quality services, improve referral practices and importantly reduce number of referrals to the higher levels as a result of enhanced competencies. These can effectively be done by ensuring quality, appropriate and cost effective equipment are made available at such levels to complement service delivery efforts.

Recommendations

- ***The Ministry of Health should consider decentralizing the printing of data collection tools to service delivery agencies. With the guidance of the Ministry, agencies should be able to manage the printing and use of such tools possibly through their IGF.***

- ***The Ministry should look at the possibility of going fully electronic and institutionalise paperless transactions at the facility level.***

- ***The Ministry should make efforts aimed at solving the delayed reimbursement by the NHIA to stem the challenge of agencies and individuals surcharging for services they are not suppose to be charging clients.***

3.1.4 Equity Geography: Skilled Delivery

Ghana has accepted and adopted the concept of Universal Health Coverage, the Ministry therefore must ensure there is equitable access to quality health services by all those that need such services. To measure how well the sector is doing regarding equitable access to health services, the Ministry chose supervised delivery, doctor to population ratio and nurse to population ratio across the regions as a proxy indicator.

The equity geography - skilled delivery indicator is a ratio that measures the relationship between the best performing region and the worst performing region. The objective is to identify and address gaps in access to skilled delivery services. This indicator, however, has not made any significant gains since 2013 stagnating from a base ratio of 1.6 in 2013 to a ratio of 1.63 in 2017, although this performance represents an improvement over the previous year. Upper East region consistently remains the best performing region throughout the four-year period whilst Volta region constantly remains the least performing region.

Table 2 Geography Equity in Skilled Delivery, 2013 – 2017

Year	Best region	Worst region	Ratio
2013	67.5%	43.4%	1.6
2014	73.5%	45.3%	1.6
2015	73.6%	43.6%	1.7
2016	74.2%	43.3%	1.7
2017	75.5%	46.3	1.63

Human resource is a key component in achieving Universal Health Coverage. Accordingly, production of adequate and appropriate health workforce is desirable. Of equal importance is the equitable distribution of such workforce in the right numbers and mix. Apart from being an indicator measuring geographical access to service delivery, it has implication for equitable distribution for midwives and other auxiliaries.

Recommendations

- ***The Ministry of Health, relevant agencies, and the local governing authorities should collaborate to provide the necessary incentives that will draw health workers to a locality to work. Health workers need good quality schools for their kids for instance apart from accommodation.***
- ***The Ministry should support to improve efficiency in data management through improved supervision at all levels particularly at the facility level where data are collected. The need to close the gap between survey data and administrative data has become important.***
- ***The agencies should provide incentives to highly performing facilities and districts to encourage others to strive to improve outputs/outcomes***

3.1.5 Equity Geography: Doctor Population Ratio

Doctors are needed in the right numbers and distribution to help improve health outcomes. Key health indicators such as maternal, neonatal and under five mortalities are relatively high and the absence of doctors in their right numbers and spread were the main reasons why the Ministry of Health introduced this indicator. The objective was to monitor the rate of production and geographical availability of this cadre of staff throughout the country.

The equity ratio for doctors has improved by more than 100% from a high ratio of 16.7 in 2013 to 8.1. The sector has therefore made tremendous progress addressing the imbalance in doctor distribution although more needs to done. Performance in 2017 declined by 14.1% over 2016 although overall population of doctors improved by 6.2% from 3,456 to 3,669. Upper East remain the region with the least number of doctors per population whilst Greater Accra is the most staffed region with about 40% of all doctors in Ghana.

Table 3 Equity: Doctor to Population Ratio by Geography

Year	Best	Worst	Ratio
2013	1:3,178	1:53,064	16.7
2014	1:2,744	1:36,048	13.1
2015	1:3,186	1:30,601	9.6
2016	1:3,518	1:24,985	7.1
2017	1:3404	1:27652	8.1

Despite the achievement, inequities exist within regions, where most doctors could be found at the regional hospitals and Teaching Hospitals. The continuous improvement in the equity gap could be attributed to a number of factors including increase in the number of medical doctors, advertisement of vacancies in the regions for recruitment and the new approach to training of house officers which exposes them to regions and districts where they would normally not go.

3.1.6 Equity Geography: Nurse Population Ratio

Equitable distribution of nurses and nursing services has been a major challenge over the years. In an attempt to solve the problem and improve service delivery across the country, the Ministry of Health initiated a system to accelerate training of various categories of nurses with the expectation that nurse population ratio together with their relative distribution will improve.

Table 4 Equity: Nurse to Population Ratio by geography

Year	Best	Worst	Ratio
2013	1:715	1:1,423	2.0
2014	1:669	1:1,255	1.9
2015	1:514	1:1,096	2.1
2016	1:500	1:1,033	2.1
2017	1:500	1:1030	2.1

Although the Nurse population ratio has improved tremendously over the past four years, equity in terms of their distribution has remained a serious challenge to the sector. Geographical equity in terms of distribution of nurses per population did not change year on year. It however deteriorated from 2.0 in

2013 to 2.1 in 2017. Efforts aimed at ensuring fair distribution of Nurses is not yielding the desired result. The policy where regions trained and retained all nurses though they do not need all of them should to be re-examined. Whilst it is pertinent to maintain overall production of nurses at sustainable level, it is important to streamline administrative procedures for recruiting nurses into the sector. Upper East which is the best performing region with around 1 nurse to 320 population.

Recommendations:

- ***Ghana Health Service should look at equitable distribution of nurses within districts and regions since facilities within may be deprived.***

3.2.0 Ensure Sustainable Financing and Financial Protection for the Poor

This section discusses funding for healthcare for service delivery and various mechanisms for financing health. It discusses health's share of the national budget, per capita expenditure on health, funds availability for service delivery and insurance as a health financing mechanism in the sector. The objective is to ascertain the extent to which financing arrangements for the sector are sustainable over the medium term. A total of eight indicators are selected for this objective. Financial data from the National Health Insurance Authority, the Medium Term Expenditure Framework of Government and the annual audited financial report were the ain sources of evidence for the assessment of this objective.

3.2.1 Highlights on the Financial Statement

Revenue and Expenditure Analyses

This section highlights the Ministry of Health's Financial Report for the year ended 31st December 2017. Total Gross Revenue, recorded by the Ministry was GH¢5,581.1 million, the sources of which have been broken down in Table 6 below.

Table 5 Revenue distribution by source (Table A)

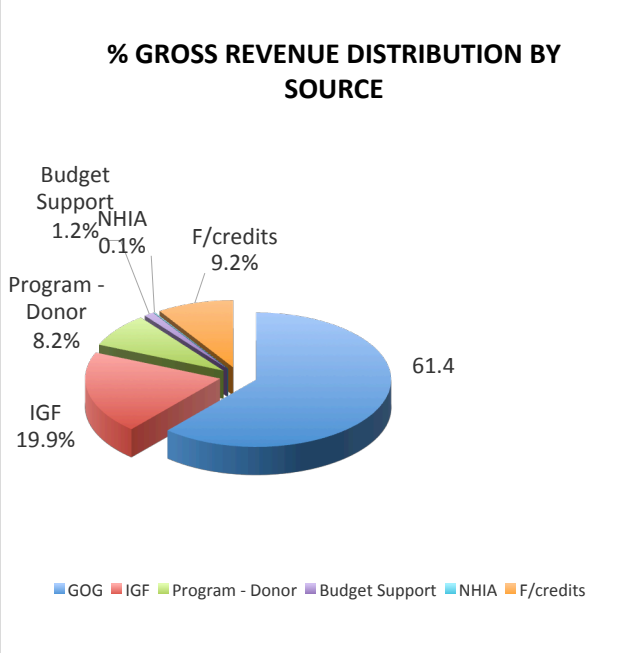
Table A: Gross Revenue Distribution by Source					
Source of Funds	December (2017)			2016 (December)	
	Amount (GHC Million)	US Dollar (Million)	Percent	Amount (GHC Million)	Percent
GOG	3,426.9	795.1	61.4	2,156.2	49.78
IGF	1,111.90	258.0	19.9	1,226.2	28.31
Program - Donor	456.7	106.0	8.2	460.7	10.64
Budget Support	66.1	15.3	1.2	130.7	3.02
NHIA	7.5	1.7	0.1	22.7	0.53
F/Credits	512.0	118.8	9.2	334.9	7.73
TOTAL	**5,581.1**	**1,294.9**	**100**	**4,331.50**	**100.00**

Source: Ministry of Health, 2017 Financial Statement

Government of Ghana contribution increased by 58.9% from GH¢2,156.22 million in 2016 to GH¢3,426.92 million in 2017. Internally Generated Fund (IGF) also decreased by 9.3% from GH¢1,226.23 million in 2016 to GH¢1,111.9 million in 2017. The contribution from donors (both Program and Budget Support) was GH¢522.8 million in the reporting year whilst there was GH¢591.42 million contribution in the same period for 2016, a decrease of 11.6%. In terms of percentage contributions by the various sources to the sector GOG and IGF contributed 81.3% in the year as compared to 78.1% in the year 2016. Donor contribution was 9.4% of Gross Revenue as against 13.7% for 2016.

In terms of donor reporting of Direct Payments, which are payments made directly from donors to implementers without passing through the headquarters, the Ministry will continue to liaise with its

Donor Partners to enable us increasingly capture expenditures from donor direct payments in the financial report. The Expenditure patterns are also presented below, graphically and analytically according to Items and Sources.



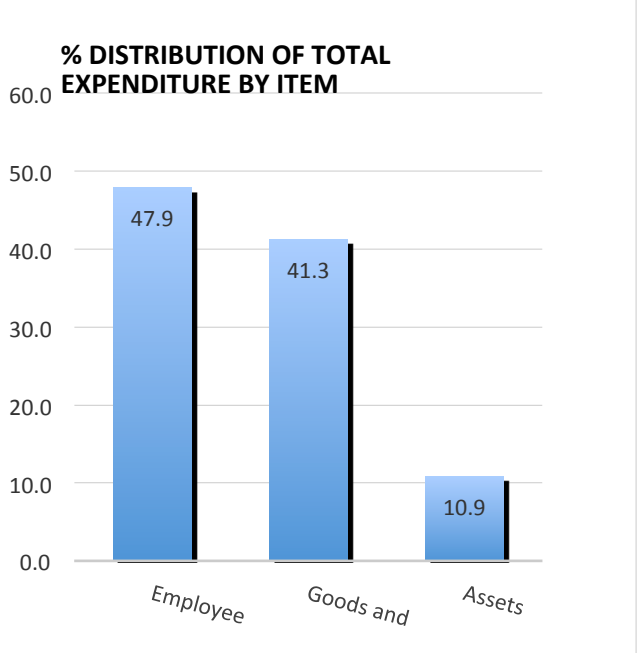


Figure 6: Gross Revenue Distribution by source **Figure 7: Figure 8 Distribution of total expenditure by item**

The Ministry recorded a total expenditure of GH¢5,512.0 million for the year under review (Table B). Out of this amount, 47.9% was for Employee Compensation as against 51.8% for 2016. Expenditure incurred on Goods and Services was 41.3% as compared to 37.2% in 2016 whilst that on Assets was 10.9% as compared to 11.1% in 2016.

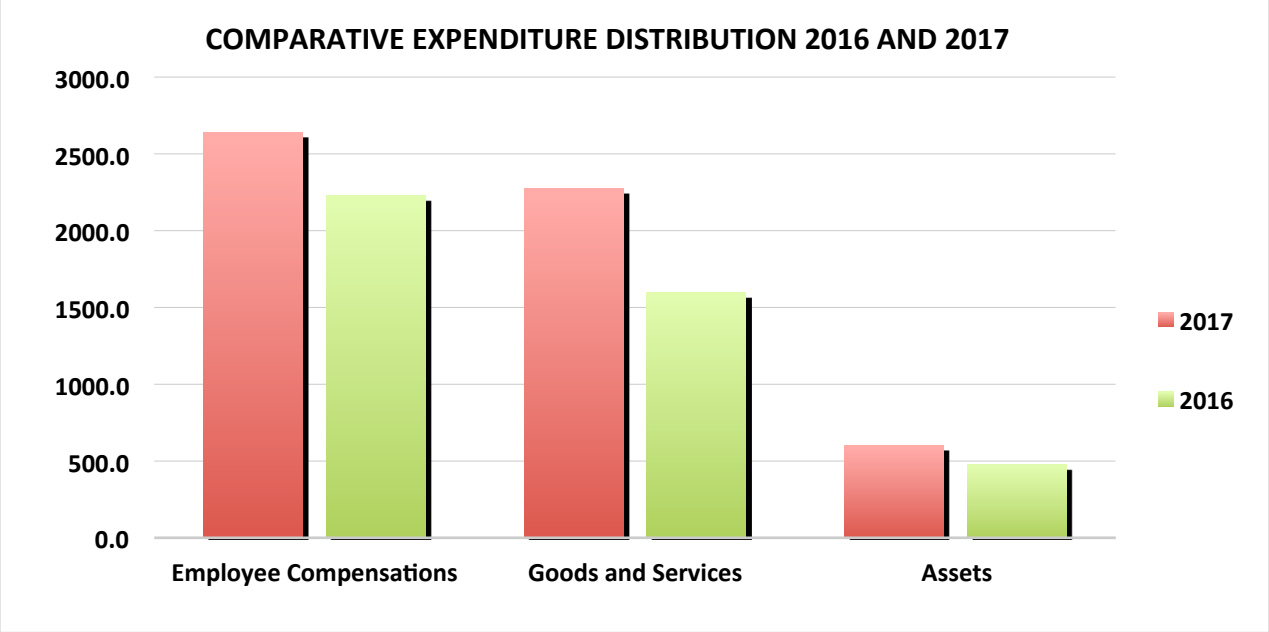
Table 3 below shows comparative pattern of expenditure between 2016 and 2017 in absolute terms. Employee Compensation increased from GH¢ 2,226.9m in 2016 to GH¢ 2,638.3m in 2017. Goods and Services increased from GH¢ 1,597.8m in 2016 to GH¢ 2,274.4m in 2017. Asset also increased from GH¢ 475.9m in 2016 to GH¢ 599.2m in 2017

Table 6 Expenditure by items (Table B)

Expenditure Distribution by Items for the Year Ended 31st December, 2017 (GH¢ 'million)								
Category	Amount in millions of GHC							
	GOG	IGF	B/SPT	MOH PROG	NHIA	F/CRED	TOTAL	Percent
Employee Compensations	2,520.8	117.5	0.0		0.0	0.0	2,638.3	47.8
Goods and Services	863.1	876.2	65.7	457.1	12.2	0.0	2,274.4	41.3
Assets	41.4	45.3	0.6	0.0	0.0	512.0	599.2	10.9
TOTAL	**3,425.3**	**1,039.04**	**74.41**	**453.1**	**12.2**	**512.0**	**5,516.0**	**100**

Source: Ministry of Health, 2017 Financial Statement

Figure 8 Comparative Expenditure Distribution 2016 and 2017



Source: Ministry of Health, 2017 Financial Statement

Analyses of Assets and Liabilities

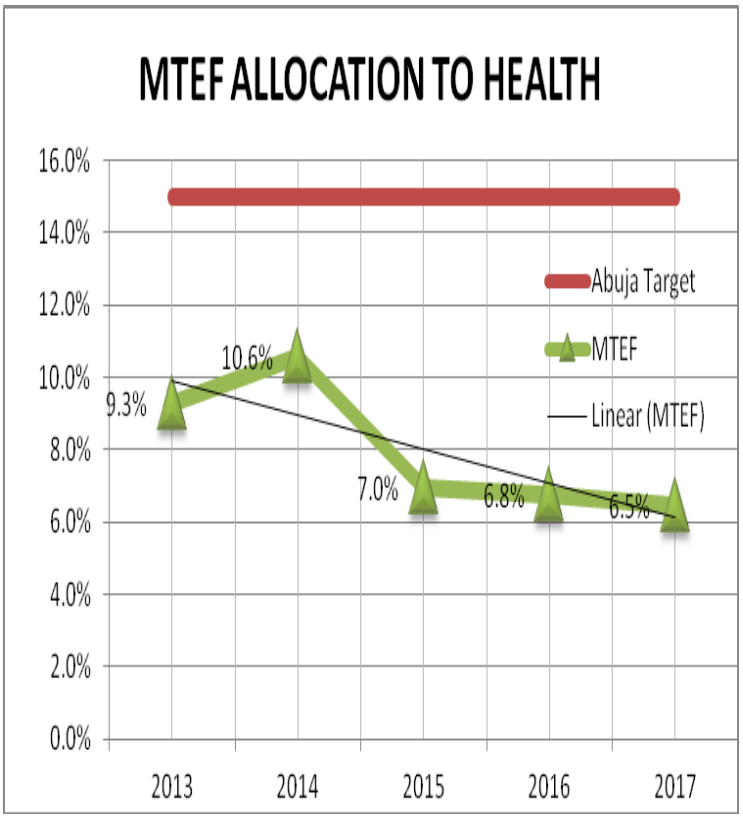
As at the end of 31st December 2017, total cash balances were GH¢301.0million as against GH¢273.0million for the same period in 2016. These amounts represent balances standing in the books of the various health facilities nationwide including MOH/GHS Headquarters. Debtors have increased from GH¢666.6m in December 2016 to GH¢732.3m in December 2017, an increase of 9.9%. A large proportion of the debtors are IGF related, emanating from non-payment of service bills by the NHIA. Most of the debtors are owed to the Hospitals and institutions which are no more benefiting from GOG and Sector Budget Support/Health Fund, but are now depending solely on IGF for the operation of the Goods and Services budgets.

Creditors have increased from GH¢508.16m in December 2016 to GH¢527.88 in December 2017, an increase of 3.9%. A large proportion of the creditors are emanating from non-payment of bills to suppliers, also as a result of delay in reimbursement of service bills to the hospitals by the NHIA and delay in the receipt of other sources of funding as well.

3.2.2 MTEF Allocation to Health

The total MTEF budget for Health is the total discretionary (excludes statutory) budget of government allocated to the Ministry of Health. The Ministry of Health's share of the national budget for 2017 was 6.5%, a decline from the 6.8% in 2016, representing a drop of 4.6%. The Ministry's share rose to a high of 10.6% in 2014 and has since dropped by 38.7%%. Total GoG budget allocation to health increased in nominal terms by 24% from GH¢ 3,387 million to 4,226 million, however total MTEF increased at a higher rate of 30.6% accounting for the decline in the Ministry's share. We can conclude that government budgetary allocation to the health sector increased at a reduced rate compared to the national budget.

Figure 9: MTEF Allocation to Health



The closest the Ministry came to the Abuja target of 15% of national budget was in 2014. This performance is against the background of rising compensation cost as a result of rapidly expanding health services, the need to expand infrastructure including provision for Planned Preventive Maintenance (PPM) and service delivery cost especially public health programmes which normally does not generate any revenue.

Against the dwindling budget support/donor pool, and the financial challenges of the NHIS in promptly reimbursing providers, the need to look for additional sources of finance for the health sector from non-traditional sources cannot be overemphasized.

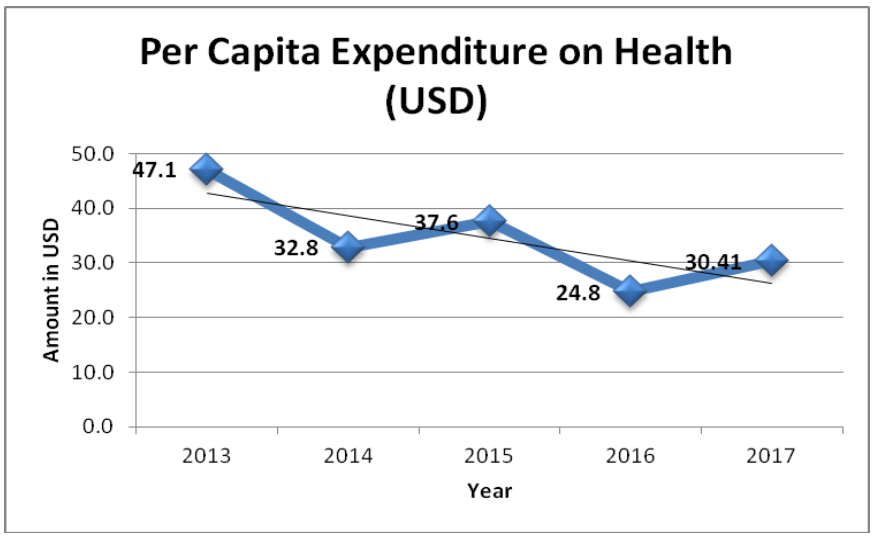
Table 7 Trends Health Sector Financial Indicators, 2014 to 2016 add 2017

No.	Indicators	2014	2015	2016	2017
2.1	% MTEF Budget on MoH	10.6%	7.0%	6.8%	6.5%
2.2	Per capita expenditure on Health (USD)	32.8	37.6	24.8	43.0
2.3	Budget Execution Rate (Goods & Services as Proxy)	61%	503%	46.1%	55.1%
3.7	Proportion of GOG spent on goods and services	11.50%	8.0%	8.0%	34.8%
3.8	Proportion of GOG spent on assets	18.40%	0.5%	0.1%	0.06%
3.9	Proportion of MoH budget (goods and services) allocated to research activities	-	-	-	-

3.2.2. Per Capita Expenditure on Health

Per capita expenditure on health in US dollars for 2017 increased by almost 28% compared to 2016. During the medium term however, per capita spending saw a downward trend as the linear trend indicates. The year 2015 experienced an increase as a result of larger than usual expenditure on compensation. In 2015 a large proportion of outstanding salary arrears was paid by the Controller and Accountant General's Department and this increased the total expenditure on health. This amount was not part of the MTEF budget in 2015.

Figure 10 Per Capita Expenditure on Health



Using 2013 as a base year, we can observe that per capita expenditure on health declined by about 55%. Perhaps this together with the lower than usual health budget share could be the reason why the health sector is struggling with the procurement of public health goods and provision of basic needs required to support service provision.

3.2.3 Budget Execution Rate

Budget execution rate is the proportion of approved budgets released by the Ministry of Finance to Ministry of Health. Budget execution rate for Goods and Services and Assets exceeded approved budget in 2017 unlike the relative low execution rates recorded in the previous years. The some of the reasons accounting for the low execution rate were the difficulties in processing GoG funds through the GIFMIS system and, late release of payment warrants from MoF especially for assets.

Table 8: Budget Execution Rates

Economic Classification		Compensation of Employees	Goods and Services	Assets	Total
Approved Budget		**2,137,522,169.00**	**1,566,715,711.00**	**521,914,474.00**	**4,226,152,354.00**
Actual Expenditure	**GoG**	2,520,775,609.89	863,141,712.35	32,698,822.92	3,416,616,145.16
	IGF	117,508,403.65	876,182,180.12	45,346,502.57	1,039,037,086.34
	Donor	-	522,904,864.89	512,538,867.86	1,035,443,732.75
	ABFA	-	-	8,660,363.00	8,660,363.00
	Total	**2,638,284,013.54**	**2,262,228,757.36**	**599,244,556.35**	**5,499,757,327.25**
Execution Rate (%)		***123.42%***	***144.40%***	***114.82%***	***130.14***

3.2.4 NHIS Membership

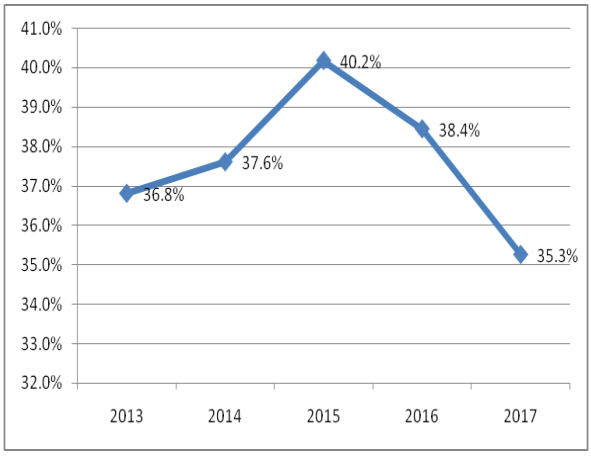
Table 9: NHIS Active Membership Coverage

Year	Active members	Population	% coverage
2013	10,144,527	26,427,760	38.38
2014	10,545,428	27,043,093	38.99
2015	11,058,783	27,670,174	40.00
2016	11,029,068	28,308,301	38.44
2017	10,576,542	29,710,642	35.3

This indicator measures the proportion of the population who can access health care services through the National Health Insurance Scheme. The figure has virtually stagnated over the medium term, deteriorating slightly to 35.3% compared with the 2013 baseline figure of 36.8%. An increase was observed between 2014 and 2015 after which it started declining. It is not immediately clear why the downward trend, however some financing challenges experienced by the NHIS during the last 2 years could have contributed to the decline.

Other factors include:

- The difficulty in renewing membership. Administrative measures put in place for registration and or renewing membership by the NHIA do not encourage the population to readily maintain their membership.



- Implicit in the law that governs the scheme is that formal sector workers do not have to contribute towards the scheme because of the 2.5% SSNIT contributions. Most formal sector workers may be unaware that they need to register to enjoy the benefits of the Scheme. The NHIS law mandates all citizens to register.
- Similarly, it is possible that the healthier section of the population do not seek health care until it is really necessary. Those members of the population considered to be riskier health-wise

could be the group maintaining their membership. This phenomenon of adverse selection could have a negative impact on the financial fortunes of the scheme.

Recommendations:

- ***Enforce the provisions of the law mandatory registration for NHIS***
- ***NHIS should conduct a rapid assessment to ascertain the public's view on membership and other contemporary issues to enable them develop strategies and policies to address them***
- ***Administrative procedures for registration should be streamlined***

Table 10 Proportion of NHIS Active Members Paying Premium

Year	No. Paying premium	Total Active members	Percent
2013	3,433,312	10,918,536	31.4
2014	3,249,541	10,545,428	30.1
2015	3,227,136	11,058,783	29.2
2016	3,130,872	11,029,068	28.4
2017	3,160,769	10,576,542	29.9

Recent funding challenges encountered by the NHIS might have contributed to the apathy on the part of the public. Delays in reimbursement to providers has led to the introduction of Copayment by some service providers. The public will not pay for insurance if they will have to pay for healthcare services at the point of service. Again healthy people will not take up insurance if they do not see the need to insure for the future. There is an adverse selection situation which the NHIS must find away to address.

Recommendation

- ***A group registration as against individual registration should be considered to take advantage of group dynamics. This will also allow for risk classification or rating.***

3.2.5 NHIS Exempt Category

Table 11 : Proportion of Exempt Categories

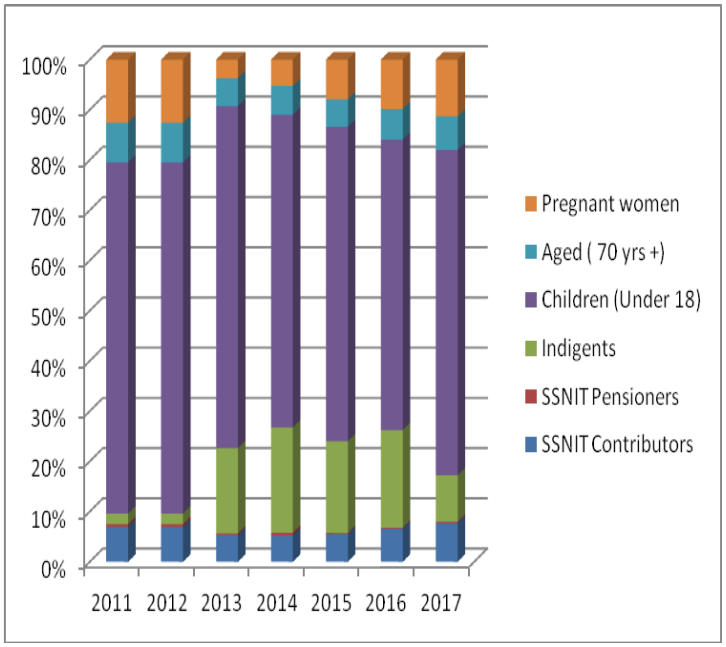
Year	Total Active members	No. Exempt	(%)
2013	10,144,527	7124364	65.3
2014	10,545,428	6924700	65.7
2015	11,058,783	7401158	66.9
2016	11,029,068	7,898,196	71.6
2017	10,476,542	7,415,773	64.7%

The NHIS was introduced to provide access to quality healthcare irrespective of one's ability to pay for certain services. The law that established the NHIS therefore provided for a liberal exemption regime that ensured that various categories of the society considered to be poor and or vulnerable are provided free access to healthcare through the scheme under certain circumstances. The exempt category as prescribed by law include SSNIT Contributors, SSNIT pensioners, children below 18 years, pregnant women and

indigents. About 2/3 of all beneficiaries of the insurance scheme have been in the exempt category since its inception. The situation is not different in 2017 with almost 65% of net beneficiaries being in the exempt category.

SSNIT contributors as a proportion of the exempt category stood at 5.4% up from the 4.7% in 2016 and 3.9% in 2013. SSNIT contributors by law are not expected to contribute to the NHIS although they are potential beneficiaries provided they can remain in good standing through registration and renewal of membership cards. This group could be a potential source of funding to finance the scheme if an arrangement that is acceptable to all stakeholders is made so that they can contribute towards the scheme as a form of cross subsidization design.

Figure 11 Exemptions by Category



About 45% of the exempt categories are children under 18 years of age.

This raises a number of issues;

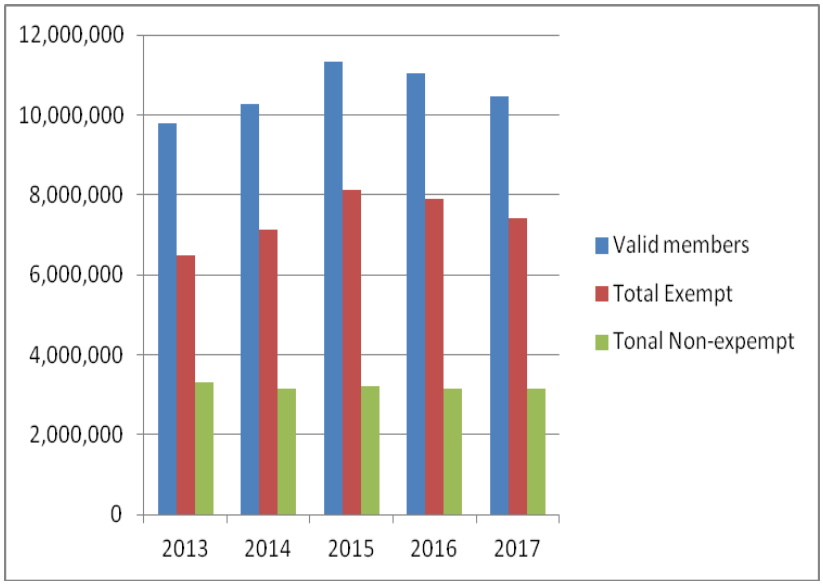
- The sheer size of this category provide room for fraud especially when proof of age is difficult and persons outside the specified age range could, with connivance of officials access free healthcare.

- The tendency for this category to indulge in risky behaviour just because they are covered by the scheme is real.

- Pregnant women also constitute almost 8% of total exempt and similar equity arguments made earlier could also apply. The blanket cover for pregnant women makes the middle class, most of which live in towns and cities the net beneficiaries.

- Geographical access challenges puts the deprived, particularly those at the rural areas at a disadvantage.

Figure 12 NHIS Active Membership



The indigent category constitutes 6.5% of the total active membership of the scheme in 2017, down from almost 14% in 2016. How high or low the coverage of this category is, depends on the ability to identify the indigent under the Livelihood Empowerment Against Poverty (LEAP) programme implemented by the Ministry of Gender, Children and Social Protection. Being indigent is a state which can change over time. The LEAP programme therefore has to authenticate every potential LEAP beneficiary regularly. The process of identifying the core poor itself is difficult in the absence appropriate data. These factors together with higher transactional cost may influence the identification of the indigent to benefit from the Health Insurance Scheme.

Table 12: Pregnant women exempted under NHIS

Year	Registered	Expected	Proportion
2011	712,718	1,011,488	70.6%
2012	742,279	1,037,286	71.6%
2013	239,481	1,063,767	23.0%
2014	373,760	1,090,949	34.3%
2015	658,943	1,129,286	58.4%
2016	778,232	1,147,525	67.8%
2017	839,531	1,188,426	70.6%

The free maternal healthcare programme was initiated in July 2008. The objective was to increase access to delivery services especially among the poor and vulnerable groups in the deprived areas. Initially, the programme chalked successes registering over 70% of expected pregnancies. The proportion fell sharply in 2013 to 23%. It has since been rising steadily and has recovered to 70.6% in 2017. Data from the NHIS on registered pregnant women does not compare favorably with service delivery data such as ANC and supervised delivery data. There is the need for the NHIS to disaggregate data into the component parts such as ANC, supervised delivery, and post natal care (PNC) services to allow for comparison. On the other hand, the scheme should work with the service providers to agree on what and how data should be collected.

Recommendations

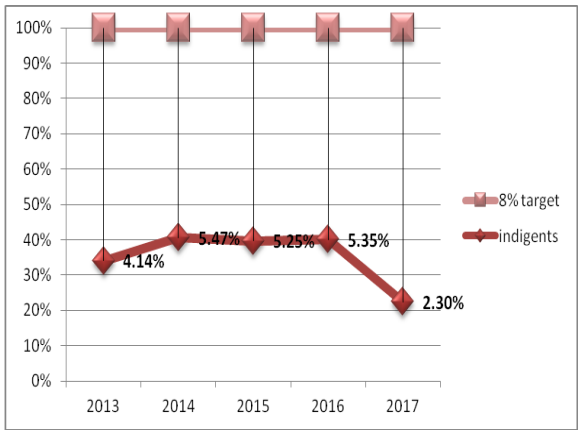
- ***The MoH should work with the NHIA and relevant stakeholders to review the exempt category***

- ***A minimal amount of premium should be paid by every beneficiary irrespective of their status***

3.2.6 NHIS Coverage for Indigents

The proportion of national population enrolled as indigents has declined from 5.4% in 2016 to 2.3% in 2017. The indigents constituted 6.5% NHIS as active members down from about 14% in 2016.

Figure 13 Coverage of Indigents



The policy regarding indigents would need to be refined to provide better guidance to service providers and the scheme alike. It is clears from figure 13 that coverage of the indigents fallen sharply in 2017. As indicated earlier, it is the responsibility of the depart of social welfare to register the core poor to enable them benefit from the scheme. The requirement and the logistics for registration of the indigents makes the task complicated. It is estimated that about 15% of the population can be classified as poor. The Ministry at the beginning of 2014 opted to target 8%. Available data indicates we are far away from achieving the target. The best performance was in 2015 and 2016 when the NHIA went out of its way to register prisoners and psychiatric inmates.

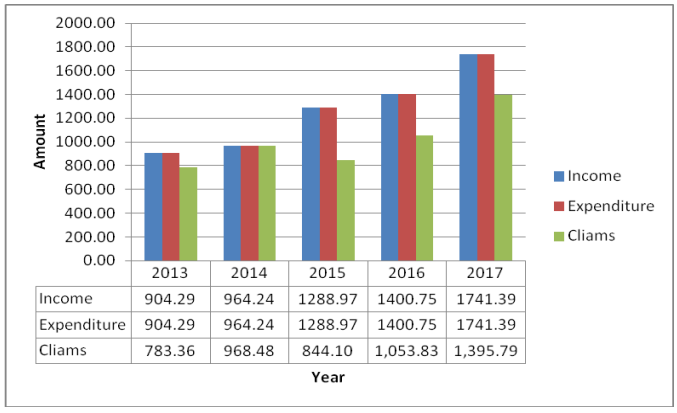
Recommendations

- ***Premium of indigents should be paid through the LEAP programme***

3.2.7 Claims Expenditure

About 80% of total income of the NHIA was used in paying claims in 2017 compared with 75% in 2016. This implied NHIA spent about 20% of all income on administrative expenses in 2017. This is above administrative expenditure target of 15% and considerably high in view of the fact that the NHIS is heavily indebted to the service providers.

Figure 14: Claims Expenditure, 2013 to 2017



	2013	2014	2015	2016	2017
Income	904.29	964.24	1288.97	1400.75	1741.39
Expenditure	904.29	964.24	1288.97	1400.75	1741.39
Cliams	783.36	968.48	844.10	1,053.83	1,395.79

In 2014, a little over 100% of total income from statutory sources was used to pay claims. This was possible because the scheme was able to plough back some of its reserves from earlier investments. Currently the scheme is more six months in arrears to service providers as a result of delayed release of receivable funds and the inadequacy of the earmarked funds for the scheme.

3.3.0 Improve Efficiency in Governance and Management of the Health System

Monitoring Governance and Management of the health system offers officers the opportunity to create awareness among stakeholders and policy makers on the changing context under which agencies and institutions work. It enables policy makers decide if earlier decisions are having the desired impact on service delivery and if not, what kind of remedial measures to be adopted.

Under this objective, nine (9) indicators are assessed using data from the NHIS, MTEF, annual audited and financial reports as well as payroll data to determine the performance of this objective. Two indicators, *Proportion of NHIS claims settled within 12 weeks and Proportion of health budget (goods and services) allocated to research activities* have never been reported on since they were included in the indicator sets. Although the NHIS has never met the requirement of settling claims within 12 weeks, introduction of electronic claims management which the NHIS has implemented on limited basis could help generate such data and its efficiency duly measured.

Tight fiscal space has prevented the Ministry from allocating resources for research activities. Introduction of this indicator however indicates the commitment of the Ministry to research in the health sector.

3.3.1 Doctor to Population Ratio

Total number of doctors has increased by about 40% from 2,615 in 2013 to 3,669 in 2017. Doctor population ratio consequently improved from 1:10170 in 2013 to 1:8098 in 2017. This compares favourably with the 2016 ratio of 1:8,301 although the improvement is not as significant as expected. Wide regional disparities exist with distribution skewed in favour of Greater Accra in particular. Disparities also exist within regions. In regions where Teaching Hospitals operate, the bulk of the doctors reside in the regional capital and work with the Teaching Hospitals.

Table 13 Doctor Population Ratio by Regions

Region	2013	2014	2015	2016	2017
AR	1:10,503	1:9,830	1:7,196	1:7,769	1:8,030
BAR	1:17,547	1:17,455	1:15,956	1:11,468	1:9,795
CR	1:23,892	1:21,823	1:19,439	1:9,905	1:9158
ER	1:19,065	1:16,733	1:15,975	1:13,082	1:12,808
GAR	1:3,178	1:2,744	1:3,186	1:3,518	1:3,404
NR	1:22,894	1:23,759	1:18,412	1:13,627	1:12,949
UER	1:33,896	1:32,285	1:24,253	1:24,985	1:27,652
UWR	1:53,064	1:36,048	1:30,601	1:17,860	1:16,222
VR	1:23,277	1:20,510	1:18,578	1:12,160	1:10,832
WR	1:28,653	1:23,814	1:28,861	1:20,275	1:22729
Ghana	**1:10,170**	**1:9,043**	**1:8,934**	**1:8,301**	**1:8,098**

The doctor/ population ratio in Ashanti, Upper East and Western regions worsened during the year. Already, the Upper East and Western regions have the least number of doctors per population and any attrition of doctors will affect overall service delivery. With the exception of Greater Accra and Ashanti regions all regions are below the national average.

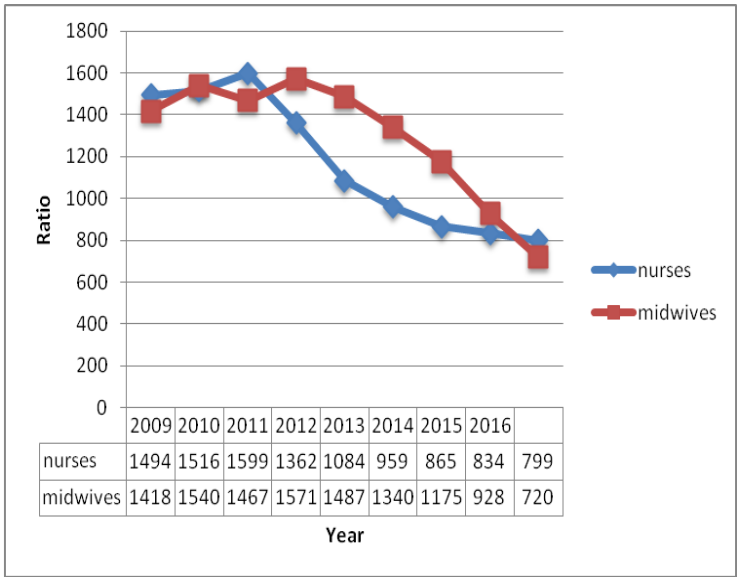
3.3.2 Nurse to Population Ratio

The total number of nurses increased from 34,380 in 2016 to 37,190 in 2017 an increase of about 8%. For the period 2013 to 2017 the number of nurses increased from 24,533 to 37,190 representing an increase of almost 52%. The nurse to population ratio improved from 1:834 in 2016 to 1:799 in 2017. Unlike the doctors, the three regions in the northern zone (Northern, Upper East and Upper West regions) have better nurse staffing situation compared to all the rest of the regions. Western region is the least staffed nurse per capita. It is clear, the Western region situation has not improved markedly since 2013 compared with the rest. This estimates exclude the Nurse Assistants (clinical). This is because policy on this category of cadres was fluid at the inception of the assessment in 2013. If Nurse Assistants (clinical) were included, the nurse to population ratio would drop farther to 1: 478.

Table 14: Nurse Population Ratio by Region

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
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
2015	1:980	1:973	1:876	1:834	1:741	1:1,096	1:514	1:634	1:818	1:1,047	1:865
2016	1:946	1:880	1:755	1:838	1:745	1:1,033	1:500	1:644	1:833	1:1,009	1:834
2017	1:878	1:807	1:713	1:816	1:743	1:945	1:500	1:597	1:785	1:1,030	1:799

Table 15 Trend of Nurse population Ratio and Midwife WIFA Ratio



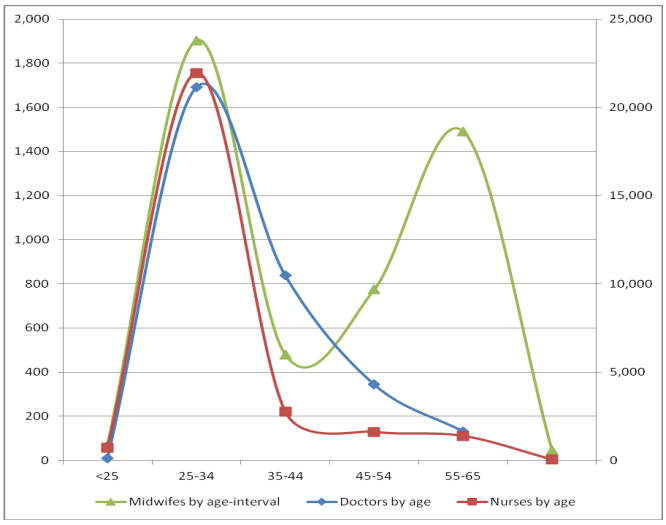
	2009	2010	2011	2012	2013	2014	2015	2016	
nurses	1494	1516	1599	1362	1084	959	865	834	799
midwives	1418	1540	1467	1571	1487	1340	1175	928	720

Estimating how many nurses and midwives are required by a country in a health system can be complex. Issues such as age, health status and equipment which influence productivity are not factored into such projections. Currently nurses are being produced from the Ministry of Health and private sector training schools, however there seem to be no clear policy regarding production numbers or per capita requirement for the country. The Ministry of health together with its stakeholders would need to agree on thresholds to guide production.

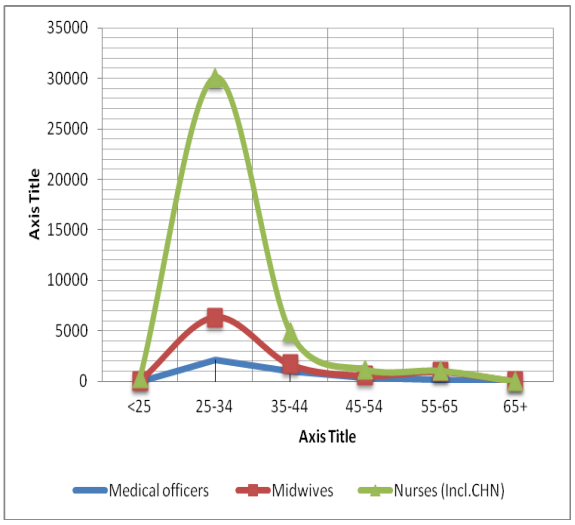
At the inception of the implementation of the sector Programme of Work a substantial proportion of the critical staff, particularly midwives were in the higher age group as depicted in figure 15 below. A decision was taken to accelerate the production of midwives to replace the aging midwives. Much progress has been made in addressing the age problem. The result is depicted in figure 18 below.

Figure 16: Distribution of Critical Health Staff By Age

2014



2017



The Midwife to WIFA population ratio has shown improvement since 2013. The training of straight midwives and the setting up of midwifery schools in all the regions has led to an improvement in the midwife population ratio in all the regions. Although there is a general improvement in the midwife population ratio, there are issues of mal-distribution of midwives in all the regions with some districts and sub-districts having low number of midwives to WIFA population.

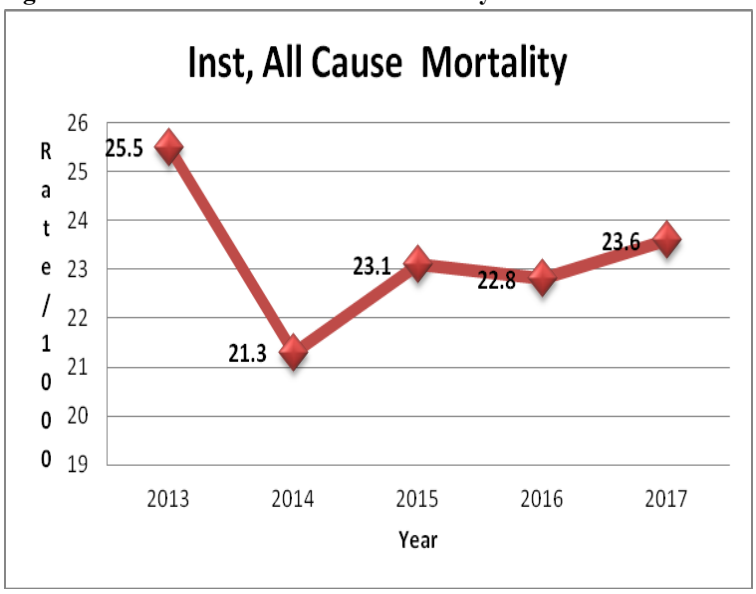
3.4.0 Improve Quality of Services Delivery including Mental Health

Objective 4 has six indicators. These indicators deals with general mortality, traditional medicine, mental health services, malaria case fatality, surgical site infections and functionality of emergency teams.

3.4.1 Institutional All Cause Mortality

Institutional all cause mortality worsened from 22.8/ 1000 hospital admissions in 2016 to 23.6/ 1000 hospital admissions in 2017. Compared to 2013, the rate dropped marginally by 8% from 25.5/ 1000 hospital admissions to 23.6/ 1000 hospital admissions. Institutional all cause mortality rate has therefore not made any significant improvement since 2013 and worsened in 2017 relative 2016 performance. Greater Accra, Upper East, Volta and Central regions were the worst performers in 2017. All four regions experienced deterioration compared to the 2016 rate. Ashanti, Eastern and Upper West Regions experienced marginal improvements in their rates.

Figure 15: Institutional All-cause Mortality



Although Korle-Bu and Komfo Anokye Teaching Hospitals together contribute about 15% of total mortalities, their rates are relatively high when compared with the Ghana Health Service. Explanations provided by the Teaching Hospitals are that bad cases are referred to them. They express the need to streamline and improve referrals from the periphery. However, arguments about referrals cannot be isolated from equitable distribution of appropriate health staff in terms of numbers and mix. As long as the quality and number of staff at the periphery are not adequate, quality of service will suffer. There is the need to clearly define the direction of our referral policy. Our current experience will make the referral hospitals always choked because the most skilled staff and equipments are concentrated at the Secondary and Tertiary levels and every little case would have to be referred. Referrals seem not to be working very well since it goes with additional cost and travelling inconvenience to clients and their relations. Most clients invariably would turn to the next available alternative which may not be the best option.

3.4.2 Traditional Medicine

The proportion of regional and district health facilities offering traditional medicine has remained the same for the past three years. Currently, there are 19 hospitals (District and Regional) offering the herbal medicine services. Earlier in 2013 a decision was made to pilot the provision of traditional (herbal) medicine alongside allopathic medicine in some of our public health facilities. Since then, no independent evaluation of the initiative was undertaken.

Recommendation

- ***There is a need to evaluate the pilot implementation of the policy to inform the way forward***

3.4.3 Facilities Offering Mental Health Services

A policy was initiated to establish mental health units in all public hospitals and wings in regional hospitals in the country. The objective is to increase access to mental health services and also minimize residential management of mental health conditions. The Mental Health Authority signed a memorandum of understanding with the Ghana Health Service which defined their roles regarding delivery of mental health services in the regions and districts.

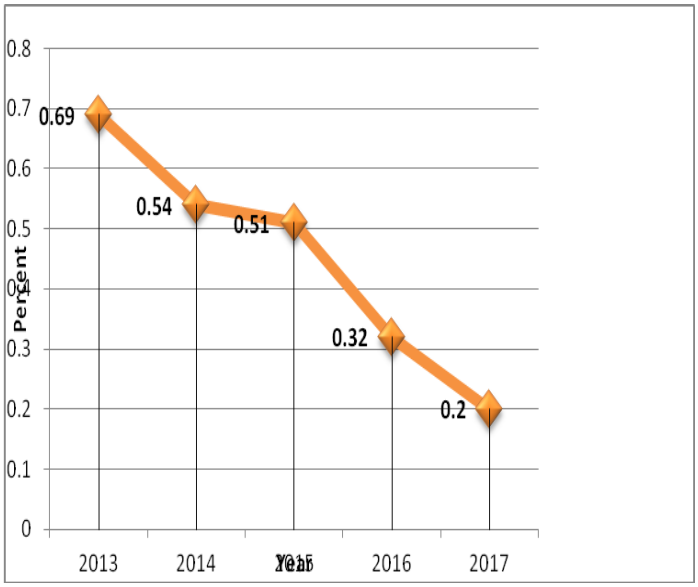
Currently all regional and existing district hospitals have mental health units. Three (3) regional hospitals (BAR, ER, VR) have Mental Health wings. The main challenges include perennial shortage of psychotropic medicines, inadequate funds for community activities and inadequate human resource. Most of the regional hospitals have no additional space to establish the mental health wings and have to expand existing infrastructure to be able to meet this requirement.

Recommendations

- ***Considering the difficulty of remunerating additional staff, the MOU to be signed between the Ghana Health Service and the Mental Health Authority should include task shifting arrangements with the Mental Health Authority providing financial and technical support***

3.4.4 Malaria Under 5 Case Fatality

Figure 17: Malaria Under 5 Case Fatality



Management of malaria in the country has seen a stupendous improvement over the past years as reflected in the reduction of Malaria under 5 case fatality. Malaria under five case fatality decline by 71% from 0.69% in 2013 to 0.20% in 2017. Compared with 2016, case fatality reduced by 60%. The improvement is due to availability of rapid diagnostic test kits. The Test Treat and Track approach is contributing to improving the testing rate. There may be the need to intensify education to the public on the need for testing before treatment

Recommendations

- ***Efforts should be made towards fully integrating malaria control activities into the general health system before the programme support ends so as to sustain gains made.***
- ***Properly document all lessons learnt and undertake an extensive evaluation of the success of the malaria control programme***

3.4.5 Surgical sight infection rate

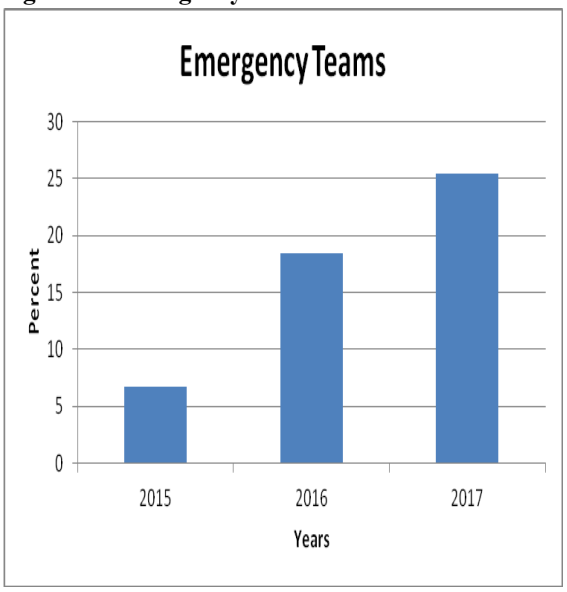
Although this indicator was introduced as a measure of quality of clinical services, reporting has not been forthcoming. This is because structures for capturing the indicator was not in place and there was no urgency on the part of the facilities to collect data on the indicator. With the assessment of regional performances, efforts are underway to gather data and report on the indicator in 2018. The teaching hospitals have also undertaken to collect and report on the indicator.

3.4.7 Hospital Emergency Teams

The proportion of public hospitals with functional emergency teams has been rising steadily over the past three years. The proportion increased by about 38% over the 2016 figure from 18.5% percent to 25.5%. Figure 18 below show the trend over the period.

An emergency core team is expected to comprise of the emergency physician/ doctor, physician assistants, ER Nurses, critical care nurse, triage personnel, porters and cleaners as captured in the 'Policy and Guidelines for Hospital Accident and Emergency Services in Ghana

Figure 16 Emergency Teams 2015-2017



However, due to the lack of requisite personnel, functional emergency teams are presently a 24-hour available trained medical staff in Basic Life Support and Advance Life Support or both in an emergency department with necessary logistics to receive, stabilize, treat and appropriately refer in a timely manner if the need be.

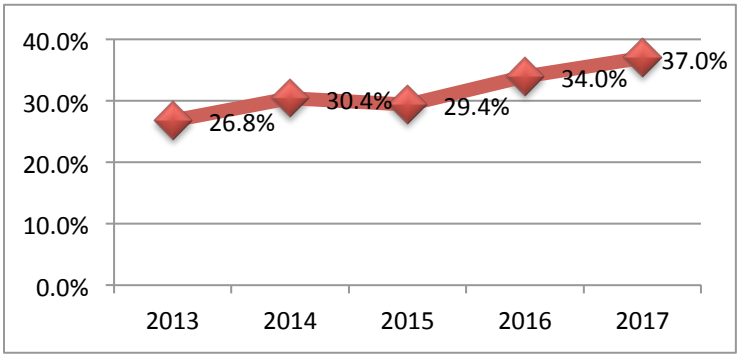
Although the total number of public hospitals with functional emergency teams were 110, the Upper East region has additional 13 functional emergency teams at the sub-district level developed as a pilot program under the Systems Improvement at District Hospitals and Regional Training of Emergency Care (*sidHARTe*). This brings the total to 123. The indicator limits the measurement to Public hospitals and this should subsequently be expanded to include all hospitals. Although the non availability of requisite staff compromised the formation of appropriate emergency teams, guidelines regarding the minimum required personnel in terms of skills, numbers and mix should be specified.

3.5.0 Enhance Capacity to Attain the Health Related MDGs

3.5.1 Couple Year Protection

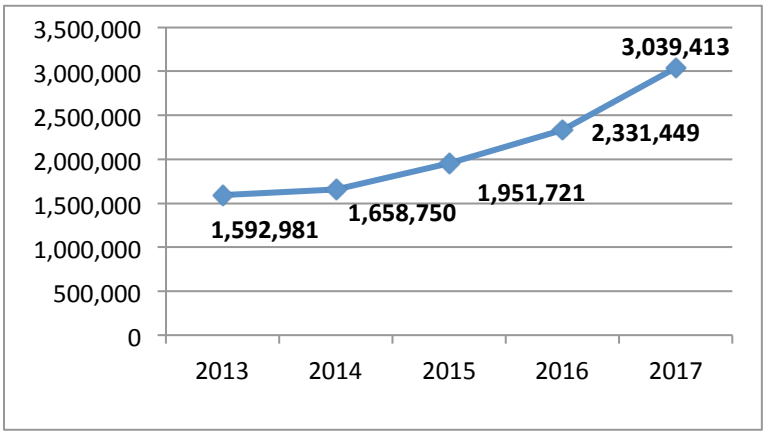
The interventions aimed at improving quality of life through family planning services made significant progress within the medium term of 2014 to 2017. Family planning acceptor rate has increased by 24.2% from a baseline of 26.8% in 2013 to 37% in 2017. In 2017, the family planning acceptor rate increased by 9% from 34% in 2016 to 37%.

Figure 17 Trend of Family Planning Acceptor Rates, 2013 to 2017



Some of the key interventions aimed at improving family planning services included the retraining of key frontline health workers like Community Health Nurses and training of Midwives to perform implant insertions, promotion of long term contraceptive methods and scaling up of adolescent friendly health services. While the annual incremental rate of family planning acceptors was relatively slow, the gradual shift from short term to long term contraceptive methods has resulted in rapid increase in estimated couple years of protections. The Figure 19 and 20 showed the trend of family planning acceptor rate and Couple Years of Protection, 2013 to 2017.

Figure 18 Trend of Couple Years of Protection, 2013 to 2017



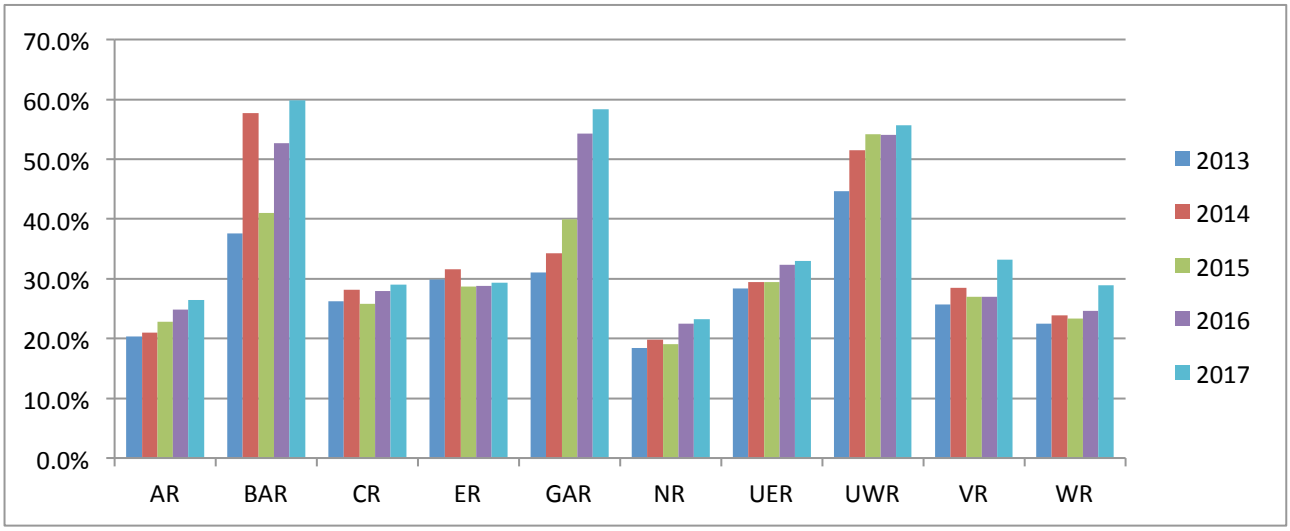
The estimated protection provided by family planning services year on year increased by more than 90% from 1.6 million in 2013 to 3.04 million in 2017. This significant increase may have been influenced by recent investments in family planning particularly MAF.

There are significant variations in performance across the regions. Brong Ahafo region has consistently remained a top performer closely followed by Greater Accra and Upper West regions. These three regions attained over 50% of the target population while the remaining seven regions mostly performed below 30% of their target populations. There is a need to explore further to understand the consistently large regional variations in family planning acceptor rates. Table 19 and Figure 21 below shows the regional performance for family planning acceptor rate from 2013 to 2017.

Table 17 Family Planning Acceptor Rates by Region, 2013 to 2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2013	20.3%	37.6%	26.3%	29.9%	31.1%	18.4%	28.3%	44.6%	25.7%	22.5%	**26.8%**
2014	20.9%	57.8%	28.2%	31.6%	34.3%	19.8%	29.4%	51.5%	28.5%	23.9%	**30.4%**
2015	22.8%	41.0%	25.8%	28.7%	39.9%	19.1%	29.5%	54.1%	26.9%	23.3%	**29.4%**
2016	24.8%	52.7%	27.9%	28.8%	54.2%	22.4%	32.3%	54.1%	27.0%	24.6%	**34.0%**
2017	26.5%	59.8%	29.0%	29.4%	58.3%	23.2%	33.0%	55.6%	33.2%	29.0%	**37.0%**

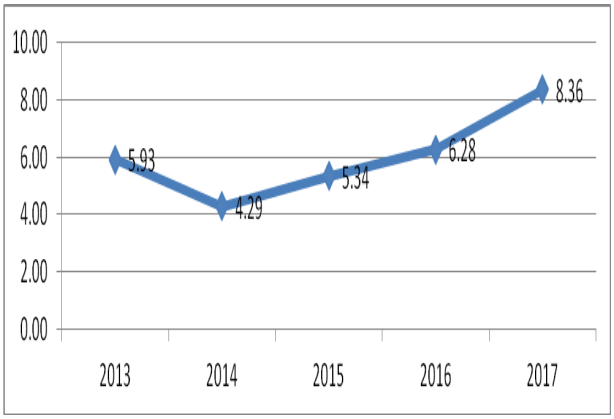
Figure 19 Family Planning Acceptor Rates by Region, 2013 to 2017



3.5.2 Institutional Neonatal Mortality

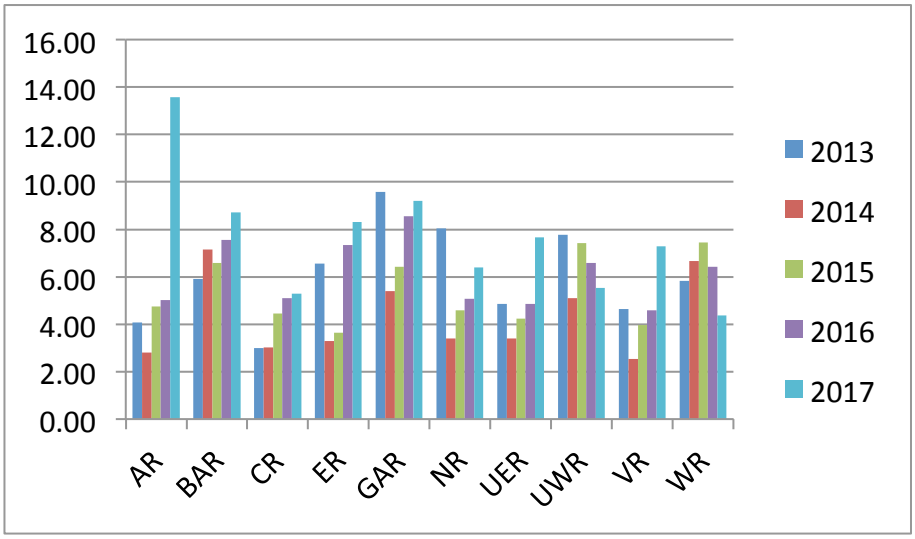
Neonatal Mortality Rate continue to deteriorate further during the period under review from 6.28/1,000LB in 2016 to 8.26/1,000LB in 2017 thereby negating the intended impact of all the interventions aimed at addressing newborn mortality. The initial progress (4.29/1,000LB) made in 2014 where iNMR declined by 28% from the 2013 baseline of 5.93/1,000LB has been eroded over the years.

Figure 20 Trend of Institutional Neonatal Mortality Rate



Apart from the Western and Upper West regions which improved their iNMR to 4.37/1,000 LB and 5.52/1,000 LB respectively, all other regions deteriorated further with Ashanti region recording the worst performance at 14/1,000 LB in 2017 up from 5/1,000 LB in 2016. Again, while Upper West and Western regions have consistently improved their iNMR, the other regions recorded contrary performances as depicted in Figure 23 below.

Figure 21 Institutional Neonatal Mortality Rate per 100,000 Live Birth by Region, 2013 to 2017



It appears all the interventions employed to improve newborn health has not yielded the desired outcomes from 2014 to 2017. The interventions included the implementation of the Millennium Accelerated Framework for Maternal Mortality (MAF) Strategy, implementation of the newborn strategy, capacity building for staff across all levels, procurement and distribution of equipment and other logistics. In view of the non attainment of the desired outcomes despite the implementation of these interventions, there is a need to focus on quality issues, staff attitude, monitoring and supervision.

3.5.3 Institutional Maternal Mortality

The institutional Maternal Mortality Ratio (iMMR) for 2017 improved slightly (2.6%) from 151/100,000 LB in 2016 to 147/100,000 LB. This performance was far below the annual target of less than 135/100,000 LB. The 2017 performance of 147/100,000 LB represent only 4.7% improvement relative to the last medium term (2014 to 2017) baseline iMMR of 154.6/100,000 LB.

Figure 22 Trend of institutional Maternal Mortality Rate and Targets, 2013 to 2017

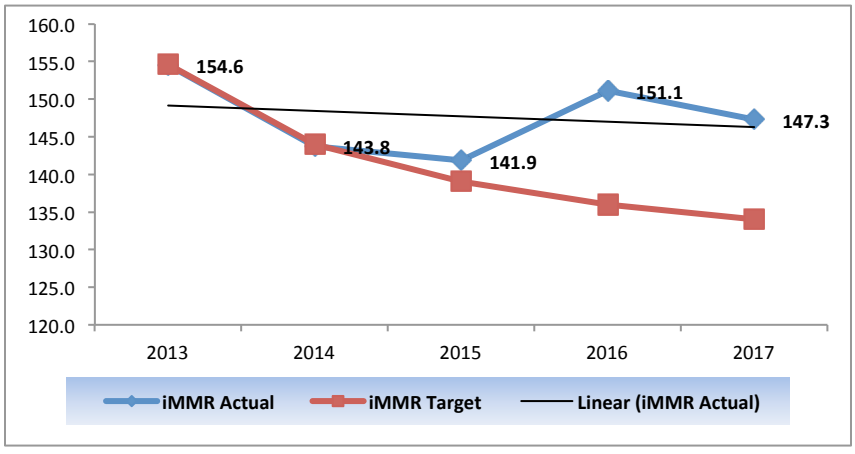
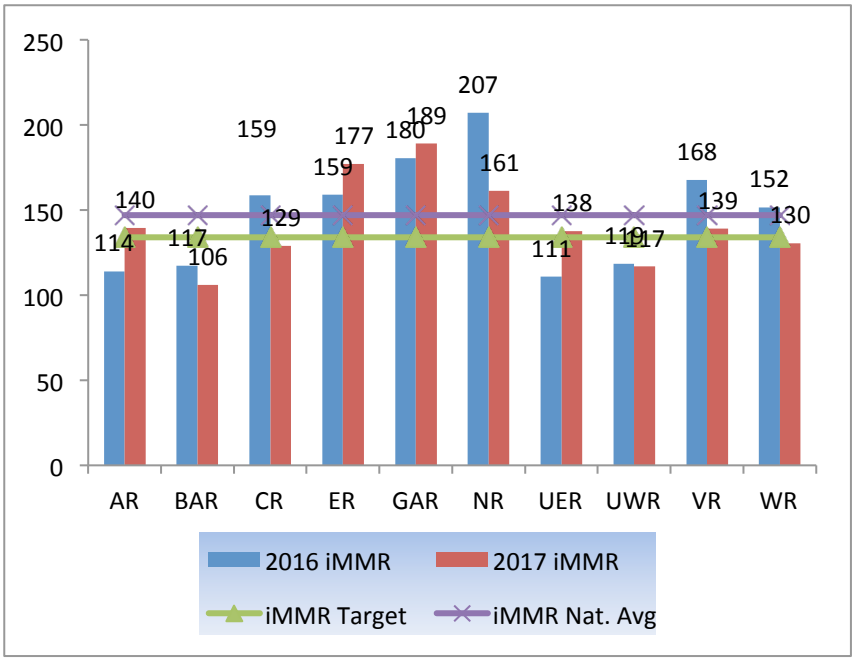


Figure 24 shows the trend of iMMR relative to the iMMR targets from 2013 to 2017. The 2017 institutional Maternal Mortality Ratio relative to 2016 performance improved in six regions while Ashanti, Eastern, Greater Accra and Upper East regions recorded deterioration. Notably among them is Eastern region which recorded a significantly high rate in 2017. Four regions - Brong Ahafo, Upper West, Central and Western regions - performed well by attaining the medium term target of less than 135/100,000 LB. Table 20 and Figure 25 below show the regional variations in iMMR performance for the periods under reviews.

Table 18 Institutional Maternal Mortality per 100,000 Live Births by Region, 2013 to 2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2013	125	138	122	200	198	174	108	193	161	153	**154.6**
2014	115	134	105	175	185	108	139	161	179	149	**143.8**
2015	136	131	108	176	177	144	90	156	134	125	**141.9**
2016	114	117	159	159	180	207	111	119	168	152	**151.1**
2017	140	106	129	177	189	161	138	117	139	130	**147.3**

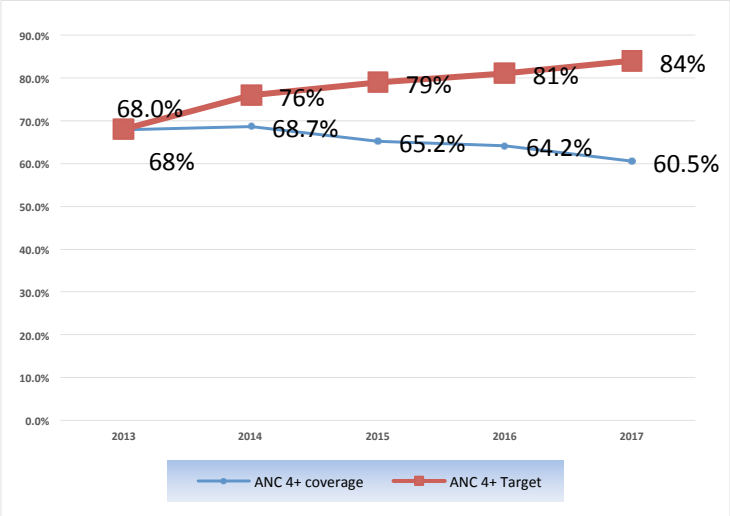
Figure 23 Institutional Maternal Mortality per 100,000 Live Births by Region, 2016 to 2017



The national performance fell short of desired outcomes despite a lot of investment in this area. There were major implementation challenges which may have affected implementation outcomes. Key challenges identified include delayed reimbursement from the NHIA which resulted in unapproved charges. This may have influenced access to services particularly by pregnant women under the free maternal health initiative.

3.5.4 Ante Natal Care Coverage

Figure 24 ANC Coverage



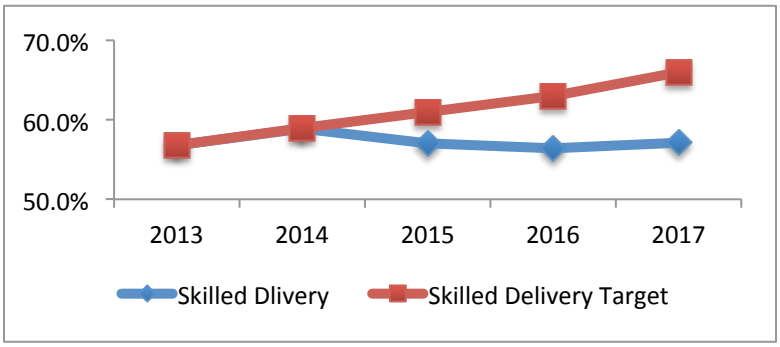
Increased demands for various packages of items from expectant women purported to be required before delivery in some health facilities may have influenced clients' decision to attend facilities on time. Other challenges identified include demand for advance payment for blood and blood products and fees for diagnostics and routine medications for ANC clients. Although these are bundled in the NHIS tariff they may also have influenced client behaviour.

The coverage for pre-natal services for expectant women is increasing with more than 50% of the women making more than four visits however, the quality needs to be improved.
There are many maternal deaths with issues that ought to be detected earlier for better health outcomes. The policy of having all pregnant women to visit antenatal clinics at least four times during the course of their pregnancy is meant to keep track of the development of the foetus and any other health conditions that the mother may have. The objective is to identify and manage such conditions effectively and timely to prevent and or minimize catastrophe and ensure better health outcomes for both mother and baby.

This policy pre-supposes a good spread of antenatal services to allow easier access to pregnant women. This laudable policy is becoming difficult to achieve with coverage data declining consistently over the past five years. With the increased production and posting of midwives to the operational levels, one would expect antenatal coverage to improve. Appropriate distribution to areas where they are needed most has not been pursued with the urgency that it deserves. Low contact with pregnant women could impact directly on skilled delivery coverage and maternal mortality. The Figure 23 illustrates the declining performance for ANC 4+ visits.

3.5.5 Skilled Delivery coverage 2018

Figure 25 Trend of Skilled Delivery coverage, 2013 to 2017



Skilled Delivery rate has stagnated between a coverage of 56% and 58% within the period with a marginal gain of 1.2% from 56.4% in 2016 to 57.1% in 2017. But for Eastern and Greater Accra, all regions recorded marginal gains.
Upper East and Upper West regions were the highest performing for skilled delivery at 75.5% and 70.9% respectively, while Volta region still recorded the least (46.3%) and remained the only region with a coverage below 50%. The details of sector performance on skilled delivery are shown in Figure 27 and Table 28 below.

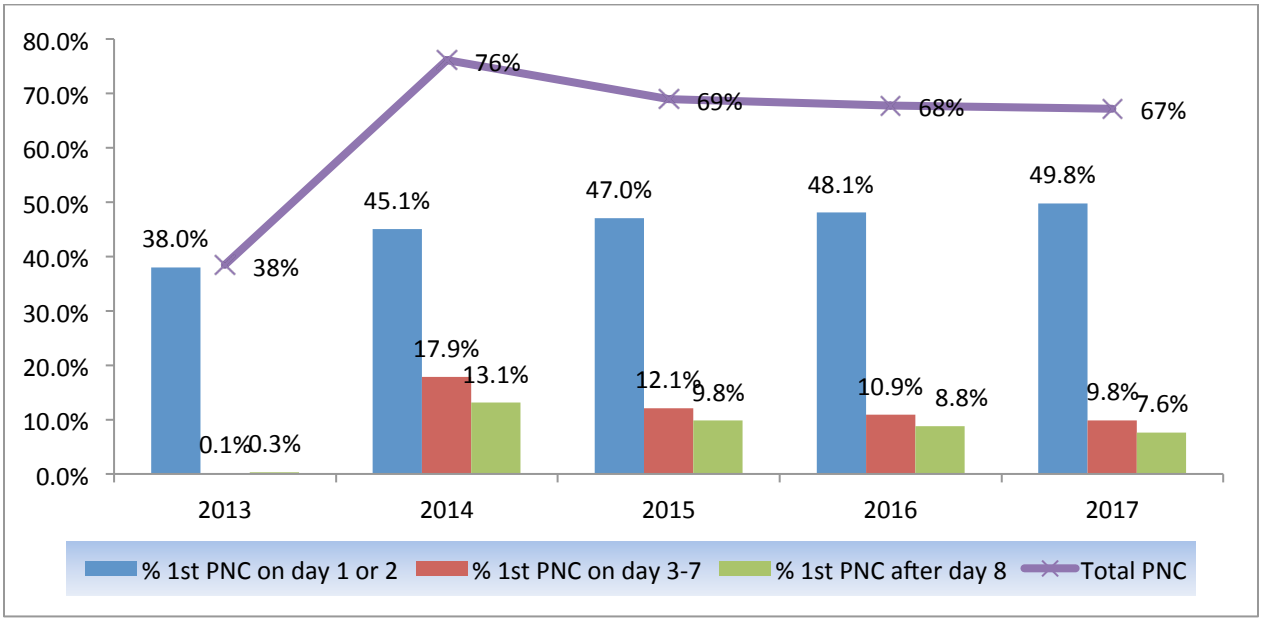
Table 19 Skilled Delivery Coverage by Region, 2013 to 2014

YEAR	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2013	56.9%	66.5%	59.0%	53.9%	58.1%	51.8%	68.4%	59.3%	44.5%	56.3%	56.8%
2014	55.6%	67.1%	61.8%	55.4%	61.5%	55.0%	74.4%	64.6%	46.4%	61.2%	58.9%
2015	54.1%	63.6%	59.4%	52.1%	60.9%	53.8%	74.8%	63.1%	44.7%	58.3%	57.0%
2016	52.8%	62.0%	57.2%	52.2%	58.6%	58.0%	74.8%	68.7%	44.3%	56.1%	56.4%
2017	53.2%	63.2%	58.7%	51.0%	55.1%	64.1%	75.5%	70.9%	46.3%	58.7%	57.1%

3.5.6 Post-Natal Care Coverage

First post-natal care coverage has consistently increased over the period by 31.1% from 38.0% in 2013 to 49.8% in 2017. Total PNC coverage however declined by 12% from a total coverage of 76% in 2014 to 67% in 2017 as depicted in Figure 28.

Figure 26 Post-Natal Care Coverage, 2013 to 2017

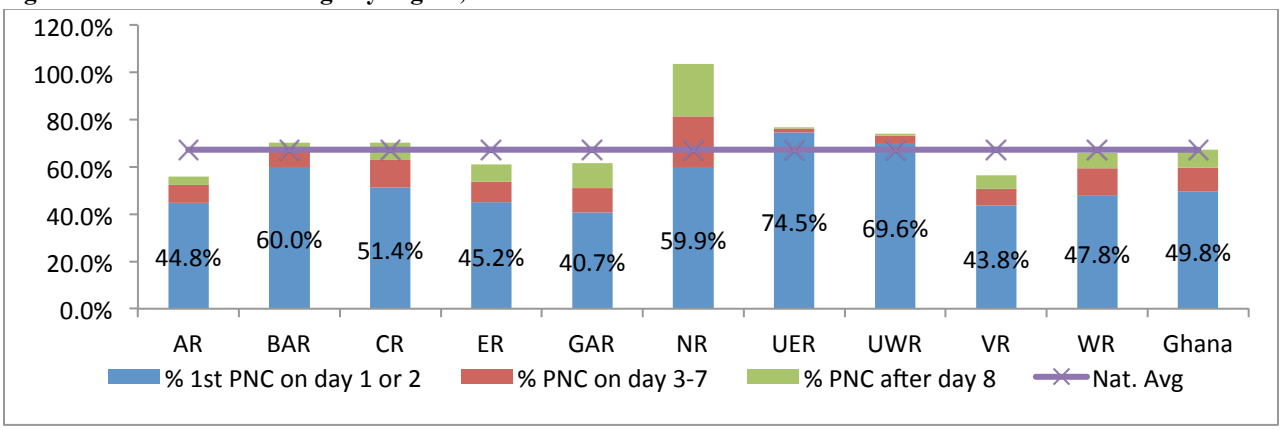


There are huge variations in 1st PNC coverage of the regional performances with the highest performance in Upper East region (74.5%) and the least in Volta region (43.8%). Northern region has attained a total PNC coverage of 103.6% in 2017. Ashanti, Greater Accra, Western and Volta regions have consistently recorded PNC coverage lower than 50% even though they showed a minimal upward trend. The poor performance of the Ashanti and Greater Accra region could be attributed to the large number of private facilities that do not report. Table 22 and Figure 29 show regional variations for PNC coverage.

Table 20 Coverage for 1st Post-natal Care on day 1 and 2 by region, 2013 to 2017

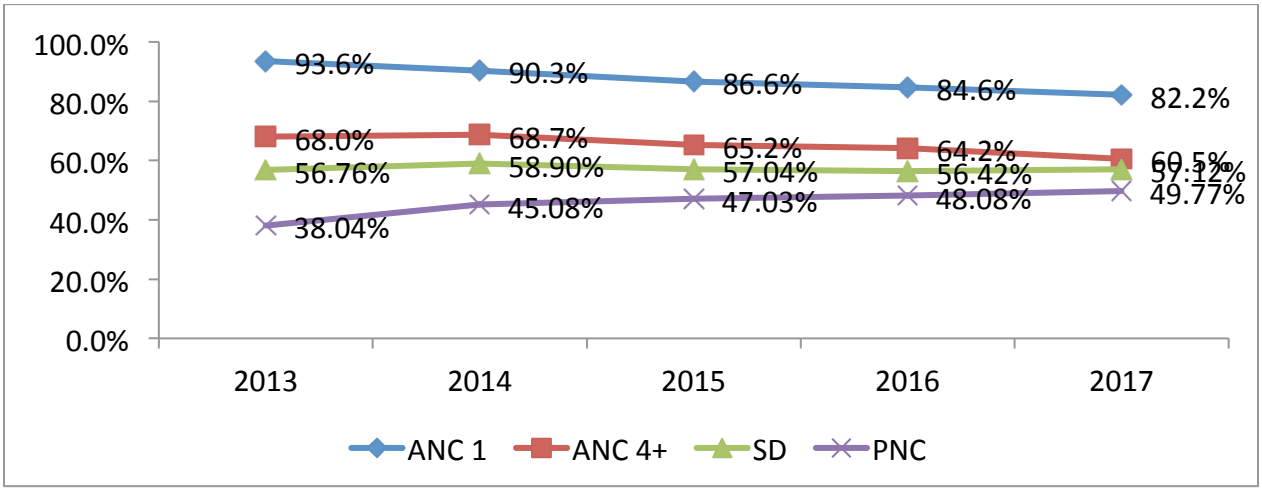
Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2013	23.8%	35.8%	30.9%	50.0%	32.5%	54.6%	69.0%	64.4%	36.0%	35.3%	38.0%
2014	36.2%	47.6%	36.2%	52.6%	40.0%	58.9%	75.2%	68.5%	41.7%	38.2%	45.1%
2015	39.0%	54.3%	47.9%	48.0%	43.6%	52.8%	75.1%	65.2%	41.7%	41.9%	47.0%
2016	41.0%	58.7%	48.8%	47.0%	42.3%	55.1%	75.2%	69.7%	41.3%	43.8%	48.1%
2017	44.8%	60.0%	51.4%	45.2%	40.7%	59.9%	74.5%	69.6%	43.8%	47.8%	49.8%

Figure 27 Total PNC coverage by region, 2017



There is growing concern about the inability of the health facilities to retain pregnant women for maternal health services from pre-natal to post-natal period. There are higher encounters with health services at 1st ante-natal (82%) which declined to 60.5% (ANC 4+) and further to 49.8% for PNC. While there are clear data capturing and reporting issues that required urgent attention, there is also indication that some of the policy initiatives to address this challenge are poorly implemented. For instance, the policy that all women delivering in health facilities should receive their 1st PNC between 6 - 48 hours if implemented properly would have closed the gap between facility delivery and 1st PNC. Figure 30 demonstrates the variations in these four maternal health service indicators.

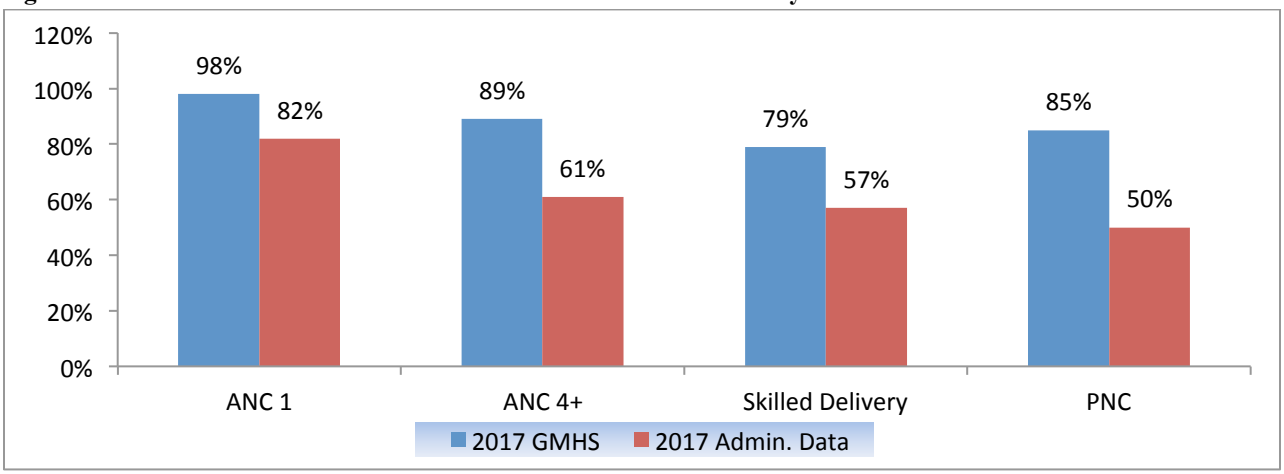
Figure 28 Variations in Some Maternal Health service indicators



Contrary to the performance using administrative data for the maternal health indicators, survey data (Ghana Demographic and Health Survey- GDHS, Multiple Indicator Cluster Survey - MICS and Ghana Maternal Health Services - GMHS) consistently showed high coverage for most of the

indicators. The preliminary report of the 2017 GMHS shows 97.6% of all expectant mothers received antenatal care from skilled providers, 89.3% of expectant women received four or more antenatal care, 79.4% of deliveries by skilled providers and 85.3% [1]of new mothers received postnatal care within first two days after birth. It is important to note that the postnatal care included those provided by Traditional Birth Attendants (TBA). Figure 31, below show the relationship between the performance of some maternal health indicators using the survey and administrative data.

Figure 29 Performance Some Maternal Health Indicators from Survey and Admin. Data



Source: MoH and 2017 GMHS

Caution must however be exercised in comparing the two data sources since the input varied with regard to the reference period. While the administrative data accounted for services or events occurring in the year 2017, the survey data accounted for the most recent birth to women aged 15-49 in the 5 years preceding the survey. This implied that if the most recent birth to any woman within the sample was in 2015, the survey would account for the ANC, ANC4+, SD and PNC with respect to this 2015 birth to the woman.

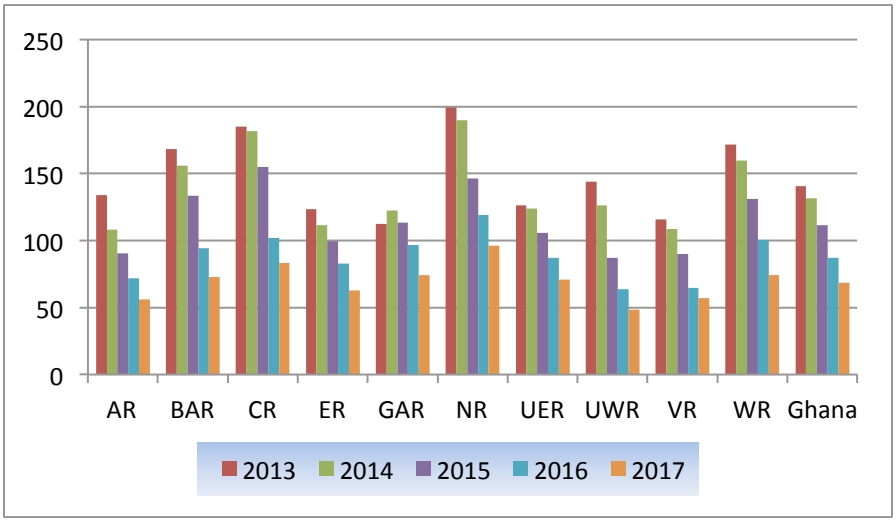
Training, recruitment and retention of midwives were some the critical interventions envisaged to positively influence the health sector performance in maternal and child health. During the medium term ending in 2017, huge investments were made to increase the number of midwives in the sector with a target of a midwife to Women in Fertility Age (WIFA) population ratio of 1: 1,250 by end of 2017 from a 2013 baseline ratio of 1: 1,487.

[1] Includes women who received PNC from a Doctor, midwife, nurse, CHO or TBA

3.5.7 Midwife Productivity Index

The number of midwives increased by 5,372 (128.4%) from 4,185 in 2013 to 9,557 in 2017. The highest recruitment was done in 2017 when 2,255 midwives came on stream representing an increase of 30.9% relative to 2016 total number of midwives. This huge increment in the number of midwives within the past four years has not translated into improved institutional maternal health indicators. Antenatal care and skilled delivery deteriorated within the period under consideration. Figure 32 demonstrates the consistent decline in number of deliveries per midwife.

Figure 30 Number of Deliveries per Midwife per Year by Region, 2013 to 2017



Using the delivery per midwife per annum as productivity index, then the productivity of midwives has significantly deteriorated by 51.3% from 141 deliveries per midwife per annum in 2013 to 68 deliveries per midwife per annum in 2017. Currently, midwives in Northern regions are relatively more productive while those in Upper West regions are the least productive at 96 and 48 deliveries per midwife per annum respectively. There are about 6 deliveries per midwife per month on average nationally. This translates to one (1) delivery per midwife every five days as depicted in Table 23.

Table 21 Midwife Productivity by region, 2017

Region	Total skilled Deliveries	Total Midwives	Deliveries/ midwife/year	Deliveries /midwife/per month	No. of Deliveries/ Midwife/ Per yr	No. of Days to Delivery one pregnant woman
AR	119,313	2,130	56	5	0.16	6
BAR	66,956	917	73	6	0.20	5
CR	62,056	745	83	7	0.23	4
ER	60,789	970	63	5	0.17	6
GAR	106,150	1,430	74	6	0.21	5
NR	75,510	784	96	8	0.27	4
UER	33,964	478	71	6	0.20	5
UWR	22,288	462	48	4	0.13	7
VR	45,507	796	57	5	0.16	6
WR	62,888	845	74	6	0.21	5
Ghana	**655,421**	**9,557**	**69**	**2**	**0.19**	**5**

World Health Organization (WHO) recommends one skilled birth attendant for every 175 pregnant women per annum. Ghana is currently around skill delivery coverage of 60%. Accordingly, if you take 60% of expected deliveries (713,055) in 2017 and assume that a midwife would optimally attend to 105 deliveries per annum (60% of WHO standard), then Ghana required 6,791 midwives to adequately attained to the deliveries seen in 2017. With a total 9,557 midwives in 2017, it implies a surplus of about 2,766 midwives during the period under review. The following tables 24, 25and 26 show the total number of midwives, number of midwives required to cover 60% of deliveries and the midwife gap (deficit or surplus).

Table 22 Total Number of Midwives by Region, 2013 to 2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2013	855	382	298	479	880	273	232	120	342	324	4,185
2014	1,066	426	328	556	884	313	261	152	390	387	4,763
2015	1,274	482	382	600	972	408	311	219	465	458	5,571
2016	1,606	696	593	736	1,132	551	383	331	657	617	7,302
2017	2,130	917	745	970	1,430	784	478	462	796	845	9,557

Table 23 Number of Midwives Required Cover 60% of Expected Deliveries by Regions, 2013 to 2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2013	1,184	566	552	641	1,004	617	248	170	521	576	6,079
2014	1,216	579	569	654	1,036	635	251	173	534	588	6,234
2015	1,248	605	604	668	1,068	648	255	175	548	633	6,453
2016	1,282	606	604	682	1,101	673	257	180	561	612	6,557
2017	1,314	622	620	708	1,128	690	278	185	569	675	6,791

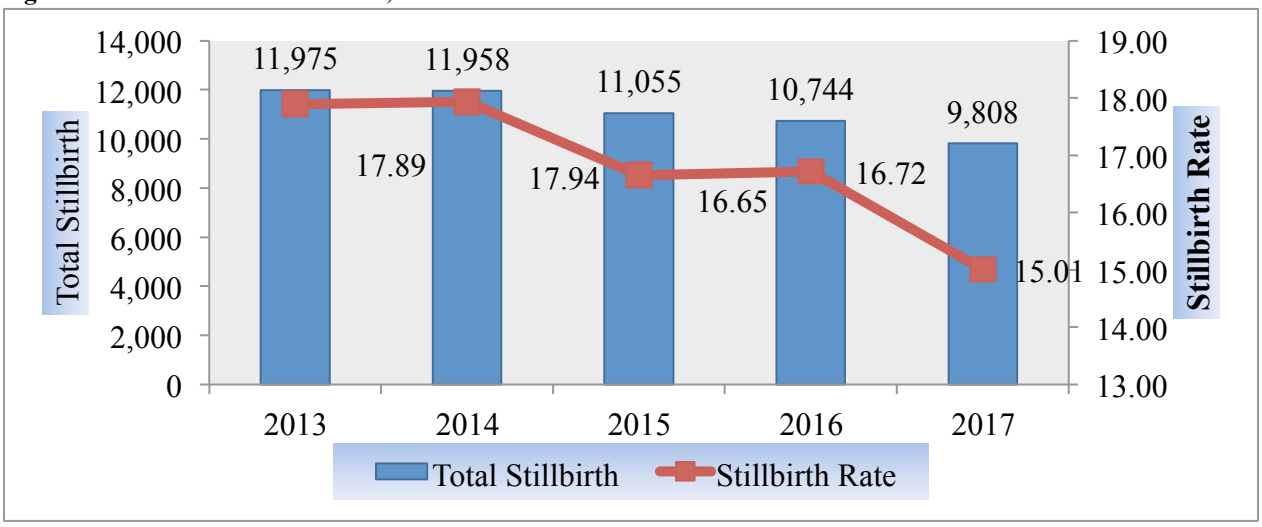
Table 24 Midwifes gap (Difference between Table 24and Table 25) by Region, 2013 to 2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2013	329	184	254	162	124	344	16	50	179	252	1,894
2014	150	153	241	98	152	322	-10	21	144	201	1,471
2015	-26	123	222	68	96	240	-56	-44	83	175	882
2016	-324	-90	11	-54	-31	122	-126	-151	-96	-5	-745
2017	-816	-295	-125	-262	-302	-94	-200	-277	-227	-170	-2,766

3.5.8 Still Birth Rate

Still birth has declined by 8.7% from 10,744 in 2016 to 9,808 in 2017. This represents a reduction of 10.2% in stillbirth rate from about 17 per 1,000 live births in 2016 to 15 per 1,000 live births in 2017. The decline in stillbirths has been gradual and consistent during the medium term period under review. The total stillbirths decreased by 18% (2,167 stillborns) from 11,975 in 2013 to 9,808 in 2017 as depicted in Figure 33.

Figure 31 Trend of Stillbirth Rate, 2013 to 2017



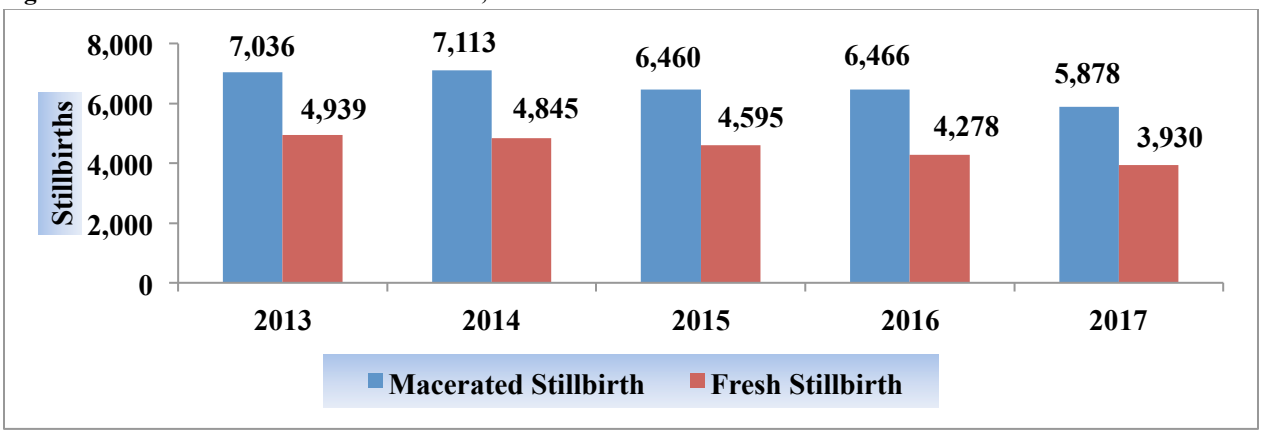
Stillbirth rates across the regions and at the national level showed similar trends. While 8 regions recorded a decline in 2017 performance relative to 2016 stillbirths, Ashanti region deteriorated from about 14 per 1,000 live births to 15 per 1,000 live births. Upper West region also stagnated in 2017 stillbirth rate performance compared to 2016 at about 14 per 1,000 live births. Table 34 show the regional performance from 2013 to 2017.

Table 25 Stillbirth Rate by region, 2013 to 2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	GH
2013	12.48	18.39	21.08	18.80	18.19	21.93	16.60	20.02	19.45	22.92	17.89
2014	14.83	17.18	19.36	16.26	19.14	21.33	15.80	18.66	18.43	20.25	17.94
2015	15.10	17.20	16.70	17.15	15.32	18.53	15.28	15.74	17.47	19.70	16.65
2016	14.40	15.45	18.60	15.88	16.96	18.95	15.67	13.85	19.20	18.36	16.72
2017	15.36	13.90	14.20	14.35	15.30	16.44	13.39	13.95	14.95	16.04	15.01

Macerated stillbirth still constitutes a higher (60%) proportion of stillbirths and this calls for the need to review the quality and coverage of antenatal care services. Although contact is made with larger (82%, 2017) number of pregnant women, during the course of their pregnancy, large drop-out rate means their conditions cannot be tracked and managed appropriately resulting in the relatively high macerated stillbirths. Figure 34 compares macerated and fresh stillbirth for the period 2013 to 2017.

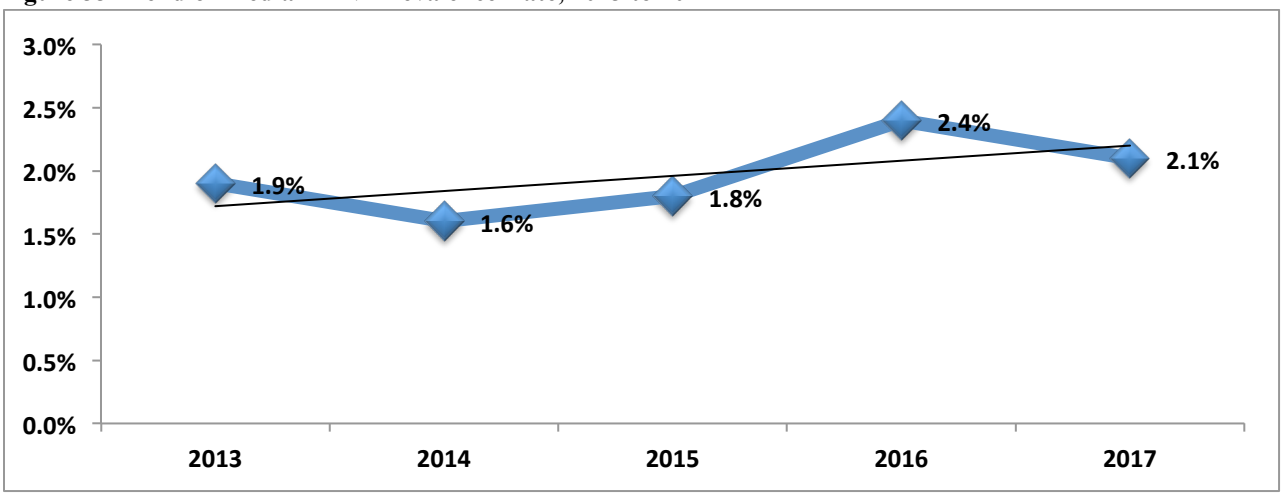
Figure 32 Macerated and Fresh Stillbirths, 2017 to 2017



3.5.8 HIV and AIDS

The National AIDS/STI Control Program (NACP) continue to lead the Health Sector response to fight the HIV and AIDS epidemic with the main objective to reduce the incidence of HIV infection among the population and reverse the recent rising trends. In 2017, the median HIV prevalence rate dropped by 12.5% from 2.4% in 2016 to 2.1%. During the period 2013 to 2017, the prevalence rate showed a rising trend. It declined in 2014 to 1.6% and then started rising until it peaked at 2.4% in 2016 and finally dropped to 2.1% in 2017 as depicted in Figure 35.

Figure 33 Trend of Median HIV Prevalence Rate, 2013 to 2017



One of the key strategies to the national HIV and AIDS response is early detection and management. People are encouraged to go through HIV counseling and testing to know their status. The total number of persons who completed the counseling and testing process increased from 798,763 in 2014 to 1,271,347 in 2017. Table 28 shows the categories of persons who were counseled and tested in 2017.

Table 26 Category of Persons Who went through Counseling and Testing, 2017

Region	Men tested	Men Positive	Non-Pregnant Women tested	Non-Pregnant Positive	Pregnant Women Tested	Pregnant Women Positive	Total Tested	Total Positive
AR	22,907	2,695	31,182	5,588	141,237	2,719	195,326	11,002
BAR	21,836	1,647	37,086	3,657	84,693	1,800	143,615	7,104
CR	13,765	1,084	22,895	2,113	73,706	1,464	110,366	4,661
ER	24,328	2,129	34,095	4,108	79,452	2,090	137,875	8,327
GAR	34,186	3,279	49,463	5,845	136,901	2,956	220,550	12,080
NR	5,182	354	10,547	941	102,211	1,600	117,940	2,895
ER	5,558	289	7,914	543	36,505	253	49,977	1,085
UWR	8,735	250	13,645	422	24,708	386	47,088	1,058
VR	30,328	1,455	50,638	3,349	65,486	888	146,452	5,692
WR	12,852	1,240	14,014	2,443	75,292	1,673	102,158	5,356
Total	**179,677**	**14,422**	**271,479**	**29,009**	**820,191**	**15,829**	**1,271,347**	**59,260**
% +ve		**8.0%**		**10.7%**		**1.9%**		**4.7%**

3.5.10 Elimination of Mother to Child Transmission of HIV (eMTCT)

Out of 15,829 pregnant women who were tested HIV positive, 67% (10,568) received Anti-Retroviral (ARV) treatment for the elimination of Mother to Child Transmission (eMTCT) of HIV. This represents a significant (32%) improvement in the proportion of HIV positive pregnant women who received ARVs for eMTCT. Pregnant women in Upper West, Northern and Western regions are less likely to receive ARVs for eMTCT. Volta and Upper East regions attained the higest coverage for the eMTCT at 90% and 87% respectively. Figure 36 and Table 29 showed the proportion of pregnant women who received ARVs for eMTCT and eMTCT implementation by regions

Figure 34 Proportion of Pregnant Women Who Received ARVs for eMTCT, 2013 to 2017

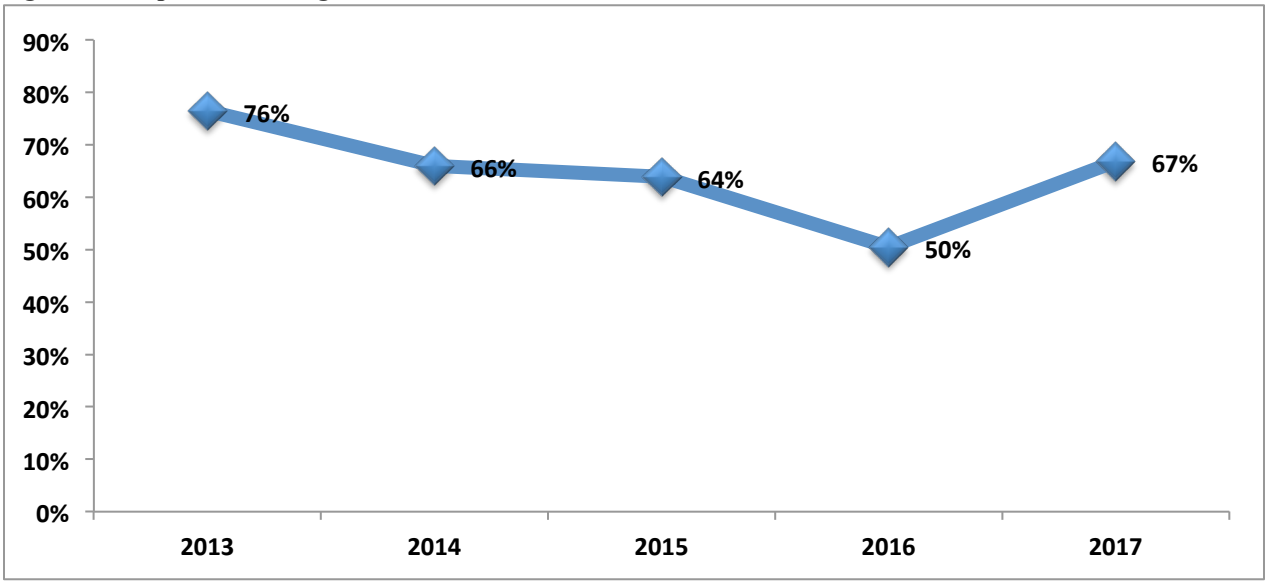


Table 27 Proportion of Pregnant Women Who Received ARVs for PMTCT by Regions, 2017

Region	Regional Targets for Testing	No. Tested	Regional Coverage	Number Positive	No. Given ARVs	Proportion Given ARVs
AR	226,479	141,237	62%	2,719	2,069	76%
BAR	106,955	84,693	79%	1,800	1,395	78%
CR	106,774	73,706	69%	1,464	729	50%
ER	120,428	79,452	66%	2,090	1,533	73%
GAR	194,443	136,901	70%	2,956	2,331	79%
NR	118,841	102,211	86%	1,600	569	36%
UER	45,393	36,505	80%	253	219	87%
UWR	31,728	24,708	78%	386	121	31%
VR	99,170	65,486	66%	888	800	90%
WR	108,053	75,292	70%	1,673	802	48%
Total	**1,158,263**	**820,191**	**71%**	**15,829**	**10,568**	**67%**

3.5.11 HIV Treatment for Newborns

A total of 8,082 infants who were HIV exposed due to their mothers' HIV positive status were screened using DNA PCR as part of the national strategy for the eMTCT through Early Infant Diagnosis (EID). Six hundred and forty-three (643) representing 8% of infants screened were positive at 18 months. This translates to 92% of infant who were exposed to HIV positive mothers but were successfully protected for HIV infection at 18 months. The proportion of babies born to HIV positive mothers who tested negative at age 18 months was 92% in 2017 compared with 88% in 2016. Western region recorded the highest of 94% of infants who remain HIV negative at age 18 months while Central and Eastern regions recorded the least at 89% HIV negative infants as depicted in the Table 30

Table 28 Early Infant Diagnosis Implementation by Region, 2017

Region	Target	Actual Exposed Babies	Total Screened	Coverage of target	Coverage of exposed babies	No. +ve	% +ve
AR	3,017	1173	957	32%	82%	79	8%
BAR	2,801	1065	719	26%	68%	38	5%
CR	1,508	402	301	20%	75%	32	11%
ER	3,987	868	2,005	50%	231%	221	11%
GAR	3,340	1521	1,515	45%	100%	153	10%
NR	646	191	121	19%	63%	10	8%
UER	1,508	106	315	21%	297%	19	6%
UWR	1,401	85	222	16%	261%	14	6%
VR	2,370	489	312	13%	64%	16	5%
WR	2,586	509	1,615	62%	317%	61	4%
TOTAL	**23,165**	**6409**	**8,082**	**35%**	126%	**643**	**8%**

3.5.12 Childhood Immunization

The national immunization coverage continues to improve over the years using penta 3 as proxy, however, there are still significant regional and district variations. The penta 3 coverage for 2017 was 97.8% compared with 94.9% in 2016. Central region had the least performance at 85.9%. With denominator population issues in Northern, Brong Ahafo and Eastern regions, it is important to now start targeting specific districts while sustaining the national coverage. Table 31, shows immunization coverage by regions.

Table 29 Trend of Immunization Coverage by Regions, 2013 to 2017

Year	2013	2014	2015	2016	2017
AR	89.7%	96.2%	96.1%	104.9%	95.8%
BAR	93.4%	98.5%	97.7%	101.4%	108.3%
CR	84.4%	88.6%	89.0%	86.7%	85.9%
ER	86.1%	88.3%	94.1%	102.1%	102.5%
GAR	76.3%	76.4%	85.4%	83.0%	93.4%
NR	113.8%	117.0%	112.6%	121.9%	124.7%
UER	86.8%	90.3%	88.2%	84.5%	85.2%
UWR	81.0%	82.6%	81.0%	82.5%	84.1%
VR	76.8%	84.6%	86.4%	84.1%	88.3%
WR	92.6%	97.4%	90.2%	91.4%	94.9%
Ghana	88.2%	92.2%	93.2%	96.2%	97.8%

3.5.13 Tuberculosis Treatment

Tuberculosis treatment success rate has improved marginally from 86% in 2016 to 87.2% in 2017. The falling Tb case notification rate has been of concern over the years. The case notification rate for TB fell from 64.4% in 2009 to 47.9% in 2017. There is the need to look at new strategies of identifying the TB cases. The introduction of Gene Xpert to improve diagnosis of TB is one of the new strategies. Commitment from health workers is key since the technology alone is not enough.

3.6.0 Intensifying Prevention and Control of NCDs and Other CDs

3.6.1 Non Polio AFP Rate

As part of the strategy of ensuring that Ghana maintains its polio free status and prepare adequately for certification as being polio free, surveillance for polio was maintained. The target is to detect at least 2% non-AFP polio cases per 100,000 children aged less than 15 years annually from stool samples collected with a stool adequacy of 80% in more than 80% of all districts in the country. No new polio cases were detected during the year. The AFP surveillance annualized non-Polio AFP rate was 4.28 in 2017 compared to 3.5 in 2016.

4.0 PROGRAMME IMPLEMENTATION

The health sector plan is based on the Programme Based Budget (PBB) structure. It is made up of four main programmes with 16 sub programmes which matched closely related activities that various agencies under the Ministry of Health are mandated to perform. Programmes one to four deals with Management and Administration, health services delivery, Human resources for health development and management and health sector regulation respectively

4.1.0 Programme 1: Management and Administration

4.1.1 Sub Programme 1.1 Management and administration

Programme 1 has five sub programmes which are implemented at the Ministry level. Sub programme 1, which deals with management and administration had four main activities. These include:

- Management and administration
- Monitor and review Health Sector programmes and activities
- Conduct Evaluation and Impact Assessment Activities
- Implement Private Sector Policy

During the year under review, four (4) major monitoring visits were organised to the regions and districts. The reports were discussed at the August and November business meetings. The Monitoring visits among other things tracked funds meant for the lower levels, equipments, looked at status of implementation of key programmes such of MAF and MCHP implementation. The major concern of the regions and districts are the timing of release of MCHNP funds and the breakdown of equipment purchased under MAF. The agencies would like a review of the procurement process to allow them a say on the type and make of equipment, Equipment maintenance through various maintenance agreements.

Guidelines for contracting PPP initiatives was developed as part of efforts to operationalize aspects of the private sector policy and also enable the Ministry review earlier agreements under the guise of PPP arrangements. The development of the guidelines would also help accelerate PPP arrangements in the sector. For the second year running, the private sector summit could not be organized for financial reasons. The private sector summit, brings together various operators in the private health sector, policy makers from the Ministry of Health and other MDAs and development partners to discuss contemporary issues concerning the development of the private sector.

Efforts aimed at improving monitoring and evaluation in the sector are yielding results. The Ministry of Health provided both financial and technical support to the Ghana Health Service to develop an assessment tool as part of efforts by the Ghana Health Service to transform the way regional reviews are done. The assessment tool is an adaptation of the Ministry's assessment tool which has been in use for the past eight years. The Ghana Health Service successfully used the tool to assess regional performance. The assessment results formed the bases of regional performance reviews throughout the country.

The Ministry of Health also provided support to the four Teaching Hospitals to develop Key Performance Indicators (KPI) tailored to their peculiar circumstances. A draft Assessment tool has also been developed for the Teaching Hospitals and all things being equal a peer assessment regime would be introduced in the ensuing year.

With the support of the WHO AFRO, the Ministry is establishing a National Health Observatory (NHO). An analytical country profile has been developed as part of the process and a mission is expected in 2018 to conduct training on statistical analysis and management of the web site

A zero draft of the sector's Common Management Arrangement have been drafted. The Common Management Arrangement (CMA) sets out arrangements for effective collaboration and coordination within the health sector Term Development. It is aimed at ensuring effective achievement of the Health Sector Medium Plan.

The Ministry of Health in collaboration with the World Health Organisation initiated a programme of work to identify and address inefficiencies across health programmes within the overall health system. The programme involves data collection and analysis. The World Health Organisation is providing Technical Assistance in the form of consultants. It is hoped this approach with a focus on strengthening accountability for results can improve alignment of health programmes and facilitate dialog to appropriately address and shape health policy. Currently the team is working with the Ghana Health Service to identify all the data gaps.

An assessment of the national health policy was conducted with the intention of revising it to conform with contemporary trends and align it to current policy direction of the government. As at December 2017 a draft policy document has been developed. A stakeholder consultation is envisaged to gather views regarding the relevance of proposed modification to the Health policy.

A process was initiated aimed at strengthening the public financial management system. The PFM plan was completed and disseminated. Implementation of aspects of the plan was also started with the training of key officers of the Ministry and agencies. The Capital Investment plan was reviewed to take on new policy guidelines as outlined by the new government. The review has been completed and the document is awaiting printing.

The under listed regulations and Bills were also completed during the year and submitted to the Attorney General's Office for review and advice.

- Specialist Health Training and Plant Medicine Research Act, 2011 (Act 833)
  - Ghana College of Pharmacists
  - Ghana College of Physicians and Surgeons
  - Centre for Plant Medicine Research

- Bills
  - National Ambulance Service
  - National Blood Service
  - Traditional Alternative Medicine Bill.

- The Health Service (decentralization) Bill currently on hold

Research Statistics, and Information Management

The Ministry of Health through the RSIM initiated a study to identify causes of maternal deaths in 50 selected districts in Ghana. To date, data has been collected and cleaned.

Pharmacy

The Ministry of Health has completed an Antimicrobial Resistance policy to guide and coordinate interventions aimed at minimizing the emergence and spread of antimicrobial resistance. The draft policy document as part the consultative process has been sent to the Ministry of Environment, science, technology and innovation, Fisheries and aqua culture and food and agriculture for their inputs. An accompanying draft national action plan has also been developed.

As part of government policy to make health care more accessible and affordable, the Ministry of Finance was tasked to develop a list of selected pharmaceutical products not manufactured in Ghana to be exempted from VAT. The Ministry of Finance further consulted the Ministry of Health to help develop a list of selected imported pharmaceutical products not manufactured in Ghana that should qualify for exemption from VAT. The list have been developed and report submitted.

The Standard Treatment Guidelines (STG) and Essential Medicines List have been developed and is in print. The STGs provide guidance to clinicians to appropriately prescribe suitable medicines to achieve optimal treatment results for identifiable clinical problems.

Development of the 2017 POW

A draft 2017 POW was developed in 2016 as part of the policy and budget process facilitated by the Ministry of Finance. In 2017, the new government presented its agenda and the 2017 Health Sector POW was revised to reflect the new direction.

Development of the HSMTDP

The current HSMTDP 2016-2017, developed under the GSGDA II will end in 2017. In early February, the MOH worked with the NDPC to develop the medium-term framework for the Health Sector. Further to this, the MOH has developed a draft HSMTDP 2018-2020 based on the medium-Term framework of the current government. The HSMTDP 2018-2021 is expected to be completed by November 2017

Finance and Audit

A validation of Budget management centres' financial report was carried out in all 10 regions. This include 85 health institutions, 5 teaching Hospitals, 3 psychiatry hospitals and other subverted organisations. The financial statement for 2016 was prepared by March ending 2017. The financial monitoring and reporting Unit developed and deployed electronic cash book for all account holders at the Ministry to facilitate timely monitoring and reporting.

Financial Monitoring at the lower levels was also identified as a major factor in poor performance in financial management. Delay in financial reporting is a major challenge. Reporting lags behind by about 3 months.

4.1.2 Sub Programme 1.5 Procurement, Supply and Logistics

Sub Programme five provide for procurement, Supply and Logistics. Five main activities were planned under this sub programme. These include;

- Completion and implementation of procurement plan.
- implementation of supply chain master plan
- Distribution of effective warehousing and monitoring health commodities
- Execution of timely clearance of commodities

Procurement of Medical Equipment under Millennium Accelerated Framework (MAF) Phase II has been completed. Distribution and installation of equipment has started. The MOH received financial support from EU and DANIDA to support the Millennium Development Goals Acceleration Framework (MAF) Part of these funds was used for procurement of Medical Equipment to support the activities of the project (Phase II).

The Ministry initiated procurement process using Restricted Tendering procedures for the selected items (19 items). Following receipt of concurrent approval from the Central Tender Review Committee and Ministry of Finance, the Ministry awarded contracts to the eight suppliers. The grand total contract sum was USD12,123,422.22. This excludes the local taxes component of 17.5%. 50% of the payments have been done as part of the contract with the exception of 1.

As part of the roll up arrangement, the Ministry has begun implementation of aspects of the supply Chain master plan. About 50% of health facilities at service delivery points have been covered under the Last Mile Distribution System. About 50% of health commodities are being stored at the Regional Medical Stores from where they are distributed to the various levels. The Ministry secured tax exemption for clearing health commodities from the Port. The ministry was able to clear 45% of commodities from the port on time.

The Ministry of Health is sourcing funds for the reconstruction of the Central Medical stores. A restructuring exercise to strengthen and make procurement in the sector more efficient has been conceived . This may include a possible merger of the Ministry's procurement outfit with that of

the Ghana Health Service. As part of the strengthening exercise the Ministry has begun implementation of various aspects of the Supply Chain Management Plan which was completed recently. The Supply Chain Management Plan has three components. The components are;

i. Logistics Management Information System (LMIS)
    a. LMIS is being developed in collaboration with the Global Fund. The road map for the system has been accepted by all stakeholders and proposals from interested parties are being evaluated

ii. Last Mile Distribution
    b. About 50% of health facilities covered under Last Mile Distribution of Commodities with the Northern, Eastern, Greater Accra and Volta regions being the main beneficiaries.
    c. Fifty percent of health commodities being stored at Regional Medical Stores from where distribution to District level and below are done

iii. Framework Contracting.
    a. The ministry has opted for Framework contracting which allows negotiation on prices and quality of medicines. It is anticipated that the contracting process will help improve efficiency in procurement and overcome fragmentation of the procurement process and bring about transparency into the process.
    b. Tender documents were launched and closed in 2017. The Ministry is currently reviewing documents and contracts are expected to be awarded by end of March 2018

The Ministry of Health successfully negotiated payment of its 2016 indebtedness to the GAVI and fully paid its financial obligation for 2017 in full. The Ministry as a result will pay its indebtedness to GAVI in three installments. This arrangement enabled the ministry to forestall major vaccine shortage in the country. Donor confidence in the Ministry as a result has improved. The Minister of Health currently serves on the boards of UNAIDS and GAVI.

4.2.0 Programme 2: Health Service Delivery

Programme 2 seeks to deliver healthcare interventions and health services at the primary and secondary care levels in accordance with approved national policies. It includes provision of pre-hospital services, as well as the conduct and use of research to inform policy and practice. It has five sub-programmes. The sub-programmes are:

- Strategy Formulation and Operational Coordination
- Primary and Secondary Health Services
- Tertiary and Specialized Health Services
- Research
- Pre-Hospital Services

As part of Efforts aimed at strengthening management systems within the Ghana Health service, Nursing and Midwifery Managers were taken through three (3) Modules in Leadership and Management training. Module I of training was carried out in eight (8) regions with total of Eight Hundred and Thirty (830) Nursing and Midwifery Managers participating. about 174 Health Managers also took part in the HAMS training whilst 1,300 non-finance managers at the District Health Directorate and Sub-District levels were trained in Public Financial Management.

Development of Staffing norms for some category of health workers was completed during the year. It was used a basis for the allocation of some category of health staff to the Regions in 2017. Although the Ghana Health service planned to deployed IHRIS to the regions and districts, they could undertake the task for lack of funds.

The Ghana health Service introduced a number of programmes to improve access to and appropriately manage non communicable diseases. Key among them include;

- Screening Hospitals for Hypertension and Diabetes have been established in all Regional Hospitals. Some District Hospitals have also set up screening for Hypertension, Diabetes and cervical cancer
- Training on Screening for Precancerous and Cancerous Cervical Lesions. Participants for the training were from 21 selected facilities, PPAG and Marie Stopes. Funding for the training was from PATH.
- Development and printing of health education materials on NCDs in collaboration with WHO and Health Promotion. Cervical cancer brochure, leaflets and posters were designed and printed. The materials were distributed to the Regional Health Administrations, and selected facilities.
- Completion of the WHO Country Capacity Survey on NCDs. Final work was submitted to the WHO

The service encounters numerous challenges. Key among them include the following;

- Inequitable Distribution of Doctors, Midwives and Nurses
- Overage vehicles in Regions and Districts

- Public Health Emergency committees not functioning optimally
- Lack of data collection Tools- Registers and reporting forms
- Poor data collection for Non- communicable diseases.
- Weak District and sub-district Teams.
- Delays in submissions of claims for reimbursement by some GHS facilities.
- Delayed reimbursement from NHIA

4.2.3 Sub Programme 2.3 Tertiary Health Services

Sub-programme 2.3 deals specifically with provision of tertiary and specialized services to all resident of Ghana. During the period under review, performance at the four teaching hospital was mixed.

While KATH and CCTH have recorded some level of improvement in their OPD visit and hospital admissions, KBTH and TTH recorded a decline relative their performance in 2015. However, institutional deaths increased across all four hospitals. Although Institutional Maternal ratio situation has generally deteriorated, the situation in KATH has improved from 1,056.89 per 100,000LB in 2016 to 1020.52 per 100000 Live Births in 2016. The Tamale teaching hospital unlike KATH recorded more (from 39 in 2015 to 66 in 2016) maternal deaths thereby increasing its iMMR from 570/100,000LB to 896/100,000LB in 2016.

There were some specialist outreach service delivery to the peripheral health facilities by KATH (30 outreach visits) and TTH (20 outreach visits) during the period under review, mainly in the areas of maternal and child health services. The management of the teaching hospitals are concern about the high logical cost involved in organizing outreach services to the regional and district levels and urged policy makers either appropriately make budgetary allocation for it or allow for services provider during such visits to be claimed under the NHIS by the host hospitals.

Three out of the four teaching hospitals have conducted client satisfaction survey in 2016 with highest client satisfaction reported CCTH (99%) and the least at TTH (45.7%). With client satisfaction level of 65% in the KATH, the average client satisfaction across the teaching hospitals was about 70% in 2016.

4.2.4 Sub Programme 2.4 Research

In an effort to undertake and or conduct Scientific research, the Ghana Health Service through their research directorate carried 30 research studies. During the period, 738 protocols were reviewed, 710 were approved and 28 protocols were deferred for redesign.

The GHS is determined to put in place measures to enhance support for research. As a result, 28 publications were made in peer-review journals whilst 24 senior/junior researchers and health professionals were trained in scientific writing and publication. A research capacity strengthening programme was carried out for 16 middle-level scientists from the Health Research Centres. Similar training was organised for 26 scientists in Knowledge Management &Research Translation

and 16 participants for Grant Writing. Draft briefs such as introducing Meningitis A Conjugate Vaccine into Ghana's Routine Immunization Schedule were produced. All these culminated in a national research dissemination forum during the year.

4.3.0 Programme 3: Human Resource

This programme involves the training and production of health professionals including equipping them with appropriate skill mix supported by adequate resources for their training. Human Resource Development and Management covers pre-service and post-basic training as well as specialised training at all levels. The sub-programmes are:

- Pre-Service Training
- Post-Basic Training
- Specialized Training

4.3.1 Sub Programme 3. Training and Recruitment

A total of 14,747 Health Staff were granted clearance for recruitment in 2017. The Table 32 below provide details of staff recruited

Table 30 Category of staff

NO.	GRADE	QUANTITY
1	Nurses	11,573
2	Medical Officers	247
3	House Officers	69
4	Support Staff	1,883
5	Cuban Specialist	23
5	Allied Health Staff	938
6	Physician Assistants	14
TOTAL		**14,747**

The Ministry of Health formed a committee to restructure training unit of the Ministry of Health The Committee among others recommended the following:

- The review of the cost of forms from GH₵160.00 to GH₵100.00
- The use of electronic means of admission.

Fees charged by the schools were review downwards as follows;

- Basic Programmes: from GH₵2,520 to GH₵1,340.00
- Post Basic Programmes: from GH₵5,995 to GH₵3,345.00

4.4.0 Programme 4: Health Sector Regulation

This programme covers the regulation of the health professionals, pharmaceuticals, medical and non-medical products, food manufacturing establishments and health facilities.

4.4.1 Sub Programme 4.1 Regulation of Health Facilities

The health facilities regulatory agency was established to license and monitor health facilities for the provision of public and private health care services. It registered 487 health facilities during the year out which 135 was given license to practice their trade. The agency also developed a number of standard operating procedures to facilitate and standardize the operations of the agency.

4.4.2 Sub Programme 4.2: Regulation of Health Professionals

There are four main professional regulatory bodies regulating professionals in the health sector. These are Allied Health Professionals Council (AHPC), Nursing and Midwifery Council (NMC), Medical and Dental Council (MDC) and Pharmacy Council (PC). Table 26 and 27 below show the list of health professionals regulated by the aforementioned councils.

Medical and Dental Council

Thirteen (13) Physician Assistants training and Certified Registered Anaesthetists training institutions were inspected and duly accredited. Three Hundred and Thirty-Sixty (336) [319 General Duty Medical, 6 General Duty Dental, 11 Specialists] Practitioners took Council's Registration examinations in February and November, 2017. Hundred and Sixteen (116) passed and 220 failed.

Nine hundred and seventy-eight (978) Physician Assistants and Certified Registered Anaesthetists took the Council's Licentiate Examination. Seven hundred and seventy-eight (788) passed and two hundred and ten (210) failed.

Seven Hundred and Thirty-Seven (737) newly qualified Medical and Dental Practitioners and 721 Physician Assistants and Certified Registered Anaesthetists were inducted into the profession and provisionally registered to enable them commence their Housemanship and internship respectively. About 1,934 first year and second year house officers were duly placed in accredited institutions for Housemanship in 2017.

Physician Assistants and Certified Registered Anaesthetists in Good Standing (2014 – 2016)

Table 31 Physician Assistants and Certified registered Anesthetists in good standing

Registers	2014	2015	2016	2017
Permanent	1651	1789	2026	1502
Provisional	410	192	784	2603
Total	**2061**	**1981**	**2810**	**4105**

All the 53 institutions accredited for Housemanship are accredited for Physician Assistant (PA) and Certified Registered Anaesthetics (CRA) internship. In addition, 31 institutions were accredited for PA/CRA internship making a total of 84 institutions.

The Council registered a total of 7356 [*Provisional: 1,934; Temporary: 289 and Permanent: 5,133*] Medical and Dental Practitioners and 4105 [*Provisional: 1,502 and Permanent: 2,603*] Physician Assistants and Certified Registered Anaesthetists from January to November, 2017

Nursing and Midwifery Council

The Nursing and Midwifery Council conducted licensing examinations for 14 programmes (Nurse Assistants, Nurses and Midwives) as part of the regulatory regime and conducted three induction ceremonies for newly qualified Nurse Assistants, Nurses and Midwives. in Ghana,

Table 32 Licensure Examination Results

Programme	Candidates	Passed	%
Basic			
NAC	8,379	7,224	86
NAP	2,759	2,528	92
RGN	7,353	5,396	73
RMN	504	361	72
RCN	1,425	1,109	78
RM	3,142	2,488	79
PNNM	2,610	2,486	95
Post Basic			
OPN	51	51	100
CCN	58	57	98
ENT	54	53	98
PHN	59	59	100
PON	51	46	90
PN	7	7	100

A nationwide induction Ceremony was organized for 18,265 newly qualified Nurse Assistants, Nurses and Midwives in four Regions (Greater Accra, Ashanti, Upper East and Central Region

Quality Improvement workshop was organized for Examiners (560) in seven phases (Nsuta, Ashanti Region and Greater Accra Region) whiles 45 Emergency Nurses inducted at KATH

First Peer Reviewed Journal of Nursing and Midwifery Council (Numid Horizon) launched

Allied Health Professions Council

A total of 3547 Allied Health professionals were registered during the year. Provisional registration of given to 1,354 professionals and 861 were permanently registered. Pins were renewed for 1332 professionals.

Table 33 Professions under Allied Health Professions Council

Professions under Allied Health Professions Council	
1. Nutrition	10. Diagnostic Radiography
2. Disease Control	11. Optometry
3. Community Mental Health Officers	12. Physiotherapy
4. Dental Assistants	13. Audiology
5. Environmental Health Officers	14. Dietetics
6. Health Information	15. Medical Physics
7. Health promotion	16. Occupational Therapist
8. Medical Laboratory Science	17. Prosthetics and Orthotics
9. Sonographer	

The Council submitted One Thousand, Three Hundred and Fifty-Four (1,354) names to the National Service Secretariat to generate pins for their internship at the various accredited health facilities for the 2017/18 service year. The interns were from the Health Training Institutions that are accredited with the Council.

The Council also printed permanent and provisional certificates for the professionals who were being registered permanently and for internship respectively. One Thousand Three Hundred (1,300) Provisional Certificates were printed for the interns to commence their internship programmes whilst Eight Hundred and Sixty-One (861) permanent Registration Certificates were printed for the various allied health professionals.

Nine (9) institutions (both Public and Private) presented their curriculum for accreditation to run various allied health programmes which are being reviewed. Three (3) institutions accreditation applications were reviewed and visitations are yet to be carried out. Five (5) institutions had their accreditations reviewed with visitations. They are yet to be written to on their status. Four (4) Institutions had their programmes accreditations reviewed and their certificates issued accordingly.

The 2016 Supplementary Examination was held on 29th April 2017 at the School of Allied Health Sciences Examination Block. A total of 506 candidates registered with 417 Passes, 78 Failures and 11 Absentees. The pass rate was 82.4%

2017 Main Licensure Examination

The 2017 main Licensure Examination was held on 2nd December 2017 at three (3) examination centres simultaneously. The centres were Accra, Kumasi and Tamale which was the first time. This decision was in line with our objective of bringing the examinations closer to the professionals.

The centres registrations were as follows:

Accra	921
Kumasi	1,064
Tamale (First Time)	318
TOTAL	**2,303**

Out of 2,303 registrants, 2,138 Passed, 165 Failed and 26 Absented culminating into a pass rate of 92.84%.

Pharmacy Council

Four Hundred and Twenty applications were received from training institutions for internship. All eligible applicants (420) were posted to hospitals (273) and Communities (147) for internship. To ensure effective arrangement for internship, meetings were held in the southern and northern sectors for both preceptors (177) and interns (127). Orientation was also organised for 312 final year students.

Licensure examination was organised for 223 candidates out of which 182 passed (81.6%). Two Hundred and Eighty (280) Pharmacists were registered and inducted and 141 Pharmacy Technicians were also registered. All eligible practitioners were licensed.

UDS and Entrance UCHS received accreditation to mount Doctor of Pharmacy programme. Four other institutions were accredited to mount HND in Dispensing Technology programme

Table 34 Pharmaceutical Facility Business Operating Permit Statistics

Practitioners/ Region	OTCMS	Community pharmacies	% Renewed OTCMS	% Renewed Pharmacies
GAR	1,736	1,714	72.6	65.5
ASHANTI	2,330	550	79.4	74.6
NORTHERN	799	76	83.7	67.1
WESTERN	1,744	125	75.1	76.8
VOLTA	1076	47	78.3	100.0
EASTERN	1,681	98	77.6	88.8
B/A	1,514	118	81.9	91.5
CENTRAL	1,805	91	73.1	95.6
U/E	236	21	82.6	85.7
U/W	170	14	70.0	92.9
TOTAL	**13,091**	**2,854**	**77.2**	**71.1**

Gazette of Pharmacists and Pharmacies was published and registration and licensing policy document was also developed and disseminated

About 70% of operational facilities were visited to enforce standards and 74.2% of operating permits were renewed.

Continuing Professional Development (CPD) programmes were conducted for all pharmacists. A 4-weeks top-up programme for Diploma Technology Cert holders.

The Pharmacy Council has 3,815 on register but 2,523 were in Good Standing as at 31st Dec, 2017. It also has 1,031 Pharmacy Technicians in Good Standing and 13,091 OTCMS registered but 10,106 in Good Standing as at Dec, 2017.

4.4.3 Sub Programme 4.3: Regulation of Food, Pharmaceutical and Medicinal Products

The Food and Drugs Authority continue to exercise its regulatory mandates for Food, Pharmaceutical and Medicinal Products. During the year under review, It carried out registration and licensure of regulated products. It also undertook market surveillance quality testing of regulated products including safety monitoring of medicines.

Description	Actions	2016	2017
Registration	Application Received	5670	7725
	Application analysed	5481	7649
	Application passed	5301	7339
Licensure	Application Received	1538	1425
	Application analysed	1205	1344
	Application passed	1185	1063
Market Surveillance	-	1228	2423
Quality Testing	Application Received	2741	3150
	Application analysed	2220	2665
	Application passed	1657	2100
Safety of Medicine	-	1607	2715

5.0 MILESTONES IMPLEMENTATION

Table 32: 2016 Milestones Implementation Status

Health Objective	2016 Milestone	Status Implementation
HO 1: Bridge the equity gaps in geographical access to health services	One flagship telemedicine project based in one teaching hospital established	developed
	Financing strategy developed for the sector to ensure effective resource mobilization	developed
HO 2: Ensure sustainable financing for health care delivery and financial protection for the poor	Appropriate mix of provider payment mechanisms established	Capitation suspended
	Composite planning undertaken in 50% of districts	developed
	2 questions included in DHS on client satisfaction and knowledge of patient charter	done
HO 3: Improve efficiency in governance and management of the health system	Private sector data fully integrated into the public system	About 80% of private sector operators reporting through DHIMS
	Institutionalize performance contract	Performanc3e contract instituted in MOH and GHS
HO 4: Improve quality of health services delivery including mental health services	mentorship program for specialist / Consultants to support lower levels introduce	Programme developed. Has challenges with sustainability
	90% of district hospitals and 70% of health centres equipped with C/BEmOC equipment respectively	EmONC assessment suspended
	Adolescent health corners established in 30 hospitals	
HO 5: Enhance national capacity for the attainment of the health related MDGs and sustain the gains	Maternal mortality survey carried out	Survey carried out. Preliminary results out
	Emergency response strategy for diseases of epidemic potential reviewed	
	Elimination status of guinea worm and polio maintained	maintained
	Improve orthotics and prosthetic services institutionalize	
	Healthy lifestyles have been integrated into the Basic schools but they have not been integrated into the Teacher Training Schools. (Basic School = Yes,Teacher Training College = No)	done

6.0 IMPLEMENTATION OF AIDE MEMOIRE 2016

6.1 Completed Activities In 2016 Aide Memoire

Table 33: Aide Memoire Implementation Status; Completed Activities

COMPLETED		
NO.	**ACTIVITY**	**PROGRESS TO DATE**
1.	The National Newborn and the MAF Steering Committees should each study the reports of the comprehensive mortality audit and provide the Ministry by July 2017 with priority interventions to address the issues identified and a clear roadmap for their implementation.	Recommendations were made at the just ended 6th Annual Newborn Meeting held in July.
2.	The Ministry of Health should organize a health sector Human Resource Forum in June 2017. Following which, Draft Cabinet Memo to seek political level support for decisions from the forum by the end of September 2017.	HR Forum held. Final Report on HR Forum ready and circulated.
3.	The Ministry of Health should organize a health sector Human Resource Forum in June 2017. Following which, Draft Cabinet Memo to seek political level support for decisions from the forum by the end of September 2017.	HR Forum held. Final Report on HR Forum ready and circulated.
4.	The MoH should reactivate the Health Financing Working Group to support the implementation of the health financing strategy and other broader health financing issues. This should be reported on at the June Sector working group meeting.	Completed. Names have been sent to Hon Minister for approval.
5.	MoH will organize orientation and training on PFM for decision makers in the health sector. This will start from the third quarter of 2017	305 senior managers have been sensitized. 150 Internal auditors and 100 procurement officers trained. Audit training completed.
6.	The MoH to set up a Quality Management Unit to oversee the quality assurance programmes by end of November 2017.	The Quality Management Unit has been set up. A Quality Manager has been appointed (Dr. Asiedu). Engagements have been done with the various heads of agencies.
7.	The GHS to circulate supportive supervision checklists to all their levels by the end of July 2017.	Done. The integrated supportive supervision checklist was completed and circulated. This was also followed by nationwide integrated supportive supervision and monitoring that took place from July 10-27. Reports of the monitoring have been discussed and shared at the Directors meeting chaired by DG and shared with the regions as well
8.	MoH should undertake a review of the current Health Sector Medium Term Development Plan by end May 2017.	Review has been done and feeds into the development of the new HSMTDP.
9.	MoH to define Country specific	Draft available.

	SDG baseline and targets to be presented at the August Sector Working Group meeting.	
10.	MoH to present a Draft New HSMTDP by end of August 2017.	Draft was presented at the August Business Meeting.
ONGOING		
11.	The MoH should ensure that the quarterly meetings of the CHPS steering committee meetings revived.	Steering Committee Meeting rescheduled to 21st December, 2017, because of Hon. Minister's unavailability. Technical Working Group Meeting date has not been fixed yet. Looking for a suitable date.
12.	Accelerate the integration of MTCT/PMTCT services into RMNCH by the end of the 3rd quarter of 2017. Provide the Ministry with concrete plan to ensure integration of HIV/PMTCT and paediatric care into RMNCH services. This should be reported on to the HSWG biannually.	Harmonised ANC Registers are available to integrate PMTCT, TB and Malaria into RMNCH. Maternal health booklet will be combined with the Child Health booklet. This is to provide a means of integrating the health of the baby with the mother. Capacity building is also currently ongoing. This was hinted on during the CARMMA Launch.
13.	The Ministry of Health should source for funds and complete the staffing norms by the end of July 2017.	First 70% completed and in use. That was what was used in developing the HR Forecasting. The remaining 30% is not done yet because there's no support.
14.	Regions should provide a comprehensive mortality audit report and identify the hot spots for Maternal and Neonatal Mortality. The report should include analyses of the level of readiness to respond; and provide recommendations on immediate steps to be taken by the end of June 2017	The following are the recommendations from the Maternal Death Audits which Northern Region has put in place. These are generally to address the gaps that have been identified in the system • Blood donation Campaigns • Follow up on maternal deaths at facility and community levels • Establishment of emergency transport systems • To forestall HR strategies, task shifting/task sharing is done (increasing the number of service providers providing maternal health services in order to ensure 24 hour service) • Formation of labour room platforms in all districts • Monitoring, supervision and coaching visits • Supply of emergency drugs • Use of TBAs as link providers • Early referrals and skilled delivery • Establishment of referral systems in all districts • Usage of modified motor king as rural ambulances where there's no means of transport

		• Use of pregnancy diaries to track pregnant women till they deliver
15.	Development and submission of nominal roll by all heads of agencies to the Ministry by August 2017.	All agencies have submitted their nominal roll except GHS.
16.	The MoH to review the recommendations of the report of the NHIS review and take a decision. This will be undertaken by the end of August, 2017.	Report completed and yet to be circulated. Political decision yet to be taken at the presidential level.
17.	MoH will draw a plan and a roadmap to transition from DP funding to Sustainable domestic financing of essential healthcare commodities (Vaccines, HIV Drugs, Reagents, Contraceptives, etc.) by the end of the fourth quarter of 2017.	Not yet due. Work started.
18.	MoH to develop an epidemic response plan to address the gaps identified by the Joint External Evaluation by September ending 2017.	Meeting with WHO held in Koforidua to start the process. WHO is providing assistance with 11 action packages agreed on Norwegians are also ready to assist
19.	The Ministry of Health to activate the One Health Inter-ministerial Committee by July 2017	Letters written to CD regarding the formation of the One-health Inter-ministerial Committee.
20.	The MoH to set up a Health Promotion Unit by the end of September 2017	Funding received from WHO. Study tour to Botswana. Team made up of members from MoH, GHS (Health Promotion), NCCE, University of Ghana, School of Public Health. Team will leave on 18th November and return on 26th November.
21.	The Ghana Health Service will review and upgrade the Health Promotion Department to a Division by the end of September 2017.	Consultant procured by UNICEF and TWG constituted. Preliminary team meetings underway
22.	MoH will develop a Terms of Reference for NCD research by the end of July 2017. This should sit on the broader National Research Policy.	TOR for NCD research developed and submitted.
23.	MoH to ensure the development of a strategy for integration of NCD screening at the community level by December 2017	Working group developed constituting Programme Manager, before it can commence.
24.	The Mental Health Authority to	Meeting held between MHA and NHIA. NHIA has

	liaise with the NHIS to ensure that mental health clients are continually registered and taken care of. This is to start by September 2017.	agreed to support in the registration of the clients and allow mental health clients to use the NHIA card in the treatment of physical conditions. However, it would be difficult to include mental health as part of the benefit package.
25.	The Ministry should develop National Research Policy by September 2017.	A TOR has been written for consultancy. A concept note has been drafted and circulated to all directorates for their inputs. The next step is to organise a workshop for all stakeholders. Budget for workshop drawn, currently awaiting approval.
26.	The MoH should develop by end of October 2017, a Quality Healthcare Service Delivery Accountability Framework to guide agencies enforce quality of care improvement	Process Started. TOR developed. Quality Technical Committee as the working group for now. (All Agencies, Regulators, Private Sector , MOH, Civil Society)
27.	MoH to develop National Strategy on WASH in Healthcare facilities by end of October 2017	TOR and Concept note approved. Ministry of water resources and Sanitation, MoFEP, GHS, WHO, etc. are playing a key role. UNICEF will provide a consultant by the end of 2017 and the consultant's work will commence in January 2018.
28.	Service delivery agencies should develop agency specific WASH strategies by end of October 2017	1. After attending the WASH in Health Care Facilities Conference in Dakar, Senegal in June 2016, GHS put in place a WASH Steering Committee with TOR. 2. The WASH Steering Committee inaugurated a WASH/IPC-HCF Technical Committee with TOR, which amongst others included developing a WASH/IPC-HCF Strategic Plan and coordinate its implementation. 3. GHS put in place a Steering Committee and a WASH/IPC-HCF Technical Committee to implement Strategic Plan 4. The Technical Committee in collaboration with UNICEF and WHO have developed WASH-IPC Indicators with SOPs and Facility Reporting Forms
29.	The MoH will liaise with the MoF to appraise the various PPP models and advise agencies on those that will be appropriate for the health sector.	The Public Investment Division, Ministry of Finance has been engaged. Broad areas for PPPs in health have already been identified. Discussions are ongoing with the World Bank for a consultant to undertake a detailed analysis. Draft contracting and PPP guidelines have also been developed.
30.	Under the leadership of the Hon. Minister of Health, the National Supply Chain Committee will resume meeting on a quarterly	**1. LMD:** Almost eight (8) regions are implementing the LMD. The other two regions, Ashanti and Central Regions) are being assessed. Hoping to get all regions will be on board by the end of the first

	basis to assess progress against critical milestones for comprehensive supply chain reforms.	quarter 2018. **2. LMIS:** Consultant engaged in the development of the software. Currently Proposals received are being reviewed at Koforidua to select the best consultant for the work. **3. Warehousing:** A lot of work has been done. Committee is yet to select the best strategy to be forwarded to the Global Fund. It was agreed that the ten (10) Regional Medical Stores should be maintained and brought to the WHO-approved standard. Ministry is working on getting assistance in the building of the Central Medical Store. **4. Framework Contracting:** Tender launched. The closing date is 16th of November. CCTH wanted to withdraw but then Hon. Minister for Health wrote to them and they're now on board. All 10 RMDs and 4 Teaching hospitals are on board. Afterwards a technical group will meet and evaluate. Duration is initial one-year for 2018. **5. SCMP:** Steering committee is yet to meet. One meeting already held in 2017.
31.	The Sector Working Group should be briefed quarterly on the proceedings of the National Supply Chain Master Plan Steering Committee meetings.	
32.	The MoH should define the agenda for the development of the new HSMTDP by end of May 2017.	Draft medium term plan have been circulated internally for comments. It will be presented at the Business meeting
NO DECISION YET		
33.	The MoH will reactivate the IGF/PFM committee to streamline the use of IGF in the sector by the end of June 2017	No decision yet.
34.	MoH to review the EOC arrangement and engage NADMO to strengthen capacity for effective coordination by September ending, 2017	Activity yet to be undertaken
AFTER 2017 AUGUST BUSINESS MEETING		
COMPLETED		
35.	Technical Committee to see to the implementation of all the recommendations, review the MAF Strategy, Maternal and Neonatal deaths	Work is done. Template given and there will be a follow up meeting to look at the template.
ONGOING		
36.	Monitoring Indicators must be developed for all Teaching	GHS PPMED is currently working with THs to increase Teaching Hospital data in DHiMs2.

	Hospitals	Meeting funded by UNICEF to develop indicators for Teaching Hospital's peer review that will be put into the DHIMS2, there is also on-going training of all HIOs in Teaching Hospitals in DHIMS2 through GF support. The overarching need for the MoH to give a policy directive for all aggregated service data to be put into the DHIMS2 is important. This will also facilitate the Holistic Assessment.
37.	DISHOP Training to strengthen the sub-district system.	A Technical Working Group has been put together and are reviewing all documents and training manuals. Dateline of completion is November. Training will start January 2018
38.	Extra resources are needed to complete the other component of the DHIMS 2. Deployment of the E-tracker is not progressing steadily. Ensure that all facilities are on the DHIMS.	As part of efforts to strengthen and sustain the gains Ghana has made in the area of Health Management Information System, The Global Funds approved some key activities for the year 2017 to ensure that the National wide web based district health information management systems is supported to address key recommendation Key Activities includes development of OPD eTracker for all CHPS facilities in the country, CHPS tracking tool in dhims2 for all districts to report on quarterly status of their functional CHPS, procure tablets for offline version of dhims2, Improving the quality of cause of death data in DHIMS2. Building capacity of clinicians and data capture officers on new Cause of Death (COD) certificate in DHIMS2 instance Capacity and skills development of Regional and districts staff to support DHIMS2 and eTracker deployment .and deploy eTracker for TB care in 103 TB burden district hospitals. The division is also working with USAID and Samsung to deploy the full suit of eTracker in 3 regions of Ghana.

7.0 CAPITAL INVESTMENT

7.1 Progress on Infrastructure Projects

Table 35: Infrastructure Projects Implementation

Project	Implementation Status
Construction Of Offices For The Ministry Of Health	• This project, which has a revised of costs $24.3m is being funded by the Government of Ghana and co-financed by Amandi Holdings Ltd. It is to provide office accommodation for the Ministry of Health • Construction period has been extended by 1-year due to the decision to the addition of three additional floors to accommodate additional staff of MOH Headquarters
Re-tooling health Facilities for Maternal Newborn and Child health Services	• Under the Millennium Acceleration Framework and in collaboration with our development partners A lot of essential Equipment has been procured and deployed across the country they include: – 20 200KVA generators for needy facilities – 212 delivery beds – 200 delivery sets – 51 theatre tables – 21 phototherapy machines – 10 incubators – 45 blood bank fridges 70 Anaesthesia machines (installation & user training ongoing)
Construction and equipping 10 polyclinics in the Central Region	Polyclinics are located in the following towns; Bisease, Gomoa Dawurampong, Akunfode, Etsii Sunkwa, Odoben Gyamera,Biriwa, Ekunfi Naakwaa, Mankrong, Bimpong Egya, Gomoa Potsin Completion averages 60%
Construction And Equipping 5 Polyclinics In The Greater Accra Region	The polyclinics are located at Adentan, Ashiaman, Bortianor, Oduman, Sege. Projects are about 25% completion on the average

8no. Hospitals Project	• First 4 of the 8-hospitals are scheduled for completion by June 2018 • These are: – Wa Regional Hospital – Tepa District Hospital – Nsawkaw District Hospital – Atomic Hospital • The Other 4 are scheduled to be completed in December 2018. These are – 250-Bed Regional Hospital, Kumasi-Sewua – 60-Bed District Hospital, Salaga – 60-Bed District Hospital, Twifo Praso – 60-Bed District Hospital, Konongo-Odumasi
DELIVERY OF 7no. DISTRICT HOSPITAL PRO.	The Dodowa hospital in the Shai Osudoku district has been completed and is in use. The six remaining hospitals which are various levels of completion are suspended awaiting MOF approval for extension of loan. They are; • Kumawu • Abetifi • Fomena • Sekondi (Kwaqnsawrodo) • Takoradi European Hospital • Garu Levels of competion ranges from 10-70%
Accelerating Tb Case Detection In Ghana (Orio)	• This project was designed to enhance TB control program to achieve WHO/Stop TB target of 70% case detection in Ghana by 2015 and lower the burden of TB • Total of 52 digital radiographic systems for 48 hospitals nationwide provided – 4 portable radiographic systems of which 2 permanently installed in specially designed "TB Screening Vans" for the NTP for outreach programs – Supply and installation of tequipment is on-going at the various sites he
Completion And Equipping Of Bekwai District Hospital	• Gov't has secured a loan of Eur22.3M through Ellipse Projects SAS to fully complete the Project. • The project scopes include the completion of the remaining civil works, supply and installation of requisite equipment, provision of training and maintenance. The Ministry is awaiting the final VFM audit report based on negotiations with the contractor to enable the Ministry submit the supply contract to Parliament for approval ***The MOF has informed MOH of some new development with the terms of the Loan from UKEF. MOF and MOH are in discussion***

Construction Of Akatsi District Hospital	• The project, which cost GHC12m, is to construct Male and Female Wards, Central Supply and Sterilization Department & Laundry, Theatre, Mortuary and Block of flats for Akatsi District Hospital • Progress of work is about 70% complete • Ministry is in the Process of securing funds to fully equip the hospital as well as the provision of critical mechanical and electrical installations
Expansion Of Radiotherapy And Nuclear Medicine Centres In KBTH & KATH	– Civil and retrofitting works at KBTH for Simulator, Cobalt, Unique Accelerator and Brachytherapy rooms have been completed – All equipment installations have also been completed – Civil and retrofitting works at KATH for Simulator room has been completed – Simulator equipment installation has also been completed – Linac and Brachytherapy rooms are currently ongoing and at 70% and 50% complete respectively
Bolgatanga Regional Hospital Project	• Phase I of the Project is at 92.39% completion • Equipment Installation and Training are yet to commence • Full complement of equipment has not been secured yet with a funding gap USD5m. • The Ministry has received a funding proposal of USD20m for the completion of Phase I and Phase II • A joint cabinet memorandum has been submitted to cabinet for consideration
Major Rehabilitation And Upgrade Of Tamale Teaching Hospital Phase Ii	• The cost of this project is Euro38.5 m and the completion of this Phase II will bring the bed state of the hospital to 800 beds from existing 400 beds. • The Contract is on site and progress of work is 55% complete
University Of Ghana Medical Centre – Legon Project	• Efforts are underway to operationalize the University of Ghana Medical Centre • Cabinet memo to be submitted to cabinet for consideration to procure a USD50m for completion for the development of Phase II
New/ Potential Capital Projects	

Construction Of 5 District Hospital	• SAWLA • TOLON • SOMANYA • BUIPE • WHETA and a – POLYCLINIC IN BAMBOI – Both Cabinet and Parliamentary approvals for this project have been received – Value for Money auditing has been completed and awaiting final report from Ministry of Finance.
Construction Of 1 District Hospital And 5 Polyclinics In The Western Region	• This project received approval from ORIO who is providing a 35% grant. • ORIO has approved the Evaluation process and has given the No-Objection for the Ministry to sign the Contract with the winning firm
Urology Centre At Korle-Bu Teaching Hospital With Ppp Arrangement	• Discussion ongoing for the development of a Urology centre under a PPP arrangement A joint cabinet memorandum will soon be submitted to cabinet for consideration
Greater Accra Regional Hospital (Ridge) Project Phase Ii	• The Ministry Operationalized Phase 1 of the newly built Greater Accra Regional Hospital at Ridge in May 2017 • Construction of Greater Accra Regional Hospital Phase II – Joint Cabinet memorandum between MoH and MoF for funding has been completed and submitted to cabinet – Estimated cost of Phase II at USD98m

ANNEXES

Annex 1: Sector Wide Indicators and Targets

No.	Indicator	Measurement	Target			
			2014	2015	2016	2017
Objective 1: Bridge the equity gaps in geographical access to health services						
1.1	Proportion of functional ambulance service centre's (*Absolute Numbers*)	No. of functional ambulance centres / total no. of expected ambulance centres	N/A	N/A	N/A	N/A
1.2	Proportion functional CHPS zones	No. of functional CHPS zones/ total no. of demarcated CHPS zones	2,450	2,595	2,753	2,918
1.3	Per capita OPD attendance	Total OPD attendants / population	1.17	1.21	1.27	1.3
1.4	Equity poverty: U5MR	U5MR in lowest wealth quintile / U5MR in highest wealth quintile	N/A	<1.9	N/A	N/A
1.5	Equity geography: Supervised deliveries	Region with highest coverage / region with lowest coverage	<1.5	<1.4	<1.3	<1.2
1.6	Equity geography: Doctor to population	Region with highest ratio / region with lowest ratio	N/A	N/A	N/A	N/A
1.7	Equity geography: Nurse to population	Region with highest ratio / region with lowest ratio	<1.9	<1.85	<1.8	<1.75
1.8	Equity gender: Female/ male NHIS active membership	Female active NHIS members / male active NHIS members	N/A	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	Total GOG budget incl. IGF to health / total GOG budget incl. IGF	≥15%	≥15%	≥15%	≥15%
2.2	Per capita expenditure on health (USD)	Total health expenditure / population	>44	>44	>45	>45
2.3	Budget execution rate (Goods and Service as proxy)	Total disbursement from MOFEP to MOH and agencies / total budget	>80%	>85%	>87%	>90%
2.4	Proportion of population with active NHIS membership	Number of active NHIS members / population	>39%	>40%	>41.5%	>43%
2.5	Proportion of NHIS members in exempt categories	No. of members in exempt categories (SSNIT pensioner, U18, +70, Indigents) / total number of members	N/A	N/A	N/A	N/A
2.6	Proportion of NHIS expenditure on claims reimbursement	Total amount spent on reimbursement of claims / total annual expenditure including infrastructure development, administration and investments	N/A	N/A	N/A	N/A
2.7	Equity poverty: NHIS members	NHIS active membership among female 15-49 years in lowest wealth quintile / NHIS active membership among females 15-49 years in population	N/A	N/A	N/A	N/A
Objective 3: Improve efficiency in governance and management of the health system						
3.1	Doctor : Population ratio	Number of doctors / population	1:10,000	1:9,900	1:9,750	1:9,500
3.2	Nurse : Population ratio including CHNs	Number of nurses incl. community health nurses / population	1:1,000	1:1,000	1:1,000	1:1,000

3.3	Midwife : WIFA Population ratio	Number of midwifes / population of women in fertile age	1:1,400	1:1,350	1:1,300	1:1,250
3.4	Proportion of health facilities in current registration	No. of health facilities registered with Health Institutions and Facilities Regulation Authority / total no. of health facilities	N/A	N/A	N/A	N/A
3.5	Proportion of receivable funding for NHIS received from MOF	Total annual allocations of NHIL and SSNIT received / annual budget estimates for NHIL and SSNIT	>75%	>80%	>85%	>90%
3.6	Proportion of NHIS claims settled within 12 weeks	No. claims settled within 12 weeks / total no. claims settled	N/A	N/A	N/A	N/A
3.7	Proportion of GOG spent on goods and services	GOG goods and services expenditure / total GOG expenditure	N/A	N/A	N/A	N/A
3.8	Proportion of GOG spent on assets	GOG investments expenditure / total GOG expenditure	N/A	N/A	N/A	N/A
3.9	Proportion of health budget (goods and services) allocated to research activities	Amount of MOH budget allocated for research / total MOH budget for goods and services	>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	All institutional deaths / all discharges and deaths (per 1000)	<35	<33	<30	<28
4.2	Proportion of regional and district public hospitals offering Traditional medicine practice	No. of regional and district public hospitals offering traditional medicine practice / total no. of regional and district public hospitals	>5%	>8%	>10%	>13%
4.3	Proportion of public hospitals offering mental health services	No. of public hospitals offering mental health services / total no. of public hospitals	N/A	N/A	N/A	N/A
4.4	Institutional Malaria Under 5 Case Fatality Rate	No. of children U5 who die as a result of malaria per year / no. children admitted and diagnosed with malaria	<0.60	<0.57	<0.53	<0.50
4.5	Surgical site infection rate	No. surgical wound infected among inpatients / total no. surgical interventions among inpatients	N/A	N/A	N/A	N/A
4.6	Percentage of public hospitals with functional emergency team	No. public hospitals with trained emergency team / total number of public hospitals	N/A	N/A	N/A	N/A
Objective 5: Enhance national capacity for the attainment of the health related MDGs and sustain the gains						
5.1	Unmet need for contraception	No. of women aged 15-49 years who are married or in union with unmet need for family planning / no. women aged 15-49 who are married or in union	N/A	<23%	N/A	N/A
5.2	Couple Year Protection (CYP), All sources incl. the private sector	The estimated protection provided by family planning services during a one-year period, based upon the volume of all contraceptives sold or distributed free of charge to clients during that period	>2.30 mil	>2.45 mil	>2.55 mil	>2.70 mil

5.3	Infant Mortality Rate	No. of deaths of infants below 1 year / 1,000 live births	N/A	<50	N/A	N/A
5.4	Institutional Neonatal Mortality Rate	No. of institutional deaths of neonates before the age of 28 days / institutional live births	<5.5	<5.3	<5.0	<4.5
5.5	Neonatal Mortality Rate	No. of deaths within the first 28 days of life / 1,000 live births	N/A	<30	N/A	N/A
5.6	Under-5 Mortality Rate	No. of deaths of children below 5 years / 1,000 live births	N/A	<75	N/A	N/A
5.7	Maternal Mortality Ratio	No. of maternal deaths / 100,000 live births	N/A	<300	N/A	N/A
5.8	Institutional Maternal Mortality Ratio	Institutional maternal deaths / institutional live births	<145	<140	<137	<135
5.9	HIV prevalence rate	Proportion of the ANC clients aged 15-24 years who are tested HIV+ at NACP sentinel sites	<1.1%	<1.0%	<0.9%	<0.8%
5.10	Proportion of infected pregnant women who received ARVs for PMTCT	Number of HIV positive pregnant women who received ARV for PMTCT/ Projected HIV positive pregnant women as per NACP sentinel survey	>40%	>44%	>48%	>50%
5.11	Proportion of babies born to HIV mothers who tested negative at 18 months	Total number of babies tested negative at 18 months/ total number of babies born to HIV positve mothers	N/A	N/A	N/A	N/A
5.12	Proportion of children U5 who are stunted	Total no. of children too short for their age / total no. of children	N/A	<16%	N/A	N/A
5.13	Proportion of children fully immunized (proxy Penta 3 coverage)	Number received Penta 3 / projected population of children under 1 years	>88%	>90%	>90%	>90%
5.14	Antenatal Care Coverage 4+	No. of women undergoing ANC service by a skilled health provider at least four times during pregnancy / total number of expected pregnancies	>75%	>78%	>80%	>83%
5.15	Exclusive breast feeding for six months	No. of infants aged who are exclusively breastfed / total no. infants	>50%	>53%	>55%	>57%
5.16	Proportion of deliveries attended by a trained health worker	No. of deliveries attended by a trained health worker / expected number of deliveries	>58%	>60%	>62%	>65%
5.17	Still birth rate	Number of still births (fresh and macerated combined) / expected number of deliveries (per 1000)	N/A	N/A	N/A	N/A
5.18	Postnatal care coverage for newborn babies	No. of newborn babies getting the services of skilled health providers within 2 days of birth/ Total number of live births	N/A	N/A	N/A	N/A
5.19	Proportion of children under 5 years sleeping under ITN	No. of children under 5 years who slept under an ITN during the previous night / total number of children under 5 years	N/A	>65%	N/A	N/A
5.20	TB treatment success rate	No. of patients who are proven cured using smeared microscopy at the end of treatment / total number of patients	>88%	>88%	>88%	>88%

		who initiated treatment				
Objective 6: Intensify prevention and control of non-communicable and other communicable diseases						
6.1	Non-AFP polio rate	No. of non-polio AFP cases reported / 100,000 children 0 - 15 years	>2	>2	>2	>2
6.2	Population prevalence of hypertension	No. persons BP above specified level / total no. persons surveyed	N/A	N/A	N/A	N/A
6.3	Number of deaths attributable to selected cancers	No. of deaths to XX cancers / total number of deaths (Refine)	N/A	N/A	N/A	N/A

Annex 2: Holistic Assessment Tool

A2.1 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 whiles 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.

A2.2 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

A2.3 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 SWIs)*
- 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

A2.4 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 finalization of the holistic assessment will be influenced by these discussions.

A2.5 Assumptions

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

i. Objectives are not equal in weight in their contribution towards achieving the overall goal of the sector.
ii. Indicators are not equal in weight in their contribution towards achieving the objective.
iii. For each objective, all indicators collectively contribute 75% of total objective weight towards achieving the objective.
iv. 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, CHAG and NHIA) and Development Partners.

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

- *Improving health status*
- *Improving client satisfaction*
- *Improving financial risk protection*
- *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 to four principles; these include the indicator's contribution to:

- *Achieving its objective*
- *Improving health status*
- *Strengthening the health system, and*
- *Level of Indicator (Input, Process, Output, Outcome and Impact)*

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

A2.6 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.

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 ≥ 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.

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.

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, 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

6b. Step Two: Assessment of the Health Objectives

The indicators and milestones are grouped under Health Objectives as defined in the 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 1.24. The range is divided into five quintiles, and the performance of each objective is interpreted within these quintiles.

If objective score is within the highest quintile, then the objective is highly performing and assigned **a colour code dark green**.

If the objective score is within the second highest quintile, the objective is moderately performing and assigned **a colour light green**

If the objective score is within the middle quintile, the objective has stagnated and assigned **a colour code yellow**.

If the objective score is within the second lowest quintile, the objective is underperforming and assigned **a colour code light red**

If the objective score is within the lowest quintile, the objective is severely underperforming and assigned **a colour code dark red**

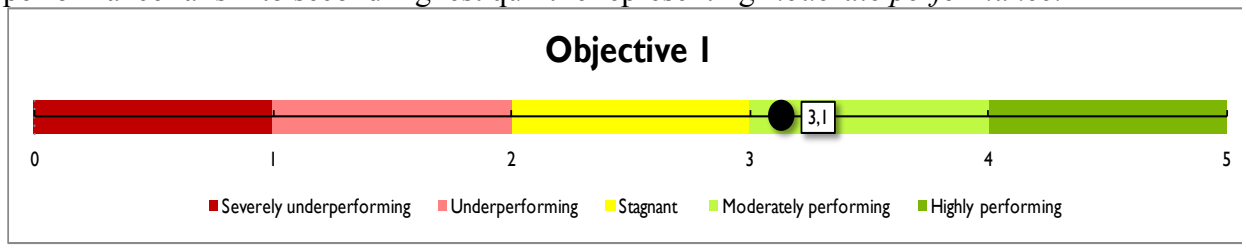
6c. Step Three: Assessment of the whole health sector

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:

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.*



- If the overall sector score is within the highest quintile, then the sector is highly performing
- If the overall sector score is within the second highest quintile, then the sector is moderately performing
- If the overall sector score is within the middle quintile, then the sector performance is stagnant
- If the overall sector score is within the second lowest quintile, then the sector is underperforming
- 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:

- An analysis of the progress of each indicator over the past three years.
- An assessment of each Health Objective and of the overall sector performance.
- The extent to which sector priority activities and agency plans and programmes have been implemented
- 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.

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

Table 35 Indicator weighting

Indicators		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 3: 2017 Indicator Assessment

1.1 Number of functional ambulance service centres

2017 Performance: 133
2017 Target: No target set
Source: NAS
Trend: Neutral (0%)
Target: NA
Outcome: 0

2011	2012	2013	2014	2015	2016	**2017**
24	121	122	128	127	133	**133**

Result:
The number of ambulance stations remain the same, thus 133 stations. However, out of the total number of stations, only 45(34%) are functional. The number of functional stations reduced from 60% in 2016 to 34% in 2017. Vehicle availability for the 45 functional stations stands at 50% in 2017.This accounted for the falling number of cases seen from 14,085 in 2016 to 9,180 in 2017.Most of the ambulances are over aged (5years and above).

1.2 Number of functional CHPS zones

2017 Performance: 5,175
2017 Target: 2,918
Source: GHS-PPME
Trend: Neutral (28.3%)
Target: Achieved
Outcome: 1

2011	2012	2013	2014	2015	2016	**2017**
1,659	2,175	2,315	2,948	3,951	4,034	**5,100**

Result:
The number of functional CHPS zones has increased from 2,315 in 2013 to 5,120 in 2017 representing a 120.3% increment. The year under review recorded a 26.4% increment over the 2016 performance.

1.3 Per capita OPD attendance

2017 Performance: 0.98
2017 Target: 1.30
Source: DHIMS + KATH + KBTH
Trend: Worsening (-7.55%)
Target: Not Achieved
Outcome: -1

	2012	2013	2014	2015	2016	**2017**
# OPD (mill.)	30.3	30.8	31.1	30.6	30.4	**29.1**
Population (mill.)	25.9	26.6	27.3	28.2	28.7	**29.7**
Ratio	**1.17**	**1.16**	**1.15**	1.08	1.06	**0.98**

Results

OPD per capita continues to decline generally across all regions. It declined by 7.5% over the 2016 performance and by 15.5% since 2013. With exception of UER (1.47) and BAR (1.38), which attained the medium-term target of 1.3 OPD per capita, all other regions performed below the target. Northern region consistently recorded the least OPD per capita between 2013 to 2017.

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	1.14	1.48	0.86	1.05	0.69	0.61	1.65	1.05	0.86	1.28	1.05
2012	0.96	1.63	1.00	1.38	0.95	0.70	1.99	1.12	1.01	1.44	1.17
2013	0.91	1.68	1.07	1.31	0.85	0.78	2.07	1.16	1.08	1.45	1.16
2014	0.92	1.82	1.06	1.22	0.83	0.79	1.85	1.26	1.20	1.44	1.17
2015	0.9	1.59	1.04	1.29	0.76	0.72	1.76	1.12	1.01	1.30	1.08
2016	0.87	1.56	1.03	1.20	0.76	0.67	1.86	1.20	0.97	1.28	1.06
2017	0.8	1.38	0.99	1.07	0.75	0.62	1.47	0.98	0.92	1.18	0.98

1.5 Equity geography: Skilled deliveries

2017 Performance: 1.63
2017 Target: <1.2
Source: DHIMS2
Trend: Neutral (4.1%)
Target: Not Achieved
Outcome: 0

	2012	2013	2014	2015	2016	**2017**
UER	69%	68%	74%	73.6%	74.2%	**75.5%**
VR	45%	43%	45%	43.6%	43.3%	**46.3%**
Ratio	1.5	1.6	1.6	1.7	1.7	**1.6**

Result:
The equity ratio between best and worst performing regions have improved from 1.7 in 2016 to 1.6 in 2017 indicating a 6% increment. The UER and Volta region has recorded best and worst performing regions in terms of skilled delivery respectively since 2012. All the regions have improved marginally in their skilled delivery coverage except for the Greater Accra which declined by 6 % in 2017.

Equity indicator	Best region	Worst region	Ratio
2011	65.4%	40.5%	1.62
2012	69.4%	46.1%	1.51
2013	68.4%	44.5%	1.54
2014	74.4%	46.4%	1.60
2015	74.8%	44.7%	1.67
2016	74.8%	44.3%	1.69
2017	75.5%	46.3%	1.63

1.6 Equity geography: Equity geography: Doctor to population

2017 Performance: 8.1
2017 Target: <10.0
Source: MOH, IPPD
Trend: Improving (14.1%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
GAR	1:3,178	1:2,744	1:3,186	1:3,518	**1:3,404**
UER	-	-	-	1:24,985	**1:27,652**
UWR	1:53,064	1:36,048	1:30,601		
Ratio	16.7	13.1	9.6	7.1	**8.1**

Result:

The equity geography ratio for doctors has widen to 8.1 in the year 2017 from 7.1 in 2016.The population ratio has decreased by 14% in 2017. Whiles Greater Accra improves marginally in terms of doctor to population ratio, UER declines drastically. The Greater Accra region is the most endowed region with 40% of all doctors in Ghana residing in the region whilst UER remains the region with the least (1%) number of doctors**.**

Equity indicator	Best	Worst	Ratio
2011	1:3,871	1:42,364	10.9
2012	1:4,246	1:45,565	10.7
2013	1:3,178	1:53,064	16.7
2014	1:2,744	1:36,048	13.1
2015	1:3,186	1:30,601	9.6
2016	1:3,518	1:24,985	7.1
2017	1:3,404	1:27,652	8.1

1.7 Equity geography: Equity geography: Nurse to population

2017 Performance: 2.1

2017 Target: <1.75

Source: MOH, IPPD

Trend: Neutral (0%)

Target: Not Achieved

Outcome: 0

	2013	2014	2015	2016	**2017**
UWR	-	-	-		
WR	-	-			1:1,030
UER	1:715	1:669	1:514	1:500	1:500
AR	-	-			
NR	1:1,423	1:1,255	1:1,096	1:1,033	
Ratio	2.0	1.9	2.1	2.1	**2.1**

Result:

The nurse equity ratio remained at 2.1 over the past three years. Within the medium term under review, the equity gap between the best and worst performing regions stagnated around 2.0.

Equity indicator	Best	Worst	Ratio
2011	1:1,160	1:2,023	1.7
2012	1:960	1:1,791	1.9
2013	1:715	1:1,423	2.0
2014	1:669	1:1,255	1.9
2015	1:514	1:1,096	2.1
2016	1:500	1:1,033	2.1
2017	1:500	1:1,030	2.1

1.8 Equity gender: Female/ male NHIS active membership

2017 Performance: 1.43
2017 Target: No Target
Source: NHIA
Trend: Neutral (0.7%)
Target: Not Applicable
Outcome: 0

	2014	2015	2016	**2017**
Female	6,105,503	5,861,589	6,482,107	**6,181,160**
Male	4,439,625	4,282,938	4,546,961	**4,295,382**
Ratio	1.38	1.37	1.43	**1.44**

Result

The gender equity ratio between male and female NHIS active cards holders has stagnated around 1.4.

	2013	2014	2015	2016	2017
Female	6,389,859	6,105,503	**5,861,589**	**6,482,107**	**6,181,160**
Male	4,668,930	4,439,625	**4,282,938**	**4,546,961**	**4,295,382**
Ratio	1.37	1.38	**1.37**	**1.43**	**1.44**

2.1 Proportion of total MTEF allocation to health

2017 Performance: 6.5%
2017 Target: ≥15%
Source: MOH
Trend: Worsening (-4.1%)
Target: Not Achieved
Outcome: 0

	2014	2015	2016	**2017**
MTEF for Health (mill GHc)	3,354	4,323	5,892	**4,226**
Total MTEF (mill GHc)	31,750	44,001	50,109	**65,467**
Proportion	10.6%	7.0%	6.8%	**6.5%**

Result:

The MTEF allocation to health has increased in nominal term over the years until it declined in 2017 by 28.28% from GHC5.892 million. The rate of increase in MTEF allocation to health is much low than the rate at which the total MTEF is growing thereby resulting in the declining performance of the proportion of MTEF allocation to health in Ghana.

2.2 Per Capita Expenditure on Health (USD)

2017 Performance: USD31.2
2017 Target: > USD45
Source: MOH
Trend: Improving (74.4%)
Target: Not Achieved
Outcome: *1*

	2013	2014	2015	2016	**2017**
Expenditure (mill. USD)	1,096	1,253	1,061	711	**953**
Population (mill)	26.6	27.3	28.2	28.7	**29.7**
Ratio	41.2	32.8	37.6	24.8	**43.0**

Result:

Per capital expenditure on health in US dollar has fluctuated during the medium term and was largely influenced by the cedi to dollar exchange rate.

2.3 Budget execution rate (Goods and Service as proxy)

2017 Performance: 55.1%
2017 Target: > 90%
Source: MOH
Trend: Improving (19.5%)
Target: Not Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
Disbursed (mill GHc)	998.9	998.4	-	3,546	**1566.7**
Budget (mill GHc)	1,770.5	1,630.4	-	1,634	**863.1**
Rate	57%	61.2%	503%	46.1%	**55.1**

2.4 Proportion of population with active NHIS membership

2017 Performance: 35%
2017 Target: >43%
Source: NHIA
Trend: Worsening (-7.9%)
Target: Not Achieved
Outcome: -1

	2013	2014	2015	2016	**2017**
# Active members (mill)	9.8	10.3	11.3	11.0	**10.5**
Population (mill)	26.6	27.3	28.2	28.7	**29.1**
Proportion	37%	38%	40%	38%	**35%**

Result:
The proportion of population with NHIS coverage rose gradually to 40% in 2015 and decline to 35% in 2017. The decline observed in NHIS membership in 2017 compared to 2016 was significant. The active membership reduced from 11,029,068 in 2016 to 10,576,542 in 2017.The

Year	Informal	SSNIT Contributors	SSNIT Pensioners	Indigents	Children (Under 18)	Aged (70 yrs +)	Pregnant women	Total
2011	2,638,585	392,697	32,672	119,253	3,959,802	446,684	712,718	8,302,411
2012	2,747,945	408,972	34,026	124,177	4,123,921	465,197	742,279	8,646,517
2013	3,303,168	344,247	23,385	1,101,106	4,414,931	362,390	239,481	9,788,708
2014	3,144,992	371,006	40,858	1,491,491	4,430,051	404,704	373,760	10,256,862
2015	3,224,643	446,916	18,743	1,482,895	5,081,895	445,829	641,999	11,342,920
2016	3,130,872	521,722	16,630	1,534,333	4,565,795	481,484	778,232	11,029,068
2017	3,160,769	571,497	20,775	684,819	4,804,866	494,285	839,531	10,576,542

indigent population was the category that significantly declined by 55.4% (1,534,333 in 2016 to 684,819 in 2017) whilst other categories recorded gains ranging from 1% (informal sector employees) to 25% (SSNIT pensioners).

2.5 Proportion of NHIS members in exempt categories

2017 Performance: 70.1%
2017 Target: >65%
Source: NHIA
Trend: Neutral (-2.1%)
Target: Achieved
Outcome: 0

	2013	2014	2015	2016	**2017**
# Exempt members (mill.)	6.1	6.7	8.1	7.9	**7.4**
# Active members (mill.)	9.8	10.3	11.1	11.0	**10.6**
Proportion	63%	66%	71.6%	71.6%	**70.1%**

Results:

The proportion of NHIS members in the exempt category stagnated around 71% from 2015 to 2017. Over the period, more 1/3 (41.4% to 45.4%) of the exempt categories were children under 18 years of age. In 2017, the proportion of indigents among the exempt category dropped significantly by 53.5%.

Year	Informal	SSNIT Contributors	SSNIT Pensioners	Indigents	Children (Under 18)	Aged (70 yrs +)	Pregnant women	Total exempt (%)	Tonal Non-exempt
2011	31.8%	4.7%	0.4%	1.4%	47.7%	5.4%	8.6%	68.22%	2,638,585
2012	31.8%	4.7%	0.4%	1.4%	47.7%	5.4%	8.6%	68.22%	2,747,945
2013	33.7%	3.5%	0.2%	11.2%	45.1%	3.7%	2.4%	66.26%	3,303,168
2014	30.7%	3.6%	0.4%	14.5%	43.2%	3.9%	3.6%	69.34%	3,144,992
2015	28.4%	3.9%	0.2%	13.1%	44.8%	3.9%	5.7%	71.57%	3,224,643
2016	28.4%	4.7%	0.2%	13.9%	41.4%	4.4%	7.1%	71.61%	3,130,872
2017	29.9%	5.4%	0.2%	6.5%	45.4%	4.7%	7.9%	70.1%	3,160,769

2.6 Proportion of population covered by NHIS as indigents

2017 Performance: 2.3%
2017 Target: 7.60%
Source: NHIA
Trend: Worsening (-57.4%)
Target: Not Achieved
Outcome: -1

	2013	2014	2015	2016	**2017**
# Exempt Indigents (mill.)	1.1	1.5	1.5	1.5	**0.7**
Population (mill.)	26.6	27.3	28.2	28.7	**29.7**
Proportion	4.1%	5.5%	5.3%	5.4%	**2.3%**

Results

The proportion of the population enrolled as indigents declined (44.3%) from 4.1% in 2013 to 2.3% in 2017.The proportion of population covered by NHIS as indigents drastically declined by 57.4% from 5.4% in 2016 to 2.3% in 2017.

Year	No indigents	% of population
2011	119,253	0.47%
2012	124,177	0.48%
2013	1,101,106	4.14%
2014	1,491,491	5.47%
2015	1,482,895	5.25%
2016	1,534,333	5.35%
2017	684,819	2.30%

2.7 Proportion of NHIS expenditure on claims reimbursement

2017 Performance: 81.1%

2017 Target: >85%
Source: NHIA
Trend: Worsening (19.8%)
Target: Not Achieved

	2013	2014	2015	2016	**2017**
Claims exp. (mill. GHc)	783.3	968.5	844.1	1,053.8	**1,395.8**
Total income (mill. GHc)	987.1	1,280.8	1,183.2	1,544.4	**1,721.4**
Proportion	79.4%	69.5%	71.3%	68.2%	**81.1%**

Outcome: 1

Results

During the medium term, the NHIS claims expenditure increased by 74% from 783.3 million in 2013 to 1,395.8 million in 2017.The proportion of NHIS expenditure on claims reimbursement in 2017 was 81.1%, an improvement over the 2016 figure of 68.2%.

Year	Claims expenditure	Total expenditure
2011	548.7	762.9
2012	616.2	798.3
2013	783.4	987.1
2014	968.5	1280.8
2015	844.1	1183.2
2016	1,053.8	1544.4
2017	1,395.8	1721.4

Year	Claims	Admin and logistical support inc Asset	Support to MOH	Operating	NHIS ID card expenses	IDA project (WB)	Loan payment	TOTAL
2011	548.71	17.20	147.33	36.75	9.62	3.29	0.00	762.90
2012	616.21	6.93	74.67	71.35	20.05	9.07	0.00	798.28
2013	783.36	4.31	31.68	140.02	27.69	0.00	0.00	987.06
2014	968.48	4.48	29.16	128.46	76.57	0.00	73.61	1,280.76
2015	844.10	21.40	42.43	199.76	75.46	0.00	0.00	1,183.15
2016	1,053.83	124.81	106.05	135.62	124.11	0.00	0.00	1,544.42
2017	1,395.79	2.26	74.18	190.57	58.58	0.00	0.00	1,721.38

3.1 Doctor: Population ratio

2017 Perform: 1:8,098
2017 Target: 1:9,950
Source: IPPD - MOH
Trend: Neutral (-2.4%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
Population (1,000)	26,598	27,274	28,232	28,688	**29,711**
# Doctors	2,615	3,016	3,160	3,456	**3,669**
Ratio	1:10170	1:9,043	1:8,934	1:8,301	**1:8098**

Results

The total number of doctors has increased significantly by 40% from 2013 to 2017 resulting in improvement in doctor population ratio from 1:10,170 in 2013 to 1:1: 8,098 in 2017. At the beginning of the medium term (2013), UWR was the least (1: 53,064) performing region in terms of doctor to population ratio. In 2017, this has improved even better than the Western and Upper East regions, although the region failed to meet the national target of 1: 9,950.

During the year under review, whilst all regions' doctor to population ratio improved, Western and Upper East regions performance deteriorated. Greater Accra, Ashanti, Central and Brong Ahafo regions' doctor to population ratio met the medium target for 2017.

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
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
2015	759	166	136	183	1466	154	46	25	129	96	3,160
2016	722	231	267	228	1369	216	45	44	202	132	3,456
2017	716	278	296	242	1450	233	44	50	230	130	3,669

Yr	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR
2011	1:7,868	1:16,532	1:22,040	1:16,698	1:3,871	1:22,380	1:42,364	1:42,085	1:24,673	1:27,540
2012	1:9,828	1:16,679	1:23,405	1:19,467	1:4,246	1:20,195	1:38,279	1:45,565	1:24,728	1:29,082
2013	1:10,503	1:17,547	1:23,892	1:19,065	1:3,178	1:22,894	1:33,896	1:53,064	1:23,277	1:28,653
2014	1:9,830	1:17,455	1:21,823	1:16,733	1:2,744	1:23,759	1:32,285	1:36,048	1:20,510	1:23,814
2015	1:7,196	1:15,956	1:19,439	1:15,975	1:3,186	1:18,412	1:24,253	1:30,601	1:18,578	1:28,861
2016	1:7,769	1:11,468	1:9,905	1:13,082	1:3,518	1:13,627	1:24,985	1:17,860	1:12,160	1:20,275
2017	1:8,030	1:9,795	1:9,158	1:12,808	1:3,404	1:12,949	1:27,652	1:16,222	1:10,832	1:22,729

3.2 Nurse: Population ratio

2017 Performance: 1:799
2017 Target: 1:1,000
Source: IPPD - MOH
Trend: Neutral (-4.2%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
Population (1,000)	26,598	27,274	28,232	28,688	**29,711**
# Nurses	24,533	28,437	32,657	34,380	**37,190**
Ratio	1:1,084	1:959	1:865	1:834	**1:799**

Result

The number of nurses has improved over the years. The number increased from 24,533 in 2013 to 37,190 in 2017 representing a 52% increment. The country's nurse to population ratio has improved from 1:1,084 in 2013 to 1:799 in 2017 thereby achieving the medium-term target of 1:1000 population and far below the WHO recommended nurse to population ratio. This number of nurses excludes nurse assistants (clinical) numbering about 24,941 as at 2017. Should this be included, the nurse to population ratio would be 1:478.

Upper East Region consistently performed as the best region of nurse to population ratio from 2013 while Western Region was the least performing.

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	2,427	1,278	1,335	1,718	3,468	1,314	912	617	1,383	1,364	15,816
2012	2,968	1,447	1,657	2,106	4,438	1,466	1,026	704	1,514	1,707	19,033
2013	3,996	1,987	2,036	2,693	5,320	1,899	1,516	869	2,010	2,207	24,533
2014	4,890	2,236	2,499	3,181	5,928	2,215	1,641	931	2,529	2,387	28,437
2015	5,573	2,721	3,017	3,504	6,300	2,588	2,171	1,207	2,929	2,647	32,657
2016	5,927	3,011	3,505	3,558	6,461	2,849	2,248	1,221	2,948	2,652	34,380
2017	6,546	3,375	3,800	3,799	6,645	3,193	2,433	1,359	3,172	2,868	37,190
2017*	11,282	6,063	6,362	5,771	9,469	6,437	3,755	2,791	5,002	5,199	62,131

** 2017 including nurse assistants (clinical)*

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR
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
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
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
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
2015	1:980	1:973	1:876	1:834	1:741	1:1,096	1:514	1:634	1:818	1:1,047
2016	1:946	1:880	1:755	1:838	1:745	1:1,033	1:500	1:644	1:833	1:1,009
2017	1:878	1:807	1:713	1:816	1:743	1:945	1:500	1:597	1:785	1:1,030
2017*	1:510	1:449	1:426	1:537	1:521	1:469	1:324	1:291	1:498	1:568

** 2017 including nurse assistants (clinical)*

3.3 Midwife: WIFA population ratio

2017 Performance: 1:720
2017 Target: 1:1,250
Source: IPPD - MOH
Trend: Improving (-22.4%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
WIFA (1,000)	6,381	6,546	6,776	6,885	**7,131**
# Midwives	4,185	4,763	5,571	7,302	**9,557**
Ratio	1:1,487	1:1,340	1:1,175	1:928	**1:720**

Results

Within the medium the number of midwives increased by 128% from 4,185 in 2013 to 9,557 in 2017.This translates into significant improvement of Midwife to WIFA population ratio of 1:720 in 2017 down from 1: 1,487 in 2013.In 2017, the midwife to WIFA ratio increased by 22%.The are improvement across all the ten regions exceeding the medium term target of 1:1250, however, there are regional variations of midwife to WIFA populations.

Upper West Region attained the best (1:408) midwife to WIFA population ratio at the end of the medium term 2017 whilst Northern Region was the least (1:901).

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	754	369	308	489	833	298	198	147	358	279	4,033
2012	736	353	290	461	829	270	192	132	313	287	3,863
2013	855	382	298	479	880	273	232	120	342	324	4,185
2014	1,066	426	328	556	884	313	261	152	390	387	4,763
2015	1,274	482	382	600	972	408	311	219	465	458	5,571
2016	1,606	696	593	736	1,132	551	383	331	657	617	7,302
2017	2,130	917	745	970	1,430	784	478	462	796	845	9,557

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR
2011	1:1,522	1:1,503	1:1,716	1:1,292	1:1,155	1:1,997	1:1,269	1:1,146	1:1,420	1:2,044
2012	1:1,601	1:1,607	1:1,879	1:1,400	1:1,197	1:2,268	1:1,324	1:1,301	1:1,665	1:2,027
2013	1:1,415	1:1,519	1:1,885	1:1,375	1:1,163	1:2,308	1:1,109	1:1,458	1:1,562	1:1,831
2014	1:1,166	1:1,394	1:1,766	1:1,210	1:1,193	1:2,071	1:997	1:1,173	1:1,404	1:1,564
2015	1:1,002	1:1,260	1:1,563	1:1,145	1:1,119	1:1,635	1:847	1:830	1:1,207	1:1,348
2016	1:816	1:913	1:1,070	1:953	1:990	1:1,235	1:699	1:555	1:875	1:1,078
2017	1:632	1:693	1:852	1:738	1:808	1:901	1:565	1:408	1:741	1:760

3.4 Proportion of health facilities in current registration

2017 Performance: 22%
2017 Target: >25%
Source: HEFRA and DHIMS
Trend:
Target:
Outcome: -1

	2013	2014	2015	2016	**2017**
# Facilities in registration	1,279	**1,358**	**-**	**-**	**32,000**
# Facilities	6,042	**6,042**	**-**	**-**	**2,059**
Ratio	21%	**22%**	**-**	**-**	**1%**

3.5 Proportion of receivable funding for NHIS received from MOF

2017 Performance: 69.6%
2017 Target: >90%
Source: NHIA
Trend: Worsening (-16.1%)
Target: Not Achieved
Outcome: -1

	2014	2015	2016	**2017**
Total received (mill. GHc)	**731.0**	1,193.28	1,279.66	**1,206.38**
Total receivables (mill. GHc)	**926.6**	1,185.67	1,494.28	**1,734.46**
Ratio	**78.9%**	100.6%	85.6%	**69.6%**

3.6 Proportion of NHIS claims settled within 12 weeks

2017 Performance: 0%
2017 Target: >20%
Source: NHIA
Trend:
Target:
Outcome: -1

	2013	2014	2015	2016	2017
# Claims settled (in 12 weeks)	-	-	-	-	-
# Claims	-	-	-	-	-
Ratio	-	-	-	-	-

3.7 Proportion of GOG spent on goods and services

2017 Performance: 34.8%
2017 Target: >15%
Source: MOH
Trend: Improving (335%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
GOG Spent on G&S (mill. Ghc)	-	934.7	-	2,064	**2,480.02**
Total GOG Spent (mill. GHc)	-	2,371.8	-	1.6	**863**
Ratio	31%	39%	8%	8%	**34.8%**

3.8 Proportion of GOG spent on assets

2017 Performance: 0.06%
2017 Target: >5%
Source: MOH
Trend: Improving (2,300%)
Target: Achieved
Outcome: -1

	2014	2015	2016	**2017**
GOG Spent on Asset (mill. Ghc)	-	-	2,064	-
Total GOG Spent (mill. GHc)	-	-	2.4	-
Ratio	18%	0.50%	12%	**0.06**

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

2017 Performance: 1.5%
2017 Target: >1.5%
Source: MOH
Trend:
Target:
Outcome: -1

	2014	2015	2016	**2017**
MOH budget on research	-	-	-	-
MOH budget on goods and services	-	-	-	-
Ratio	-	-	-	-

4.1 Institutional all cause mortality

2017 Performance: 23.6
2017 Target: <28/1000
Source: DHIMS+KBTH+KATH
Trend: Neutral (-2.1%)
Target: Achieved
Outcome: 1

	2013	2014	2015	**2016**	**2017**
# In-patient deaths	34,984	30,445	36,503	36,767	39,320
# Admissions (1,000)	1,459	1,535	1,583	1,612	1,664
Ratio / 1000	25.5	21.3	23.1	22.8	23.6

Results

Institutional all-cause mortality during the medium term has not made significant gains. In 2017, the rate of inpatient deaths per 1000 admissions deteriorated by 4% from 22.8/1000 in 2016 to 23.6/1000 in 2017.Apart from Ashanti and Upper West regions which experienced marginal improvement in performance, all regions performance declined. Greater Accra, Upper East, Volta and Central could not meet the medium target of less twenty-eight per one thousand admissions (<28/1000).

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2012	13.8	25.9	32.7	31.4	30.8	21.9	22.7	20.5	30.4	22.0	27.8
2013	16.3	22.7	32.7	32.5	28.1	21.0	23.9	20.1	25.4	23.3	24.7
2014	12.0	20.0	22.3	25.5	29.7	17.0	25.9	14.4	22.2	18.8	20.7
2015	12.0	24.8	22.1	25.5	24.3	16.4	24.1	18.1	25.2	18.2	23.1
2016	11.8	20.6	22.8	24.2	28.9	13.9	21.7	19.6	26.5	18.9	22.8
2017	10.8	20.9	28.1	23.3	32.3	14.6	29.0	17.3	28.1	21.8	23.6

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

2017 Performance: 13.1
2017 Target: >13%
Source: TAM-D
Trend: Neutral (-0.769%)
Target:
Outcome: 0

	2014	2015	2016	**2017**
# Hospitals	13	16	19	**19**
# Hospitals	143	143	143	**145**
Ratio	9.1	11.2	13.2	**13.1**

Results

The number of regional and district hospitals offering traditional medicine remains the same (19) in 2017 year under review. The number of hospitals integrating traditional medicine practice to the mainstream health care increased by 6 in 2017 to 19 from 13 in 2014 representing an increment in 44% during the medium term from 9.1 in 2013 to 13.1 in 2017.

4.3 Proportion of public hospitals offering mental health services

2017 Performance: 100%
2017 Target: No target
Source: ICD - GHS
Trend: Improving (1.2%)
Target: NA
Outcome: 1

	2015	2016	**2017**
# Hospitals offering MHS	206	426	**431**
# Hospitals	431	431	**431**
Ratio	48.7%	98.8%	**100**

Results

The number of public hospitals offering mental health services increased by 109% from 206 in 2015 to 426 in 2017.All regional and district hospitals have incorporated mental health services into the mainstream health care.

4.4 Institutional Malaria under 5 Case Fatality Rate

2017 Performance: 0.20
2017 Target: <0.50
Source: DHIMS+KATH+KBTH
Trend: Improving (-37.5%)
Target: Achieved
Outcome: *1*

	2013	2014	2015	2016	**2017**
# Under-5 deaths -malaria	1,348	1,129	1,056	590	**327**
#Under-5 mal. admission/ 1000	196	208	205	182	**161**
Ratio	0.69	0.54	0.52	0.32	**0.20**

Results

Within the medium term, management of malaria has seen a significant improvement. Malaria under five case fatality rate declined drastically by 71% from 0.69 in 2013 to 0.20 in 2017.

Compared with 2016, malaria under 5 case fatality rate for 2017 reduced by 38% which exceeded the national target of less than 0.5 under five malaria deaths per 1000 under five malaria admissions.

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2012	0.35	0.77	0.98	0.38	0.66	1.19	0.70	0.70	0.95	0.78	0.76
2013	0.42	0.46	0.86	0.43	0.92	1.11	0.69	0.76	0.70	0.58	0.67
2014	0.18	0.35	1.38	0.32	0.53	1.06	0.40	0.44	0.50	0.42	0.53
2015	0.18	0.45	0.54	0.26	0.49	0.81	0.72	0.57	0.58	0.45	0.52
2016	0.13	0.26	0.36	0.23	0.29	0.49	0.51	0.35	0.39	0.32	0.32
2017	0.05	0.26	0.16	0.17	0.13	0.34	0.30	0.33	0.17	0.16	0.20

4.5 Surgical site infection rate

2017 Performance: -
2017 Target: <4%
Source: ICD - GHS
Trend:
Target:
Outcome: -1

	2014	2015	2016	**2017**
# Surgical site infections	-	-	11,602	-
# Surgical interventions	-	-	207,737	-
Ratio	-	4.6%	5.6%	-

4.6 Percentage of public hospitals with functional emergency team

2017 Performance: 25.5%
2017 Target: No target
Source: ICD - GHS
Trend: Improving (176.12%)
Target: NA
Outcome: 1

	2015	2016	**2017**
# Hospitals	29	80	**110**
# Hospitals	431	431	**431**
Proportion	6.7%	18.5%	**25.5%**

Results

The proportion of public hospitals with functional emergency teams have improved by 38% in 2017. All the 10 regional hospitals and some district hospitals (100) functional emergency teams.

5.2 Couple Year Protection (CYP)

2017 Performance: 3.04 million
2017 Target: >2.70 million
Source: DHIMS2
Trend: Improving (30.5%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
GHS - DHIMS	1.59	1.66	1.95	2.33	**3.04**
Others	0.48	0.95	-	-	-
CYP (mill.)	2.07	2.61	1.95	2.33	**3.04**

Results

The estimated protection provided by family planning year on year increased by more than 90% from 1.6 million in 2013 to 3.04million in 2017.

A significant progress has been made with regards to the provision of Family Planning Services within the medium term of 2013 to 2017.Family planning acceptor rate has increased by 38% from 26.8% in 2013 to 37% in 2017. Under the 2017-year review, the family planning acceptor rate increased to 37% from the 2016 rate of 34%.

Table 36: Family Planning Acceptor Rates by Region, 2011 -2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	16.6%	35.4%	26.1%	32.6%	30.2%	19.3%	24.2%	41.6%	26.4%	22.3%	25.8%
2012	18.0%	28.2%	28.4%	32.9%	29.4%	17.7%	29.7%	44.7%	26.3%	21.4%	25.6%
2013	20.3%	37.6%	26.3%	29.9%	31.1%	18.4%	28.3%	44.6%	25.7%	22.5%	26.8%
2014	20.9%	57.8%	28.2%	31.6%	34.3%	19.8%	29.4%	51.5%	28.5%	23.9%	30.4%
2015	22.8%	41.0%	25.8%	28.7%	39.9%	19.1%	29.5%	54.1%	26.9%	23.3%	29.4%
2016	24.8%	52.7%	27.9%	28.8%	54.2%	22.4%	32.3%	54.1%	27.0%	24.6%	34.0%
2017	26.5%	59.8%	29.0%	29.4%	58.3%	23.2%	33.0%	55.6%	33.2%	29.0%	37.0%

Table 37: Couple Year of Protection by Region, 2011-2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR
2011	94,796	121,181	96,635	104,566	30,667	74,625	28,048	19,633	51,093	47,268
2012	143,650	127,774	132,743	232,567	239,841	30,265	68,557	29,842	106,241	111,440
2013	244,984	157,562	157,963	282,638	367,849	42,149	56,292	32,507	129,855	121,183
2014	179,200	169,290	173,144	257,578	406,925	44,279	110,569	34,115	162,016	121,634
2015	205,696	216,633	169,189	293,131	575,582	49,110	94,136	39,555	171,803	136,888
2016	336,448	269,657	209,963	303,363	595,467	61,638	141,797	50,860	183,040	179,216
2017	479,496	268,568	239,242	513,933	682,066	72,492	115,366	55,397	311,678	301,175

5.4 Institutional Neonatal Mortality Rate

2017 Performance: 8.36

2017 Target: <4.5

Source: DHIMS2

Trend: Worsening (36.7%)

Target: Not Achieved

Outcome: -1

	2013	2014	2015	2016	**2017**
# Neonatal deaths	3,897	2,807	3,483	3,970	**5,378**
# Institutional LBs (1,000)	657	655	653	631	**644**
iNMR/ 1,000	5.9	4.3	5.3	6.3	**8.36**

Result

Institutional Neonatal Mortality rate continued to deteriorate throughout the medium term from 5.9/1,000 in 2016 to 6.3/1,000 in 2017.

Table 38 Institutional Neonatal Mortality by Regions, 2011-2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	252	330	166	270	960	289	129	158	170	268	2,992
2012	223	339	161	347	1041	360	172	113	163	310	3,229
2013	666	406	168	408	972	459	148	137	208	325	3,897
2014	341	509	187	220	597	208	110	98	122	415	2,807
2015	586	438	275	221	755	292	142	143	183	448	3,483
2016	567	496	306	448	935	325	162	139	194	398	3,970
2017	1577	575	316	498	953	480	256	123	325	275	5,378

Table 39 Institutional Neonatal Mortality Rate by Regions, 2011-2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	2.2	5.5	2.8	4.1	10.4	4.3	4.3	8.7	3.9	4.4	4.9
2012	2.17	5.05	2.85	5.17	10.90	6.86	5.84	6.87	3.94	5.45	5.51
2013	4.07	5.91	3.01	6.56	9.58	8.05	4.86	7.77	4.65	5.84	5.93
2014	2.82	7.16	3.03	3.30	5.40	3.39	3.39	5.09	2.54	6.67	4.29
2015	4.76	6.57	4.45	3.64	6.42	4.58	4.25	7.43	3.96	7.44	5.34
2016	5.01	7.54	5.11	7.34	8.56	5.07	4.86	6.59	4.58	6.42	6.28
2017	13.59	8.71	5.30	8.31	9.19	6.40	7.65	5.52	7.29	4.37	8.36

5.8 Institutional Maternal Mortality Ratio

2017 Performance: 147
2017 Target: <135
Source: DHIMS
Trend: Neutral (-2.65%)
Target: Not Achieved
Outcome: 0

	2013	2014	2015	2016	**2017**
# IMMR	1,016	941	926	955	948
# ILB (100,000)	6.6	6.5	6.5	6.3	**6.4**
Ratio	155	144	142	151	**147**

Results

The institutional Maternal Mortality rate improved slightly (3%) from 151/100,000 LB in 2016 to 147/100,000 LB in 2017.The performance is deteriorated by 5% below the baseline performance. The medium target of less than 135 maternal deaths per 100,000 live births was not achieved. Four regions; Brong Ahafo, Upper West, Central and Western region have attained the medium-term target.

Table 40: Institutional Maternal Mortality by Region 2011-2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2010	165	73	82	115	169	84	37	26	77	77	905
2011	228	76	74	135	224	114	38	29	87	62	1,067
2012	79	112	64	116	196	111	40	24	72	75	889
2013	205	95	68	124	201	99	33	34	72	85	1,016
2014	139	95	65	117	204	66	45	31	86	93	941
2015	168	87	67	107	208	92	30	30	62	75	926
2016	129	77	95	97	197	133	37	25	71	94	955
2017	162	70	77	106	196	121	46	26	62	82	948

Table 41: Institutional Maternal Mortality rate by Region 2011-2017

Year	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	197.4	127.4	123.8	207.3	242.4	170.8	127.4	159.6	200.6	101.0	174.4
2012	76.9	166.8	113.2	172.9	205.3	211.7	135.8	145.9	173.8	131.8	151.8
2013	125.3	138.3	121.6	199.5	198.1	173.7	108.4	192.9	161.0	152.7	154.6
2014	114.8	133.6	105.2	175.5	184.7	107.5	138.7	161.1	178.8	149.5	143.8
2015	136.4	130.6	108.4	176.1	176.8	144.3	89.7	155.8	134.3	124.5	141.9
2016	114.0	117.1	158.6	158.9	180.4	207.3	110.9	118.6	167.7	151.5	151.1
2017	139.6	106.0	129.1	176.9	189.0	161.3	137.5	116.8	139.0	130.4	147.3

5.9 HIV Prevalence Rate

2017 Performance: 2.1%
2017 Target: <0.8%
Source: NACP - GHS
Trend: Improving (12.5%)
Target: Not Achieved
Outcome: 1

	2011	2012	2013	2014	2015	2016	**2017**
HIV Prev.	1.7%	1.3%	1.9%	1.6%	1.8%	2.4%	**2.1%**

Results

The HIV prevalence has worsened gradually from 1.6% in 2014 to 2.1% in 2017. Although there was a significant improvement by 12.5% in 2017 relative to 2016 performance, the medium-term performance was still 11% points below the 2013 baseline.

Table 42: HIV Counselling and Testing Services

Region	Men tested	Men Positive	Non-Pregnant Women tested	Non-Pregnant Positive	Pregnant Women Tested	Pregnant Women Positive	Total Tested	Total Positive
AR	22,907	2,695	31,182	5,588	141,237	2,719	195,326	11,002
BAR	21,836	1,647	37,086	3,657	84,693	1,800	143,615	7,104
CR	13,765	1,084	22,895	2,113	73,706	1,464	110,366	4,661
ER	24,328	2,129	34,095	4,108	79,452	2,090	137,875	8,327
GAR	34,186	3,279	49,463	5,845	136,901	2,956	220,550	12,080
NR	5,182	354	10,547	941	102,211	1,600	117,940	2,895
ER	5,558	289	7,914	543	36,505	253	49,977	1,085
UWR	8,735	250	13,645	422	24,708	386	47,088	1,058
VR	30,328	1,455	50,638	3,349	65,486	888	146,452	5,692
WR	12,852	1,240	14,014	2,443	75,292	1,673	102,158	5,356
Total	179,677	14,422	271,479	29,009	820,191	15,829	1,271,347	59,260
% +ve		8.0%		10.7%		1.9%		4.7%

5.10 Proportion of infected pregnant women who received ARVs for PMTCT

2017 *Performance: 67%*
2017 Target: >50%
Source: NACP - GHS
Trend: Improving (32.4%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
# on ARV	7,266	8,299	7,813	9,556	**10,568**
# HIV +ve	9,508	12,583	12,236	18,956	**15,829**
	76%	66%	64%	50%	**67%**

Results

The number of HIV infected pregnant women put on ARV for the prevention of mother to child transmission of HIV has increased by 45% (3,302) while the ARV coverage declined by 12% from 76% in 2013 to 67% in 2017.

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

2017 ***Performance: 91.7%***
2017 Target: >96%
Source: NACP - GHS
Trend: Neutral (0%)
Target: Not Achieved
Outcome: 0

	2013	2014	2015	2016	2017
# HIV negative babies	-	-	-	-	
# Babies born to HIV+ mothers	-	-	-	-	
	93%	92%	**91%**	**91.7%**	**92%**

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

2017 Performance: 97.8%
2017 Target: >90%
Source: DHIMS2
Trend: Neutral (3.4%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
# Penta 3 doses given (1000	915	981	1,016	1,086	**1,123**
Population < 1 yrs (1,000)	1,064	1,091	1,129	1,148	**1,188**
	86%	90%	90%	94.6%	**97.8%**

5.14 Proportion of mothers making fourth ANC visit

2017 Performance: 60.5%
2017 Target: >83%
Source: DHIMS2
Trend: Neutral (-4.3%)
Target: Not Achieved
Outcome: 0

	2013	2014	2015	2016	**2017**
# Mother making 4th ANC (1000)	705	730	711	725	**695**
#Expected pregnancies (1000)	1,064	1,091	1,129	1,148	**1,188**
	66%	67%	63%	63.2%	**60.5%**

5.16 Proportion of deliveries attended by a trained health worker

2017 Performance: 57.1%
2017 Target: >65%
Source: DHIMS
Trend: Neutral (2.9%)
Target: Not Achieved
Outcome: 0

	2013	2014	2015	2016	**2017**
# Mothers delivering (1000)	589	627	622	637	**655**
# Expected pregnancies (1000)	1,064	1,091	1,129	1,148	**1,188**
	55%	57%	55.1%	55.5%	**57.1%**

Results

The rate of skilled birth attendance in Ghana is somewhat low and has remained almost stagnant at around 57% during the period 2013 – 2017. At the current pace of increase, the rate is likely to remain unchanged in the coming several years.

Skilled Delivery Rate

	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2013	56.9%	66.5%	59.0%	53.9%	58.1%	51.8%	68.4%	59.3%	44.5%	56.3%	56.8%
2014	55.6%	67.1%	61.8%	55.4%	61.5%	55.0%	74.4%	64.6%	46.4%	61.2%	58.9%
2015	54.1%	63.6%	59.4%	52.1%	60.9%	53.8%	74.8%	63.1%	44.7%	58.3%	57.0%
2016	52.8%	62.0%	57.2%	52.2%	58.6%	58.0%	74.8%	68.7%	44.3%	56.1%	56.4%
2017	53.2%	63.2%	58.7%	51.0%	55.1%	64.1%	75.5%	70.9%	46.3%	58.7%	57.1%

There are large inequalities between the regions in skilled birth attendance rate, with the absolute inequality gap almost around 30% in the period 2014 – 2017. In 2017, Upper Eastern Region had

the highest skilled birth attendance rate (76%), followed by Upper West (71%) and Northern Region (64%). Volta Region had the lowest rate of skilled birth attendance (46%) followed by Eastern Region (51%) and Ashanti Region (53%).

During the period 2013 – 2017, the rate of skilled birth attendance improved in six Regions, with the biggest improvement in Northern Region (by 28%), followed by Upper West (by 27%), Upper Eastern (by 8%), Ashanti (by 3%,) and Western and Volta (each by 1%). The rate dropped in Eastern Region (by up to 10%), Greater Accra Region (by 7%), and Brong Ahfo and Central (each declining by 6%).

5.17 Still birth rate

2017 Performance: 15/ 1,000 LB
2017 Target: <16
Source: DHIMS
Trend: Improving (-11.7%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
# Still births	11,975	11,958	11,055	10,744	**9,808**
# Live births (1,000)	657	655	653	632	**644**
Ratio (/1000)	18	18	17	17	**15.01**

Results

Still births has decline by 8.7% from 10,744 stillbirths in 2016 to 9,808 in 2017. This represent a reduction of 10.2% in stillbirth rate from about 17 stillbirths per 1,000 live births in 2016 to 15 stillbirths per 1,000 live births. The decline in stillbirths has been gradual and consistent during the medium term period under review. The total stillbirths decreased by 18% (2,167 stillborns) from 11,975 to 9,808,

5.18 Postnatal care coverage for newborn babies

2017 Performance: 50%
2017 Target: > 55%
Source: DHIMS
Trend: Improving (6.4%)
Target: Not Achieved
Outcome: 1

	2014	2015	2016	**2017**
# Mothers making PNC in 48 hrs (1000)	480	513	543	**571**
# Expected deliveries	1,090	1,129	1,148	**1,188**
	44%	45%	47%	**50%**

5.20 Tuberculosis Treatment Success Rate

2017 Performance: 87%
2017 Target: > 88%
Source: NTP - GHS
Trend: Neutral (3.4%)
Target: Not Achieved
Outcome: 0

	2012	2013	2014	2015	2016	**2017**
# Successful treatments	-	-	-	-	-	**12,073**
# Treatments	-	-	-	-	-	**14,162**
	86%	87%		85%	85%	**87%**

6.1 Non-AFP polio rate

2017 Performance: 4.3
2017 Target: >2
Source: DHIMS
Trend: Improving (22.9%)
Target: Achieved
Outcome: 1

	2013	2014	2015	2016	**2017**
# Suspected cases	188	246	757	468	**562**
# Children under 15 (100,000)	102	104	107	118	**124**
AFP polio rate	1.9	2.4	7.1	3.5	**4.3**

6.3 Number of deaths attributable to selected cancers

2017 Performance:
2017 Target:
Source: NCD - GHS
Trend:
Target:
Outcome: -1

	2013	2014	2015	2016	**2017**
# Deaths attri. to cancers	-	-	-	-	
# Deaths	-	-	-	-	
	-	-	-	-	