



ANNUAL  
REPORT

2016





# Christian Health Association of Ghana (CHAG)

# ANNUAL REPORT 2016

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# ABBREVIATIONS

AC	Annual Conference
ANC	Ante Natal Care
ARI	Acute Respiratory infections
ARV	Anti-retroviral Vaccine
BLS	Basic life Support
C4C	Connect for Change
CCG	Christian Council of Ghana
CHAG	Christian Health Association of Ghana
CHC	Church Health Coordinators
CHCU	Church Health Coordinating Units
CHPS	Community Health Planning and Services
CQI	Continuous Quality Improvement
CSO	Civil Society Organization
CSS	Community System Strengthening
DANIDA	Danish international Development Agency
DFID	Department for International Development
DPs	Development Partners
DHMIS	District Health Management Information System
EMS	Emergency Medical Services
ENBC	Essential New Born Care
ES	Executive Secretariat
FAME	Fellowship and Associates Medical Evangelism
FP	Family Planning
GHS	Ghana Health Service
GOG	Government of Ghana
GPCC	Ghana Pentecostal and Charismatic Council
HEFRA	Health Facilities Regulatory Agency
HR	Human Resources
HSS	Health Systems Strengthening
IGF	Income Generating Funds
IMCI	Integrated Management of Childhood Illness
IPD	In-Patient Department
MAF	MDG Accelerated Framework
MCH	Maternal and Child Health

MDG	Millennium Development Goal
MHS	Mental Health Service
MI	Member Institutions
MOH	Ministry of Health
MOU	Memorandum of Understanding
MSDS	Minimum Service Data Set
NCHS	National Catholic Health Secretariat
NHIA	National Health Insurance Authority
OPD	Out-Patient Department
OPAT	Organizational Performance Assessment Tool
PHC	Primary Health Care
PLHIV	Patients Living with HIV and AIDS
TBA	Traditional Birth Attendant
UTI	Uterine Tract Infection
URTI	Upper Respiratory Tract Infection

# Chairman's Letter

Dear Friends,

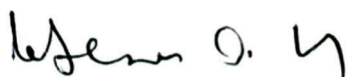
All that we were able to achieve in 2016, amidst the seemingly unsurmountable challenges that were present in the course of the year, happened because you, the good people of this country, reposed your confidence and trust in us to serve you. The commitment, endurance and tenacity of our able Christian health workers contributed immensely to the successes we chalked in 2016. On behalf of the Board, let me thank you both, those who had the privilege to render Christ-like health services and those clients that received services from CHAG in 2016.

Our mandate is to provide healing to all manner of people in fulfillment of the Healing Ministry of our Lord Jesus Christ. In the light of this mandate, we sought to improve the lives of mothers who go through birth in our institutions and we achieved a lot by reducing institutional maternal mortality. Furthermore, our committed professional and other staff in our dedicated Member Institutions upheld our Christian identity and witness even in crisis moments between Organized Labour and Government and for this, we are most grateful.

In spite of the achievements in 2016, CHAG is still confronted with increasingly dynamic changes and challenges in the health sector. As in the previous year, we experienced significant cuts in funding during 2016 owing to the exit of our core Development Partner, DANIDA whose exit was predicated by Ghana's assumed status of a Lower Middle Country. We are still confronted with about 11 months delay in reimbursement of validated claims from the National Health Insurance Authority. This situation adversely affected our capacity to deliver quality service for needy people in 2016 and continues to threaten CHAG's potential to render services. In many ways, the financial and organizational sustainability of CHAG services remain a major concern. Consequently, the far-reaching transformation process that begun about 3 years ago is being pursued with several objectives: *to strengthen our position as the most reliable partner in the health sector, to drive our ability to innovate and to successfully position CHAG for the long term in the face of emerging challenges. Ultimately, we aim at evolving operational and structural changes that will promote the development and sustainability of Christian health service delivery.*

Please, enjoy this 2016 Annual Report, which highlights the impact CHAG has made on the lives of our cherished clients and the Ghanaian public as a whole. Co-operation and Partnership is our cherished core value. We uphold unity in diversity. Together, we are transforming health care and meeting the needs of our clients now and in the future. Your support is highly valued!

With gratitude,



**Dr. Kwabena Adu Poku**

Board Chairman

Christian Health Association of Ghana (CHAG)

## A Note of Gratitude

In pursuit of our core value of holistic healthcare provision, CHAG rendered curative, preventive, promotive and rehabilitative health services for the year 2016. In doing all that we maintained our commitment to providing quality training of health professionals across our network of 300 Member Institutions.

With barely 7.4% health infrastructure CHAG contributed 29% of national in-patient care and 20% of national OPD services in 2016. Specifically, we handled 6,065,897 Outpatient visits, 464,377 admissions, supervised 136,669 deliveries and admitted 2,878 students in the 17 pre-service CHAG Training Colleges. These modest gains, with limited resources, was an affirmation and demonstration of CHAG's efficiency niche in the health Sector. We owe these significant contributions to our dedicated Front-Line Staff, Senior Leadership and Board of Trustees for their commitment to the values and ideals of CHAG. Consistent with core value of cooperation and partnerships, CHAG collaboratively worked with Agencies, Providers, and Organizations to improve equitable and convenient access to affordable quality health services. In particular, we enjoyed the indispensable support of the Government of Ghana through the Ministry of Health, DANIDA, EU, UKAID/DFID, UNFPA, Catholic Relief Services, amongst others.

On behalf of my Management Colleagues, I wish to thank the Board of Trustees for their guidance, direction and support in many ways, and our CHAG Secretariat Staff for their dedicated efforts and for the way they continued to uphold the culture of excellence and creativity. As a Christian Not-For-Profit Organization, our aspiration is to provide extraordinary health services, in all its dimensions, to those we serve. Hence, we would continue to explore innovative interventions and strive to promote health and healing for those who depend on us in the times ahead.

This 2016 annual performance report highlights the details of our collective achievements, common challenges and pointers for our future growth prospects and potentials as Christian Health Service Providers. The report represents our renewed promise and pledge to promote Jesus Christ's healing ministry everywhere, to everybody, and at all times!

Sincerely,



**Peter Kwame Yeboah**

Executive Director

Christian Health Association Ghana (CHAG)



# Christian Health Association of Ghana (CHAG) in a Nutshell

CHAG is a Network Organisation of 300 Health Facilities and Health Training Institutions owned by 25 different Christian Church Denominations. CHAG provides health care to the most vulnerable, deprived, marginalized and underprivileged population groups in all 10 Regions of Ghana, particularly in the most remote areas.

The larger 7 Church denominations operate autonomous coordinating offices either at Presbytery, Diocesan or National level. They provide technical, logistical and program support to their corresponding Health Facilities. To some extent, they also mobilize funding for their members. Majority of these offices have longer-term strategic plans, policies and administrative guidelines.

At the National level, CHAG is spearheaded by the Secretariat providing stewardship for CHAG, developing strategic partnerships in support of capacity development of the network and its members, and articulating the Network's position and interest in the policy discourse of the health sector.

CHAG is a recognised Implementing Partner/Agency of the Ministry of Health (MOH) and works within the policies, guidelines and strategies of the MOH. Nonetheless, CHAG is autonomous and takes an independent position to advocate and promote improvements in the health sector and to promote the interest of its members and target beneficiaries.

CHAG is directed by a Strategic Framework outlining aspirations and approaches inspired by Christian identity, purpose and values.

For more information, kindly visit CHAG website: [www.chag.org.gh](http://www.chag.org.gh)

## Table 1: Core Values of CHAG

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- Pro poor; assist the most vulnerable and less privileged in society.
  - Respect the dignity and equal rights of each person irrespective of gender, sexual orientation, race, age, religion, political orientation and societal status.
  - Act in the spirit of love, service, justice, compassion, forgiveness and truthfulness.
  - Holistic health care, address psychological, physical, spiritual and social needs of clients.
  - Respect autonomy of members of the Association and their own unique contribution to shared vision, mission and objectives.
  - Critical reflection on performance for continuous quality improvement.
  - Honest, open and transparent and working towards joint action for results.
- 

The overall objective of CHAG is to contribute to national health sector objectives and outcomes. Specific objectives of CHAG relate to representation and partnership development (Table 2).

## Table 2: Objectives of CHAG

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- Foster effective partnerships between Church health services.
  - Improve dialogue and partnerships within the health sector.
  - Promote improvements in the health sector.
  - Advocate and promote Christian values and ethics in health care policy and services delivery.
  - Promote the interests and sustainability of Church health services in Ghana.
- 

CHAG is governed by a Board of Trustees and directed by a strategic framework outlining medium term aspirations and approaches.<sup>1</sup> At the National level, CHAG operates a Secretariat, which provides stewardship, develops strategic partnerships, builds capacity and articulates the interest of the Association through lobbying, advocacy and policy dialogue. The larger Church denominations operate coordination offices at various levels providing financial, technical, logistical and program support to their respective health facilities. CHAG works closely with the Ministry of Health (MOH) and its Agencies at policy and implementing levels based on performance agreements, mutuality and reciprocity.<sup>2</sup>

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<sup>1</sup> CHAG Strategic Framework 2014-2016, Unity in Diversity, December 2013.

<sup>2</sup> Memorandum of Understanding between MOH and CHAG, 2006. Memorandum of Understanding between GHS and CHAG, December 2013.

# Summary Outlook 2016

*In fulfillment of its mission, The Christian Health Association of Ghana (CHAG) successfully cared for millions of our fellow citizens in 2016.*

Thus, CHAG consolidated its role in the Ghanaian health sector by improving access to quality health services and professional training through its Network of 300 hospitals, Health Centres, Clinics and Training Schools.

On leadership and governance, CHAG sought to strengthen health facility systems and to improve outcomes within the Network by increasing access to the use of Organizational Performance and Assessment Tool (OPAT). CHAG thus adopted OPAT as a performance management tool to monitor performance in the nine health system blocks within the network.

To improve efficiency of at the CHAG Secretariat, the Board of Trustees restructured the Secretariat's functional portfolio by realignment of duties, introducing two new key positions with an overall aim of ensuring efficiency and effectiveness of work.

Consistent with CHAG's objective to support the achievement of national health outcomes, CHAG initiated processes to partner the Ministry of Health toward the implementation of CHPS policy.

Without any relief, CHAG continued to bear the debilitating consequences of NHIS mounting indebtedness as a result of delays in reimbursement of NHIS validated claims. This adversely impacted on our capacity to fulfil our core mandate to our cherished clients. In line with CHAG's cooperation and partnership with Government, CHAG actively supported the NHIS Review Committee, set up by His Excellency President John Mahama, which sought, amongst other things, to restructure the NHIS to make it more sustainable, equitable, efficient, and accountable and to the utmost satisfaction of the Ghanaian public. Towards sustainability and optimization of health services, CHAG initiated steps to assist member institutions set up centres of excellence that will expand the skill and knowledge of specialists to remote areas. In the coming year, CHAG seeks to operationalize these centres of excellence to ensure equitable access to specialized services to the unreached and marginalized areas.

In spite of the mounting challenges exacerbated mostly by the NHIS indebtedness, CHAG proved to be a reliable partner in the health sector. Overall, CHAG increased its contribution to the national health sector objectives as indicated by a selected number of outcomes, performance and input indicators. In particular, there were improvements in key health sector outcome indicators from the year 2012 to 2016. These indicators include Maternal Mortality, Still Births and Crude Mortality rates. There was a decline in maternal mortality ratio from 145 to 109 deaths per 100,000 live births in the year under review. This represents 24.8% decline of the ratio (145/100,000 live births) recorded in 2015.

Over a five-year period, there has been 31.0% reduction in institutional maternal mortality and 13.3% reduction in Under-5 mortality within the CHAG network (refer table 3 below). This is attributed to concerted efforts, innovations and good interventions targeted at avoidable maternal and under-5 mortality within the CHAG network over the period. Stillbirths and crude mortality reduced by 23.1% and 17.4% respectively, compared to 2012. These are indications of improvement in the quality of health service delivery within the Network. However, Neonatal and Infant Mortality Rates worsened over the said period. Table 3 on the next page provides detail on the key outcome indicators for CHAG over a five-year period.

Table 3: Key Health Indicators: 2012 - 2016

Outcome Indicator	Year					% Change 2015 - 2016	One-year Performance 2015 - 2016	% Change 2015 - 2016	5-Year performance 2015 - 2016	National 2016	Developing Countries 2016
	2012	2013	2014	2015	2016						
<b>Material Mortality Rate</b>	158	168	167	145	109	24.8%	Improved	-31.0%	Improved	151 <sup>1</sup>	239 <sup>4</sup>
<b>Neonatal Mortality Rate</b>	5.5	7.1	9.8	6.5	13	100%	Worsened	136.4%	Worsened	28 <sup>2</sup>	52 <sup>2</sup>
<b>Infant Mortality Rate</b>	6.6	7.9	10.9	8.6	12.9	50%	Worsened	95.5%	Worsened	43 <sup>2</sup>	107 <sup>2</sup>
<b>Under 5 Mortality Rate</b>	21.1	19.5	17.3	15.1	18.3	21.2%	Worsened	13.3%	Improved	62 <sup>2</sup>	177 <sup>2</sup>
<b>Still Birth Rate</b>	26	24	21	21	20	4.8%	Improved	23.1%	Improved	29 <sup>3</sup>	18.4 <sup>5</sup>
<b>Crude Mortality Rate</b>	23	23	21	22	19	13.6%	Improved	17.4%	Improved	9 <sup>2</sup>	16 <sup>2</sup>

<sup>1</sup> Institutional Maternal Mortality ratio, DHIMS 2, 2016<sup>2</sup> The World Bank, Data, 2014, 2015<sup>3</sup> World Health Organization: Maternal, newborn, Child and adolescent health, stillbirths 2015<sup>4</sup> World Health Organization: Maternal Mortality Key facts 2015<sup>5</sup> 2015 worldwide estimates: WHO neglected tragedy of stillbirths

## Performance Indicators

Furthermore, selected performance indicators showed improvement in 2016 compared to previous years. Total number of outpatient attendance was 6,065,897, an increase of 2.1% over that of 2015 and 6.6% over a 5-year period (2012-2016). Total hospital admissions increased by 1.9% in the year under review, and 16.9% over a 5-year period. These two are indications that Clients continue to have confidence in CHAG facilities. With the establishment of Community Health Planning Services (CHPS) compounds in many communities across the country coupled with the proliferation of private health facilities, it was speculated that OPD attendance and admissions would reduce in the year under review; however, the contrary happened, showing clients' preference and patronage of CHAG Facilities. Another plausible explanation is the fact that consistent with CHAG's core values, staff of CHAG Member Institutions (CMIs) did not go on strike when there were compelling reasons to do so as the other service providers did. Hence, CHAG reliably absorbed the excess workload that emanated from the impasse between government and organized labour.

Total deliveries in 2016 was 136,669, an increase of 24.0% compared to 2015. Of this, the number of Caesarian Sections (CS) was 25,612, which represents an increase of 17.3% of that of 2015. Thus in 2016, the proportion of CS cases to total delivery was 19.0%. Although this is a little better compared to 2015, it is still beyond the WHO recommended 6-10%.

Used as a proxy indicator for all childhood vaccinations, the number of children vaccinated for BCG decreased by 6.4% over the period. Bed-occupancy rate, which is the proportion of beds occupied by patients at any given time and a measure of demand for beds in hospitals, is declining since 2013 with an average of 52.6% for 2016. Student enrollment with CHAGs Nurses and Midwifery Training Colleges for the year 2016 increased by 115.5% compared to 2015. Between 2012 and 2016 the rise in student enrolment nearly quadrupled with 254% increase. Although the average student pass rate for final examinations dropped from 98% to 95% in 2016, over the last five years there has been an improvement from 61% in 2012 to 95% in 2016.

Table 4: Performance Indicators.

Performance indicator	2012	2013	2014	2015	2016	% Change 2015-2016	1-year Performance	% Change 2012-2016	5-year Performance	National 2016	Sub-Saharan Africa
Total Out-Patients	5,813,740	5,844,783	5,749,927	5,942,777	6,065,897	2.1%	Improved	4.3%	Improved	29,948,878	
Total Admissions	397,240	428,601	439,186	455,577	464,377	1.9%	Improved	16.9%	Improved		
No of Deliveries	114,205	117,313	119,141	110,228	136,669	24.0%	Improved	19.7%	Increased		
Total Caesarian Sections	17,839	19,284	20,779	21,834	25,612	17.3%	Increased	43.6%	Significantly increased		
Caesarian Rate	15.60%	16.40%	17.40%	19.8%	19.0%	4.0%	Improved	21.8%	Worsened	6.5% <sup>1</sup>	2% <sup>1</sup>
Vaccination (BCG)	109,878	111,371	113,413	91,632	85,813	-6.4%	Declined	-21.9%	Decreased		
HTC Clients counselled	31,451	36,946	50,238	40,161	62,291	55.11%	Significantly increased	98.1%	Decreased		
Bed Occupancy Rate	68.60%	64%	69%	39.7%	52%	31.0%	Improved	-24.6%	Decline		
Student Enrollment	726	1,854	2,849	2,491	2,878	115.5%	Significantly increased	296.4%	Significantly increased		
Student Pass Rate	61.00%	65.00%	88.00%	98.00%	95.00%	-3.0%	Declined	55.7%	Improved		

<sup>1</sup> World Health Organization - Trends in Caesarean delivery by Country and Wealth quintile: a cross sectional survey in Asia and sub-Saharan Africa

## Input Indicators

As depicted in Table 5 and Figure 1, selected *input indicators* showed a considerable improvement in the area of human resources with a noticeable increase of 42% in the total number of CHAG staff enrolled on GOG-payroll since 2011. The average proportion of *clinical staff* relative to the total staff establishment increased from 48% in 2012 to 60% in 2016, although distribution of clinical staff remained uneven.

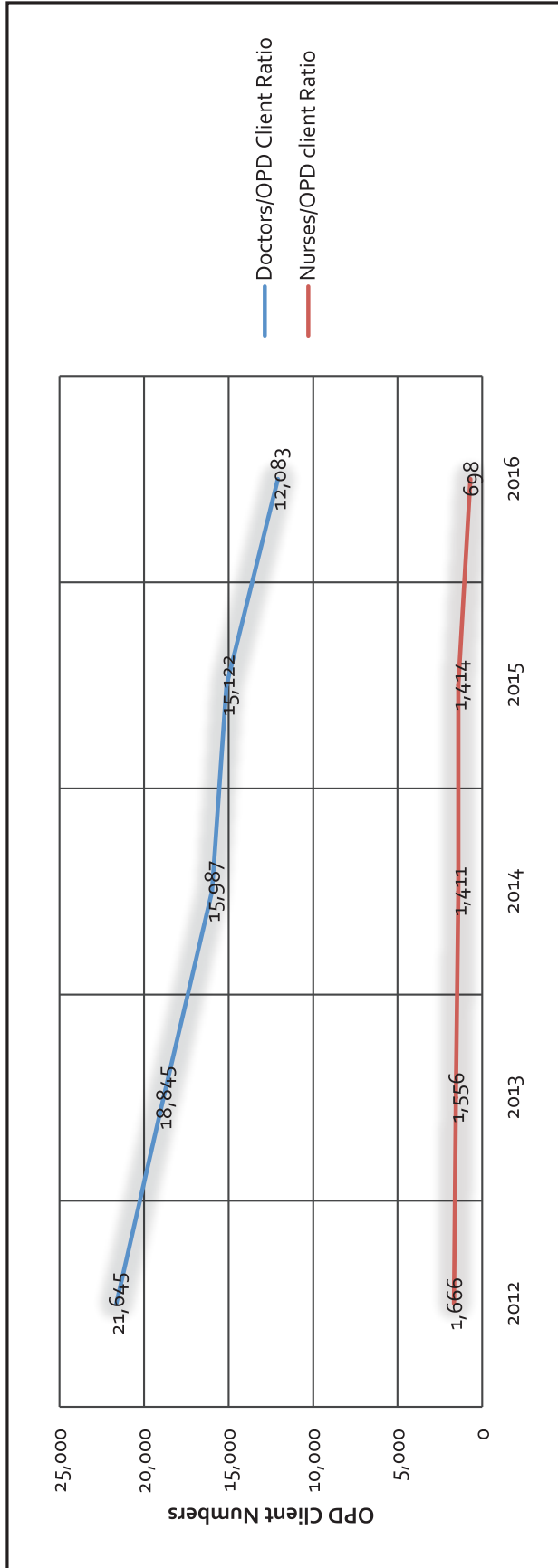
Doctor to client and nurse to client ratios have seen continuous improvements from 2012 to 2016 as shown in table 5. Every year there are nurses and doctors who accept posting into CHAG and this accounts for the improvement in the above ratios. The nurse/Client ratio at the moment is better than the national nurse to client ratio of 1:834.

Table 5: Input Indicators: 2012-2016

Input indicators	2012	2013	2014	2015	2016	% Change 2015-2016	1-year performance	% Change 2012-2016	5-year performance	National (Ghana)	WHO Standard
Total Mechanized Staff	8,861	9,356	11,127	12,584	15,942	26.7%	Increased	79.9%	Significantly increased		-
% Clinical/non-clinical staff Ratio	48	64	73	53	60	13.2%	Improved	25.0%	Improved		-
Doctor/OPD-Client Ratio	1:21,645	1:18,845	1:15,987	1:15,122	1:12,083	20.1%	Improved	44.2%	Improved	0.096:1,00 <sup>01</sup> (1:10,416)	3.4/1,000 <sup>3</sup>
Nurse/OPD-Client Ratio	1:1,666	1:1,556	1:1,411	1:1,414	1:698	50.6%	Significantly improved	58.1%	Significantly improved	1:834 <sup>2</sup>	3.4/1,000 <sup>3</sup>

<sup>1</sup>WHO Global Health Observatory Data, 2010<sup>2</sup>Holistic Assessment Report 2016, MOH

Figure 1: Trend of Doctors and Nurses/OPD Clients Ratio 2012 - 2016



<sup>3</sup> Staff Access deficit indicator, 2010 World Health Report

# Performance Outcome and Status for 2016

As an Implementing Partner, CHAG sought to contribute to the achievement of Ghana's Health Sector Medium-Term Development Plan (2014-2017) by adopting the Health System Strengthening approach. Hence, the focus areas comprised;

1. Health Service Delivery
2. Health Information
3. Leadership and Governance
4. Human Resource for Health
5. Health Financing
6. Health Technology
7. Community Ownership and Participation
8. Partnership
9. Health Research

This section provides information on the performance, outcome and status of CHAG during 2016. It is structured on the nine (9) health systems building blocks as adopted in 2010 by CHAG as its performance management framework.

## 1.0 Service Delivery

CHAG provides primary, secondary and tertiary health care as well as preventive, promotive, rehabilitative and palliative services. CHAG's health service provision hinges on core values such as Christian identity, purpose and values with much emphasis on protection of patient's rights and adherence to professional medical norms and ethics. Other important aspects are quality of care and patient safety, addressing the local disease burden and improving efficiency and effectiveness. Services provided by CHAG are aligned to national health sector priorities and in accordance with standard treatment guidelines.

### 1.1 Out-Patient and In-Patient Services

The total number of outpatients seen in CHAG in 2016 was 6,065,897, whereas total number of patients admitted beyond 24 hours was 464,377 (refer to table 4). There was an increase of 2.1% in the OPD attendance in 2016 compared to that of 2015 and 4.3% compared to 2012. Out of every 10,000 Out-patients, about 766 were admitted across CHAG Hospitals with 18 beds per 1,000 population. In-patient Clients seen in CHAG facilities decreased marginally by 1.0% over the period under review. The overall increase in in-patient was 16.9% over the last five years. Of the patients seen within the Network,

85% and 82% respectively of the OPD and in-patients clients were insured. There has been gradual decline in the proportion of patients (both OPD and in-patient) insured since 2013 as shown in table 6. This trend is not unique to CHAG. At the national level, the proportion of the population insured is declining according to the 2016 Holistic Assessment Report of the Ministry of Health. The trend may be explained by the gradual loss of confidence in the NHIS given the seemingly chronic indebtedness challenges that is undermining service providers' capacity to provide responsive health services to clients.

The increase in OPD numbers signifies the trust of clients in CHAG Facilities given that many CHPS compounds and private health facilities are being established in many communities, which have the potential of reducing patronage of existing Facilities. This is a positive outlook for CHAG Institutions particularly in areas where NHIS capitation is being implemented or scaled up.

The decline in in-patients' numbers however, though marginal, may signal two possibilities; (1) clients are seeking early treatment thereby reducing the need for admissions and or (2) clients are seeking care in other facilities. To avert the later situation, if it is the case, CHAG will build strong quality assurance teams within our facilities in the coming year to ensure that clients have a better option.

Table 6: OPD, IPD Service Outputs and Insurance Status of clients: 2012 – 2016

Performance Indicator	2012	2013	2014	2015	2016	Trend
OPD	5,692,640	5,766,567	5,979,124	5,942,777	6,065,897	Increasing
OPD Insured	88%	94%	89%	87%	85%	Declining
IPD	397,240	428,601	439,186	455,577	464,377	Increasing
IPD Insured	84%	86%	86%	85%	82%	Declining

## 1.2 The Contribution of CHAG to National Outpatient and In-Patient Services

In 2016 CHAG contributed 20.0% and 29.0% respectively of National OPD and in-patient numbers as shown in figure 2 and table 7 below. CHAG has been contributing an average of 29% to National in-patient services since 2012 (refer to figure 2 below). Similarly, CHAG's contribution to National OPD care has been fairly constant over the past five years. The average contribution since 2012 is 19.4%. The number of clients seen at the inpatient and outpatients departments have not significantly changed since 2012 even though the number of CMIs have increased. The establishment of many CHPS and private health facilities in some of the areas CMIs operate is creating competition for some of our clients.

Regionally, CHAG's contribution to IPD and OPD care is highest in the Ashanti region where CHAG contributes 75% and 44% to in-patients and out-patient care respectively. These figures exclude IPD and OPD clients attended to by the Komfo Anokye Teaching Hospital and private facilities in Kumasi (refer to table 8 below). The second region where CHAG makes significant contribution to in-patient care is in the Brong Ahafo with 58% and the least in the Greater Accra region with 8%. In terms of OPD, CHAG's second contribution is in the Brong Ahafo followed by the Northern region with 42% and 38% respectively. Again the least contribution is in the Greater Accra region with 7%. (Refer to table 8 below)

Figure 2: Trend of Percentage CHAG Contribution to National OPD & IPD



Table 7: CHAG percentage Regional Contribution to National OPD and IPD Services, 2016

Output	2012	2013	2014	2015	2016	% Change 2015 - 2016	1-year Performance	% change 2015-2016	5-Year Trend
National OPD	29,496,283	30,142,274	31,087,824	29,949,173	29,948,878	<0.001%	Decline	1.5%	Decline
CHAG OPD	5,813,740	5,749,927	5,749,927	5,942,777	6,065,897	2.1%	Improved	4.3%	Improved
CHAG % Contr. to National OPD	20%	19%	18%	20%	20%	0	Unchanged	0	No change
National IPD	1,405,997	1,460,360	1,534,379	1,501,773	1,588,050	5.75%	Improved	9.0%	Fluctuating
CHAG IPD	397,240	428,601	439,186	455,577	464,377	1.9%	Improved	16.9%	Improved
CHAG % Contr. to National. IPD	28%	29%	29%	30%	29%	-1%	Improved	14%	Improving

Table 8: CHAG's contribution to Regional and National OPD and IPD, 2016

Region	In-patients			Out-patients			Percentage (%)	
	National In-patients	Contribution by CHAG	National Out-patients	Contribution by CHAG	National Out-patients	IPD	OPD	
Ashanti	115,446	86,453	2,719,849	1,207,168	75	44		
Brong Ahafo	167,635	97,813	3,415,961	1,291,657	58	38		
Central	187,824	40,026	3,591,370	573,827	21	16		
Eastern	190,752	37,433	4,130,672	702,316	20	17		
Greater Accra	127,207	16,846	3,639,881	269,827	13	7		
Northern	171,412	56,316	942,999	395,691	33	42		
Upper East	156,701	12,903	2,373,324	310,717	8	13		
Upper West	85,236	25,184	2,086,391	235,157	30	11		
Volta	292,129	49,638	4,866,360	610,880	17	13		
Western	193,708	41,765	1,974,714	468,659	22	24		
National	1,588,050	464,377	29,741,521	6,065,897	29	20		

Source: DHIMS 2 (accessed 20<sup>th</sup> May 2017)

### 1.3 Contribution to OPD by Church Denomination

Catholic and Presbyterian Health Services together contributed over 70% of OPD numbers seen in the year 2016 with Catholics contributing the largest (63.8%) as shown in figure 3 below. The trend has been the same from 2012, with the Catholic Facilities contributing higher proportions of Outpatient and In-Patient data, followed by Presbyterian Health Services and SDA as shown in figures 3. The National Catholic Health Service’s (NCHS) contribution of 63.8%, of OPD data, represents an increment of 2.6% compared to 2015. The contribution by Presbyterian Health Services increased by 1.2% compared to 2015. But compared to 2013 when the service contributed 16.8%, this year’s contribution represents a drop of about 5.2%. It is important to note that the contribution from the Presbyterian Health Service has been declining since 2013. Similarly, the OPD contributions by GAHS (SDA), Pentecost and Salvation Army have been declining since 2012. That of Methodist declined by approximately 1% between 2015 and 2016 but increased between 2012 and 2015 by about 1.7%.

Figure 3: OPD Contribution by Denomination, 2016

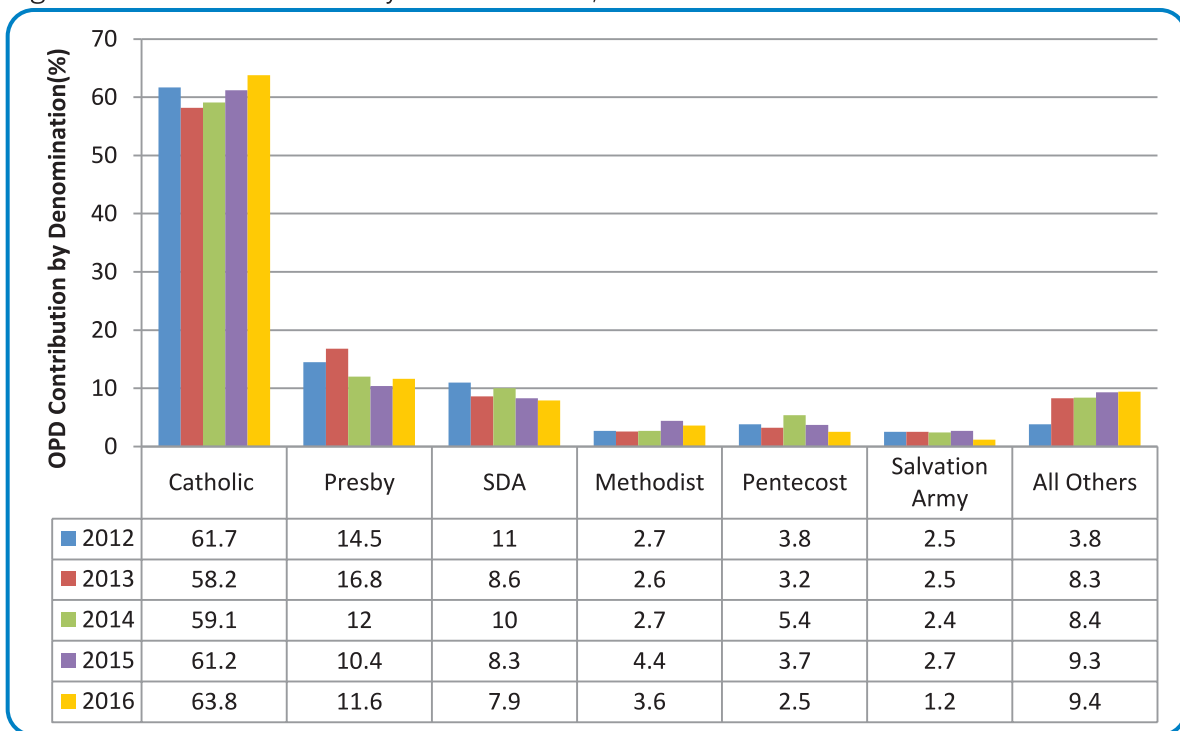
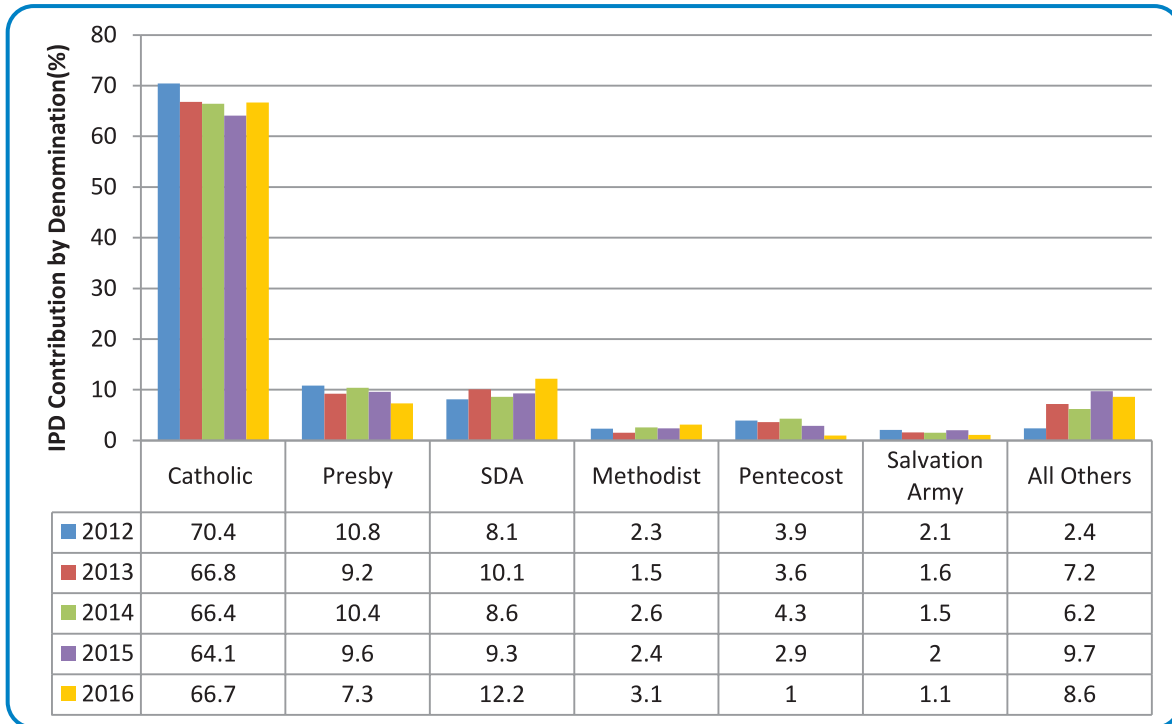


Figure 4: IPD Contribution by Denomination, 2016



Regarding inpatients care, the National Catholic Health Service contributed approximately 67% to the CHAG IPD Client attendance compared to other Denominational Health Services. However, compared to 2012 this year’s contribution represents a reduction of 3.7%. Again, similar to the pattern observed for OPD contribution, the IPD contributions by the Presby, Pentecost and Salvation Army are declining since 2012 whilst that of SDA and Methodist are rising as shown in figure 4.

#### 1.4 Contribution to CHAG OPD & IPD by Region

CHAG has higher number of Member Institutions in the Ashanti Region than any other region in the country. The region has the highest population and by extension, the highest number of health facilities. However, Brong Ahafo contributed more (21%) to OPD clients within the network than the Ashanti region (refer to figure 5). With 39 Hospitals and Clinics the Ashanti Region contributed about 20% of OPD Client attendance in 2016. The Eastern Region was the third with 12%.

Figure 5: Proportion of 2016 Annual OPD Clients contributed by Region

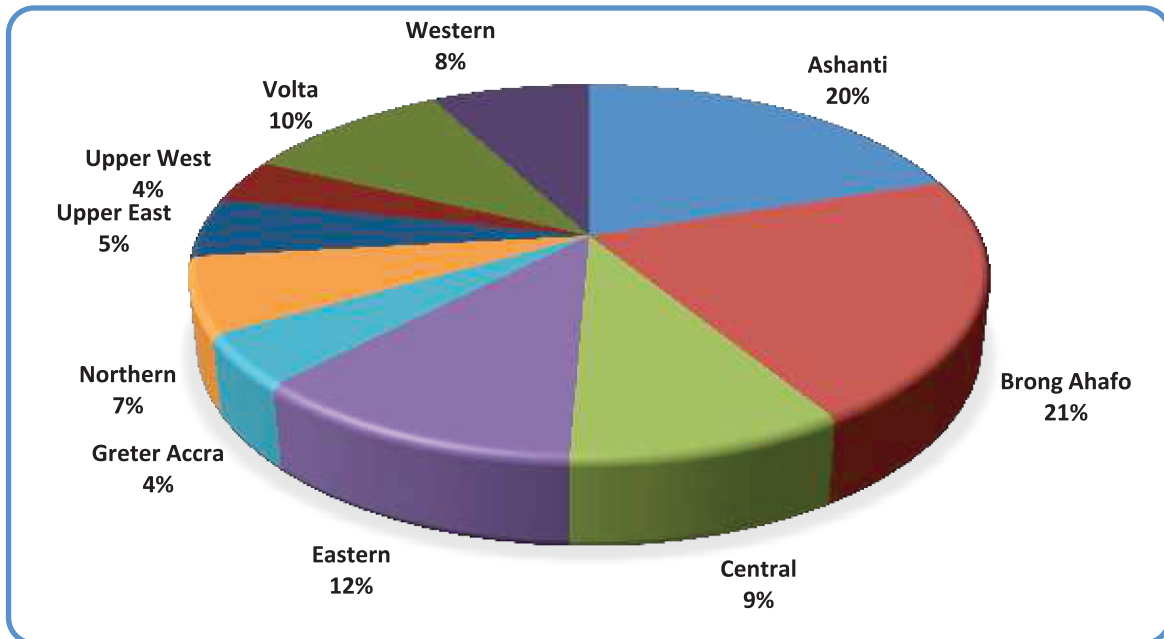
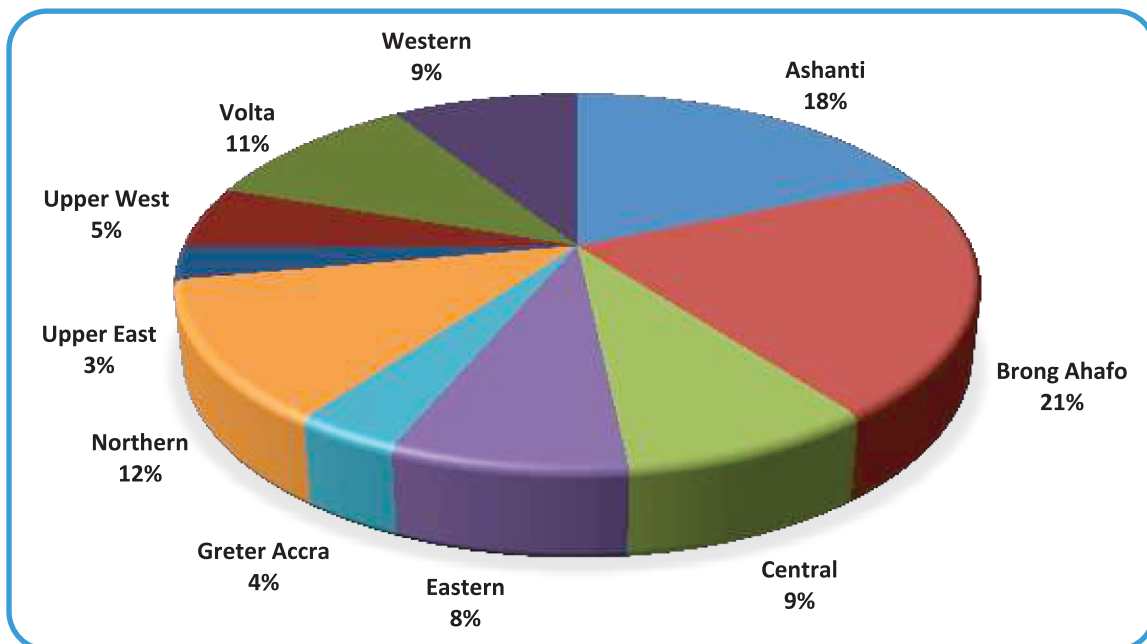


Figure 6: Proportion of 2016 Annual Admissions Contributed by Region

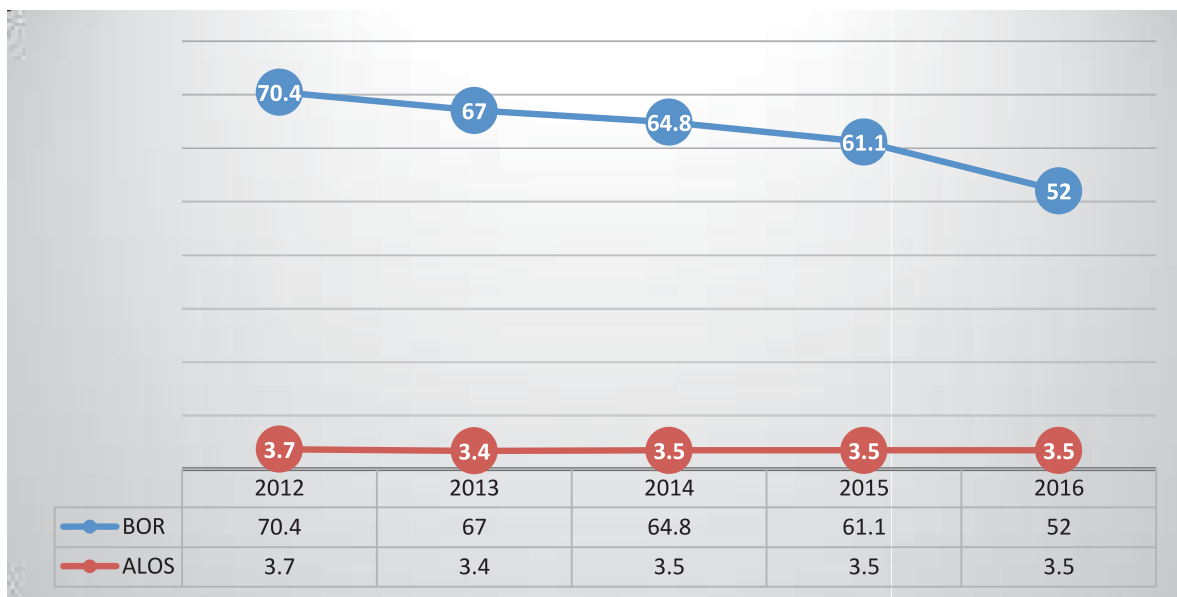


Again, with regards to in-patient care, Brong-Ahafo Region contributed a higher proportion of 21% inpatient admissions followed by Ashanti region with 18%. Upper East contributes the least (3%) of IPD followed by the Greater Accra region with 4%. Upper East contributes the least because most of the facilities there are clinics which do not admit more patients. Figure 6 highlights regional contribution to IPD data.

### 1.5 Bed Utilization and Average Length of Stay

From 2012 to 2016 proportion of beds utilized by inpatients per 100 beds in CHAG decreased from 70 to 61 beds. The progressive decline in bed utilization could be attributed to early diagnosis and treatment thus avoiding the need to get admitted. The decreasing trend means that the demand for hospital beds within CHAG facilities decreased. It is a pointer to the fact that going forward, it may not be necessary to keep many beds in a facility. Rather than focusing on building facilities with large number of hospital beds, it is instructive to rather focus on quality of service delivered to clients. Average days spent at all wards were 3.5 days and this has been so since 2014. Figure 7 below provides details.

Figure 7: Trend of Bed Occupancy Rate and Average Length of Stay, 2012 - 2016



## 1.6 Reproductive and Sexual Health Services

CHAG continued to prioritize reproductive and sexual health in 2016. CHAG recorded an unprecedented 136,669 deliveries, a 24% increase of the deliveries that occurred in 2015 and about 20% increase from 2012. Nineteen percent (19%) of all these deliveries were performed under Caesarian Sessions (C-S). This rate is high considering the World Health Organization's observation that C/S rate of more than 10-15% are not associated with decreases in maternal, neonatal and infant mortalities. The observed rate is above the national average CS rate of 6.5%. It is important however, to note that the number of Caesarean deliveries conducted in 2016 was about 5% less than deliveries done in 2015. Over the past five years, CS has increased by 22%. It may be in response to increase demand for Caesarean deliveries by clients or that the work overload for the few professional staffs within the network is forcing them to impose CS on clients. Some institutions recorded as high as 44%, calling for a need to investigate the causes of high Caesarian section rate.

A total of 124,785 pregnant women were registered for prenatal care (ANC) in 2016 (refer table 6). This is 17.4% increase over that of 2015 and about 34% increase in 5 years (since 2012).

One hundred and forty-two thousand, seven hundred and four (142,704) mothers were registered for Postnatal Care (PNC) representing an increase of 16% compared to 2015. Majority of these women received prenatal care before delivery. More maternal deaths were audited in 2016 (97%) compared to 2015 (86%). This is part of the accountability measures instituted to learn lessons in order to formulate feasible interventions to ensure that maternal mortality is reduced to the barest minimum.

Figure 8: CHAG's Contribution to Regional Deliveries, 2016

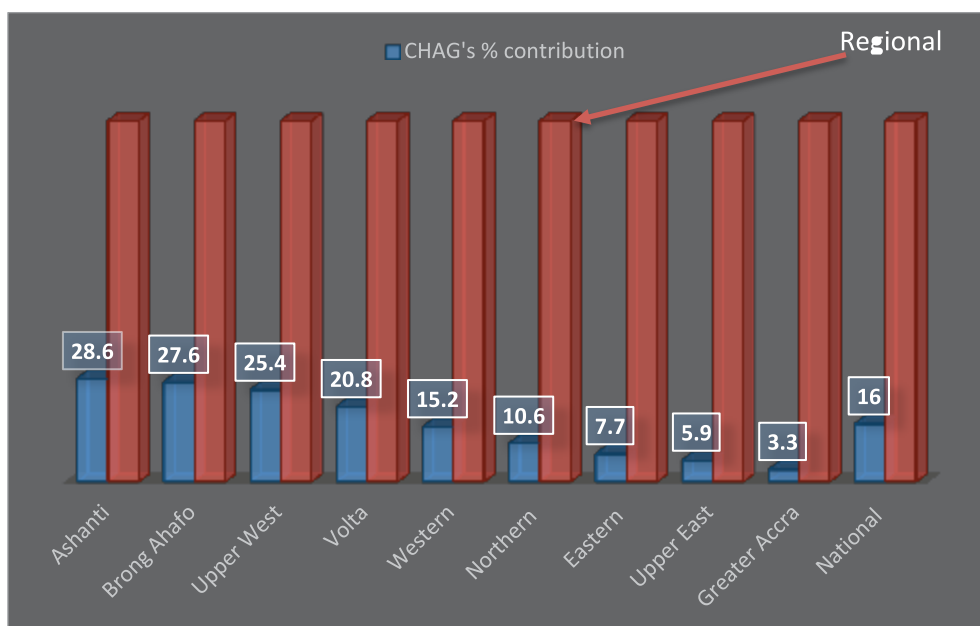


Table 8: Reproductive and Sexual Health service outputs, 2012-2016

Performance	2012	2013	2014	2015	2016	% Change 2015-2016	One-year Performance	% Change 2012-2016	5-year performance	National 2015	Sub-Saharan	WHO Standard
Total Deliveries (Live/Still)	114205	117313	119141	110228	136,669	24%	Increased	19.7%	Increased			
Total CS	17839	19284	20779	21834	25,612	17.3%	Worsened	43.6%	Worsened			
CS Rate	15.60%	16.40%	17.40%	19.8%	19%	-4.0%	Improved	21.8%	Worsened	6.5% <sup>1</sup>	2% <sup>1</sup>	10 – 15% <sup>2</sup>
Total ANC Registrants	93303	125647	117257	106271	124,785	17.4%	Increased	33.7%	Increased			
Total ANC Attendance	507034	632282	620223	560394	641,554	14.5%	Increased	26.5%	Increased			
ANC 4th Visit Rate	105%	75%	92%	84%	81%	-3.6%	Decline	-22.9%	Worsened			
Total PNC Registrants	81149	87177	91551	122924	142,704	16.1%	Improved	75.9%	Increased			
MM Audit Rate	77%	92%	86%	86%	97%	12.8%	Improved	26.0%	Improved			

<sup>1</sup> World Health Organization - Trends in Caesarean delivery by Country and Wealth quintile: a cross sectional survey in Asia and sub-Saharan Africa

<sup>2</sup> WHO statement on Caesarean section rates; [http://www.who.int/reproductivehealth/publications/maternal\\_perinatal\\_health/cs-statement/en/](http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/cs-statement/en/)

## 1.7 Family Planning

CHAG implements policies of the Ministry of Health including family planning. Accordingly, in 2016, family planning services were provided by CMIs to clients. Through the support of the MAF programme, about 5,000 implants were obtained to boost the acceptor rates for artificial family planning in non-Catholic health facilities within the CHAG Network. The proportion of family planning acceptors who are adolescents (10-19 years) has been increasing from 2013 to 2015 with a slight drop in 2016 as seen in table 9. The adolescent age group form an important group to target for family since unwanted teenage pregnancies are often associated with complications and mortality. It is also good to know the number of males going for sterilization is gradually increasing with 14 men having vasectomies for the year under review. The number of new clients accepting family planning (16,886) is very encouraging and so was implant acceptors. More efforts need to be put in to ensure that more postnatal women accept family planning.

Table 9: Family Planning acceptors and couple years of protection

Description	2013	2014	2015	2016
Percentage postnatal registrants accepting family planning	16.7	14.6	14.8	15.1
Proportion of family planning acceptors who were adolescents (10-19)	13.7	15	17	15.7
Proportion of family planning acceptors who were adolescents (15-19)	12.3	14.2	16	14.5
Total Family Planning Continuing Acceptors	44,668	45,526	50,293	38,721
Total Family Planning New Acceptors	22,644	21,969	23,355	16,886
Total family planning acceptors	67,312	67,495	73,648	55,607
Total couple year protection	71,295.5	69,701.4	92,851.5	55,274.5

Table 10 gives a trend of the various family planning from 2013 to 2015.

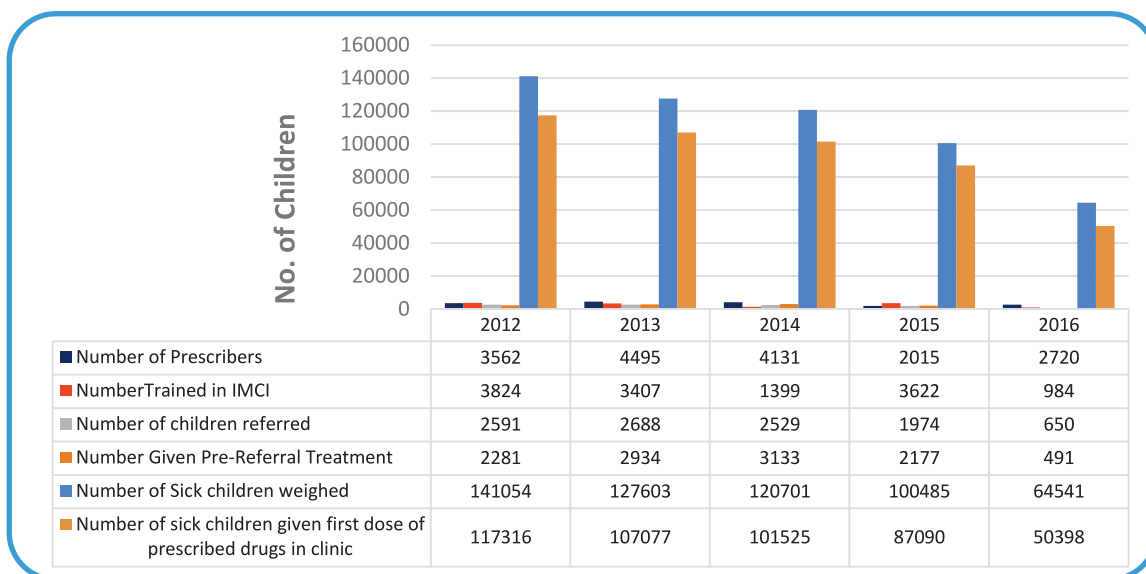
Table 10: Trend of Family Planning by type, 2013-2015

Description	2013	2014	2015	2016
Natural family planning	10,821	10,344	15,101	6,756
Male sterilization (vasectomy) acceptors	0	4	14	7
Female sterilization acceptors	463	455	807	695
Condom (male) acceptors	52,581	70,715	83,470	67,724
Condom (female) acceptors	81	162	108	261
Oral contraceptives acceptors	10,542	11,592	10,810	8,326
Implant acceptors	2,956	3,308	4,336	6,478
All other artificial methods acceptors	37,053	33,026	34,280	26,941

## 1.8 Child Health Services

Provision of Child Health Services form an integral component of the continuum of care provided by CHAG. Children, particularly those under the age of 5-years, form a key target group for health services delivery. For this reason, there are a number of interventions and trainings tailored to their needs. One such training is the Integrated Management of Childhood Illnesses (IMCI). Every year some staff from selected institutions are trained to provide services to children. Compared to the previous years, the number trained in 2016 was 984, less than the 1,075 trained in 2015. As can be seen in figure 9 below, since 2012 there has been a steady decline in the number of staff trained in IMCI. In 2016, there was about 8% decline in the numbers trained. Not surprisingly, under-5 mortality worsened same year by about 21%. It is important that this training is sustained in order to consolidate the gains made in addressing avoidable under-five mortality in Ghana. This is particularly important given that in each year, proportionately large number of new Nurses who have direct contact with children enter the service.

Figure 9: Integrated Management of Childhood Illnesses (IMCI) 2012-2016



## 1.9 HIV / AIDS SERVICES

HIV /AIDS services in 2016 increased with corresponding increase in the number of patients both counselled and tested. A total of 62,291 clients were counselled for HIV in 2016, compared to about 40,161 in the previous year (refer to table 11). This represents over 55% increase of those counselled. About 93% (58,067) of those counselled were tested and 15% of those tested were positive. For HIV/AIDS Prevention from Mother to Child Transmission (PMTCT), 115,734 pregnant women were counselled for HIV out of which 110,655 were tested and 2.3% were positive. Compared to 2015, fewer number of HIV clients (3,800) are on ART compared to the previous year. In the course of the year under review, there were several reports of shortages of ARTs in different locations. This may account for the reduced numbers on ART.

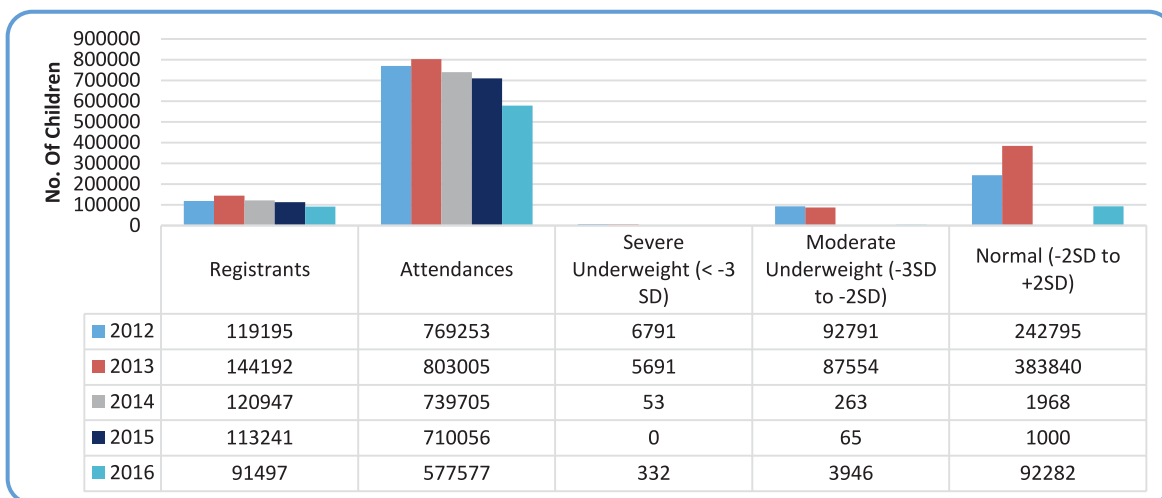
Table 11: HIV/AIDS Service Output 2012 - 2016

	2012	2013	2014	2015	2016	% Change 2015-2016	One-year Performance	% Change 2012-2016	5-Year performance
HTC Client Counseled	31451	36946	50238	40161	62,291	55.1%	Increased	98.1%	Significantly increased
HTC Client Tested	29330	32269	38593	39008	58,067	48.9%	Increased	98.0%	Significantly increased
% HTC Tested +VE	24%	21%	18%	17%	15%	-11.8%	Improved	-37.5%	Improved
PMTCT Clients Counseled	73169	111470	110856	136836	115,734	-15.4%	Decreased	58.2%	Increased
PMTCT Clients Tested	66421	92695	108817	93254	110,655	18.7%	Increased	66.6%	Increased
% PMTCT +VE	5.20%	2%	1.50%	2%	2.3%	33.3%	Worsened	-55.8%	Improved
All other HIV Tested +VE	8296	6459	5325	4072	2,947	15%	Improved	-64.5%	Improved
No of Clients ARV Treatment	4096	5360	5325	4520	3,800	-15.9%	Decline	-7.2%	Decline

### 1.10 Outreach Health Services

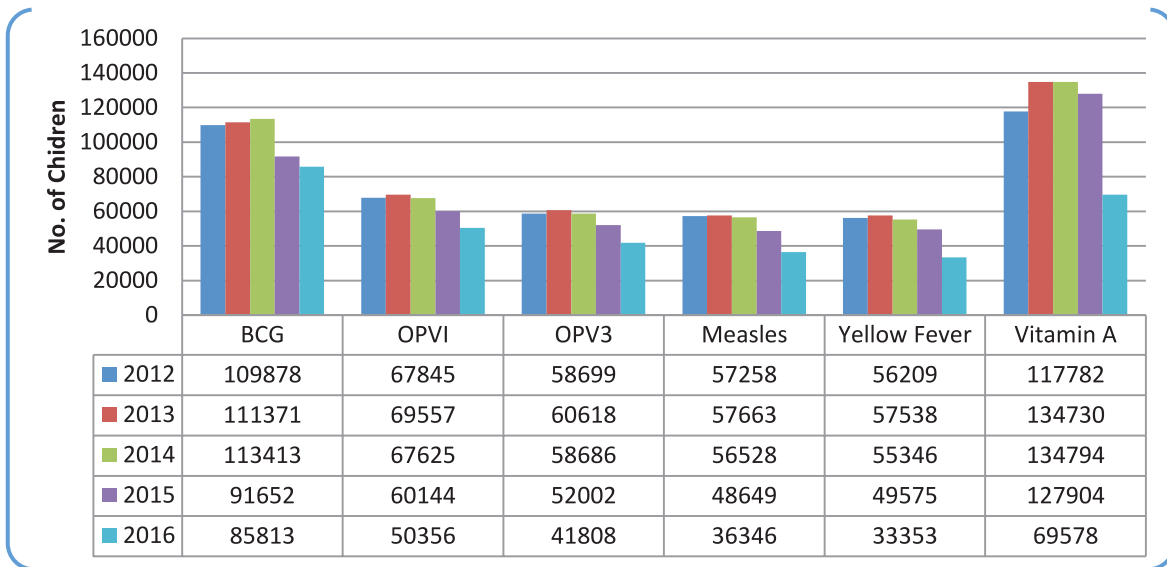
A total number of 577,577 children were reached during the outreach programmes in 2016. This is about 18.7% less than the number reached (710,056) in 2015. About 91,497 children were registered for Child Welfare clinics. Whereas 92,282 had normal (-2SD to +2SD) weight, about 3,946 of these children were moderately underweight (-3SD to -2SD), whilst 332 were severely underweight (<-3SD) (See Figure 9).

Figure 10: Child Welfare Outreach Services From 2012 – 2016



In the year 2016 CHAG member institutions immunized a total of 128,158 children during outreach services. The common vaccine given to children over the past 5 years (2012-2016) has been vitamin A supplement and the vaccine that was less frequently given during the same period was that against Yellow fever with 36,163 doses. As seen in figure 10 below, the number of children immunized for BCG, OPV, Measles, Yellow Fever and Vitamin A were lower than the number immunized in 2015. Since 2014, there has been a progressive decline in the number of children immunized against the above conditions. Efforts should be made to ensure vaccines for these childhood conditions are available for immunizations every year. This will prevent deaths from the childhood killer diseases for which significant achievements have been made in Ghana.

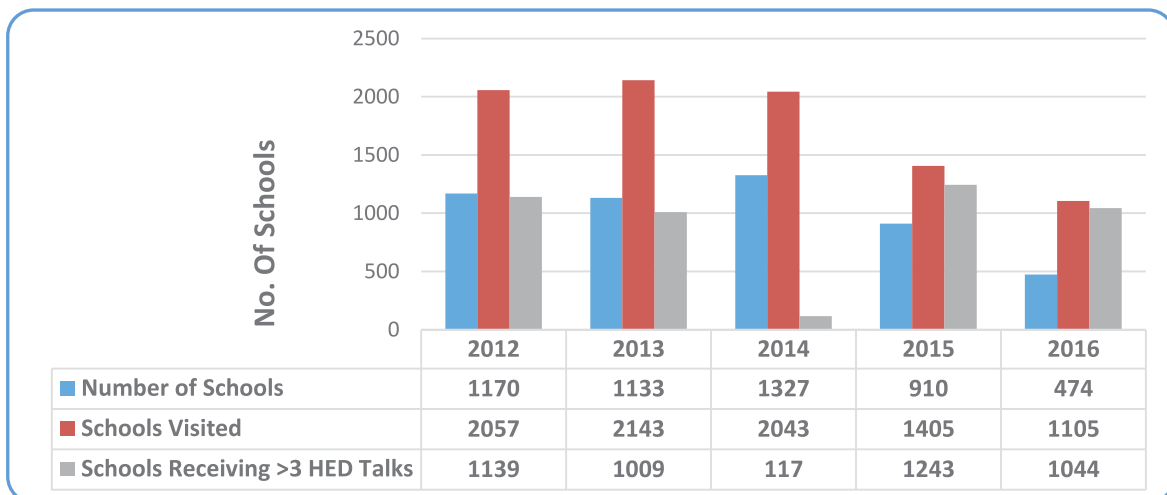
Figure 11: Outreach Immunization Coverage and Vitamin- A Supplementation: 2012 - 2016



### 1.11 School Health Programme

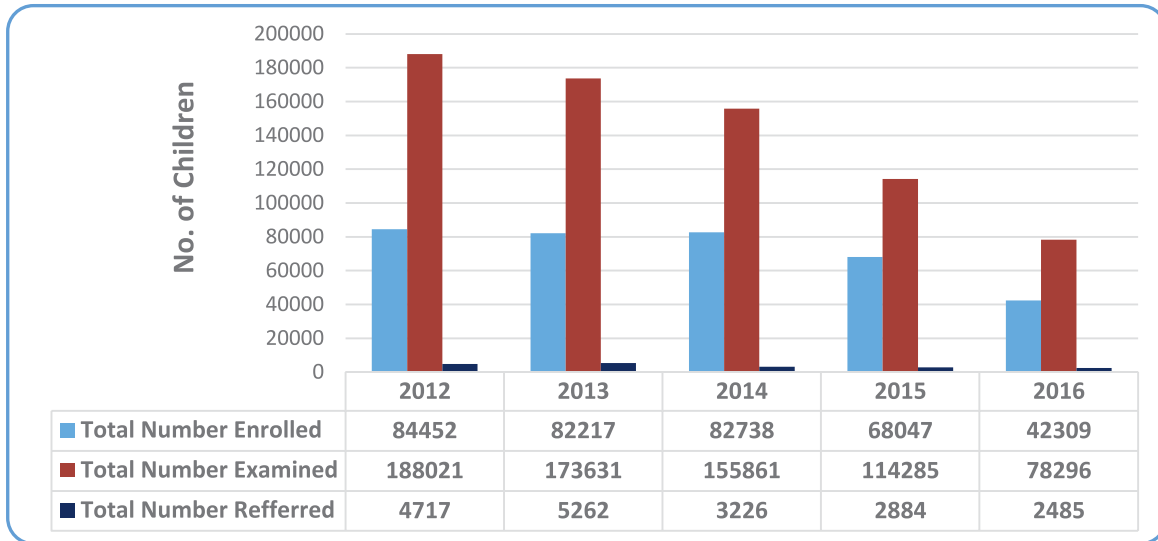
The total number of schools visited by CHAG Health facilities in 2016 were 1,105 which depicts 48% drop in that of 2015 and 100% drop in that of 2012. There was a decline in the number of schools visited from 2012 to 2016. About 1,044 of the schools visited had at least 3 health education talks in 2016 which is 16% drop in that of 2015 and 10% drop in that of 2012 (refer to figure 11).

Figure 12: School Health Programme From 2012 - 2016



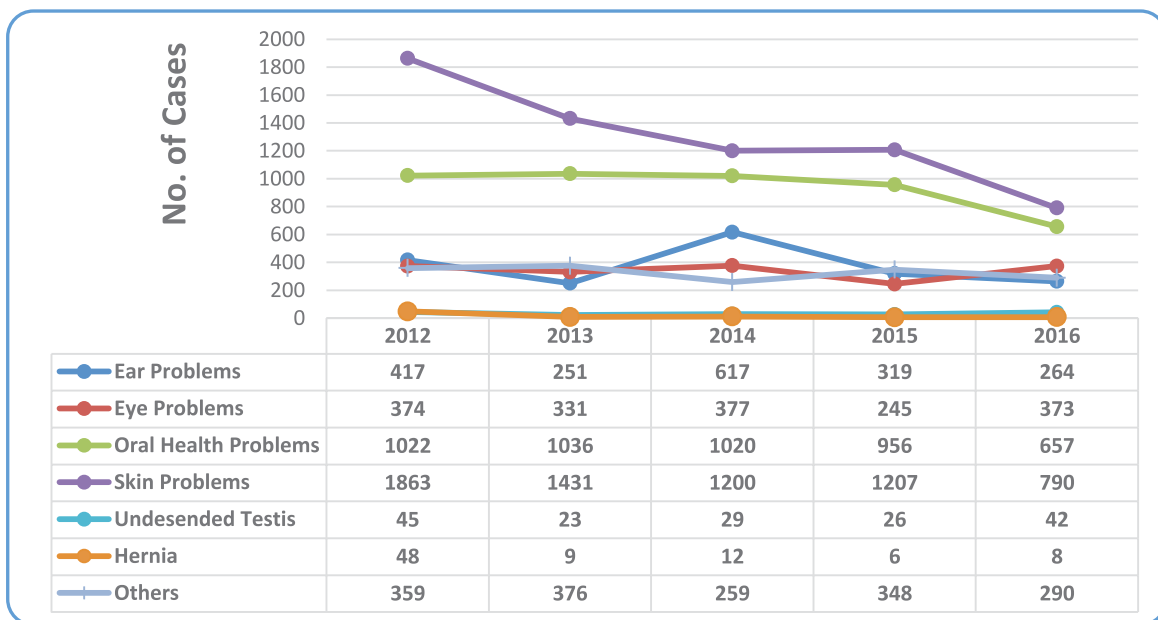
In 2016, about 42,309 students enrolled for School health Programme. This is 38% and 100% less than that of 2015 and 2012 respectively. Of the numbers enrolled, 78,296 of them were examined whilst 2,485 were referred (see figure 12 below).

Figure 13: Student Enrolled in School Health Program from 2012 - 2015



In 2016 a total of 2,424 children were diagnosed with various conditions during school outreach services. Top five diseases/conditions diagnosed during school health examination by CHAG facilities were Skin diseases (33%), Oral conditions (27%), Eye diseases (15%), Ear problems (11%), and Undescended Testis (2%). The rest constituted 12% (290 conditions) of all diagnoses which was 17% less than that of 2015 and 19% less than that of 2012 (refer to figure 13).

Figure 14: School Health Programme Diagnosed Conditions From 2012 - 2016



## 1.12 Summary Burden of Disease (Epidemiology)

The range of conditions that people presented to the various CHAG health facilities in 2016 did not change much compared to that in 2015. The top 10 common causes of OPD morbidity for the past five years (2012 to 2016) have remained the same. Malaria continues to be the commonest cause of OPD morbidity and admissions in CHAG Health facilities since 2012 as shown in Table 12 below. Over the past five years, there has been a steady decline in the proportion of malaria particularly in 2015 with a little rise in 2016. This may be attributed to the efforts of Malaria Control Programme in ensuring that clinicians are treating actual malaria cases and not considering every fever as malaria. The extensive education and workshops on Malaria case management and the policy of “test before you treat” may be paying off. Over the past few years, several rapid test kits were distributed to the network to ensure that cases were tested before treatment. Additionally, many prescribers, laboratory personnel and other paramedical staff were taken through malaria case management through various workshops in most of the regions. There were also massive campaigns on the use of Insecticide Treated Nets (ITNs) especially for pregnant mothers as well as indoor residual spraying against mosquitoes in some regions of Ghana. These activities have made huge impact on malaria. As seen in top ten conditions for 2016, majority of the conditions we dealt with were infections; malaria, respiratory and urinary tract infections among others. These have implications on pharmaceutical products being used. We are leaning more on antibiotics because of the conditions that are presenting at our health facilities. Since antibiotics are comparatively expensive, health care cost is rising as a result. As prescription for antibiotics increase, so is the potential for antibiotic resistance to develop in the general population. With this trend, there will come a time when we will need to use highly effective but expensive antibiotics. In the end, a situation will arise where we will spend more on pharmaceutical products.

### 1.12.1 Morbidity

From 2012 to 2016, the top-10 morbidity statistics remained relatively similar. In 2016 Malaria accounted for 38.8% of OPD attendance followed by Respiratory tract infections (13.8 %), Rheumatic/Joint pains (10.0 %), and Diarrhea diseases (6.7 %). Figure 14 shows the details with the other conditions and the proportions seen.

Figure 15: CHAG Top Ten (10) Causes of Morbidity for the year ending December 31, 2016

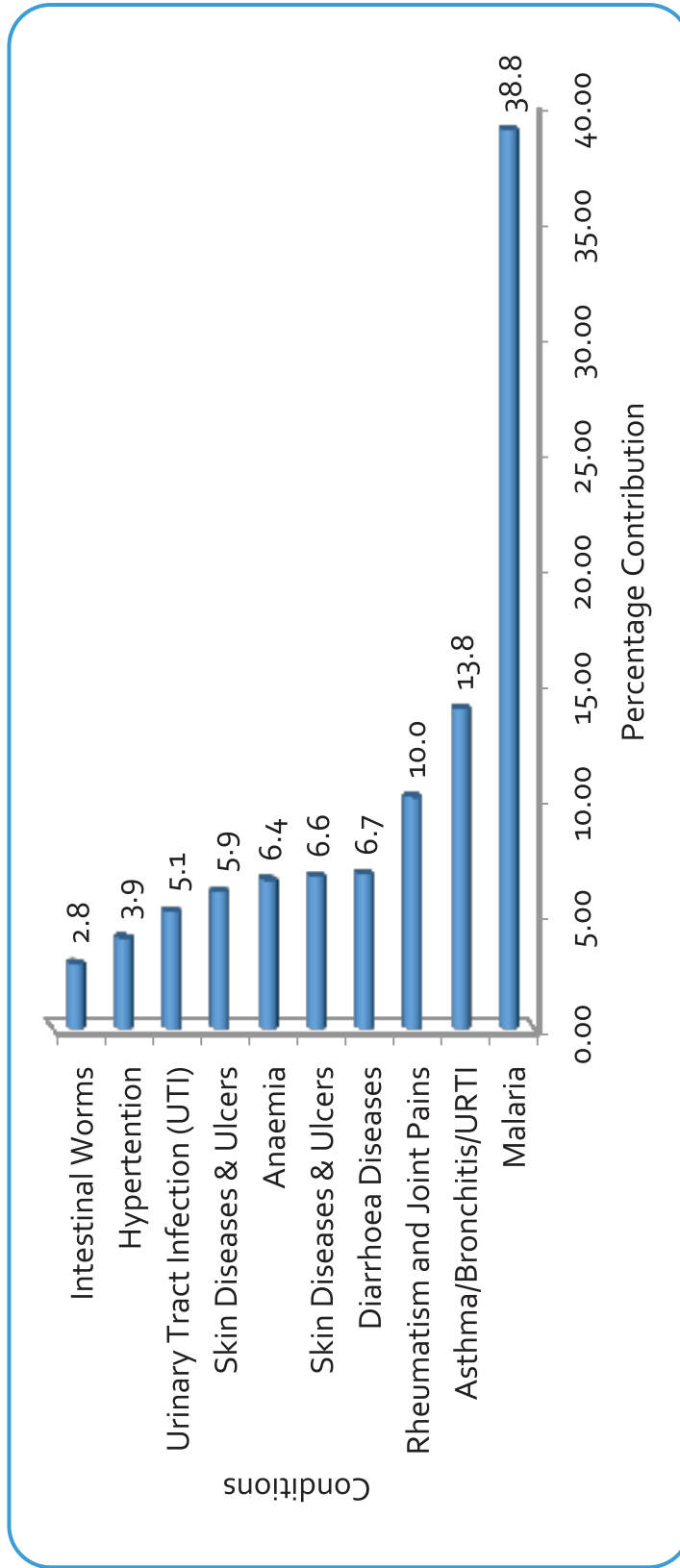


Table 12: Top-10 causes OPD Morbidity: 2012 – 2016

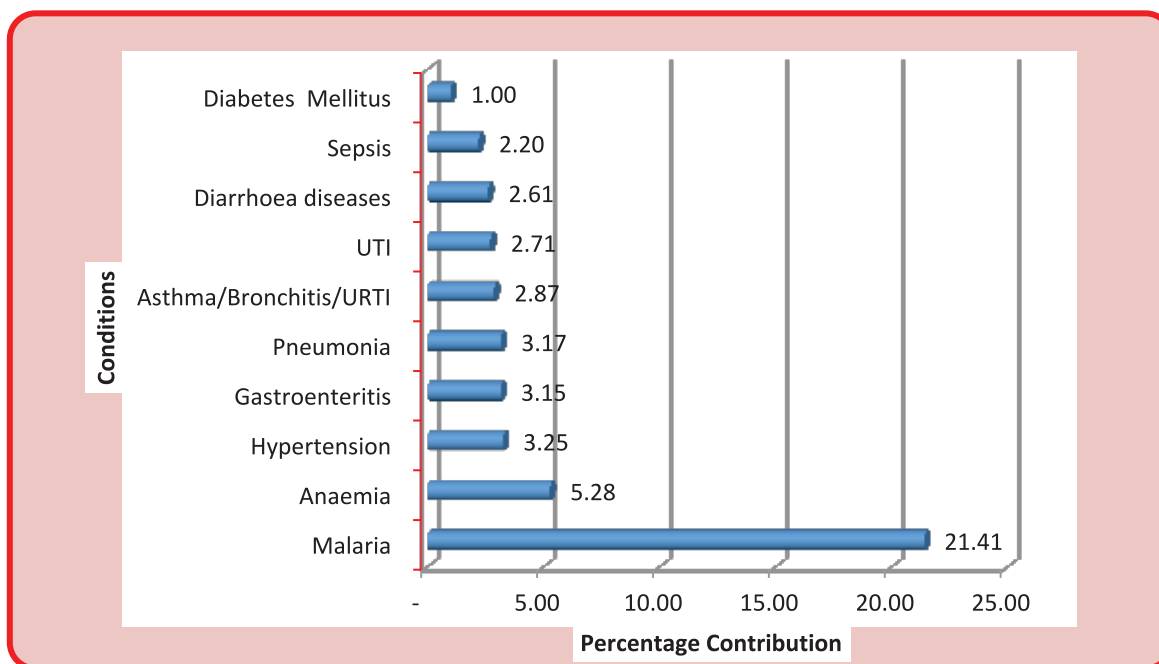
Condition	Percentage (%) Contribution by Condition										One-year performance	% Change 2012-2016	5-year performance
	2012	2013	2014	2015	2016	2015-2016							
Malaria	50	45.8	44.9	22.9	38.8	15.9	Worsened	-11.2	Improved				
URTI	10.2	16.2	7	8.5	13.8	5.3	Worsened	3.6	Worsened				
Rheumatism / Joint Pains	5.8	6.6	8.3	5.2	10	4.8	Worsened	4.2	Worsened				
Skin Diseases &Ulcer	5.7	6.2	7.3	3.5	6.4	4.8	Worsened	0.7	Worsened				
Anaemia	4	3.0	5.3	3.4	6.4	3.0	Worsened	2.4	Worsened				
Diarrhoeal Disease	4.5	4.7	5.3	3	6.7	3.7	Worsened	2.2	Worsened				
Urinary Tract Infection	2.9	3.5	3.9	2.7	5.1	2.4	Worsened	2.2	Worsened				
Hypertension	6.0	4.9	4.2	2.2	3.9	1.7	Worsened	-2.1	Improved				
Intestinal Worms			-	1.7	2.8	1.1	Worsened	-					
All Others			41	43.7	93.4								

Malaria cases accounted 38.8% of OPD cases in 2016 representing an increase of 15.9% when compared with 2015. Since 2012, the proportion of OPD cases due to malaria has dropped by about 11.2%. Current measures regarding malaria case management should continue in order to sustain the gains made in the fight against malaria. It's important to note that there were increases in the proportions of the top 10 causes of OPD morbidity in 2016 compared to 2015.

### 1.2.2 Admissions

Malaria accounted for about 21% of the causes of admission. Anaemia, Hypertension and gastroenteritis were the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> leading causes of admission accounting for 5.3%, 3.3% and 3.2% of all causes of admissions respectively. Figure15 and Table 13 show the top 10 causes of admissions in CHAG.

Figure 16: CHAG Top Ten (10) Causes of Admission 2016



Over a 5-year period, the proportions of malaria, Anaemia, hypertension and respiratory tract infections that account for the top 5 causes of admissions within CHAG facilities have reduced.

Specifically, the proportion of admissions accounted for by malaria has reduced by over 31% since 2012. This demonstrates the downward trend of malaria as seen with the OPD cases. Anaemia has reduced by 7.7%. Typhoid fever which used to account for fairly significant amount of emergency surgeries due to perforations, has also decreased by over 2%. The reduction may be due to the availability and rampant use of certain antibiotics such as ciprofloxacin.

Table 13: Top-10 Conditions for Admissions: 2012 – 2016

Condition	2012-2016				% Change 2015-2016	-year performance	2012-2016	-year Performance	
	2012	2013	2014	2015					2016
Malaria	52.8	50.3	26	24	21.4	-2.6%	Improved	-31..4%	Improved
Anaemia	13	11	6	3.4	5.3	1.9%	Worsened	-7.7%	Improved
Asthma/Bronchitis/URTI	3.9	3.8	2	3.1	2.9	-0.2%	Improved	-1.0%	Improved
Hypertension	5.9	5.9	3	2.2	3.3	1.1%	Worsened	-2.6%	Improved
Pneumonia	4.5	4.7	2	2.9	3.2	0.3%	Worsened	-1.3%	Improved
Gastroenteritis	3.3	3.9	3	2.7	3.2	0.5%	Worsened	-%	Improved
Diarrhoea Diseases	5.7	6.1	2	2.5	2.6	0.1%	Worsened	-0.1%	Improved
UTI	-	3.1	2	2.5	2.7	0.2%	Worsened		
Sepsis	-	-	1	1.7	2.2	0.5%	Worsened		
Typhoid/Enteric Fever	3.5	2.6	1	1.5	1.0	-0.5%	Improved	-2.5%	Improved
All Others			51	50.5	21.4	-29.1%	Improved		

### 1.12.3 Mortality

In 2016, Cerebro-Vascular Accident (CVA) was the commonest cause of mortality in CHAG institutions accounting for 5.6% of all adult deaths. Hypertension is the commonest cause of CVA. The trend is a recognition of changing social lifestyles, a situation that bring non-communicable diseases (NCDs) to bear. The situation calls for lifestyle modification to reduce the incidence of NCDs and hence CVAs. Anaemia and HIV/AIDS were the second and third highest cause of mortality accounting for 4.8% and 3.9% respectively. Malaria accounted for only 2.8% of mortalities, again, highlighting the improvement in malaria care. Figure 16 and table 14 give details of the mortality for 2016 and a trend from 2012.

Figure 17: CHAG Top Ten (10) Causes of Mortality for 2016

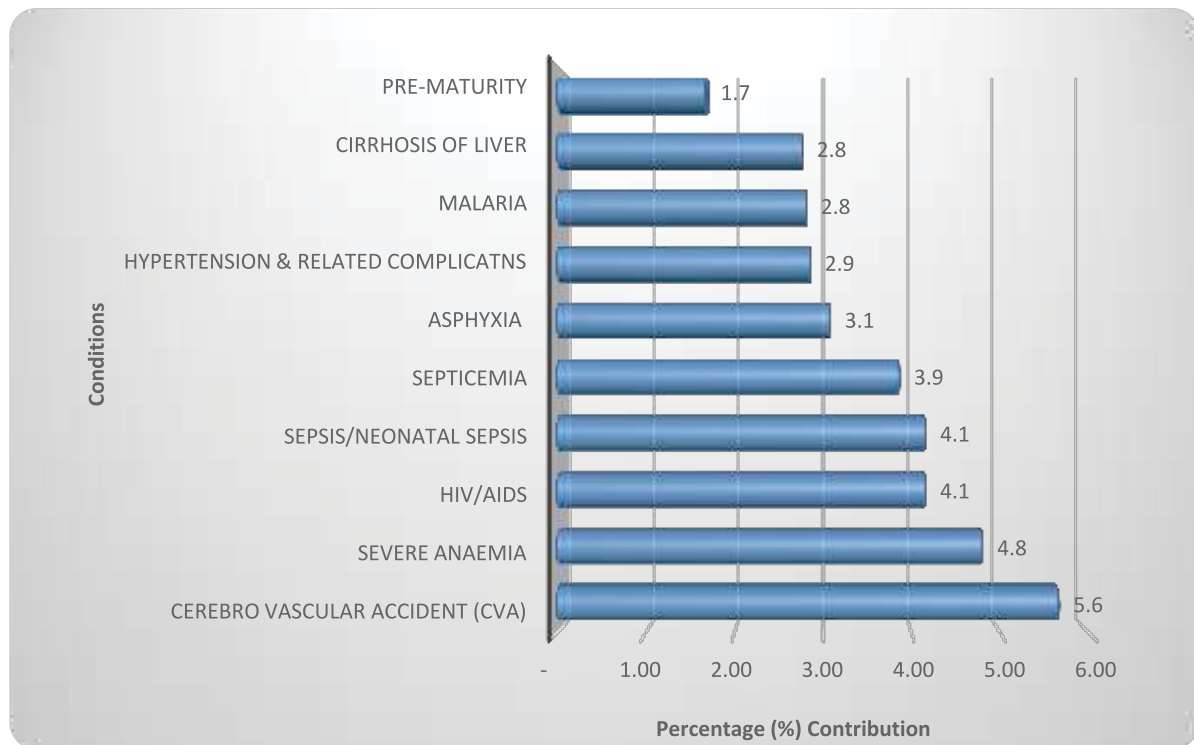


Table 14: Top-10 causes of Mortality: 2010 - 2015

Diagnosed Condition	2012	2013	2014	2015	2016	% Change 2015-2016	One-year performance	% Change 2012-2016	5-year performance
Severe Anaemia	12.8	10.1	15.1	6.7	4.8	-1.9%	Improved	-8	Worsened
Cerebro-Vascular Accident	15.8	14.5	14.7	5.7	5.6	-0.1%	Improved	-10.2	Improved
HIV/AIDS	15.9	16.6	13.7	4.3	4.1	-0.2%	Improved	-11.8	Improved
Septicaemia	15.3	14.9	14.3	4.0	3.9	-0.1%	Improved	-11.4	Improved
Asphyxia	-	5.9	6	3.5	2.8	-0.7%	Improved		
Malaria	13.5	12.8	13	3.3	2.9	-0.4%	Improved	-10.6	Improved
Hypertension	7.6	7.7	6.7	3.1	4.8	1.7%	Worsened	-2.8	Improved
Cirrhosis of Liver	4.5	6.7	6	2.5	5.6	3.1%	Worsened	1.1	Improved
Sepsis	5.3	5.3	5.5	5.3	4.1	-1.2%	Worsened	-1.2	Worsened
Prematurity	-	-	4.9	1.5	3.9	2.4%	Worsened		
All Others	-	-	61	60.1	57.	-2.6%	Improved		

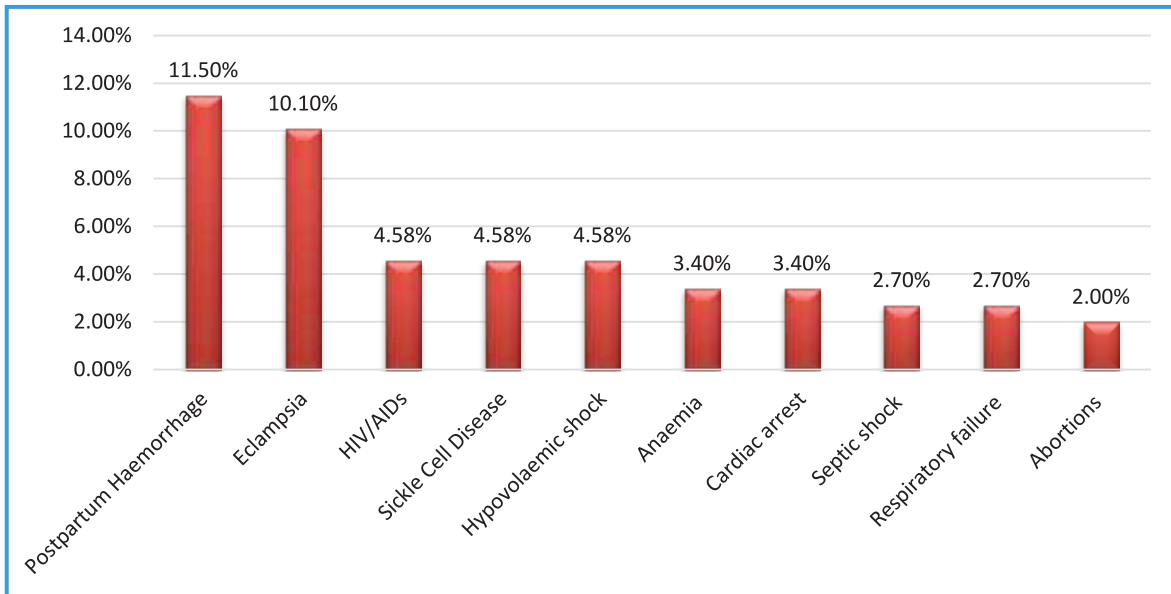
In 2016, the leading cause of death was CVA, Liver disease followed by severe anaemia and hypertension. However, the proportion of deaths due to Anaemia was significantly lower compared to 2015 and significantly low compared to 2012. Over a period of 5 years the proportion of mortality from Cerebro-vascular accidents, HIV/AIDSs, Septicaemia and malaria have significantly reduced as shown in table 14.

### 1.12.4 Maternal Mortality

Reducing maternal and neonatal mortalities were some of the key goals of CHAG in 2016. Particularly for maternal mortality, a number of strategies and interventions were implemented to ensure that this goal is achieved. Accordingly, for the period of reporting, maternal mortality ratio significantly reduced from 145/100,000 live births to 109/100,000 live births as shown in table 3.

From 2012 to 2016 there has been progressive reduction in the number of pregnancy related deaths per 100,000 live births within the CHAG network. Post-Partum Haemorrhages, Anaemia, Eclampsia were the common causes of maternal deaths in CHAG Hospitals during 2016 as shown in Figure 17.

Figure 18: CHAG Top Ten (10) Causes of Maternal Mortality: 2016 Annual



### 1.13 Key Health Outcome Indicators

There were improvements in three key health sector outcome indicators from the year 2012 to 2016. These indicators include maternal mortality, under – 5 mortality, Stillbirth and crude mortality rates. Specifically, from 2012 to 2016, institutional maternal mortality has reduced by about 31.0%, under-5 mortality by 13.3%, Stillbirth by 23% and crude mortality by about 17% as seen in table 16. These gains are as a result of concerted efforts from Member Institutions to improve these health outcomes.

Neonatal and Infant mortality rates worsened over the same 5-year period with 136% and 96% increases respectively. In the course of 2016, some innovative approaches and active campaigns were undertaken with regards maternal and neonatal mortality.

Aside the outcome indicators, certain output indicators improved including total deliveries (table 4), total OPD clients seen, total admissions, number of persons counselled and tested on HIV including PMTCT. These gains indicate the confidence and trust the public has in the CHAG health network.

#### 1.13.1 Contribution of the MDG Accelerated Framework (MAF) Programme towards the Achievement of Key Indicators

For the year under review, a number of activities were undertaken by the CHAG secretariat that sought to improve maternal and neonatal outcomes, and FP as part of the MAF programme with support from the EU and DANIDA through the Ministry of Health. With the support, CHAG implemented a number of initiatives and strategies including;

- 1) 100 Days Free from Maternal Mortality Campaign
- 2) Collaborative networking to reduce maternal mortality
- 3) Mentorship programme with obstetrician gynaecologist
- 4) Technology and social media platform to reduce maternal mortality
- 5) Equipment for emergency obstetrics and neonatal care.

About 74 hospitals benefitted directly from this programme and were involved in the 100 Days free of maternal mortality campaign, collaborative networking, the mentorship programme and the social media platform for the reduction of maternal mortality. Again, these 74 hospitals and 210 clinics benefitted from equipment that were distributed for Emergency and Obstetrics and Neonatal Care (EmONC). These equipment include Cardiotocograph (CTG) machine, electronic Foetal Doppler machines and ventilation bags. The programme supported the achievement of the institutional maternal mortality ratio of 109 maternal deaths per 100,000 live births, reduction in stillbirths and skill transfer and capacity development of key staff.

Through this programme, the following number of staffs were trained:

- 1) About 27 Community Health Nurses (CHNs) and midwives were trained in implant insertion. These in turn, trained about 116 CHNs and midwives in non-Catholic Health Facilities within the CHAG Network across the country. The Secretariat obtained about

- 5000 implants for those trained to improve uptake of family planning in their respective communities.
- 2) Two hundred and ninety-two (292) CHNs, Staff Nurses, Midwives and Doctors were trained in life saving skills.
  - 3) Three hundred and one (301) health workers were trained in Essential Newborn Care including Kangaroo mother care.
  - 4) About 58 hospital teams were trained in maternal death audit using the new guidelines. This training may have accounted for the increased number of maternal death audits seen in 2016.
  - 5) Some doctors were trained in obstetrics surgeries during supportive supervision visits by mentors.
  - 6) One hundred and four (104) midwives and community health nurses were trained in the use of ultrasound scan and CTG machines.

The success and outcome of the MAF programme is huge (see table 15) and has the potential to reduce maternal mortality to the barest minimum if continued. An added value to the MAF programme is the establishment of social media/communication platform for health professionals involved in addressing maternal and child health. These social media platforms have facilitated transfer of skill and knowledge in real time in managing complicated and urgent maternal health cases and challenges. It allowed sharing the skill of the few obstetrician/gynaecologist in the network including some moving from their facilities to other facilities voluntarily to support cases presented on the platforms. Networking and bonding among the staff has been enhanced. The programme has introduced voluntary accountability, a new paradigm to ensure services are zero maternal and neonatal mortality within the CHAG network.

Table 15: Summary Targets and achievements

S/N	Priority Area	Description	Target	Achievements
1	FP 6 - Family Planning	Train of CHNS and Midwives to insert implants	60	27 ToTs were trained. 116 midwives and CHNs trained.
2	EmONC 4 – Life Saving Skills (LSS)	Train midwives in revised LSS	355	292 midwives, staff nurses & doctors trained in LSS.
3	EmONC 5 – Obstetric Surgery	Train Doctors in obstetric surgeries	71	51 Doctors trained in surgeries
4	EmONC 12 – Maternal death audit	Train facility based maternal health and death audit teams on revised guidelines.	64	58 teams trained
5	EmONC 16 - ENBC	Train health workers in ENBC, including neonatal resuscitation, kangaroo mother care	240	301 health workers trained
6	SD – CTG and Ultrasound scan	Train staff on the use of CTGs and Ultrasound scan machines	142	104 midwives and Staff nurses trained
7	EmONC 9 – specialist support visits	Conduct specialist support visits to lower level facilities and underserved areas	71 visits	145 field visits were done
8	Cross-cutting	Conduct BCC on maternal health & Family Planning		Radio education and SBCC activities were done in various communities

Table 16: Key Health Outcome Indicators: 2012 – 2016

Outcome Indicator	Year		Year		Year		Year		Year		Year		
	2012	2013	2014	2015	2016	2015 - 2016	% Change	One-year Performance	% Change	2012 - 2016	5-Year performance	National	Developing
Maternal Mortality Rate	158	168	167	145	109	109	-24.8%	Improved	-31.0%	Improved	2012 - 2016	2016	2016
Neonatal Mortality Rate	5.5	7.1	9.8	6.5	13	13	100%	Worsened	136.4%	Worsened	2012 - 2016	2016	2016
Infant Mortality Rate	6.6	7.9	10.9	8.6	12.9	12.9	50%	Worsened	95.5%	Worsened	2012 - 2016	2016	2016
Under 5 Mortality Rate	21.1	19.5	17.3	15.1	18.3	18.3	21.2%	Worsened	-13.3%	Improved	2012 - 2016	2016	2016
Still Births Rate	26	24	21	21	20	20	-4.8%	Improved	-23.1%	Improved	2012 - 2016	2016	2016
Crude Mortality Rate	23	23	21	22	19	19	-13.6%	Improved	-17.4%	Improved	2012 - 2016	2016	2016

Institutional Maternal Mortality, DHIMS 2, 2016

<sup>1</sup> The World Bank, Data, 2014, 2015

<sup>2</sup> World Health Organization: Maternal, newborn, Child and adolescent health, stillbirths 2015

<sup>3</sup> World Health Organization: Maternal Mortality Key facts 2015

<sup>4</sup> 2015 worldwide estimates: WHO neglected tragedy of stillbirths

Maternal deaths have decreased over the last 5 years with significant reduction from 2014 to 2016. There was a significant reduction of about 31% in maternal mortality in 2016 compared to 2012. This is below both the National average of 319 per 100,000 live births and that for developing countries of 239 per 100,000 live births as seen in table 16 above. Stillbirth and crude mortality were also improved in 2016 compared to 2015. These are all below the national averages. There were various interventions, including the CHAG-MAF programme. That may have contributed to the improvements seen in 2016. A trend of maternal mortality in depicted in figure 18 below.

Figure 19: Trend of Maternal Mortality Ratio: 2012 - 2016

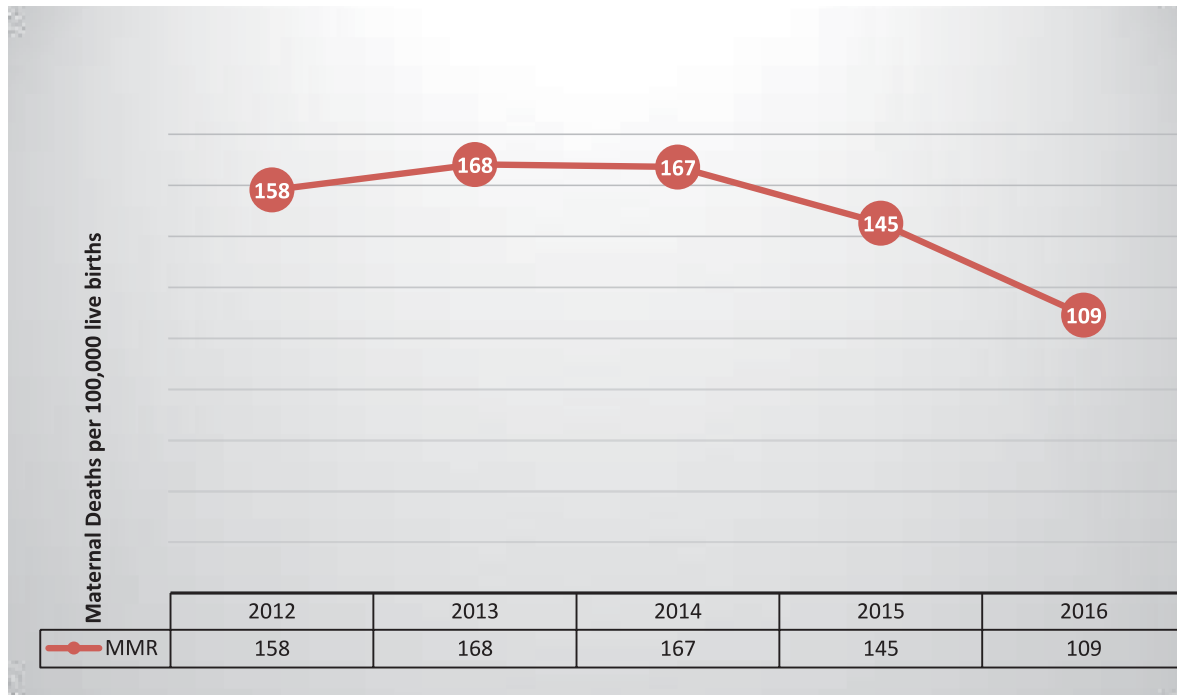
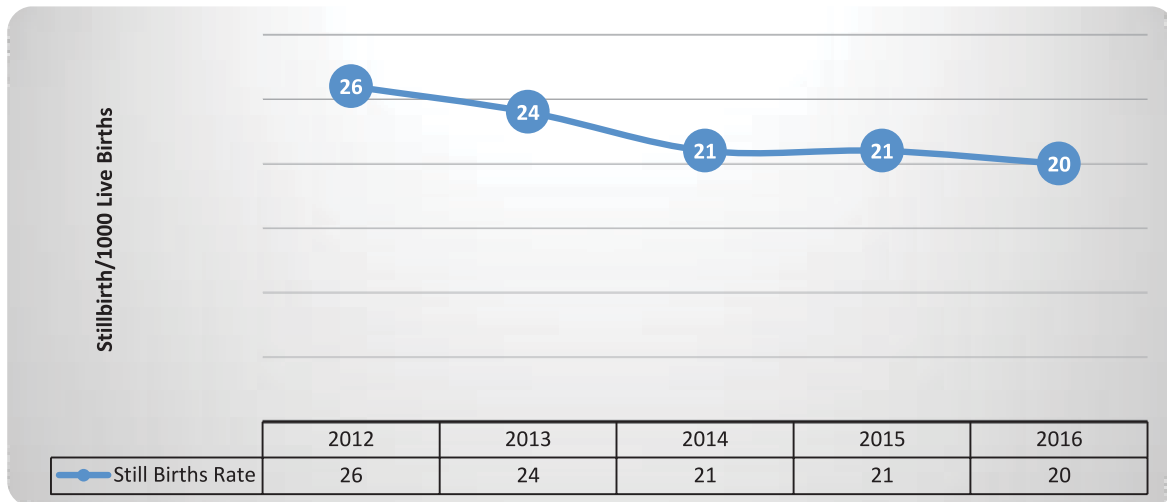


Figure20: Trend of Still Births Rate: 2012-2016



There is a steady decline in stillbirth rate since 2012. The highest decline was recorded between 2013 and 2014. Thereafter, the decline has been gradual. These may be attributed to continuing professional development activities in the various districts particularly the essential new-born care training being carried out nationwide. There are programmes like helping babies’ breath, lifesaving skills etc. that are being carried out by Ghana Health Service, Systems for Health (USAID) that involve CHAG staff. These trainings are essential and need to continue in order to sustain the gains made in reducing stillbirth rate.

Figure 21: Trend of Neonatal Mortality Rate: 2010 \_ 2015

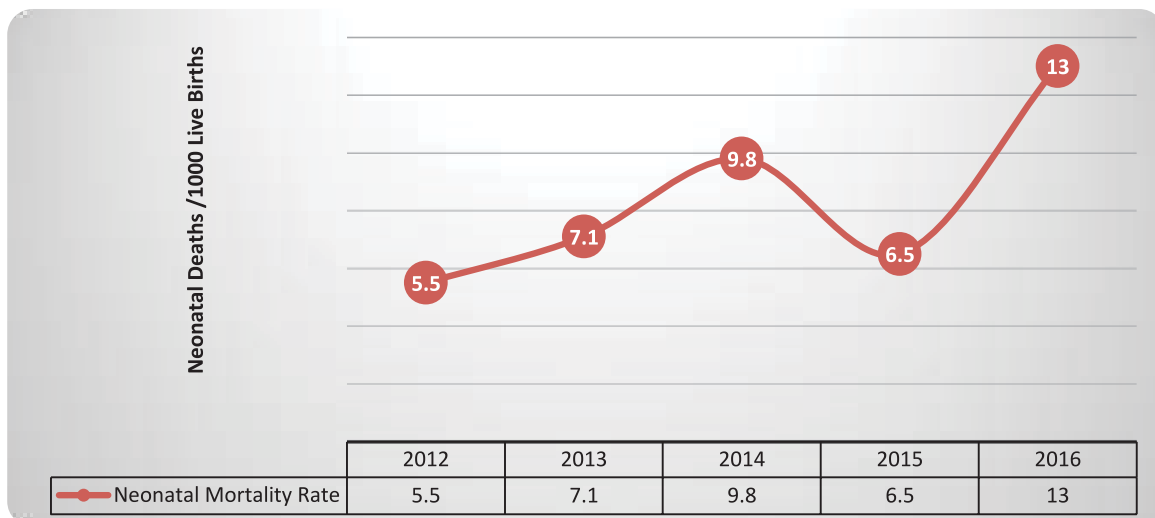
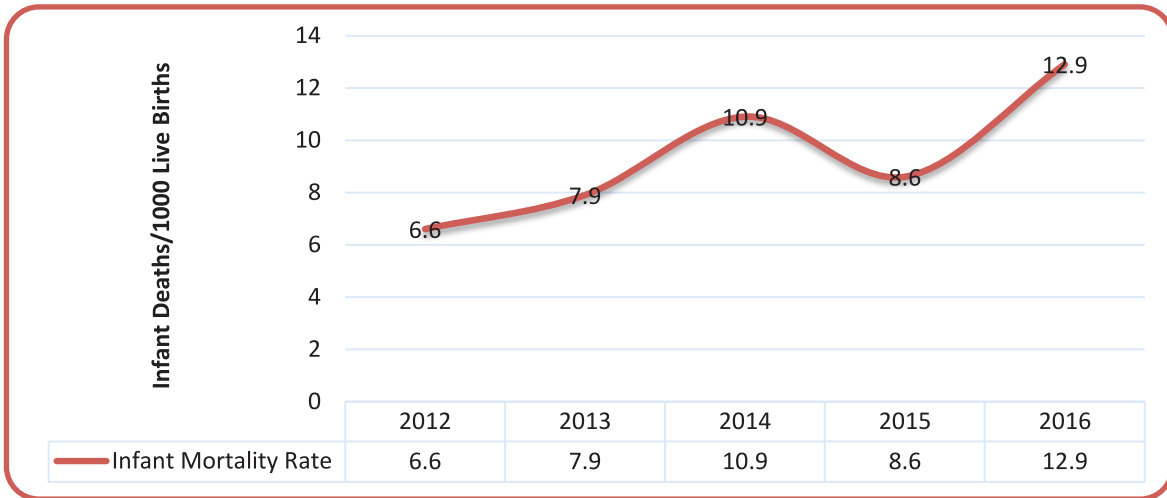


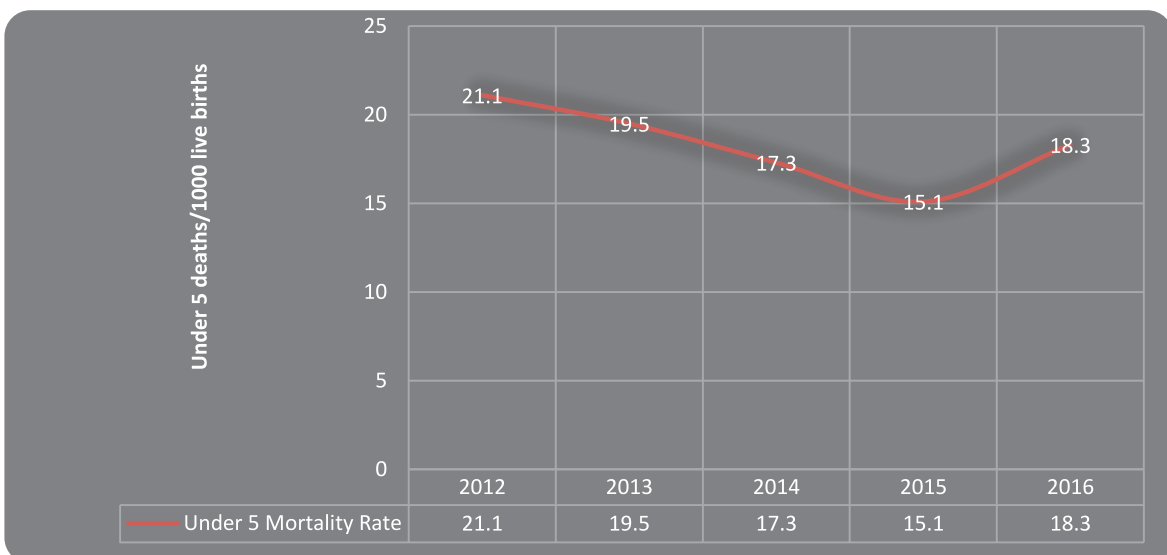
Figure 20 shows a sharp rise in neonatal mortality for the year under review compared to the previous year when there was a sharp decline. It is possible that increase in postnatal care facilitated recording more neonatal deaths hence the increase in neonatal deaths.

Figure 22: Trend of Infant Mortality Rate: 2012 – 2016



The trend in infant mortality is similar to that of neonatal mortality with sharp rise in 2016 as shown in figure 21 above. For two years since 2012 there was an increase in the number of infant deaths. This declined from 2014 to 2015 and finally rising again in 2016. There may have been interventions that were introduced in 2015 that appeared to have worked somewhat. Attempts should be made by healthcare managers in the various institutions to ensure that the trend does not continue.

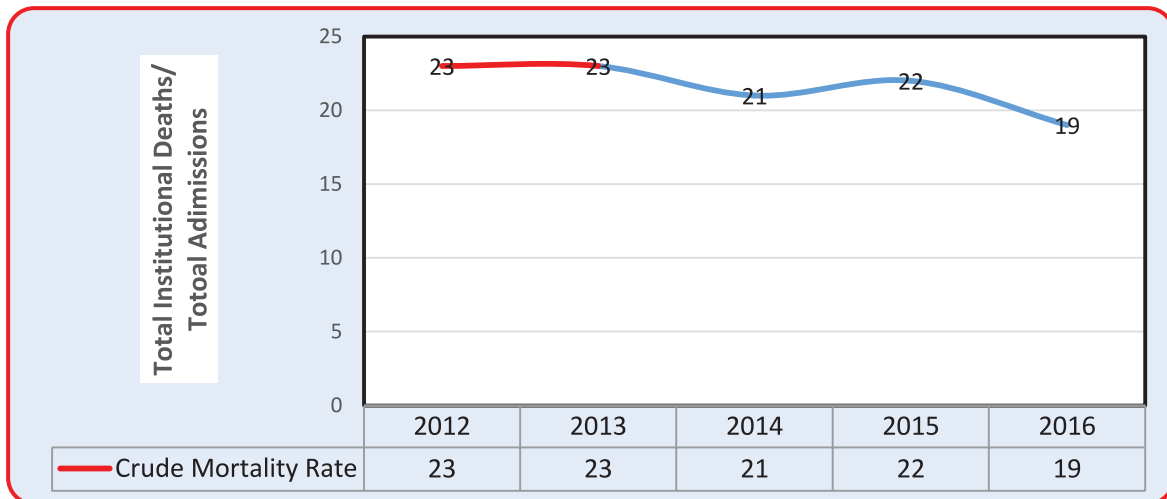
Figure 23: Trend of Under 5 Mortality Rate (U5MR): 2010 – 2015



There has been an improvement in reducing the deaths of children under 5 years. Particularly for the period between 2012 and 2015, a noticeable decline was observed. In

2016 however, an increase in under-5 mortality was observed. For every 1,000 live births that occurred in CHAG institutions, about 18 children under the age of 5 years died.

Figure 24: Trend of Crude Mortality Rate: 2010 – 2015



Institutional deaths in CHAG have been between 19-25 per 1,000 admissions over the last five years with 2012 recording the highest as shown in Figure 23. The general trend over the past five years is a reduction (improvement) in the mortalities.

### 1.14 Hospitals' Performance Outcomes

Some selected indicators were used to rank CHAG member institutions as seen below. St. Dominic's Hospital in Akwatia recorded the highest CS rate followed by Asamang SDA, St. Francis Xavier, Sunyani SDA and Kwadaso SDA hospital in Kumasi, with rates of 44%, 42%, 39, 36, and 35% respectively. Amongst the possible reasons for the unusual CS rates is that some of these Hospitals act as referral facilities as well as de facto secondary/regional level centres of care. Hence, they could be susceptible to receiving and managing such "bad cases" which are mostly indications for CS. These rates are far higher than the WHO approved CS rate 10-15%. Obviously, the upward trend is becoming the norm in those health facilities, a situation which requires supportive intervention. Whereas financial incentives and motivational packages tied to the number of surgeries could be a causal factor, given the relatively high number of specialist obstetrician gynaecologists and midwives in some of the facilities, CS rate should not be high in those facilities. Consequently, CHAG, in collaboration with stakeholders, will evaluate the causes of the high rate particularly in the affected CMLs towards improving maternal and child health in the Network.

Figure 24 below shows the CS league table for 2016.

**Figure25: 2016 Caesarean Section Delivery Rate (%) by Institution**

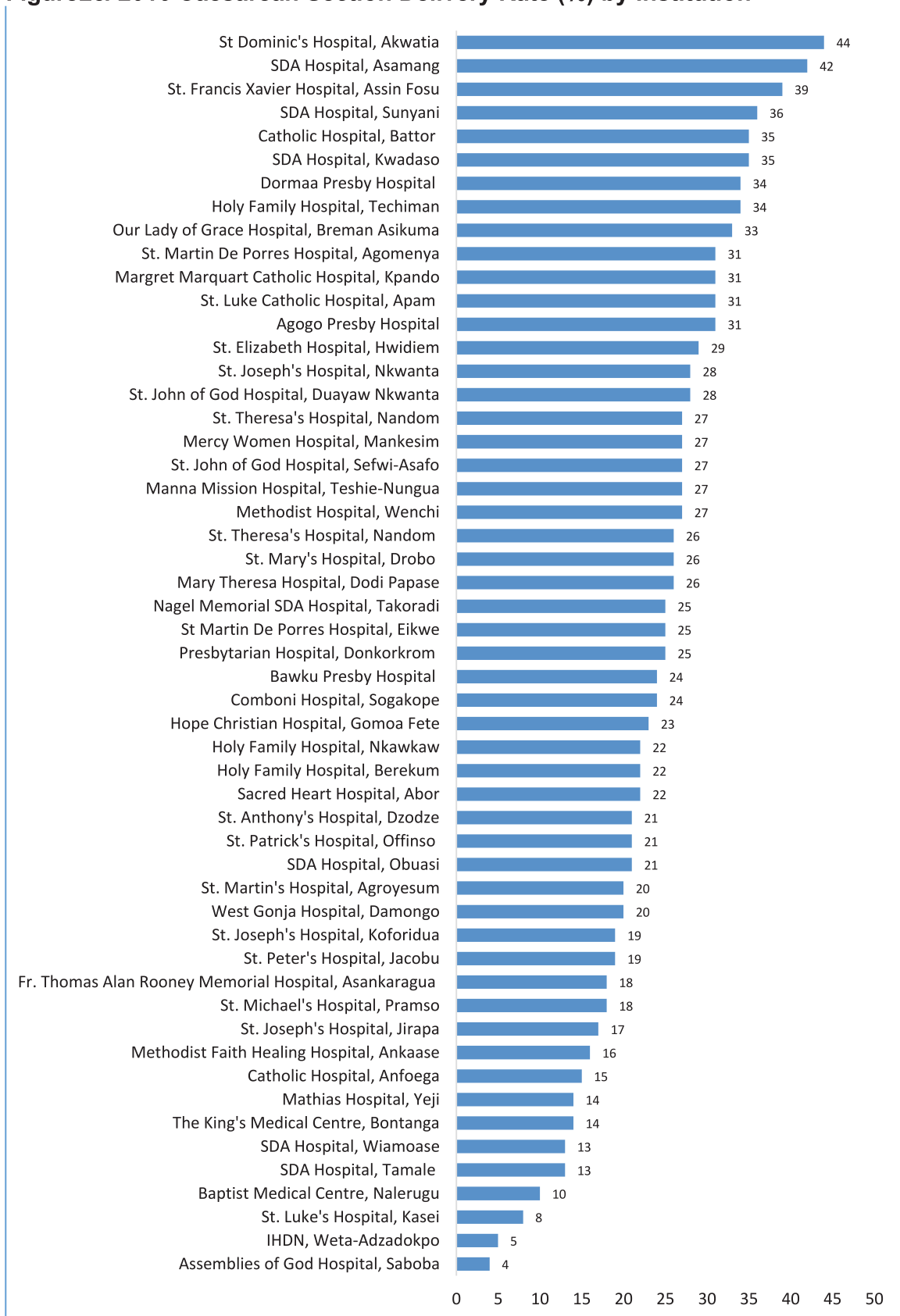
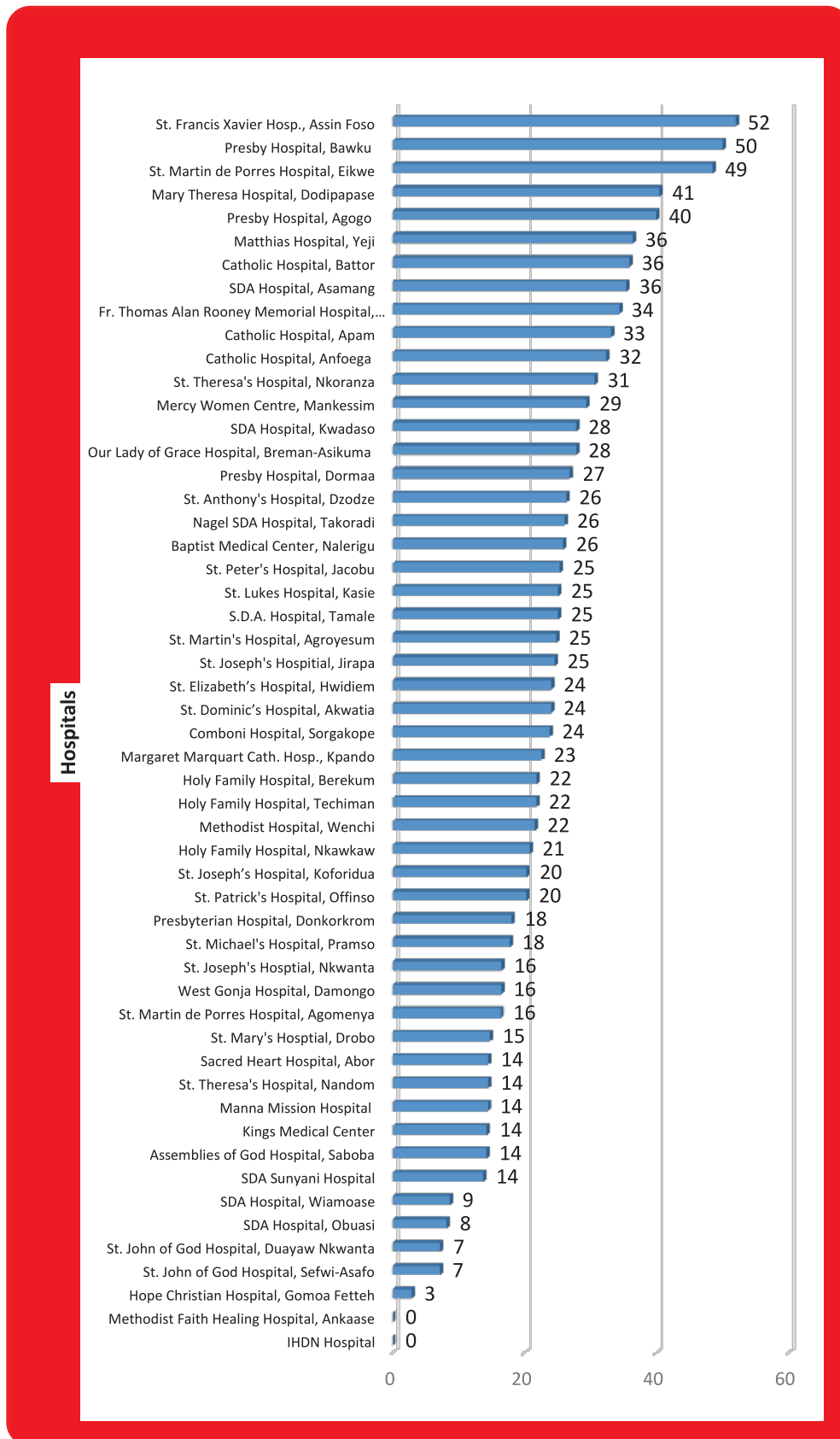


Figure26: 2016 Stillbirth Rate (per 1,000 deliveries) by Institution



St. Francis Xavier hospital which recorded the 4<sup>th</sup> highest CS rate, again recorded the highest stillbirth rate of 52 stillbirths per 1,000 live births. Again, this calls for supportive intervention. The lowest rates were recorded in St. John of God Hospital, Duayaw-Nkwanta. Surprisingly, the situation of Agogo Presbyterian Hospital should be investigated given the volume of patients they attend to yearly, which makes it a near impossibility not to record at least one (1) stillbirth, all things being equal.

Figure 27: 2016 Infants Mortality Rate by institution

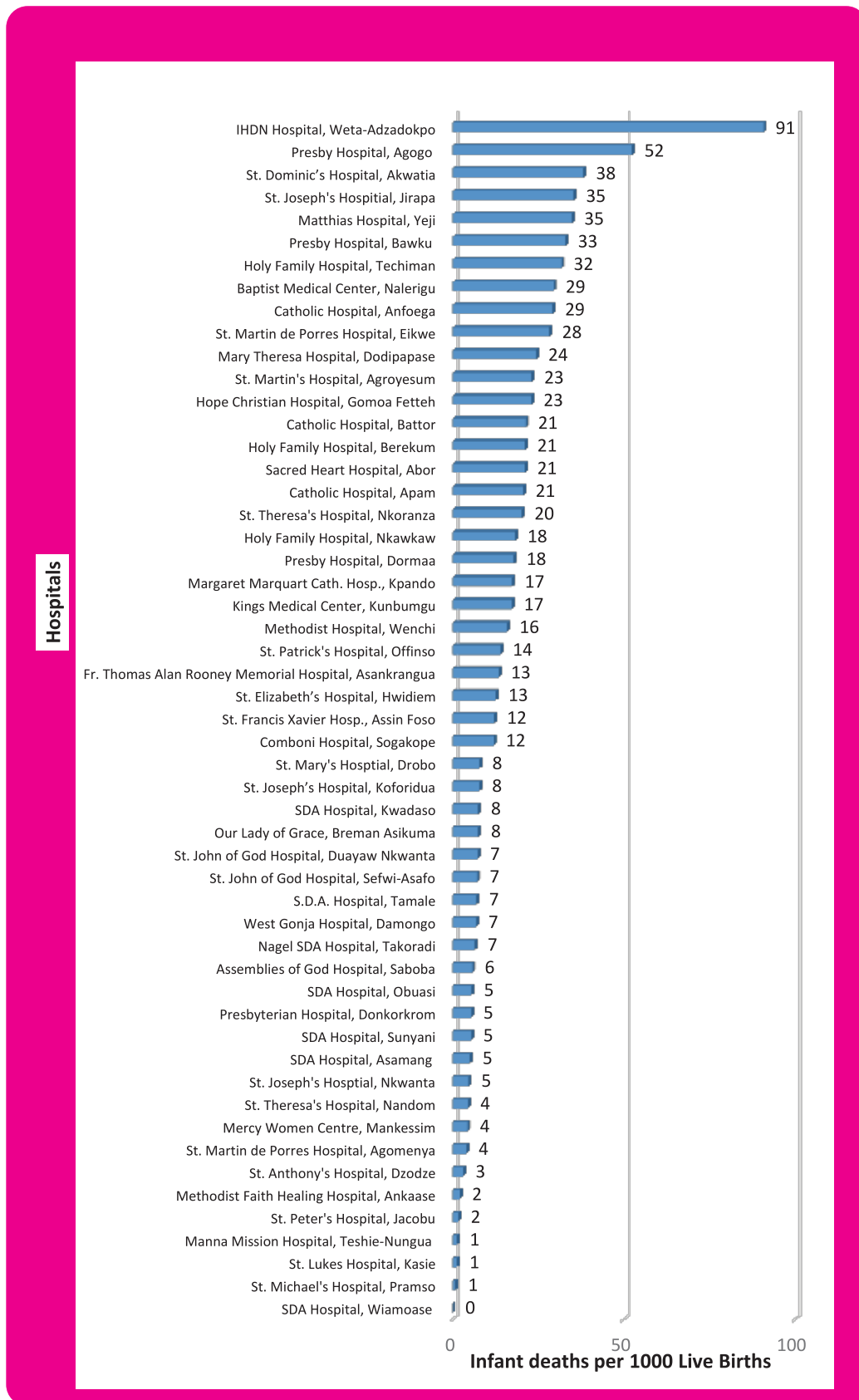
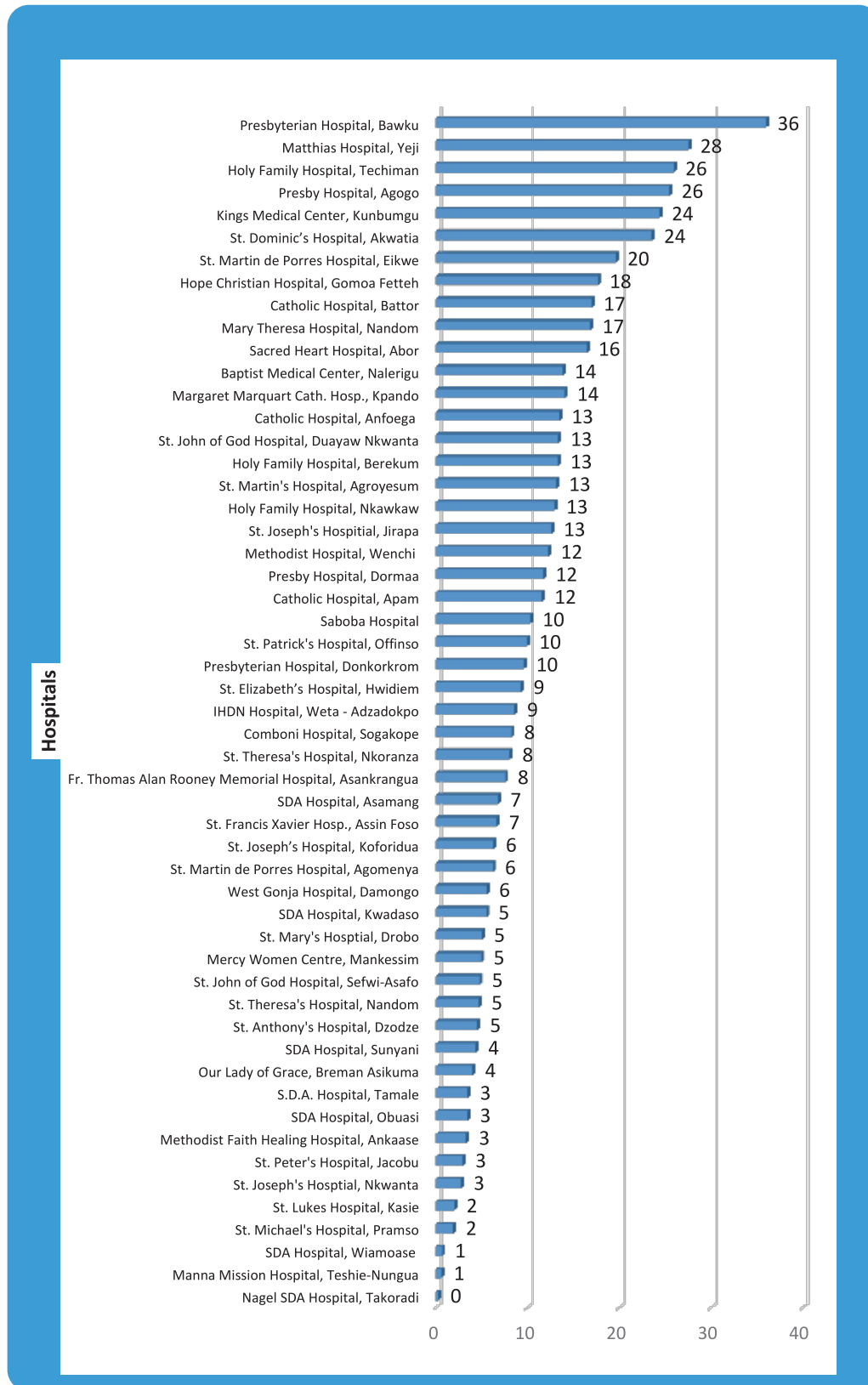


Figure 28: Under 5 Mortality Rate: 2016





## 1.15 Mental Health Services

Since 2013, CHAG with funding support from the Department for International Development (DFID-UK) has embarked on a number of activities to improve on the quality of life of persons living with mental illness. CHAG's Mental Health programme has 3 objectives, which are to: (1) to reduce the incidence of and stigma towards persons with mental illness; (2) Increase access to treatment, care and support for persons suffering from mental illness; and (3) Re-integrate treated mentally ill persons back into their communities and support them. The program is in its fifth year now. While a lot of the planned activities and strategies have been carried out, in 2016 CHAG Scaled up the program to involve important aspect of mental services including training professionals in newly WHO approved programmes (mhGAP), engaging Muslim Clerics, and obtaining psychotropic medicines.

Within the last year of the programme, CHAG will obtain psychotropic medicines for its institutions providing mental health services by setting up psychotropic medicines revolving fund and provide other logistics such as motorbikes and PA systems to facilities for outreach services in mental health

Towards achieving the above strategies, 46 students were sponsored for a 2-year mental health at the Kintampo College of Well-Being in Community Mental Health and Community Medicine and Clinical Psychiatry. Furthermore, about 560 community health workers and prescribers were given refresher trainings in mental health to make mental health services accessible to all people in Ghana. To this end, mental health services got integrated with OPD services in about 172 facilities with 92 CHAG institutions having their staff trained in 2015. Ultimately, the year under review saw a total of 3% of all Out Patient Department (OPD) attendances being mentally ill cases totaling 178,284 out of an estimated target of 5,942,777. Compared to 2014, this represents a 3.4% increase over the numbers seen in 2014 (172,498). Over 40% of those seen were females. In the years ahead, CHAG is targeting 10% treatment rate of mental cases annually at the OPD level.

### 1.15.1 Achievement for 2016

In 2016, the following were achieved through the mental health programme:

- Improved access to mental health services over 150 facilities have fully integrated mental health services in their OPD services
- Training: Six hundred and fifty-one (651) prescribers were trained in diagnosing mental conditions using the WHO mhGAP.
- About 1,311 different groups including community health nurses, community volunteers were trained in identifying and providing basic mental health services to clients in communities.

- Sponsorship - 65 Physician Assistants and CHNS have been trained in Clinical Psychiatry and community mental health programmes at Kintampo College for Health and Well Being.

### 1.15.2 Mental Ill Clients seen at OPD and IPD

In 2016, consistent with CHAG's aim of integrating mental health services into the mainstream of care, a lot of activities in mental health services occurred. This translated into relatively high number of clients that were seen in 2016. In 2016 12,811 mentally ill persons were seen at the various facilities across the country. A little over 3,500 new clients with mental illnesses were seen at the OPDs of CMIs while 9,296 visits were made by clients to our member institutions where they received services (refer table 17 below). Of the 3,515 new registrants, 2,170 of them, representing 61.7% were registered with the National Health Insurance Scheme (NHIS). Some facilities took it as a responsibility to register clients who were not on NHIS so that they could health care anywhere.

It is heartwarming to note that 167 clients were referred from traditional, herbal and faith-based institutions, indicating a collaboration which had been emphasized during the training of various cadres of professionals (refer table 18 below). With continued collaboration, it is anticipated that the number of mentally ill persons who suffer abuses in the hands of traditionalists and faith-based centres will reduce.

Ninety-one (91) clients were referred out to higher levels of care whereas about 174 clients were referred into CHAG facilities for care. This is the outcome of the numerous education campaigns that the facilities embarked on in the communities. Three (3) clients were referred from special institutions in the course of the year while eleven (11) cases were involved rape or defilement. Unfortunately, 1,094 clients defaulted in their visits for reviews (refer to figure 30 below). Not surprisingly, about 171 clients relapsed. The number of vagrants received in the course of the year were 43 of which eight (8) were treated / rehabilitated and restored to their homes. Two hundred and seventy-one clients (271) clients who were repatriated were received and treated well.

Table 17: Mental Health OPD and IPD data

	REGISTRANTS		RE-ATTENDANCES		ADMISSIONS			DEATHS		REFERRALS	
	Total registrants	NHIS	Revisits/reviews	Voluntary admissions	Involuntary admissions	Deaths	Clients referred in	Clients referred out			
Male	1,738	920	4,185	223	29	143	13	88	48		
Female	1,777	1250	5,111	244	37	133	5	86	43		
Total	3,515	2,170	9,296	467	66	276	18	174	91		

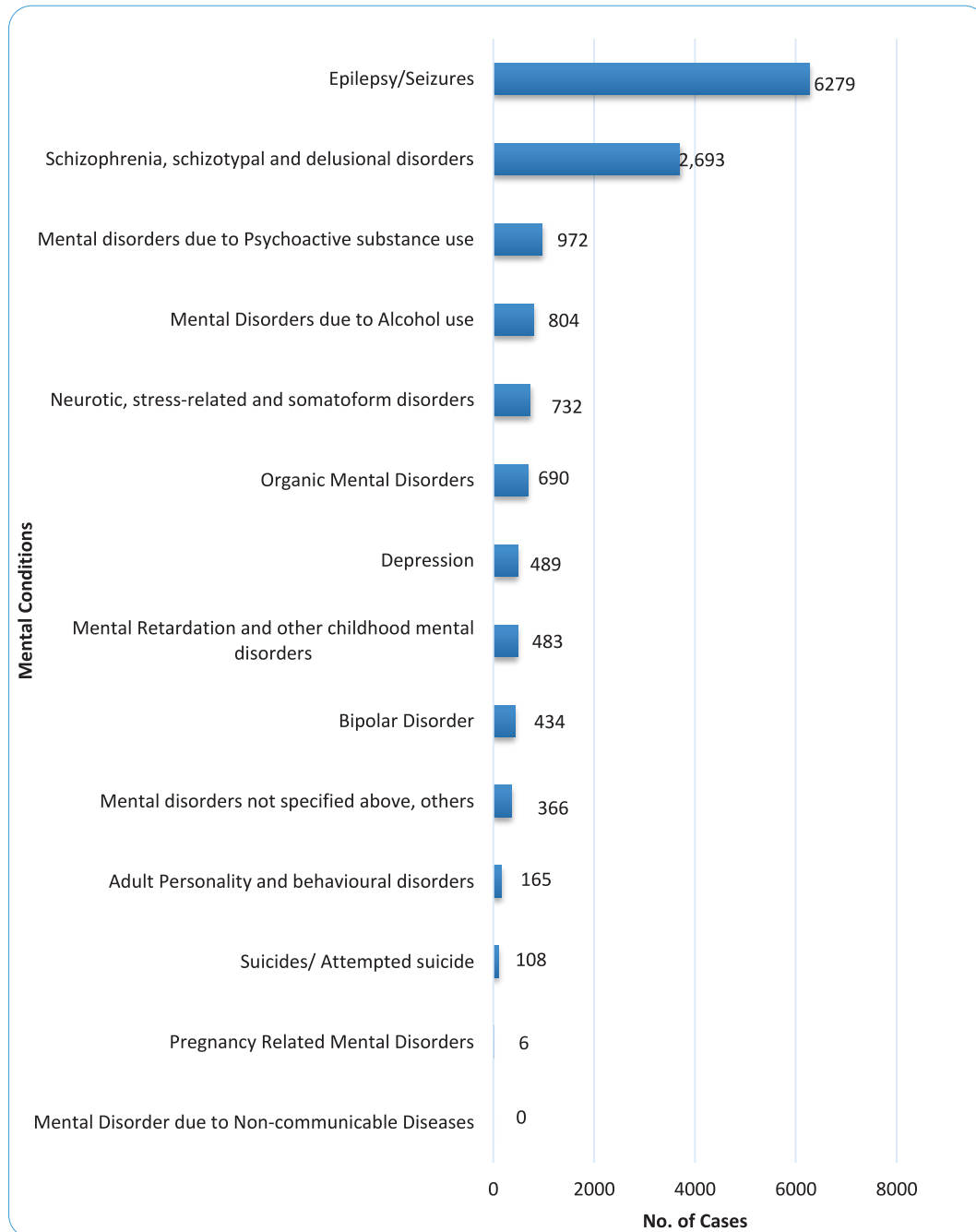
Table 18: Mental ill persons received from other facilities and other categories of mentally ill persons seen in 2016

	Clients received from Traditional, Herbal & faith-based centres	Clients received from specialized institutions (prisons, police cells etc.)	Special clients (domestic violence, rape, defilement)	Defaulters	Relapsed	Vagrants treated & rehabilitated	Repatriated clients received
Males	91	2	1	479	89	31	92
Females	76	1	10	615	82	12	179
Total	167	3	11	1094	171	43	271

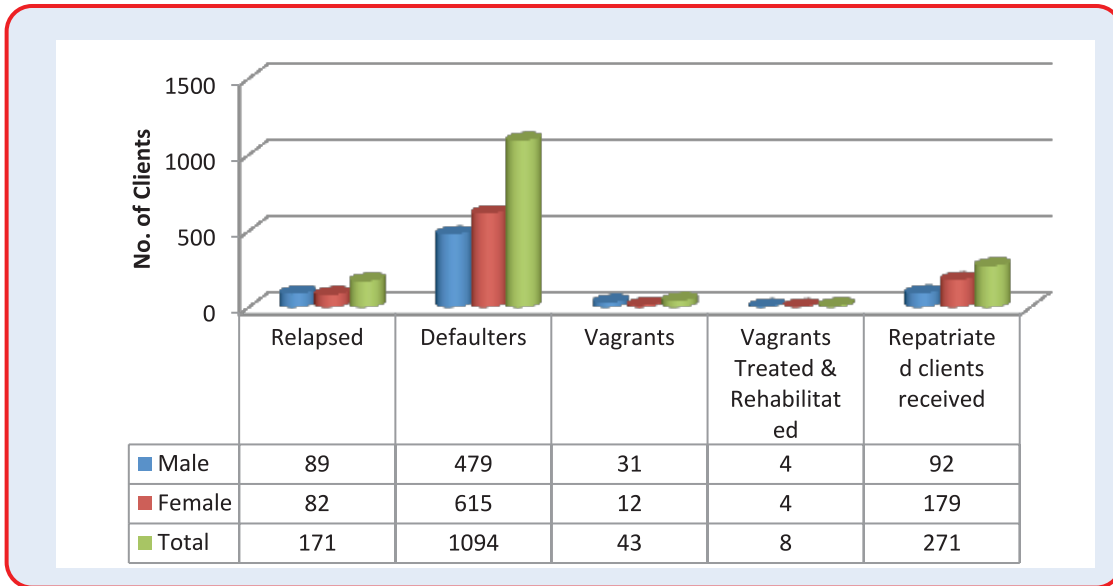
### 1.15.3 Mental health conditions seen in 2016

Aside epilepsy and seizures (now being classified under NCDs) delusional disorders and schizophrenia were the common conditions seen in 2016. About 3,693 cases were seen followed by alcohol use disorders. Figure 29.

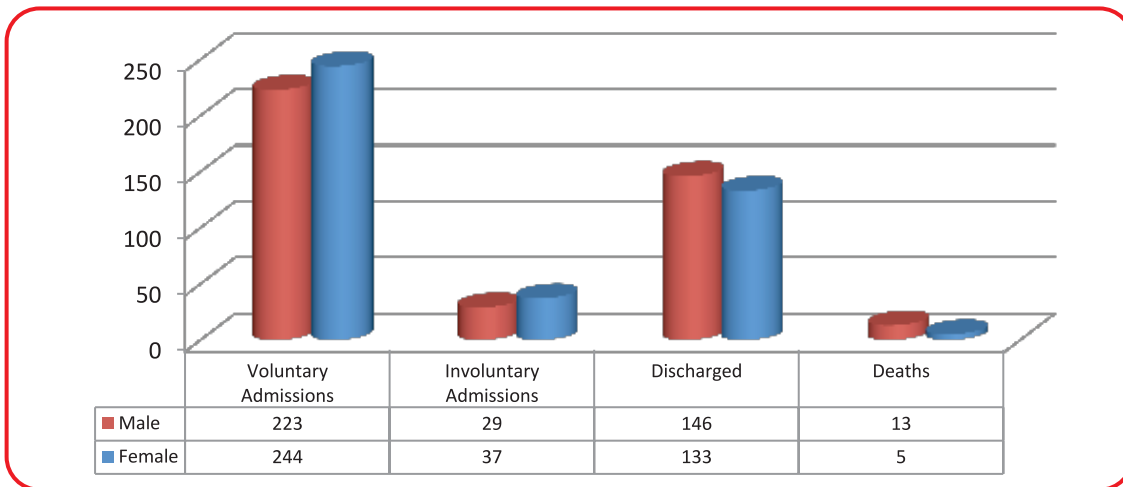
Figure 30: Mental Health Cases reported in 2016



**Figure31: Relapsed, defaulters and special mentally ill persons seen in CHAG institutions in 2016**



**Figure32: Admissions, discharges and deaths for mentally ill persons seen in 2016**



### 1.15.4 Facilities in the Spotlight

Many of our facilities are unique in a sense, for the range and manner of health services they provide. In many ways this results from innovations, passion and compassionate care from our hard-working staff. Our spotlight in 2016 fell on institutions that are leading the way in certain areas of care that is outstanding for our cherished clients. We focus on three institutions here.

#### Catholic Hospital, Battor

The Catholic Hospital in Battor is a major facility serving the people of Battor and its environs. The facility is noted for quality obstetrics and gynaecological care. In recent times, the gynaecology unit, under the leadership of the Kofi Effah has taken on a battle with cervical cancer which is the second leading cause of cancer deaths in women globally.

Current estimates indicate that in Ghana every year 3,052 women are diagnosed with cervical cancer and 1,556 die from the disease. The World Health Organization (WHO) projects that by the year 2025, 5,000 new cases of cervical cancer and 3,361 cervical cancer deaths will occur annually in Ghana. Countries that have organized screening programmes have successfully reduced the incidence of cervical cancer by picking up precancerous lesions of the cervix and treating them before they develop into cancer. In Ghana, there is no organized cervical cancer screening programme, with screening being opportunistic in isolated centres. Catholic Hospital, Battor in the North Tongu District of the Volta Region of Ghana has experience in cervical cancer screening and treatment and is hoping to scale up nationally.

From January 2014 to October 2016, Catholic Hospital, Battor, has partnered the Charité Universitätsmedizin, Berlin, Germany, with a GIZ/ESTHER and German Rotary Volunteer Doctors (GRVD) funded project and screened 2,000 women in the communities for cervical cancer. These women were screened in their homes (self-sampling with the Evalyn brush) and HPV testing (with the Arbor Vita OncoE6 test) in the laboratory in Catholic Hospital, Battor and full genotyping in Berlin. Self-sampling is supervised by the Community Health Nurses who stay in the communities with them and have home visits as part of their schedule). For those who test negative, their next screening is after 5 years. Only screen positives are followed up. Women who needed further follow up had colposcopy and those who needed treatment for cervical precancer were treated with Loop Electrosurgical Excision Procedure (LEEP) in the Catholic Hospital, Battor.

In all, 23 women with cervical precancer (CIN II and CIN III) and three women with early cervical cancer were picked up and treated. This approach, the first of its kind in Ghana, demonstrated that community-based cervical precancer screening using the CHPS (Community-based Health Planning and Services) is feasible in cervical cancer prevention in Ghana, especially for women in remote/rural areas. Dr. Kofi Effah, an Obstetrician Gynaecologist who leads the cervical cancer screening and treatment programme at Battor, envisions to train more health workers nationally on the use of mobile colposcopy for screening for cervical cancer at the community level. Dr. Effah hopes to build the

competencies of health personnel to be able to treat selected premalignant lesions of the cervix with ablation (cryotherapy and thermal coagulation). He calls on agencies and government to put in resources to ensure that Ghanaian women with cervical precancer conditions are detected early and receive treatment.

### Hope Christian Hospital

Hope Christian Hospital is located at Gomoa Feteh in the central region of Ghana. It serves 30 communities in about 8 districts, particularly the Gomoa East district with a population of about 239,900. The hospital sprung up as a healthcare wing of an orphanage but now provides healthcare to the communities in its environs. There are two things that make the hospital unique aside provision of care to orphans. First, the facility operates a policy known as the “ask 3 campaign” where every client after being seen by a prescriber or a midwife is supposed to ask three questions. This is to ensure that clients get educated about their condition in order to improve compliance to treatment and promote health. It breaks the apparent barrier between clients and their doctors or health professionals and clients. Secondly, the facility offers snacks twice a week to women attending prenatal care. This ensures that supervised deliveries improve in the 30 communities they the facility serves.

### The King's Medical Centre

The King's Medical Centre will be providing the first *Hydro-Mobile Clinic* in Ghana in the next few months so serve clients who get cut off from health services by the White Volta during the rainy season. For the entire Kumbungu and Tolon districts of Northern Ghana, there is only one hospital, The King's Medical Centre. The Hospital serves about 160,000 people from 278 communities in the two districts. Aside the *squatting births* which the facility is noted for, it has an important service that reflects the mission of CHAG. It is a Centre for rehabilitating severely malnourished children some of whom are otherwise left to die or disposed of by fetishes. Since 2008, the facility has rehabilitated over 3,500 malnourished children and restored them to their homes. Some of these children are now put in school and some are attending church to the glory of God.

In the next few months, the facility will provide the first *hydro-mobile clinic* in Ghana. Supported by Rotary club UK and the Wilberforce Institute, a motorized large boat clinic will be provided on the White Volta from Buipe to Nabugu near Karaga for communities that are cut off from healthcare during the rainy season.

CHAG is proud of all our member facilities for doing what they do to provide affordable, accessible and compassionate healthcare to all people in Ghana particularly the marginalized.

## 2.0 HEALTH INFORMATION

Health information encompasses all systems, procedures and staff targeted at the timely collection, analysis and dissemination of information to inform decision making: that is for planning, managing, monitoring and evaluation of health services. Integrity, Quality, Reliability and timeliness are key aspects in health information. These are relevant in making meaningful decisions in the health sector. All CHAG facilities are required to report to the CHAG Secretariat electronically using the CHAG Minimum Service Data Set (MSDS) bi-annually (January to December) and annually (January – December). Data obtained from the MSDS are validated, collated, analyzed and interpreted for reporting purposes to inform decision making at all levels within CHAG Network.

The performance of Member Institutions are also monitored and evaluated through the District Health Information Management System (DHIMS – 2). Below are listed precarious challenges faced within CHAG Network is

**Table 19: Health Information Precarious Challenges**

- Prevailing in-adequate data management and use for decision making at the health facility level
- In-ability of DHIMS-II to provide disaggregated data on CHAG at all levels;
- Late and incomplete submission of CHAG minimum data-set by members.

CHAG facilitates the provision of health service data to the government through DHIMS2 at the facility level. In 2016 completeness and timeliness of submitted data by CHAG Facilities on the DHIMS were 96.8% and 85.7% respectively. However the submission rate of CHAG Annual (January to December) 2016 minimum service data (returns) to the CHAG Secretariat by CHAG Member Institutions (CMI) comprising Hospitals, Polyclinics, Clinics, Health Centers, and Primary Health Centers) were 85.3% and 75% respectively. Only 44.5% of the CMIs could submit their report timely. The overall reporting rate by facilities to the Secretariat stood at 77.3% (232 out of 300 facilities). This situation often affects CHAG's functional capacity for evidence-informed advocacy and accountability responsibilities to various stakeholders. Consequently, the Secretariat needs to institute measures to encourage CMIs to ensure timely, accurate and complete data submission of data.

**Table 20: Report Submission Rate by Facilities (2012 -2016)**

Facility	2012	2013	2014	2015	2016
Hospitals	90%	97%	97%	97%	85.3%
All Others	81%	87%	89.0%	81%	75.0%
Overall	84%	90%	93%	86.2%	77.3%

Figure 33: Annual 2016 Minimum Service Data Set Submission Rate by Facility Type

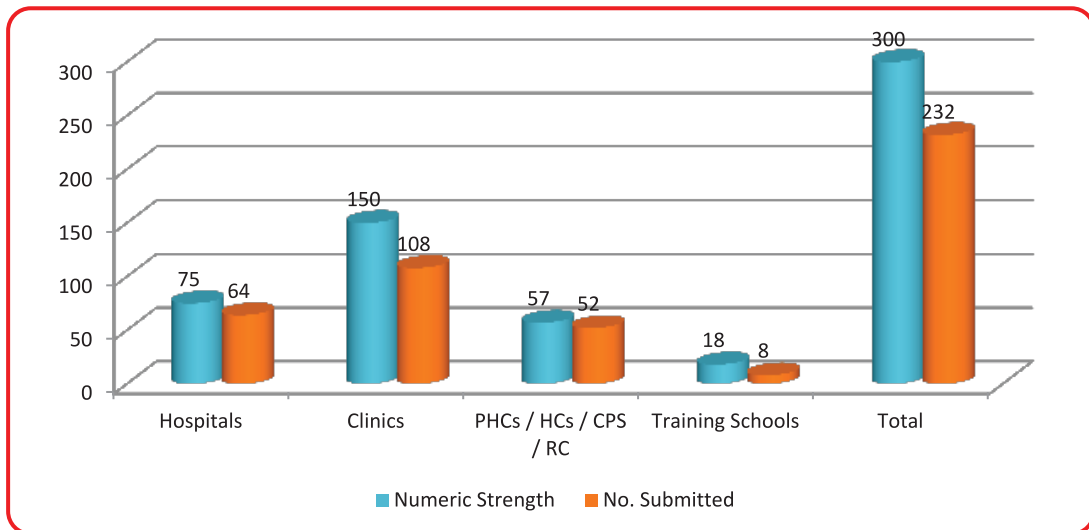
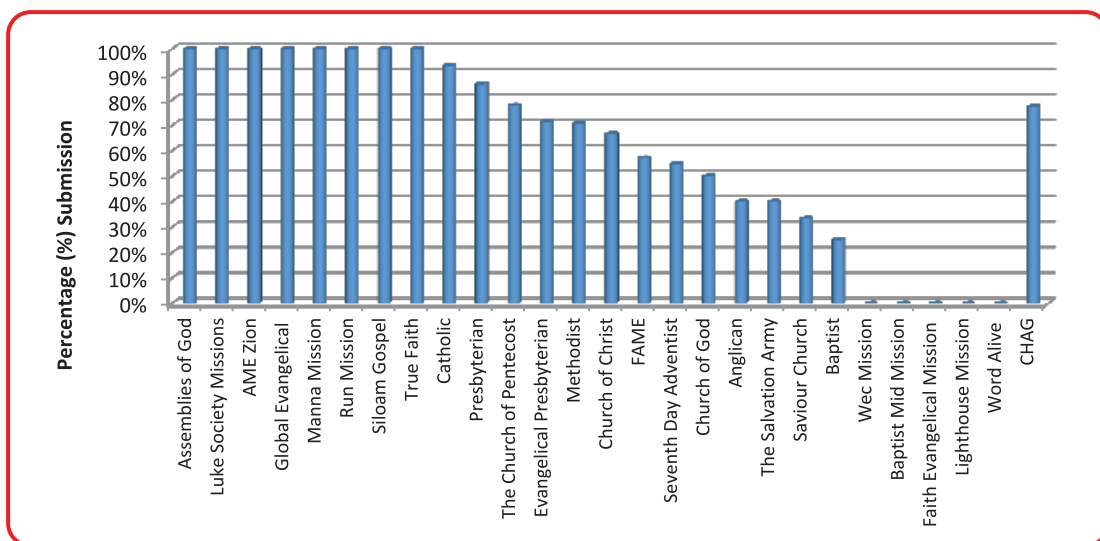


Figure 34: Denominational Minimum Service Data Submission Rates Chart

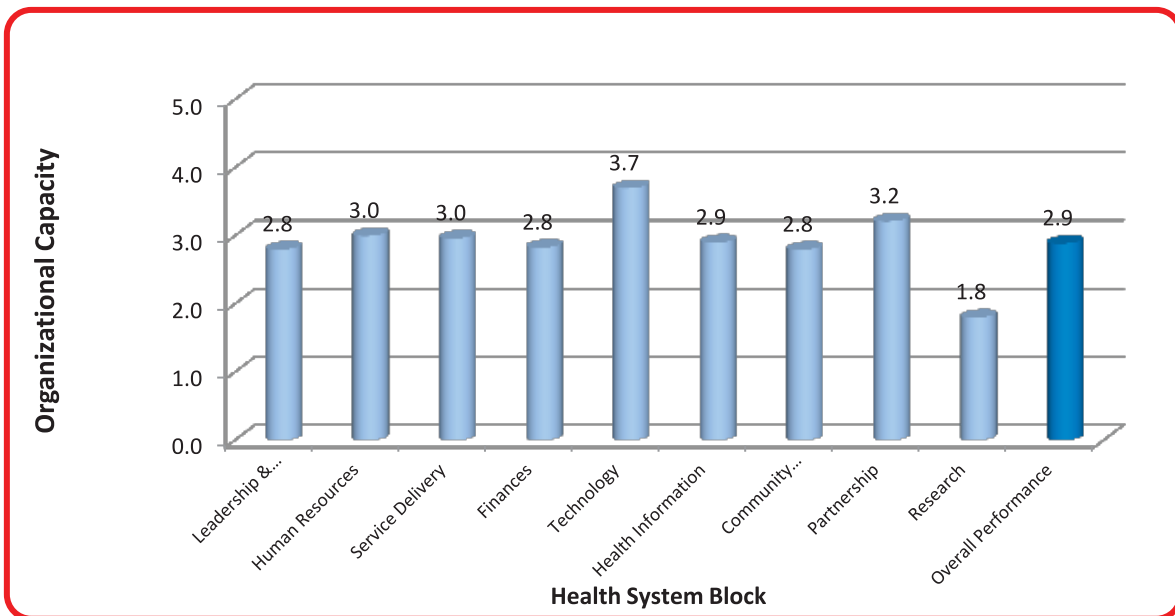


Delay in data submission is a regrettable challenge within the CHAG Network. In the years ahead, CHAG would make the necessary efforts to mitigate the challenge so as to improve data management at all levels across its network. This may require capacity building of managers in the use of information for analysis and decision making. Health information officers and other frontline staff need to be trained in data collection and management. Newly customized Hospital Management and school administration management software with potential to improve data management across the network for healthcare

providers as well as school administration management, had been licensed and being deployed within care service facilities for a scale up. Furthermore, the development of an ICT- dashboard with critical health indices across the network is being undertaken.

To realize capacity gaps of CMIs, CHAG intend to continue to monitor and evaluate the performance of its facilities with OPAT (Organizational Performance Assessment Tool). This would then feed into programme to be developed to manage identified gaps and improve quality of work as well as data. In 2016 some of the CHMIs were trained in the use of OPAT. This enabled CMIs and the Secretariat to assess their capacities by the nine system blocks adopted By CHAG. CHAG's Network performance reportedly (by the OPAT) saw slight improvement (7% difference) from 2.7 in 2015 to 2.9 in 2016. Thus, CHAG's overall organizational capacity stood at 2.9 out of 5, which is interpreted "Good". Below is a representation of CHAG capacity in 2016.

Figure 35: CHAG Network Capacity in 2016



### 3.0 LEADERSHIP AND GOVERNANCE

Leadership and governance relates to providing the direction, structure and stewardship to guide the organization to effectively achieve desired outcomes and impact. It involves the effective and transparent use of resources as well as competent performance management in an accountable, equitable and responsive manner. Important components of this system block are strategic planning, organizational and institutional development, general- and financial management, monitoring and evaluation, adherence to regulation and inter-sectorial and network advocacy. Critical challenges in leadership and governance that require sustained attention of CHAG are indicated in table 15 below:

Table 21: Leadership and Governance: Critical Challenges

- 
- Inadequate leadership and management skills;
  - Weak governance, accountability and transparency;
  - Selective compliance to policies and guidelines;
  - Inadequate organisational development and institutional strengthening capacity;
  - Difficulty in obtaining regulatory requirement
  - Non-compliance to regulatory requirement.
- 

In 2016, the CHAG Board recruited a new Deputy executive Director in the person of Dr James Duah to support the Executive Director, Mr. Peter Kwame Yeboah to steer the affairs CHAG Secretariat. The position was created as a part of the general restructuring of functional portfolios at the Secretariat aimed at ensuring efficiency and effectiveness of work. Dr. James Duah is the first to occupy this position as the Deputy Executive Director of CHAG. Dr Duah is a physician with combined specialties in public health and business administration with ten (10) years working experience at the King's Medical Centre, an Assemblies of God Hospital in Kumbungu-Tamale in the northern region of Ghana. CHAG continued to participate in health sector meetings and technical sessions to promote member's interest, influence health sector policy and advocate for the advancement of the health sector.<sup>1</sup> This yielded a positive results including the involvement of CHAG in the MAF programme on a relatively large scale. Regular progress reports were prepared and discussed with health sector stakeholders.

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<sup>1</sup> CHAG participated in the national health summit, health sector business meetings, ministerial committee on HRH, NHIA advisory committee and the Parliamentary select committee on health. Furthermore, CHAG participated in the following technical working groups: Ebola sub-committee on case management; state of the national health report; health service delivery for the National Population Council; technical committee on capitation; technical committee on national health accounts; working group on health service costing.

The 2015 performance contract with the MOH was evaluated prompting various areas for improvement.<sup>1</sup>

### National Committees on which CHAG served

*National Health Insurance Review Committee:* For the year under review, CHAG played a leadership role, through its Executive Director who was intimately involved as committee member, in the review of the nation's key social intervention tool – the National Health Insurance Scheme (NHIS). The committee, which was established by His Excellency President John Mahama in 2015 to review the NHIS in terms of sustainability, efficiency, equity, accountability and user satisfaction, submitted its findings and recommendation in October 2016. Other committees on which CHAG served at the national level are the *Technical Working Group Committee on CHPS, Committee on Health Indicators for the SDGs, National Quality Strategy Technical Group, Health Sector Working Group, Ministerial Committee on Human Resources* among others. Ultimately, CHAG's visibility, role and mandate as a major stakeholder and reliable partner in the health sector was recognized and affirmed in the final document.

The leadership of the secretariat supported member institutions particularly in the area of capacity building in key service provision areas including Mental Health, Essential Newborn Care, Lifesaving Skills for adults and children, Ultrasound scan/CTG machine training and obstetric surgeries.

## 4.0 HUMAN RESOURCES

Human Resources for Health (HRH) relate to all aspects of availability, functionality, performance and management of staff to attain optimum workforce productivity. The production, distribution, development, retention and utilization of a health workforce of the appropriate quantity, quality and the proper skill mix is essential to secure effective and quality health services. To this end, the Christian Health Association of Ghana (CHAG) regards human resource for health as central to achieving its mandate of contributing effectively to national health outcomes towards the achievement of universal health coverage and the sustainable development goal.

The HRH situation for the year ended December 2016 across the CHAG network was fairly impressive. The staffing level went up by 21% whilst turnover rate was 2.27. Other areas covered in this report include: staffing situation, the ratio of professionals to auxiliary nurses, promotions and separations of CHAG employees within the period.

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<sup>1</sup> Overall score for CHAG on specific outputs and deliverables was 40 out of 100.

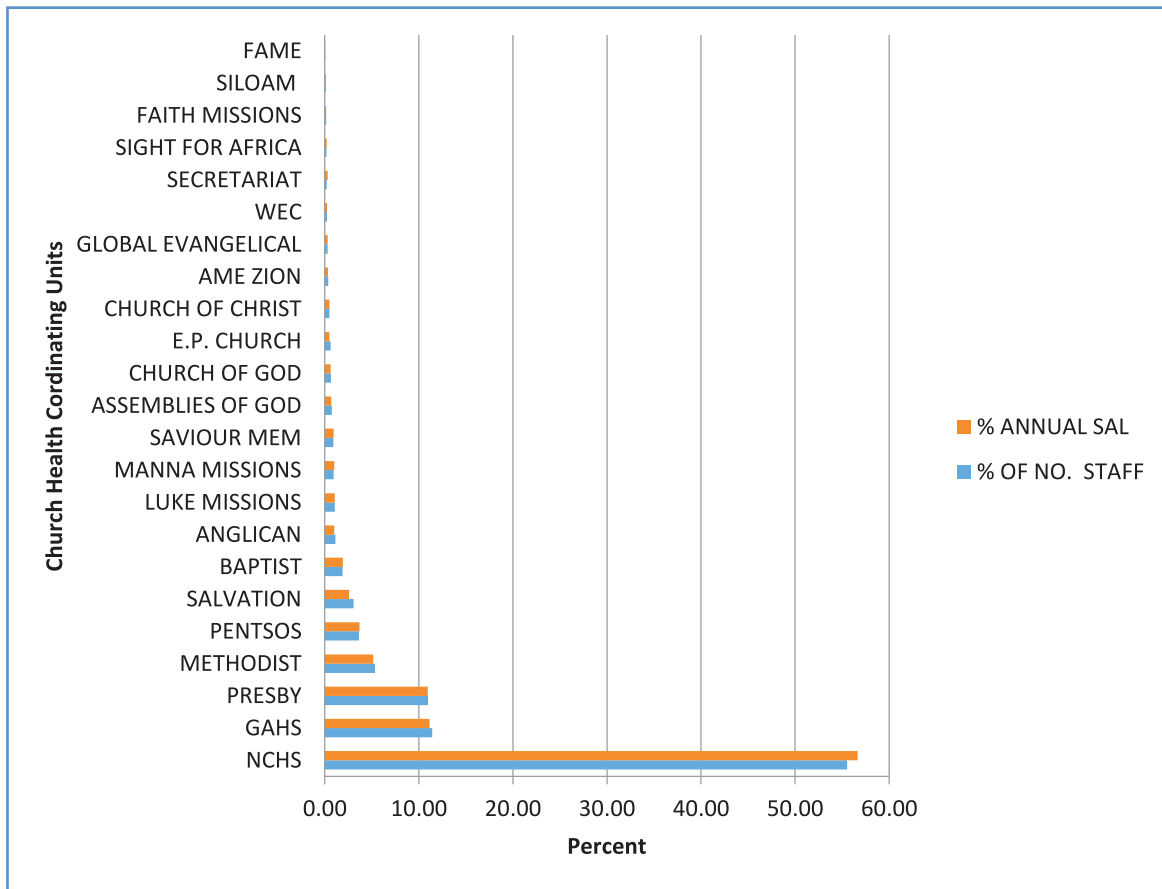
#### 4.1 Staffing Situation

The staff strength of the CHAG Network stands at twenty thousand and eighty five (20,085) as at December 31 2016. However, the number of CHAG employees on Government of Ghana payroll stands at fifteen thousand, nine hundred and twenty seven (15,927). This implies that 21% of CHAG staff are paid by CHAG Member Institutions using their meagre internally generated fund mostly earned from the NHIS reimbursements. Table 22 below provides details of the staffing situation of CHAG employees on Government payroll by Church Health Services (CHS), whilst figure 35 shows Percentage distribution of Staff by CHCU and Annual Basic Salary.

Table 22: Number of Staff and Corresponding Salaries by Institution

Sn	CHCU	No. Of staff	Annual salary 2016
1	NCHS	8848	123,979,090.36
2	GAHS	1818	24,388,041.57
3	Presby Health Services	1747	23,949,167.06
4	Methodist	853	11,260,909.02
5	PENTSOS	580	8,065,546.94
6	Salvation	486	5,644,300.66
7	Baptist	299	4,203,647.26
8	Anglican	180	2,194,658.04
9	Luke Society Mission	171	2,318,420.24
10	Manna Mission	149	2,188,078.95
11	Saviour Mission	142	2,029,350.07
12	Assemblies Of God	119	1,478,727.77
13	Church Of God	104	1,362,110.41
14	E.P. Church	97	1,058,164.36
15	Church Of Christ	81	1,080,349.05
16	Janie Speaks AME Zion	60	743,345.05
17	Global Evangelical	49	676,098.84
18	ECG	39	528,949.61
19	CHAG Secretariat	31	665,866.87
20	Run Mission	28	437,954.08
21	Faith Evangelical Mission	22	317,394.70
22	Siloam Gospel	17	220,759.69
23	FAME Ghana	7	95,778.96
	<b>Total</b>	<b>15,927</b>	<b>218,886,709.56</b>

Figure 36: Percentage distribution of Staff by CHCU and Annual Basic Salary

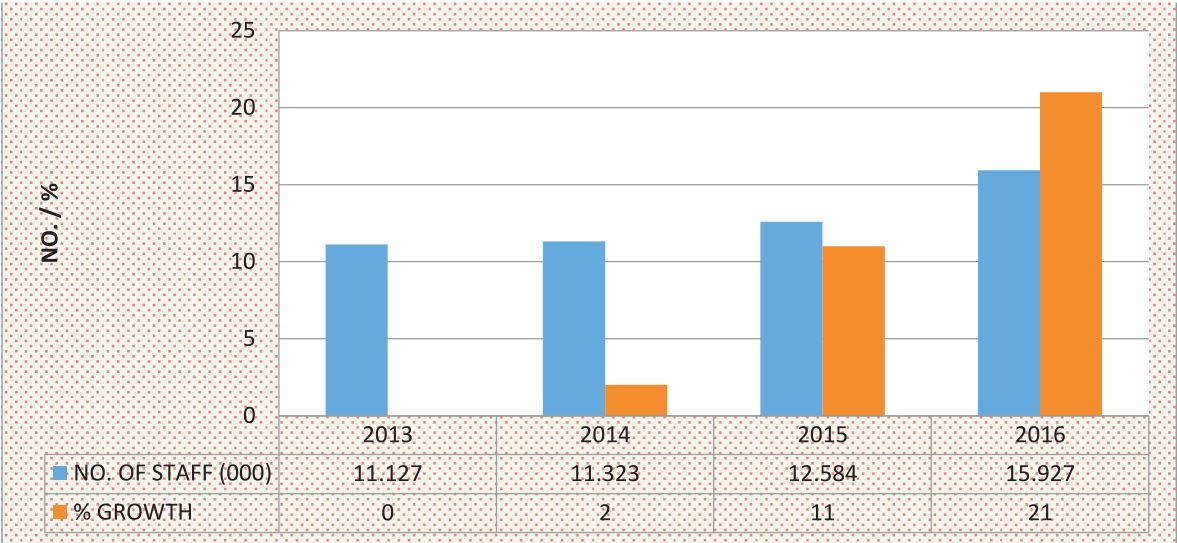


From figure 35, the National Catholic Health Service (NCHS) continues to have the highest number of employees and salaries payments. This is consistent with the number of facilities as well as the proportion of contribution of the NCHS to health services delivery of the CHAG network. In the year under consideration (2016), the human resource strength of the Service stands at eight thousand, eight hundred and forty-eight (8,848) employees on government payroll and were paid an amount of one hundred and twenty four million, (123,979,090.36) Ghana cedis during the period under review. This figure represents 55.55% and 56.64% of the total number of CHAG employees on the government payroll and amount of salary paid them respectively. Ghana Adventist Health Service (GAHS) and the Presbyterian Health Service followed with 1818 (11.41%) and 1747 (10.97%) in number of employees on Government payroll, and 24,388041.57 (11.14%) 23,949,167.06 (10.9) in salary paid respectively.

The bottom three of the distribution was Faith Mission (newly admitted), Siloam Gospel, and FAME (newly admitted) Health Services. The total staff strength of these three facilities constitutes 0.29% of the total number of CHAG employees of government payroll.

The distribution of employees within the network during the period was largely influenced by the number of CMIs under each Health service, the need as determined by workload of the CMIs, and the location of the facilities. The staff strength of the Network has consistently seen an upward trend over the recent past years. Analysis of the past four years reveals that the number of CHAG employees on government payroll has been rising at an increasing rate; rising from over eleven thousand in 2013 to over fifteen thousand in 2016. Figure 36 below depicts the rising trend of number of staff and the rate of growth. This trend is expected to continue in 2017.

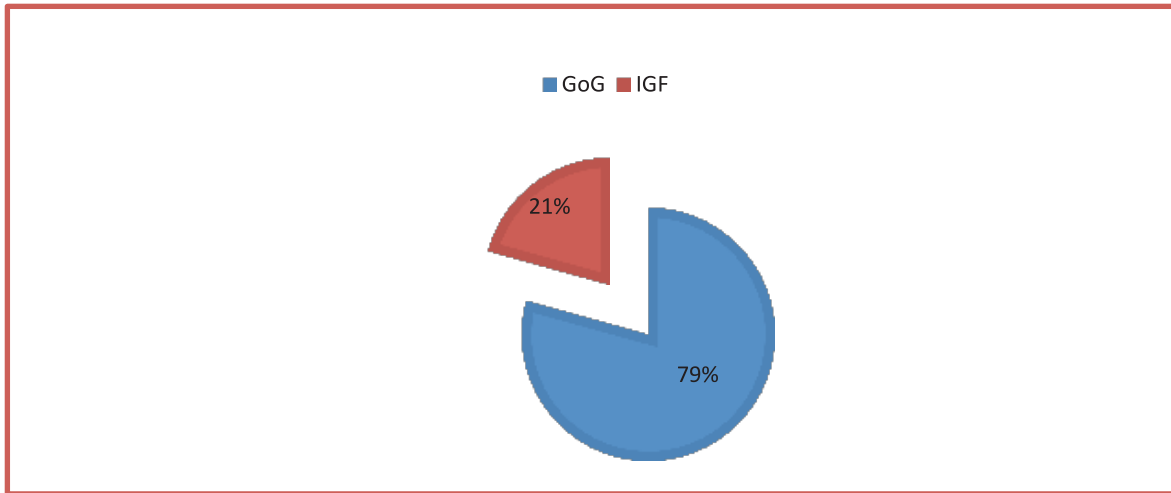
Figure 37: Four Year trend of GoG Staff on Nominal Roll



Source: CHAG 2013 - 2016 HR Data.

As indicated in figure 37 below, four thousand, one hundred and fifty-eight employees, represents 21% of the overall staff strength of CHAG were paid from the Internally Generated Funds. This phenomenon has increased financial distress of CMIs in the face of delays in NHIS claims reimbursements.

Figure 38: Proportion of GoG & IGF Staff

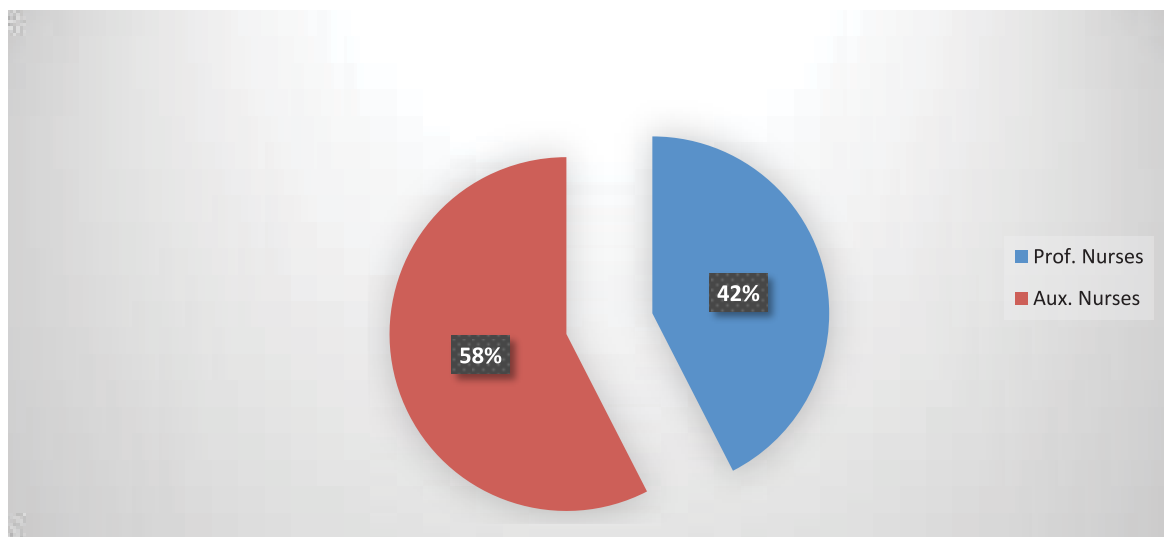


Source: CHAG 2016 HR Data.

#### 4.2 Ratio of Professional to Auxiliary Nurses

The required proportion of professional and auxiliary nurses is 60% professional and 40% auxiliary. In 2015, the rate of professional nurses and their auxiliary counterparts was 53 and 47 respectively. However, in the year under review (2016), the rate stood at 58% to 42%. This indicates an improvement in the rate, a near ideal situation, during the period. This is attributable to an increasing rate of enrolled nurses within the health sector.

Figure 39: Professional to Auxiliary Nurse



Source: CHAG 2016 HR Data.

Figure 38 shows the ratio of professional to auxiliary nurses. In numerical terms however, both categories had marginal increases. The number of nurses and midwives is shown in Table 23.

SN	CATEGORY	NUMBER
1	Professional nurse (Staff nurses - DDNS)	3,686
2	Auxiliary Nurses (Health Assistants , EN and CHN)	4,994
3	Midwives	1,371

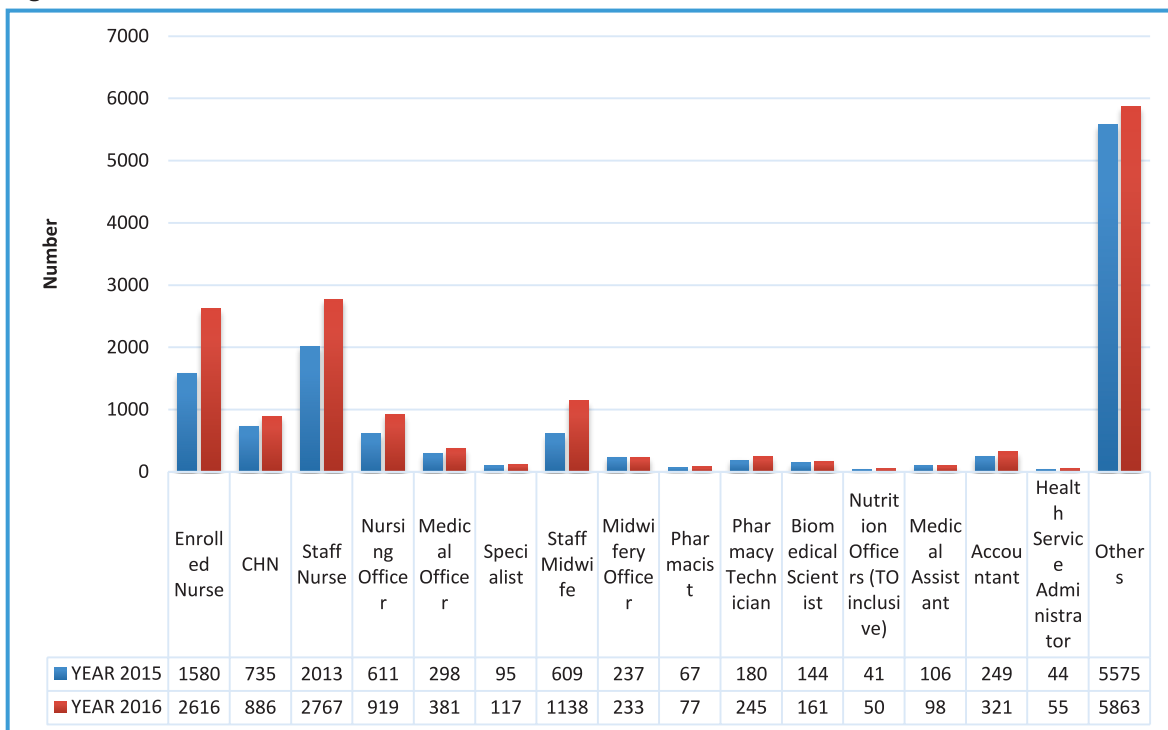
Table 23:  
Number of Nurses, Midwives and auxiliary Staff

Source: CHAG HR data 2016.

### 4.3 Doctor to Professional Nurses ratio

As at the end of 2016, there were four hundred and ninety-eight (498) Medical Doctors including specialists within the CHAG network. For everyone doctor in CHAG, there are about 7 professional nurses. When all nurses and midwives (prof and aux. nurses and midwives.) are put together, the ratio is 1:20. In the future, attention should be paid to training more medical doctors to bridge this doctor to nurse gap. Staffing Cadre Breakdown

Figure 40: No. of Staff in Cadres



Source: CHAG 2015 and 2016 HR Data.

The year 2016 has seen an upward trend in cadres except Midwifery Officer and Medical Assistant categories; significant among these is the increase in Staff Midwives from 609 to 1,138 during the period. Figure 39 compares 2016 to 2015.

#### 4.4 Summary of Key HR Performance Indicators 5-Year Trend

Table 18 provides information on some key human resource performance indicators over five year's period across the CHAG network. These include the total number of mechanized staff, and Doctor to Outpatient and nurse to out-patient ratios. This has seen continued improvement over the past 5 years.

Table 24: Key HR performance indicators

Input Performance Indicator	2012	2013	2014	2015	2016	5-Year Trend
Total Mechanized Staff	8,861	9,356	11,127	12,584	15,942	Increasing
% Clinical /Non Clinical Staff	48	64	73	53	60	Fluctuating
Doctor / Out-Patient Ratio	1:21,645	1:18,845	1:15,987	1:15,122	1:12,083	Improving
Nurse Out-Patient Ratio	1:1,666	1:1,556	1:1,411	1:1,414	1:698	Improving

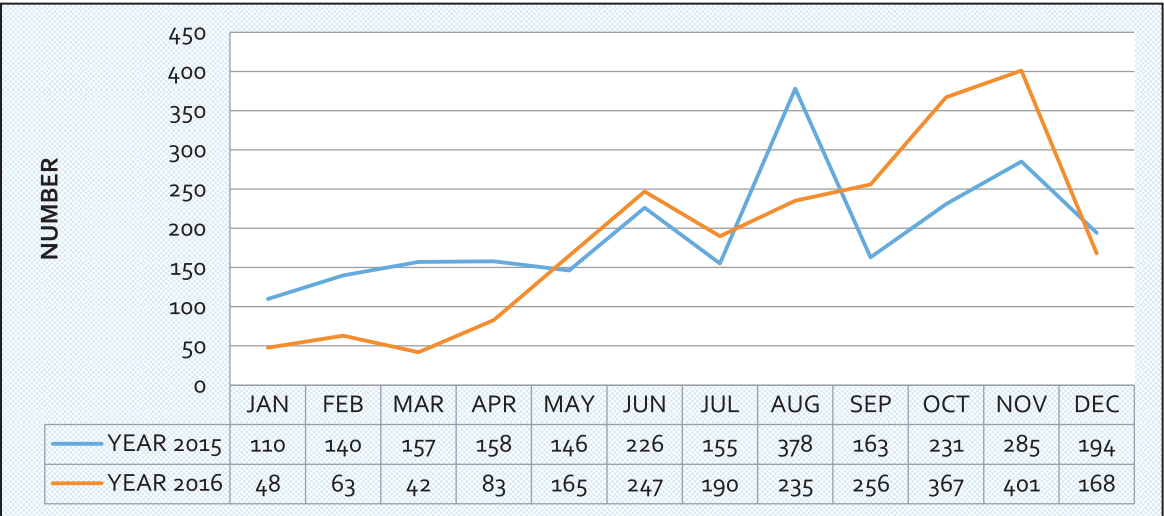
Source: CHAG 2016 HR data

#### 4.5 Promotions And Upgrades

As part of ensuring the efficiency of employees in their work, the Ministry of Health of Ghana and by extension CHAG, promotes eligible employees who met criteria set in the performance of their duties.

A total of two thousand, two hundred and sixty-five (2,265) employees of the network were promoted in 2016; indicating a 3.3% decline in the 2015 figure of two thousand, three hundred and forty three (2343). The decline is significant in the light of increasing number of health professionals within the network. Figure 40 shows monthly distribution. Promotion of CHAG employees during the period.

Figure 41: Promotions and Upgrades

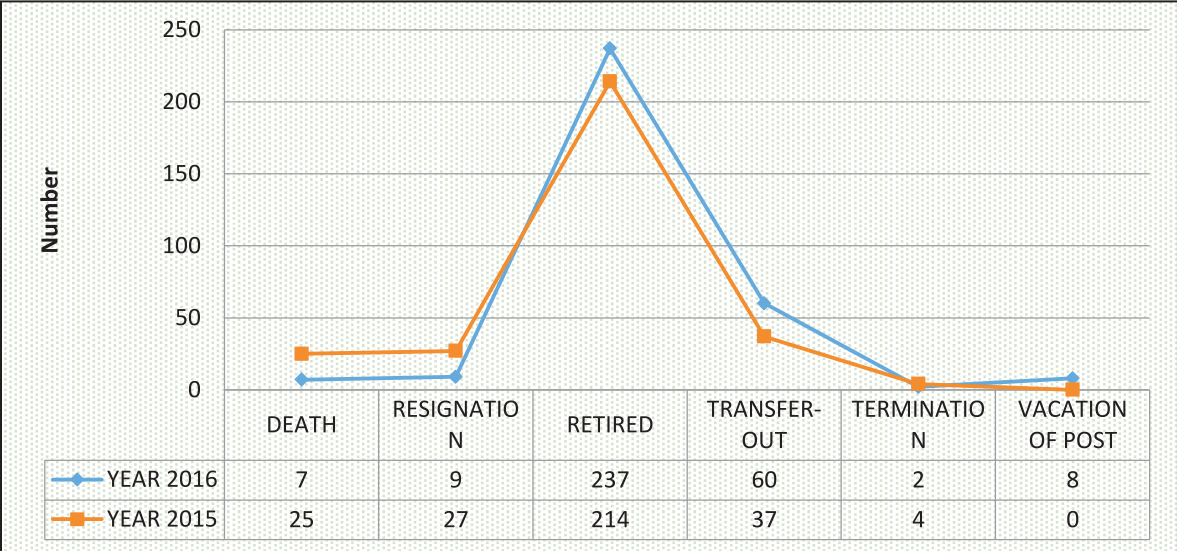


Source: CHAG HR data 2016

4.6 Separations

Separation of staff, otherwise known as attrition, has a great propensity to negatively affect health outcomes. Separations over the period included: retirement, termination, vacation of post, resignation, dismissals, and transfers. Figure 41 below compares CHAG employee attrition in 2015 and 2016. More people retired in 2016 than in 2015.

Figure 42: Employee Separations 2015 and 2016



Source: CHAG 2015 and 2016 HR Data.

In Figure 41 above it would be observed that retirement and transfer-out constituted the major sources of attrition in CHAG in the year 2016. However, other sources of separation such as vacation of post, resignation, termination and dismissal raise concerns about our human resource practices across the network. Even though, it is natural for people to relocate, effort needs to be made to investigate the actual reasons for the exit of staff, to inform appropriate retention strategies towards continuous improvement in the HR situation of CHAG.

#### 4.7 Inter-Agency Transfers

The Ministry of Health policy on transfer allows inter-agency transfer of staff. One major receiving agency of transfers from CHAG is the Ghana Health Service. Table 19 below shows improvement in the net transfers between 2015 and 2016.

CADRE	Inter-Agency Transfers for Year 2016			2015	Trend performance
	Transfer - Out	Transfer- In	% Deficit to CHAG 2016	% Deficit to CHAG 2015	
Medical officers	11	4	63.64	75	Improving
Midwives	6	4	33.33	50	Improving
Professional Nurses	18	9	50.00	80	Improving
Pharmacists	0	0	0.00	NIL	Nil
Enrolled Nurses	2	0	0.18	75	Improving
CHNs	7	3	57.14	100	Improving
Health Assistants	1	1	0.00	NIL	Nil
Others	15	10	33.33	78.57	Improving
<b>TOTAL</b>	<b>60</b>	<b>31</b>	<b>48.33</b>		<b>Improving</b>

Table 25: Inter-agency transfers 2016

Source: CHAG HR data 2016

In 2016 as compared to 2015 (Refer to table 25), although the situation seems to be improving it is quiet worrying to find more staff leaving the network than those coming in. Major possible reasons for the imbalance of inter-agency transfer between CHAG and the other agencies are the issues of location and management practices. Most of our facilities are located in hard-to-reach areas. Consequently, attracting and retaining critical staff has become a herculean task. Again, other agencies may be introducing incentive packages that seem to be attracting staff from CHAG. It is therefore imperative to find other motivational interventions to remedy the situation.

#### 4.8 Staff Turn-Over Rate

Some employees of CHAG left (separated from) the services of the network and needed to be replaced. A certain amount of turnover is unavoidable. However, it is imperative to ensure that the rate remains at manageable levels. High levels of employee turn-over have both financial and non-financial implications on the quality of healthcare delivered.

Over the period (January to December 2016), the number of retirements, transfer-out to other MOH agencies, resignations, vacation of post among other forms of separations (refer to table 25 above) were 323. Table 26 presents the breakdown.

Table 26: Staff Turn-Over Rate, 2016

Cadre	No. Of staff at the end of 2015	No. Of staff - end of year 2016	Av. No. Of staff (2015 and 2016 average)	Separations- year 2016	Staff turnover (%)
CHN	735	886	811	16	1.97
Enrolled Nurses	1580	2616	2098	24	1.14
Medical Officers	393	498	446	15	3.37
Midwives	734	1371	1053	53	5.04
Pharmacists	67	77	72	2	2.78
Professional Nurses	2624	3686	3155	48	1.52
Others	6451	6793	6622	165	2.49
Total	12584	15927	14256	323	2.27

Source: CHAG 2015 and 2016 HR Data.

In table 26, it would be observed that the cadre with the highest turnover rate (5.04%) within the period is the midwives group. This observation is worrying since the need for experienced midwives across the network cannot be overemphasized.

An overall staff turnover rate of 2.27% is quite appreciable. It is anticipated that a better rate would be achieved in 2017. In spite of the appreciable rates, there is the need for investigations into the turnover rate to ascertain whether or not the phenomenon is as a result of selective application of HR policies, deficient management practices or good management practices at the institutional level.

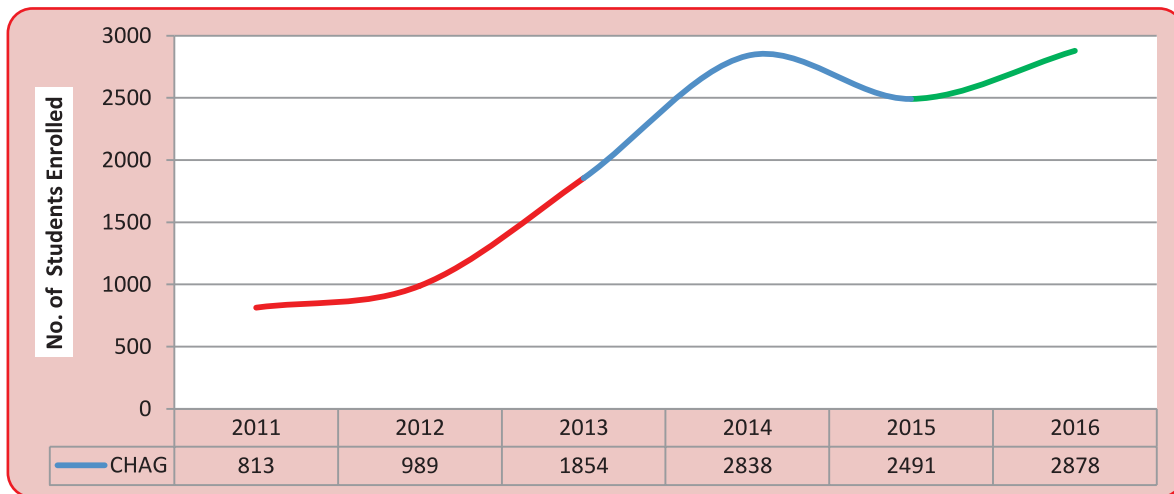
#### 4.9 HEALTH TRAINING INSTITUTIONS

Investment in pre-service training and continuous professional education of staff is a considerable measure for retaining staff to improve quality of services. CHAG therefore continued its investment in pre-service training during the period under review. The network has added three training institutions to its stock during the period, bringing the number of CHAG Health training institutions to nineteen (19).

### 4.9.1 Student Intake

The overall student intake at CHAG Training Colleges in 2016 was 2,878; an increase of approximately 24% compared to that of 2015 (2,330). The increase is largely attributed to increased number of training institutions. Figure 42 presents a 6 year trend of student enrolment.

Figure 43: Trend of Student enrolment in Training Institutions, 2011-2016

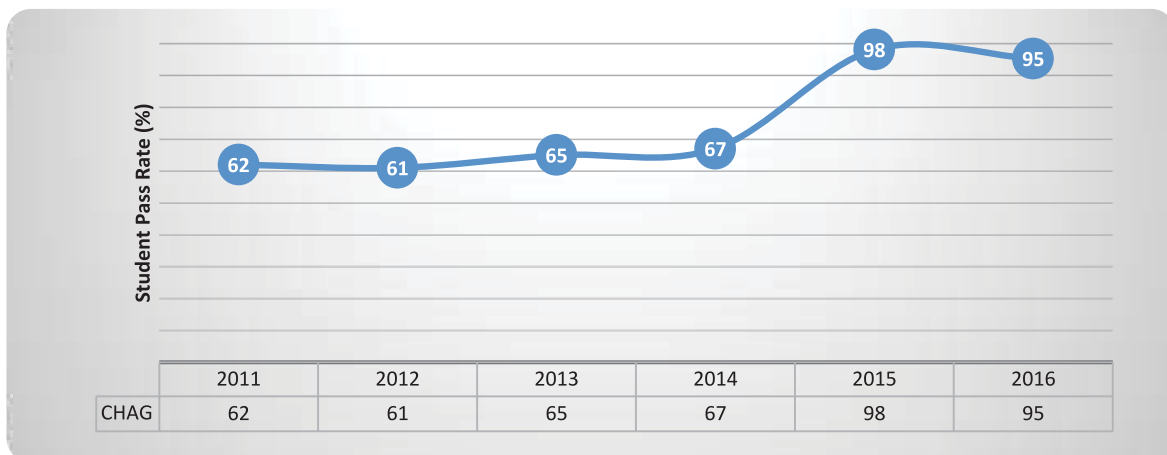


Source: CHAG 2016 HR Data

### 4.9.2 Student Pass rate

The average students pass rate dropped from 98% in 2015 to 95% in 2016; a decline of 3%. The lowest pass rate for the period under review was 89.6%, whilst the highest was 98% (refer to figure 43).

Figure 44: Trend of Student Pass Rate in CHAG Training Institutions, 2011-2016



## 5.0 HEALTH TECHNOLOGY

Health Technology relates to all aspects of infrastructures, medical equipment, amenities, medicines, vaccines, laboratory equipment and E-health applications. It furthermore relates to all procedures, systems and skills required to manage these items adequately to improve and maintain a high and uninterrupted level of service readiness by the health facility.

Critical network challenges related to health technology that require sustained attention are outlined in table 27.

Table 27: Critical Network Challenges: Health Technology

- Insufficient and obsolete health facility plant and equipment;
- Poor diagnostic support services;
- High cost of equipment and drugs.
- Weak maintenance culture budgets and plans.
- Limited availability and inadequate use of ICT infrastructure and tools

Currently, the CHAG network comprises 283 health facilities and 19 Health-Training institutions. Of the 283 facilities 139 are clinics and 74 are hospitals. In all, the network accounts for 7.4% of the total health infrastructure in the health sector. CHAG Health Facilities are unevenly distributed in all ten regions, particularly in isolated areas and deprived districts (Figure 44).

Some CHAG Facilities have maintained the level and range of services since they were established many years ago. There is need to upgrade such facilities to respond to the expansion of the catchment communities and the growing needs of the clientele. This will help minimize the demand by 'Chiefs and Opinion Leaders on politicians for 'government hospitals' in areas where CHAG facilities already exists.

Figure 45: Percentage Distribution of CHAG Facilities by Region

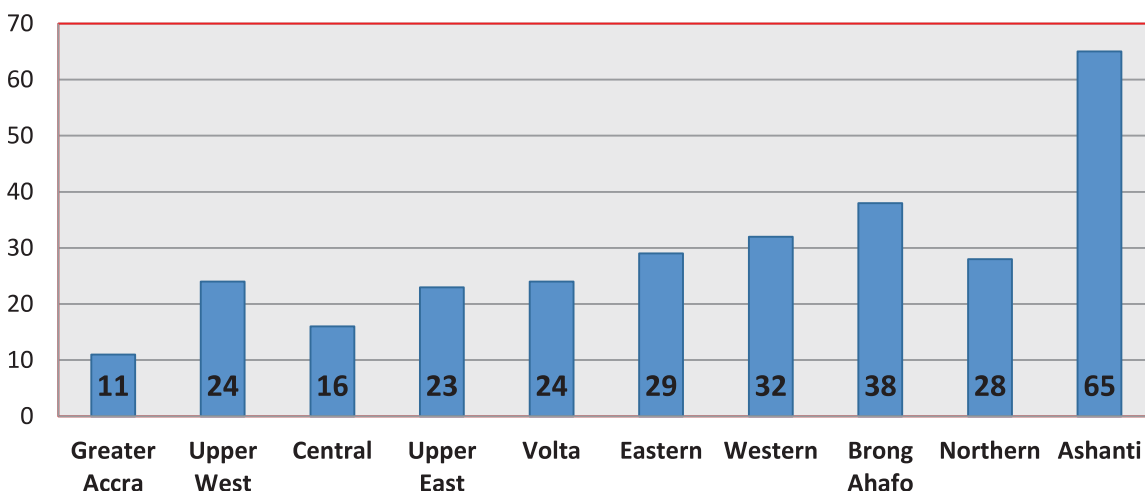
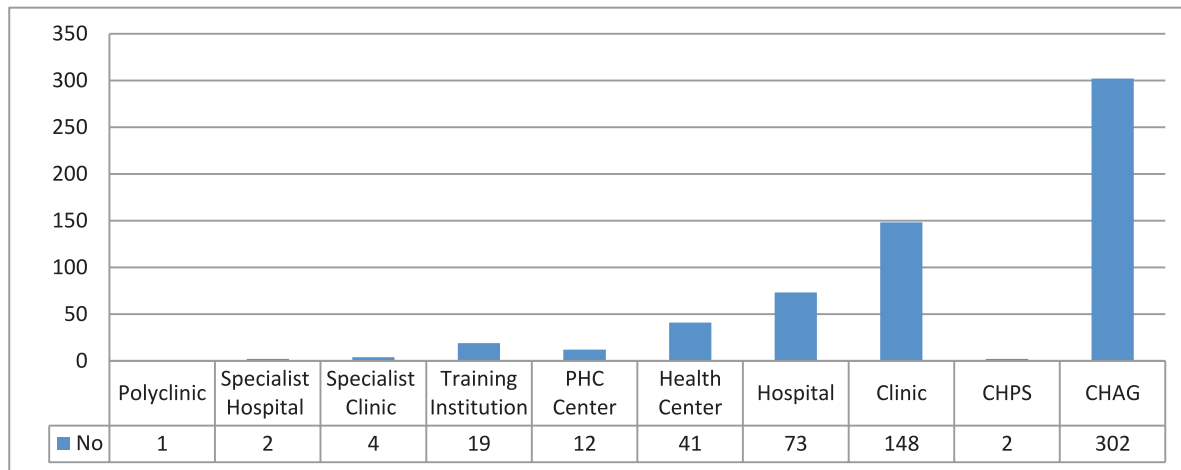
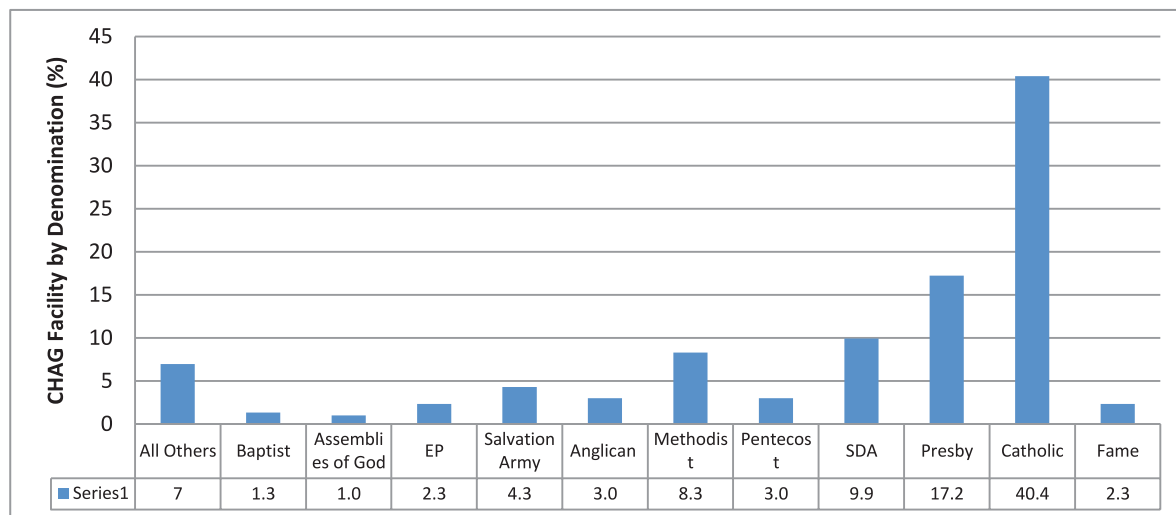


Figure 46: CHAG Facilities by Type, 2016



Majority of CHAG facilities are owned by the Catholic Church (40%) followed by the Presbyterian Church (17%), the Seventh Day Adventist Church (10%) and the Methodist Church (8%). The Salvation Army (4%), Anglican Church, and the Church of Pentecost each own about 3% of Facilities while Evangelical Presbyterian Church and FAME Ghana own about 2% each. The remaining 17 other Church denominations own about 1% of CHAG facilities (Figure 43)

Figure 47: Ownership of CHAG Facilities by Denominations, 2016



## 6.0 HEALTH FINANCING

CHAG Member Institutions are financed through government contribution, internally generated funds (mainly NHIS), direct funding support from development partners through projects and grants/donations. In the year under review, over 96% of government contribution went into staff compensation while the remaining 4% went into goods and services. In 2016, 99% of government contribution went directly to support salary costs and the remaining 1% supports capital investments. Overall government support accounted for 38% and 34% of income of CHAG member institutions (collectively) in 2015 and 2016 respectively.

Internally generated funds are mostly from health insurance claims paid by the NHIA and other private health insurance companies. This accounted consistently for an estimated 85% of income, whilst out of pocket income accounted for 15% of income in 2016. Grants, donations and direct funding from development partners etc. made up an estimated 7% in 2015 and 5% in 2016 of CHAG members' income source which primarily supported capital investment and some proportion for service delivery.

Though the majority of CHAG facilities are financially sustainable without subsidies from their parent churches, there are some member facilities which continue to receive financial subsidies from their parent churches to be able to break even financially. These subsidies go to support staff salary costs and capital investments towards maintenance or expansion of infrastructure and equipment. Recognizing that insurance is the main source of income, CHAG facilities need to improve their claims management.

The level of NHIS indebtedness to members remains high. As at 31st December, 2016, the NHIA had paid claims only up to April, 2016 for over 80% of facilities. The effect of this delay on member facilities is dire as it deprives facilities of funds to operate with, compromising on quality of care. Hospitals had to resort to borrowing at high interest rate, although tariffs are fixed. In effect, poor clients are forced to pay out of pocket for services which are supposed to be for free.

Financial sustainability of CHAG Institutions depends largely on governments' ability to fix the challenges with the NHIS.

The budget execution for 2016/7 is shown in table 28 below.

Table 28: Budget Execution 2016

	APPROVED BUDGET			% ACTUAL EXPENDITURE			TOTAL ACTUALS
	GOG	IGF	Donor	TOTAL BUDGET	GOG	IGF	
Compensation	334,426,998	28,729,189		363,156,187	254,726,222	62,681,555	317,407,777
Goods & Service	0	119,058,379	12,831,761	131,890,140	0	195,098,725	207,930,486
Investment		40,469,727		40,469,727			
Total	334,426,998	188,257,295	12,831,761	535,516,054	254,726,222	257,780,280	525,338,263
% Cont. to budget	62%	35%	2%	100	48%	49%	3%
							100

## 7.0 PARTNERSHIPS FOR HEALTH

Effective partnerships are based on commitment, communication, cooperation and coordination. Important aspects and advantages of partnerships are: improving access to services; access to complementary resources; improved focus and coordination; and improved capacity, innovation and expertise. Critical network challenges related to partnerships for health that need sustained attention are (Table 29).

Table 29: Critical Network Challenges: Partnership for Health

- 
- Weak collaboration with GHS and local authorities at the region, district and sub-district levels;
  - The of challenge of balancing the autonomy, diversity and unity of the network of
  - Collaboration with NGOs and other partners.
- 

CHAG continued to work at a decentralized structure that meets current demands of the health sector. This is required to improve representation and visibility of the Association at the regional and district levels, and to boost internal collaboration and partnerships.

In 2016, at the national level, CHAG deepened its partnership with the Ministry of Health and made visible contributions to health sector engagements. Partnership with DFID Ghana was also deepened and in the course of the year, the 5-year mental health programme was reviewed to bring on board other important areas. Aside DFID Ghana, CHAG partnered with Catholic Relief Services (CRS) Ghana office in containing the meningitis outbreak in the Northern region, Brong Ahafo, Ashanti and Western regions. Again, CHAG partnered with EPN to undertake study on maternal and child health services in faith-based health system in Ghana.

## 8.0 RESEARCH FOR HEALTH

Critical challenges exist in the implementation of health services in member institution. The purpose of operational research is to promote contextual solutions and improve the quality and effectiveness of health services management and care. Critical network challenges related to health research that need sustained attention are (Table 30).

Table 30: Critical Network Challenges: Health Research

- 
- Lack of health research agenda;
  - Limited research competence;
  - Weak documentation and dissemination of good practices across the network.
- 

During the year under review, CHAG Secretariat did a study on MCH services in faith-based health systems in Ghana. In the coming year some of the contextual problems would be researched into to provide contextual solutions.

## 8.1 CHAG'S CORPORATE MONITORING AND EVALUATION (M&E) SYSTEM

The Organizational Performance Assessment Tool (OPAT) is an M&E tool helping the health facilities to periodically assess their organizational capacity and regarding the extent to which they deliver desired health outcomes. The OPAT provides a framework of indicators and measures to assess organizational performance and outcomes of CHAG health facilities in each of the 9 HSS blocks (Tables 31 and 32). CHAG uses the OPAT for consolidated reporting and strategic capacity development of the network and individual members.

Table 31: Health Facility Performance: Organizational Capacity Indicators and Measures

HSS Block	Indicator	Measure
Leadership & Governance	Regulatory Compliance	Validity of Registration
		Audited Financial Report
		MOH/CHAG Memorandum of Understanding
		CHAG Guidelines
	Strategic Management	Use of Strategic Plan
Management Capacity	Preparation Annual Plan and Budget	
	Implementation Annual Plan	
Human Resources	Staff Coverage	Workforce Strength
	Staff Motivation	Staff Satisfaction
	Staff Competence	Staff Development
Service Delivery	Organization of Care	Availability Basic Health Services
		Accessibility Basic Health Services
		Availability Advanced Health Services
		Referral System and Practices
	Quality Assurance	Quality of Care
Finances	Financial Management	Financial Sustainability
		Financial Administration
		Budget Management
Technology	General Service Readiness	Basic Utilities
		Basic Diagnostic Equipment
		Infection Control Equipment and Amenities
		Laboratory Tests and Equipment
		Essential Medicines
Health Information	Data Management and Use	Timeliness Reporting
		Data Integrity
		Information Usage
Community Participation	Community Engagement	Community Collaboration
Partnership	Key Stakeholder Engagement	Collaboration with Health Sector Administration
Research	Operational Research	Research Agenda

Table 32: Health Facility Outcomes and Impacts

Indicator	No	Measure
1. Health Outcomes	1.1	Under-Five Mortality
	1.2	Neo-Natal Mortality
	1.3	Maternal Mortality
	1.4	Malaria Mortality
	1.5	Malaria Incidence
	1.6	HIV Prevalence
2. Responsiveness	2.1	Client Satisfaction
3. Financial Risk Protection	3.1	Health Insurance Coverage
4. Service Utilization	4.1	Out-Patient Ratio
	4.2	In-Patient Ratio
	4.3	Immunization Ratio
	4.4	Ante-Natal visits per client
	4.5	Referral Ratio
5. Quality and Safety	5.1	Fresh Still Births
	5.2	Compliance with Treatment Protocols
	5.3	Post-Surgical Wound Infection
6. Efficiency	6.1	Client-Cost Ratio
	6.2	Bed Occupancy Ratio

## 9.0 POINTERS FOR ACTION

Given all the information presented, the following are pointers for action;

### A. Service Delivery

- 1) Certain disease conditions which are largely not a priority area for the health sector, but which have important epidemiological trends like cervical cancer needs to be put in the limelight for attention. It will become an important cause of maternal mortality if not addressed today.
- 2) The need for quality improvement in all CHAG facilities, including government and quasi-government facilities is imperative. For CHAG, it should become an integral components of all services we provide so that clients will continue to have confidence in CHAG. This will ensure that OPD and inpatients services are continuously utilized.
- 3) Church Health Coordinating Units and Facility Managers should put measures in place to check the rising Caesarean deliveries. Facilities should aim at having Caesarean delivery rates within the WHO accepted range of 10-15%.
- 4) Regarding Maternal Mortality, all facilities should aim at achieving institutional maternal mortality ratio of 70 per 100,000 live births as set out in the Sustainable Development Goals (SDGs). Interventions such as the collaborative learning and 100 days free of mortality campaigns should continue to ensure that in 2017 and beyond, maternal deaths are reduced to the barest minimum. Each facility should explore innovative ways of addressing maternal, neonatal, infant and under-five deaths

### B. Human Resources

- 1) Given the increasing trend of attrition of staff from CHAG to other agencies, there is the need to conduct research on the causes of the attrition and retention. In the long term this will help address retention issues not only in CHAG but also in the other MOH agencies.
- 2) Efforts and measures that have ensured the improvements in the doctor to patient and nurse to patient ratios since 2012 are commendable. These measures and effort should be sustained to ensure that the ratios get better in the coming years and that right staff mix is attained in the network. This will enhance quality of service within the network.

### C. Health Financing

- 1) Innovative ways for addressing financial security of CHAG institutions are to be sought especially in the face of NHIS delays in reimbursements of claims to facilities. Additionally, measures that will improve NHIS claims management would worth seeking in the next couple of years.

2) There is the need for constant engagement at the national level on ways that can improve the NHIS. This NHIS is one of the best social interventions policies made for Ghanaians and it should be protected. Its success means a lot to the sustainability of CHAG and the health of the people it serves.

D. Community ownership and participation

1) Member facilities should learn to engage communities in which they operate effectively in order to address the key indicators.

E. Research

1) There is the need for operational research to generate evidence that could be used to address contextual problems. CHAG will give a major effort to ensure that research agenda is set for the network.

## Annex 1: CHAG Member Institutions by Type

#	FACILITY NAME	TYPE	REGION	DENOMINATION
1	Salvation Army CHPS Centre, Anidasofie	CHPS	Ashanti	The Salvation Army
2	Presbyterian CHPS Centre, Tolla	CHPS	Upper East	Presbyterian
3	Anglican Eye Clinic, Jachie	Clinic	Ashanti	Anglican
4	Apagya Methodist Clinic, Apagya	Clinic	Ashanti	Methodist
5	Catholic Clinic, Esaase Bontefufuo	Clinic	Ashanti	Catholic
6	Catholic Clinic, Oku Ejura	Clinic	Ashanti	Catholic
7	Catholic Clinic, Sikaman	Clinic	Ashanti	Catholic
8	Church of Christ Mission Clinic, Bomso-Kumasi	Clinic	Ashanti	Church of Christ
9	Church of God Clinic Essienimpong	Clinic	Ashanti	Church of God
10	Church of God Clinic, Ahwerewa	Clinic	Ashanti	Church of God
11	Jesus Care Voluntary Clinic, Kumawu Besoro	Clinic	Ashanti	True Faith
12	Lake Bosumtwi Methodist Clinic, Amakom	Clinic	Ashanti	Methodist
13	Madonna Maternity Clinic, Besease	Clinic	Ashanti	Catholic
14	Methodist Clinic, Aburaso	Clinic	Ashanti	Methodist
15	Methodist Clinic, Bebu - Anyiaem	Clinic	Ashanti	Methodist
16	Methodist Clinic, Brodekwanu	Clinic	Ashanti	Methodist
17	Methodist Clinic, Nyameani	Clinic	Ashanti	Methodist
18	Methodist Clinic, Senchi	Clinic	Ashanti	Methodist
19	Presbyterian Clinic, Abasua	Clinic	Ashanti	Presbyterian
20	Presbyterian Clinic, Mesewam	Clinic	Ashanti	Presbyterian
21	Saviour Church Clinic, Bonwire	Clinic	Ashanti	Saviour Church

## Annex 1: CHAG Member Institutions by Type

22	Saviour Church Clinic, Subriso	Clinic	Ashanti	Saviour Church
23	SDA Clinic, Anyinasu	Clinic	Ashanti	Seventh Day Adventist
24	Seventh Day Adventist Clinic, Apaah	Clinic	Ashanti	Seventh Day Adventist
25	Seventh Day Adventist Clinic, Nobewam	Clinic	Ashanti	Seventh Day Adventist
26	St. Ann's Maternity Clinic, Donyina	Clinic	Ashanti	Catholic
27	St. Anthony's Clinic, Anyinasu	Clinic	Ashanti	Catholic
28	St. Edward's Hospital, Dwinyama	Clinic	Ashanti	Catholic
29	St. Joseph's Clinic, Abira	Clinic	Ashanti	Catholic
30	St. Mary Anglican Clinic, Apenkra	Clinic	Ashanti	Anglican
31	St. Mary's Clinic, Yapasa	Clinic	Ashanti	Catholic
32	St. Peter's Clinic/Maternity Home, Ntobroso	Clinic	Ashanti	Catholic
33	St. Theresa's Clinic, Nope, Nope - Obrayentoboase	Clinic	Ashanti	Catholic
34	St. Thomas Gen. & Maternity Clinic, Hiaa	Clinic	Ashanti	Catholic
35	St. Vincent's Clinic, Drobonso	Clinic	Ashanti	Catholic
36	Tafo Methodist Clinic, Tafo	Clinic	Ashanti	Methodist
37	The Salvation Army Clinic, Wiampoase	Clinic	Ashanti	The Salvation Army
38	Wesley Cathedral Methodist Clinic, Adum	Clinic	Ashanti	Methodist
39	Holy Spirit Clinic, Dantano	Clinic	Brong-Ahafo	Catholic
40	Kwakuanya Methodist Clinic, Kwakuanya	Clinic	Brong-Ahafo	Methodist
41	Methodist Asuakwaa Clinic, Asuakwaa	Clinic	Brong-Ahafo	Methodist
42	Methodist Clinic, Dagyamen	Clinic	Brong-Ahafo	Methodist
43	Pentecost Clinic, Kasapin	Clinic	Brong-Ahafo	The Church of Pentecost

## Annex 1: CHAG Member Institutions by Type

44	Presbyterian Clinic, Antwirifo	Clinic	Brong-Ahafo	Presbyterian
45	Presbyterian Clinic, Buokrukruwa	Clinic	Brong-Ahafo	Presbyterian
46	Presbyterian Clinic, Gyankufa	Clinic	Brong-Ahafo	Presbyterian
47	Presbyterian Clinic, Tanoboase	Clinic	Brong-Ahafo	Presbyterian
48	Presbyterian Clinic, Yaakrom	Clinic	Brong-Ahafo	Presbyterian
49	St. Alban's Clinic, Fetentaa	Clinic	Brong-Ahafo	Catholic
50	St. Anthony's clinic, Badu	Clinic	Brong-Ahafo	Catholic
51	St. Jame's Clinic, Abesim	Clinic	Brong-Ahafo	Catholic
52	St. Joseph's Clinic, Wenchi Koasi	Clinic	Brong-Ahafo	Catholic
53	St. Matthews Clinic, Ampenkro	Clinic	Brong-Ahafo	Catholic
54	St. Peter's Clinic, Donkorkrom	Clinic	Brong-Ahafo	Catholic
55	Yawsae Methodist Clinic, Yawsae	Clinic	Brong-Ahafo	Methodist
56	Calvary Baptist Micro-Clinic, Cape Coast	Clinic	Central	Baptist
57	Pentecost Clinic, Ayanfuri	Clinic	Central	The Church of Pentecost
58	Pentecost Community Clinic, Twifu Agona	Clinic	Central	The Church of Pentecost
59	Seventh Day Adventist Clinic, Dominase	Clinic	Central	Seventh Day Adventist
60	The Salvation Army Clinic, Agona-Duakwa	Clinic	Central	The Salvation Army
61	The Salvation Army Clinic, Baa	Clinic	Central	The Salvation Army
62	Methodist Mpraeso Clinic, Mpraeso	Clinic	Eastern	Methodist
63	Catholic Clinic and Maternity, Akim Swedru	Clinic	Eastern	Catholic
64	Holy Spirit Clinic & Maternity Home, Kwasi Fante	Clinic	Eastern	Catholic
65	Hweehwee Methodist Clinic, Hweehwee	Clinic	Eastern	Methodist

## Annex 1: CHAG Member Institutions by Type

66	Notre Dame Clinic, Nsawam	Clinic	Eastern	Catholic
67	St. John's Clinic/Maternity, Akim Ofoase	Clinic	Eastern	Catholic
68	St. Joseph Clinic & Maternity Home, Kwahu-Tafo	Clinic	Eastern	Catholic
69	St. Michael's Catholic Clinic/Maternity, Ntronang-Akim	Clinic	Eastern	Catholic
70	The Salvation Army Clinic, Akim-Wenchi	Clinic	Eastern	The Salvation Army
71	The Salvation Army Clinic, Anum	Clinic	Eastern	The Salvation Army
72	The Salvation Army Clinic, Begoro	Clinic	Eastern	The Salvation Army
73	Mpraeso Methodist Clinic, Mpraeso	Clinic	Eastern	Methodist
74	Osuben Methodist Clinic, Osuben	Clinic	Eastern	Methodist
75	St. Monica's Clinic and Maternity, Akim Sekyere	Clinic	Eastern	Catholic
76	Seventh Day Adventist Clinic, New Gbawe	Clinic	Greater-Accra	Seventh Day Adventist
77	Sight for Africa Eye Clinic, Darkuman	Clinic	Greater-Accra	Run Mission
78	St. Andrew's Clinic and Maternity, Kordiabe	Clinic	Greater-Accra	Catholic
79	St. John of God Clinic, Amrahia	Clinic	Greater-Accra	Catholic
80	Catholic Clinic/PHC, Salaga	Clinic	Northern	Catholic
81	E. P. Church Clinic, Wapuli	Clinic	Northern	Evangelical Presbyterian
82	St. Joseph Clinic & Mat Home, Chamba	Clinic	Northern	Catholic
83	Church of Christ Mission Clinic, Yendi	Clinic	Northern	Church of Christ
84	Fame Clinic, Ekumdi	Clinic	Northern	FAME Ghana
85	Fame Clinic, Loagri	Clinic	Northern	FAME Ghana
86	Fame Clinic, Makango	Clinic	Northern	FAME Ghana
87	Fame Clinic, Tobali/Tatindo	Clinic	Northern	FAME Ghana

## Annex 1: CHAG Member Institutions by Type

88	Fame Clinic, Yezezi	Clinic	Northern	FAME Ghana
89	Holy Cross Maternity Home and Clinic, Sambuli	Clinic	Northern	Catholic
90	Presbyterian Clinic, Fooshegu	Clinic	Northern	Presbyterian
91	Zanzugu Yipala Methodist Clinic, Zanzugu Yipala	Clinic	Northern	Methodist
92	Anglican Clinic, Widnaba	Clinic	Upper East	Anglican
93	Anglican Clinic, Yelwoko	Clinic	Upper East	Anglican
94	Fame Clinic, Benwoko	Clinic	Upper East	FAME Ghana
95	Kayeresi Clinic, Kayeresi	Clinic	Upper East	Catholic
96	Presbyterian Clinic, Namolgo	Clinic	Upper East	Presbyterian
97	St. Martin's PHC/ Maternity Clinic, Biu	Clinic	Upper East	Catholic
98	All Saints Clinic, Piina	Clinic	Upper West	Catholic
99	Methodist Clinic, Lawra	Clinic	Upper West	Methodist
100	Nativity of Our Lady Health Centre, Ko	Clinic	Upper West	Catholic
101	Our Lady of Lourdes Clinic, Yagha	Clinic	Upper West	Catholic
102	Queen of Peace Clinic, Sabuli	Clinic	Upper West	Catholic
103	Samuel Seidu Memorial Clinic, Bayiri	Clinic	Upper West	Baptist Mid Mission
104	Seventh Day Adventist Clinic, Wa	Clinic	Upper West	Seventh Day Adventist
105	St. Christopher Clinic, Dapuori	Clinic	Upper West	Catholic
106	St. Evarist Clinic, Ullo	Clinic	Upper West	Catholic
107	St. Gregory's Clinic, Nanvilli	Clinic	Upper West	Catholic
108	St. Ignatius Clinic, Lasia Tuolu	Clinic	Upper West	Catholic
109	St. John's Clinic, Funsu	Clinic	Upper West	Catholic

# Annex 1: CHAG Member Institutions by Type

110	St. Martin de Porres Clinic, Eremon	Clinic	Upper West	Catholic
111	St. Paul's Clinic, Kundungu	Clinic	Upper West	Catholic
112	St. Stella's Clinic, Karne	Clinic	Upper West	Catholic
113	E. P. Church Dan Moser Memo. Clinic, Dambai (Hohoe)	Clinic	Volta	Evangelical Presbyterian
114	E. P. Clinic, Hatorgodo	Clinic	Volta	Evangelical Presbyterian
115	E. P. Clinic, Jamani	Clinic	Volta	Evangelical Presbyterian
116	Fame Clinic, Akplale	Clinic	Volta	FAME Ghana
117	Fr. Cuniberto's Clinic, Lume	Clinic	Volta	Catholic
118	Mater Ecclesiae Clinic, Sokode	Clinic	Volta	Catholic
119	Nazareth Healing Complex, Vane Avatime	Clinic	Volta	Evangelical Presbyterian
120	Pentecost Clinic, Kpassa	Clinic	Volta	The Church of Pentecost
121	St. Anne's Clinic & Maternity Home, Tagadzi	Clinic	Volta	Catholic
122	St. Francis Clinic, Saviefe Agorkpo	Clinic	Volta	Catholic
123	St. George's Clinic, Liati	Clinic	Volta	Catholic
124	St. Luke's Clinic, Chinderi	Clinic	Volta	Catholic
125	The Salvation Army Clinic, Adaklu Sofa	Clinic	Volta	The Salvation Army
126	Angela Memorial Catholic Clinic, Yawmatwa	Clinic	Western	Catholic
127	Anglican Clinic, Sefwi-Bonzain	Clinic	Western	Anglican
128	Bishop Anglonby Memorial Clinic, Sefwi-Bodi	Clinic	Western	Anglican
129	Holy Child Clinic, Egyam	Clinic	Western	Catholic
130	Holy Child Clinic, Fijai	Clinic	Western	Catholic
131	Kwawu Bethel Methodist Clinic Kwawu	Clinic	Western	Methodist

## Annex 1: CHAG Member Institutions by Type

132	Mary Ekuba Ewoo Memorial Adventist Clinic, Akwidadaa	Clinic	Western	Seventh Day Adventist
133	Nagel Memorial Clinic, Takoradi	Clinic	Western	Seventh Day Adventist
134	Nzulezu Methodist Clinic, Nzulezu	Clinic	Western	Methodist
135	Pentecost Clinic, Enchi	Clinic	Western	The Church of Pentecost
136	Pentecost Clinic, Tarkwa	Clinic	Western	The Church of Pentecost
137	Pentecost Clinic, Yawmatwa	Clinic	Western	The Church of Pentecost
138	Presbyterian Clinic, Papueso-Enchi	Clinic	Western	Presbyterian
139	Seventh Day Adventist Clinic and Maternity, Sefwi-Asawinso	Clinic	Western	Seventh Day Adventist
140	Seventh Day Adventist Clinic, Kofikrom	Clinic	Western	Seventh Day Adventist
141	Siloam Gospel Clinic, Bonyere	Clinic	Western	Siloam Gospel
142	St. John of God Clinic, Oseikojokrom	Clinic	Western	Catholic
143	St. Mark's Anglican Clinic, Subiri	Clinic	Western	Anglican
144	Gwira Eshiem Methodist Clinic, Gwira Eshiem	Clinic	Western	Methodist
145	Presbyterian Clinic, Ohiamatuo	Clinic	Western	Presbyterian
146	Seventh Day Adventist Clinic and Maternity, Sefwi Punikrom	Clinic	Western	Seventh Day Adventist
147	Seventh Day Adventist Clinic, Dadieso	Clinic	Western	Seventh Day Adventist
148	Seventh Day Adventist Clinic, Sefwi Amoaya	Clinic	Western	Seventh Day Adventist
149	Seventh Day Adventist Clinic, Wassa Nkran	Clinic	Western	Seventh Day Adventist
150	St Luke Methodist Clinic, Adwuofua	Clinic	Western	Methodist
151	Anglican Health Centre, Tano-Odumase	Health Centre	Ashanti	Anglican
152	Sacred Heart Health Centre, Bepoase	Health Centre	Ashanti	Catholic
153	St. John's Health Centre, Domeabra	Health Centre	Ashanti	Catholic

# Annex 1: CHAG Member Institutions by Type

154	St. Louis Health Centre, Bodwesango	Health Centre	Ashanti	Catholic
155	St. Luke's Health Centre, Seniagya	Health Centre	Ashanti	Catholic
156	Presbyterian Health Centre, Jenjemireja	Health Centre	Brong-Ahafo	Presbyterian
157	Presbyterian Health Centre, Kyeremasu	Health Centre	Brong-Ahafo	Presbyterian
158	Presbyterian Health Centre, Aboabo	Health Centre	Brong-Ahafo	Presbyterian
159	Presbyterian Health Centre, KwadwoKumikrom	Health Centre	Brong-Ahafo	Presbyterian
160	Presbyterian Health Centre, Kwamesua	Health Centre	Brong-Ahafo	Presbyterian
161	Presbyterian Health Centre, Suma Ahenkro	Health Centre	Brong-Ahafo	Presbyterian
162	Presbyterian Church Health Center, Assin-Praso	Health Centre	Central	Presbyterian
163	Presbyterian Health Centre, Assin Nsuta	Health Centre	Central	Presbyterian
164	The Salvation Army Health Centre, Ajumako-Ochiso	Health Centre	Central	The Salvation Army
165	Presbyterian Health Centre, Abetifi	Health Centre	Eastern	Presbyterian
166	Presbyterian Health Centre, Ekye	Health Centre	Eastern	Presbyterian
167	Presbyterian Health Centre, Kom- Aburi	Health Centre	Eastern	Presbyterian
168	Presbyterian Health Centre, Kwahu Praso	Health Centre	Eastern	Presbyterian
169	Tease Presby Health Centre, Afram Plains	Health Centre	Eastern	Presbyterian
170	Presbyterian Health Centre, Obregyima	Health Centre	Eastern	Presbyterian
171	Urban Aid Health Centre, Mamobi	Health Centre	Greater-Accra	The Salvation Army
172	Presbyterian Health Centre, Langbinsi-Gambaga	Health Centre	Northern	Presbyterian
173	Good Shepherd Health Centre, tuna	Health Centre	Northern	Catholic
174	Kuwani Health Centre, Kuwani	Health Centre	Northern	Presbyterian
175	Martyrs of Uganda Health Centre, Bole	Health Centre	Northern	Catholic

# Annex 1: CHAG Member Institutions by Type

		Health Centre	Northern	Assemblies of God
176	Nakpanduri Health Centre	Health Centre	Northern	Assemblies of God
177	Presbyterian Health Centre, Loloto	Health Centre	Northern	Presbyterian
178	Presbyterian Health Centre, Widana	Health Centre	Upper East	Presbyterian
179	Presbyterian Health Centre, Garu	Health Centre	Upper East	Presbyterian
180	Immaculate Conception Health Centre, Kongo	Health Centre	Upper East	Catholic
181	Martyrs of Uganda Health Centre, Sirigu	Health Centre	Upper East	Catholic
182	Presbyterian Health Centre, Siniensi	Health Centre	Upper East	Presbyterian
183	Presbyterian Health Centre, Sumaduri	Health Centre	Upper East	Presbyterian
184	St. Joseph Health Centre, Nakolo	Health Centre	Upper East	Catholic
185	St. Lucas Health Centre, Wiaga	Health Centre	Upper East	Catholic
186	St. Theresa Health Centre, Zorko	Health Centre	Upper East	Catholic
187	St. Catherine of Sienna Health Centre, Jirapa	Health Centre	Upper West	Catholic
188	St. Gerhardt Health Centre, Fielmuo	Health Centre	Upper West	Catholic
189	Koni Health Centre, Kpassa	Health Centre	Volta	Evangelical Church of Ghana
190	The Salvation Army Health Centre, Ziavi	Health Centre	Volta	The Salvation Army
191	Presbyterian CHPS Compound, Amonie	Health Centre	Western	Presbyterian
192	Presbyterian Health Centre , Kwamebikrom	Health Centre	Western	Presbyterian
193	Benito Menni Hospital, Dompoease	Hospital	Ashanti	Catholic
194	Adventist Hospital, Breman	Hospital	Ashanti	Seventh Day Adventist
195	Akoma Memorial SDA Hospital, Kortwia-Abodom	Hospital	Ashanti	Seventh Day Adventist
196	Baptist Medical Centre, Abuakwa	Hospital	Ashanti	Baptist
197	Bryant Mission Hospital, Obuasi-Adansi	Hospital	Ashanti	The Church of Pentecost

# Annex 1: CHAG Member Institutions by Type

198	Global Evangelical Mission Hospital, Apromase	Hospital	Ashanti	Global Evangelical
199	HART Adventist Hospital, Ahinsan	Hospital	Ashanti	Seventh Day Adventist
200	Hopexchange Medical Centre, Christian Village Kumasi	Hospital	Ashanti	Catholic
201	Janie Speaks A.M.E Zion Hospital, Afrancho-	Hospital	Ashanti	AME ZION
202	Methodist Faith Healing Hospital, Ankaase	Hospital	Ashanti	Methodist
203	Pope John Paul II Medical Centre, Jamasi	Hospital	Ashanti	Catholic
204	Presbyterian Hospital, Agogo, Ashanti-Akim	Hospital	Ashanti	Presbyterian
205	Seventh Day Adventist Hospital, Asamang	Hospital	Ashanti	Seventh Day Adventist
206	Seventh Day Adventist Hospital, Dominase	Hospital	Ashanti	Seventh Day Adventist
207	Seventh Day Adventist Hospital, Kwadaso-Kumasi	Hospital	Ashanti	Seventh Day Adventist
208	Seventh Day Adventist Hospital, Namong	Hospital	Ashanti	Seventh Day Adventist
209	Seventh Day Adventist Hospital, Obuasi	Hospital	Ashanti	Seventh Day Adventist
210	Seventh Day Adventist Hospital, Wiamaoasi-Ashanti	Hospital	Ashanti	Seventh Day Adventist
211	St. Luke's Hospital, Kasei	Hospital	Ashanti	Luke Society Missions
212	St. Martin's Hospital, Agroyesum	Hospital	Ashanti	Catholic
213	St. Michael's Hospital, Pramso	Hospital	Ashanti	Catholic
214	St. Patrick's Hospital, Maase-Offinso	Hospital	Ashanti	Catholic
215	St. Peter's Hospital, Jacobu	Hospital	Ashanti	Catholic
216	Holy Family Hospital, Berekom	Hospital	Brong-Ahafo	Catholic
217	Holy Family Hospital, Techiman	Hospital	Brong-Ahafo	Catholic
218	Mathias Hospital, Yeji	Hospital	Brong-Ahafo	Catholic
219	Methodist Hospital, Wenchi	Hospital	Brong-Ahafo	Methodist

## Annex 1: CHAG Member Institutions by Type

220	Presbyterian Hospital, Dormaa-Ahenkro	Hospital	Brong-Ahafo	Presbyterian
221	Seventh Day Adventist Hospital, Sunyani	Hospital	Brong-Ahafo	Seventh Day Adventist
222	St. Elizabeth Hospital, Hwidiem	Hospital	Brong-Ahafo	Catholic
223	St. John of God Hosp., Duayaw-Nkwanta	Hospital	Brong-Ahafo	Catholic
224	St. Mary's Hospital, Drobo	Hospital	Brong-Ahafo	Catholic
225	St. Theresa's Hospital, Nkoranza	Hospital	Brong-Ahafo	Catholic
226	Coast for Christ Baptist Hospital, Winneba	Hospital	Central	Baptist
227	Hope Christian Hospital, Gomoa Feteh	Hospital	Central	Church of Christ
228	Mercy Women's Hospital, Mankessim	Hospital	Central	Catholic
229	Our Lady of Grace Hospital, Breman-Asikuma	Hospital	Central	Catholic
230	St. Francis Xavier Hospital, Assin-Fosu	Hospital	Central	Catholic
231	St. Gregory Catholic Hospital, Gomoa Budumburam	Hospital	Central	Catholic
232	St. Luke Catholic Hospital, Apam	Hospital	Central	Catholic
233	Holy Family Hospital, Nkawkaw	Hospital	Eastern	Catholic
234	Presbyterian Hospital, Donkorkrom	Hospital	Eastern	Presbyterian
235	Seventh Day Adventist Hospital, Koforidua	Hospital	Eastern	Seventh Day Adventist
236	St. Dominic Hospital, Akwatia	Hospital	Eastern	Catholic
237	St. Joseph's Hospital, Koforidua	Hospital	Eastern	Catholic
238	St. Martin's de Porres Hospital, Agomanya	Hospital	Eastern	Catholic
239	Hawa Mem. Saviour Hospital, Akim-Osiem	Hospital	Eastern	Saviour Church
240	Faith Evangelical Mission Hospital, Bubuashie	Hospital	Greater-Accra	Faith Evangelical Mission
241	Manna Mission Hosp, Teshie-Nungua	Hospital	Greater-Accra	Manna Mission

# Annex 1: CHAG Member Institutions by Type

	Hospital	Greater-Accra	The Church of Pentecost
242	Pentecost Hospital, Madina		
243	Baptist Medical Centre, Nalerigu	Northern	Baptist
244	Saboba Medical Centre, Saboba	Northern	Assemblies of God
245	West Gonja Hospital, Damango	Northern	Catholic
246	Evangelical Church of Ghana Hospital, Kpandai	Northern	Evangelical Church of Ghana
247	Seventh Day Adventist Hospital, Tamale	Northern	Seventh Day Adventist
248	Tatale District Hospital, Tatale	Northern	Catholic
249	The Kings Medical Centre, Bontanga	Northern	Assemblies of God
250	Presbyterian Hospital, Bawku	Upper East	Presbyterian
251	St. Joseph's Hospital, Jirapa	Upper West	Catholic
252	St. Theresa's Hospital, Nandom	Upper West	Catholic
253	Anfoega Catholic Hospital, Anfoega	Volta	Catholic
254	Catholic Hospital, Battor	Volta	Catholic
255	Comboni Hospital, Sogakope	Volta	Catholic
256	Margaret Marquart Cath. Hosp, Kpando	Volta	Catholic
257	Mary Theresa Hospital, Dodi-Papase	Volta	Catholic
258	Sacred Heart Hospital, Weme-Abor	Volta	Catholic
259	St. Anthony's Hospital, Dzodze	Volta	Catholic
260	St. Joseph's Hospital, Nkwanta	Volta	Catholic
261	Fr. Thomas Alan Rooney Memo. Hosp., Asankragwa	Western	Catholic
262	St. John of God Hospital, Sefwi-Asafo	Western	Catholic
263	St. Martin de Porres Hospital, Eikwe	Western	Catholic

## Annex 1: CHAG Member Institutions by Type

		Hospital	Brong-Ahafo	Seventh Day Adventist
264	Valley View University Hospital, Techiman			
265	St. Lucy Polyclinic, Tamale	Polyclinic	Northern	Catholic
266	Presbyterian PHC , Agogo, Ashanti-Akim	Primary Health Care	Ashanti	Presbyterian
267	Abease PHC Project, Prang/Abease	Primary Health Care	Brong-Ahafo	Catholic
268	Dormaa Presby PHC Project, Dormaa-Ahenkro	Primary Health Care	Brong-Ahafo	Presbyterian
269	Our Lady of Fatima Health Centre, Abease	Primary Health Care	Brong-Ahafo	Catholic
270	Presbyterian Primary Health Centre, Tease	Primary Health Care	Eastern	Presbyterian
271	Our Lady of Rocio PHC, Walewale	Primary Health Care	Northern	Catholic
272	St. Joseph's PHC, Kalba	Primary Health Care	Northern	Catholic
273	Presbyterian Health Centre, Woriyanga	Primary Health Care	Upper East	Presbyterian
274	Presbyterian PHC, Bawku	Primary Health Care	Upper East	Presbyterian
275	Presbyterian PHC, Bolgatanga	Primary Health Care	Upper East	Presbyterian
276	Presbyterian PHC, Sandema	Primary Health Care	Upper East	Presbyterian
277	Wa Diocese PHC Project	Primary Health Care	Upper West	Catholic
278	E. P. Church Health Services, Ho	Primary Health Care	Volta	Evangelical Presbyterian
279	Presbyterian PHC, Enchi	Primary Health Care	Western	Presbyterian
280	The Salvation Army Rehabilitation Centre, Duakwa	Rehabilitation Centre	Central	The Salvation Army
281	The Salvation Army Rehabilitation Centre, Begoro	Rehabilitation Centre	Eastern	The Salvation Army
282	Christian Eye Centre, Abesim	Specialist Clinic	Brong-Ahafo	Anglican
283	Bishop Ackon Memorial Christian Eye Centre, Cape Coast	Specialist Clinic	Central	Anglican
284	Presbyterian Regional Eye Centre, Bolgatanga	Specialist Hospital	Upper East	Presbyterian
285	Emmanuel Eye/ Medical Centre, East Legon	Specialist Hospital	Greater -Accra	Luke Society Mission

## Annex 1: CHAG Member Institutions by Type

286	Nursing & Midwifery Training College, Agogo	Training Institution	Ashanti	Presbyterian
287	Seventh Day Adventist Midwifery Training School, Asamang	Training Institution	Ashanti	Seventh Day Adventist
288	Seventh Day Adventist Nurses Training College, Kwadaso	Training Institution	Ashanti	Seventh Day Adventist
289	St. Patrick's Midwifery School, Maase-Offinso	Training Institution	Ashanti	Catholic
290	Holy Family Midwifery/Nurses Training College, Berekum	Training Institution	Brong-Ahafo	Catholic
291	Holy Family Nursing Training College, Techiman	Training Institution	Brong-Ahafo	Catholic
292	Physiotherapy & Orthotic Training School, Duayaw Nkwanta	Training Institution	Brong-Ahafo	Catholic
292	Physiotherapy & Orthotic Training School, Duayaw Nkwanta	Training Institution	Brong-Ahafo	Catholic
293	Presbyterian Midwifery Training School, Dormaa Ahenkro	Training Institution	Brong-Ahafo	Presbyterian
294	Presbyterian Midwifery Training School, Duayaw Nkwanta	Training Institution	Brong-Ahafo	Presbyterian
295	Holy Family Nurses Training College, Nkawkaw	Training Institution	Eastern	Catholic
296	Presbyterian Nurses Training College, Bawku,	Training Institution	Upper East	Presbyterian
297	Jirapa Community Health Nursing Training School, Jirapa	Training Institution	Upper West	Catholic
298	St. Joseph's Nurses' Training College, Jirapa	Training Institution	Upper West	Catholic
299	Seventh Day Adventist Health Asst. Training School, Asanta	Training Institution	Western	Seventh Day Adventist
300	Word Alive Comm Health Nursing Training School, Esiama	Training Institution	Western	Word Alive
301	St. Joseph's Midwifery Training School, Jirapa	Training Institution	Upper West	Catholic
302	Bro. Tarcisius Prosthetics and Orthotics Training College, Nsawam	Training Institution	Eastern	Catholic



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