

CAPE COAST TEACHING HOSPITAL, GHANA



2017 PERFORMANCE REPORT

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LIST OF ACRONYMS

1.	A & E	-	Accident & Emergency
2.	ACLS	-	
3.	AIDS	-	Acquired Immune Deficiency Syndrome
4.	ANC	-	Antenatal Clinic
5.	ADR	-	Adverse Drug Reporting
6.	AGVAD	-	
7.	ARIC	-	Audit Response Implementation Committee
8.	ARV	-	Anti-Retroviral
9.	ART	-	Anti-Retroviral Treatment
10.	BCG	-	Bacillus Calmette Guerine
11.	BID	-	Brought In Dead
12.	BMC	-	Budget Management Center
13.	CCMH	-	Cape Coast Metropolitan Hospital
14.	CCTH	-	Cape Coast Teaching Hospital
15.	CEO	-	Chief Executive
16.	CPD	-	Continuous Professional Development
17.	CSSD	-	Central Sterilization Supply Department
18.	CT	-	Computed Tomography
19.	CVA	-	Cerebrovascular Accident
20.	CWC	-	Child Welfare Clinic
21.	CYP	-	Couple Year Protection
22.	DDNS	-	Deputy Director Nursing Services
23.	DHIMS	-	District Health Information Management System
24.	DOTS	-	Directly Observed Treatment Short Course
25.	DTC	-	Drug & Therapeutic Community
26.	E-Health	-	Electronic Health System
27.	EID	-	
28.	EmOC	-	Emergency Obstetric Care
29.	EmONC	-	Emergency Obstetric and Neonatal Care
30.	ENBC	-	Essential Neonatal Basic Care
31.	ENT	-	Ear Nose and Throat
32.	EPI	-	Expanded Programme Immunisation
33.	EQA	-	
34.	ETAT	-	Emergency Triage Assessment & Treatment
35.	FBS	-	Fresh Still Birth
36.	FP	-	Family Planning
37.	GCNM	-	Ghana College of Nurses and Midwives
38.	GCPS	-	Ghana College of Physicians and Surgeons
39.	G. CPham	-	Ghana College of Pharmacist
40.	GH¢	-	Ghana Cedi
41.	GHS	-	Ghana Health Service
42.	GOG	-	Government of Ghana
43.	HAMs	-	Health Information Management System
44.	HDU	-	High Dependency Unit

45.	HIM	-	Health Information Management
46.	HIV	-	Human Immunodeficiency Virus
47.	HMS	-	Hyperactive Malarial Splenomegaly
48.	HO	-	Health Objective
49.	HOs	-	House Officers
50.	HOU	-	Head of Unit
51.	HOD	-	Head of Department
52.	HR	-	Human Resource
53.	HRHD	-	Human Resources for Health Development
54.	ICT	-	Information Communication and Technology
55.	ICU	-	Intensive Care Unit
56.	IGF	-	Internally Generated Fund
57.	IPC	-	Infection Prevention and Control
58.	LB	-	Live Birth
59.	LFT	-	Liver Functioning Test
60.	LIS	-	
61.	KFT	-	Kidney Functioning Test
62.	KCCR	-	
63.	M & E	-	Monitoring and Evaluation
64.	MAF	-	Millennium Acceleration Framework
65.	MCH	-	Maternal and Child Health
66.	MCV	-	
67.	MDGs	-	Millennium Development Goals
68.	MO	-	Medical Officer
69.	MOH	-	Ministry of Health
70.	MMR	-	
71.	MRI	-	Magnetic Resonance Imaging
72.	MSB	-	Macerated Still Birth
73.	MTEF	-	Medium Term Expenditure Framework
74.	NACP	-	National AIDS Control Programme
75.	NAS	-	National Ambulance Service
76.	NCD	-	Non-Communicable Disease
77.	NGO	-	Non-Governmental Organizations
78.	NHIA	-	National Health Insurance Authority
79.	NHIS	-	National Health Insurance Scheme
80.	NICU	-	Neonatal Intensive Care Unit
81.	OBS & Gynae	-	Obstetrics and Gynaecology
82.	OHS	-	Occupational Health and Safety
83.	OPD	-	Out-patient Department
84.	PIH	-	Pregnancy Induced Hypertension
85.	PMTCT	-	Prevention of Mother to Child Transmission
86.	PNC	-	Postnatal Clinic
87.	PPM	-	Planned Preventive Maintenance / Measure
88.	PPME	-	Policy Planning Monitoring and Evaluation
89.	PPP	-	Public Private Partnership
90.	QA	-	Quality Assurance
91.	QMS	-	

92.	RCH	-	Reproductive and Child Health
93.	RTI	-	Respiration Tract Infection
94.	RUM	-	Rational Use of Medicine
95.	RVI	-	Retroviral Infection
96.	SARI	-	
97.	SATS	-	South African Triage Scale
98.	SB	-	Still Birth
99.	SBS	-	Sector Budget Support
100.	SCBU	-	Special Care Baby Unit
101.	SIL	-	Service Improvement Levy
102.	SMS	-	School Of Medical Science
103.	SMO	-	Senior Medical Officer
104.	SOP	-	Standard Operative Procedures
105.	STI	-	Sexually Transmitted Infections
106.	SVD	-	Spontaneous Vagina Delivery
107.	TAH	-	
108.	TB	-	Tuberculosis
109.	U5MR	-	Under-Five Mortality Rate
110.	UCC	-	University of Cape Coast
111.	UTI	-	Urinary Tract Infection
112.	VVF	-	
113.	WHO	-	World Health Organization
114.	WINS	-	Work Load Indicator for Staffing Norm

ACKNOWLEDGEMENT

Compiling and publishing of the 2017 annual report was possible with the support of the Chief Executive Officer of the cape coast teaching hospital, Dr. Daniel Asare as well as the hospital Directors. Appreciation goes to the Heads of Sub-BMCs/Units, management team members and staff in general for the varied role and contributions towards the 2017 performance/achievements of the facility.

The hospital is also grateful to the following organization, agencies and institutions for contributing to the successes of the hospital.

- Ministry of Health, Ghana
- Regional Coordinating Council, Central Region
- Health Donors & Partners (Local and International)
- Regional Health Administration, GHS, Central Region
- University of Cape Coast - School of Medical Science
- Board & Management of CCTH
- Hardworking staff of CCTH
- All other institutions / stakeholders
- Patient Groups (Diabetic Association, Sickle Cell Associations etc.)
- Press

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MESSAGE FROM THE CHIEF EXECUTIVE OFFICER



Since the upgrade of the hospital to a teaching hospital status, the Management and board saw the need to measure its continuous performance as a facility and through the various department and units within the facility so as to strive towards the achievement of the vision of the hospital. This led to the design of a medium term strategic plan from 2016 to 2019, making the 2017 report a formative evaluation report.

The purpose of this annual evaluation is to collect information on whether the set strategic objectives are being met during the implementation stage of the yearly plans. It would help determine whether to make changes to the yearly objectives in the following year (2018). That's by determining the relevance, efficiency, effectiveness, quality and sustainability of outcome and impact.

In-line with the key indicators to measure performance of the facility, overall, the hospital has improved on its performance compared to the previous years. The outputs achieved from the various units and sub-BMCs impacted in the performance of the hospital. For instance, the hospital has recorded a 7% increase in the OPD attendance. The service satisfaction survey in 2017 indicated 96.8% satisfaction among the patients which is an improvement compared to 85% satisfaction in 2016. Patients admission has also seen a 7.3% increase compared to the previous year. The quality of care on the wards have also seen great improvement in 2017 which resulted in a reduction by 0.8 of the average length of stay at the wards. The hospital has also recorded 5.6% rise in the surgeries performed.

Furthermore, medicine related issues have also seen great improvement. In 2017, Tracer Drug Availability increased by 11.4% although the percentage of antibiotics prescribed went up to 15.2% compared to 13.8% in 2016.

Addressing institutional mortality issues have over the years been a challenge for the facility. As such, several strategies were implemented over the years to aid in the reduction of the mortalities. Especially, neonatal and maternal mortalities, still births and under 5-years mortalities. In light of that, the measures put in place towards the strengthening of the healthcare delivery system included the strengthening of quality issues, governance, financial, medicine and technology. All these were met through the continuous involvement of the key stakeholders in both decision making and implementation of the strategies. This ultimately led to the achievement of positive results on some of the indicators. Such as, a decrease in the total Still Births by 33.5% (rate decreased by 19/1000 births) in 2017, 30.3% drop in Fresh Still Births as well as 36.5% reduction in the Macerated Still Births all in 2017. Through the collective effort from committed workforce at the facility, the hospital also recorded a reduction in the

Institutional Neonatal death by 13% as well as 14.8% reduction in institutional infant deaths in 2017 compared to 2016 with the Institutional under 5-years mortality rate also decreasing by 16/1000LB.

However, the hospital recorded no change in the institutional maternal mortality value of 41 in 2017 and 2016. As such, measures were put in place to ensure the auditing of maternal and neonatal mortalities. This is to aid in evidenced-based strategies implementation in subsequent plans to achieve the set targets and also sustain the gains. There has been a decrease in the percentage of maternal and neonatal externally referred admission. That's from 35% in 2016 to 28% in 2017 for neonatal and 50% to 49% for maternal referred admissions. Implying that, either the support the hospital is extending to the peripheral facilities is helping build their capacity to manage the cases was effective or the fact that most of the patients' access CCTH services directly without been referred. As such, the hospital has put up a polyclinic (95% completed) to tackle direct walk-in clients/patients since it's a tertiary facility. This would help strengthen the referral system and still improve access to quality health care.

The hospital achieved the gains amidst some bottle neck challenges and would need the support of stakeholders, partners and individuals in order to sustain the gains and improve on the areas with gaps. Some of these challenges are; inadequate and ageing equipment (Medical Oxygen Plant, Power Generators, Laundry and CSSD equipment, etc.), absence of a Neonatal Intensive Unit (NICU), Overcrowding, congestion and inadequate triage space at the Accident & Emergency ward, non-functioning of the installed MRI machine (handed over for service after 4 years), inadequate Accommodation for staff, the Delay in NHIS reimbursement as well as the illegal sale, development and encroachment of the hospital lands.

It is evident that, with well trained, skilled, committed and motivated workforce at CCTH, coupled with the support from all stakeholders across board, the hospital would be able to achieve its mission and provide quality services to people in Ghana as a public tertiary healthcare organisation with the use of evidenced-based practice and cutting-edge technology.

Thank you.



.....
DR. DANIEL ASARE
CHIEF EXECUTIVE

PREFACE

The 2017 annual performance review conference of the Cape Coast Teaching Hospital was held on the 20th of March 2018 at the UCC-SMS Clinical center. Organised by the hospital to take stock of achievement for 2017, identify and discuss challenges faced and to deliberate on existing and new strategies across board towards achieving the ultimate goal at institutional, regional and national levels. The event was attended by the hospital board and management members from the various sub-BMCs/Units in the hospital as well as representatives from the Ministry of Health, Ghana Health Service, Korle-Bu Teaching Hospital, Komfo Anokye Teaching Hospital, Tamale Teaching Hospital, Volta Regional Hospital, Training institutions, Services Commanders and community leaders. The presentations at the event focused on the priorities the hospital set for 2017. These are;

1. Improve quality of healthcare services
2. improve Nursing care services
3. Improve Pharmaceutical services
4. Improve Governance, Management and Leadership
5. Improve infrastructure, equipment and technology for quality health delivery,
6. Improve training outcomes and research capabilities
7. Improve Supply chain and Commodity Security
8. Improve Finance management and Audit
9. Improve Support to Communities and Lower Level Care Facilities
10. Improve and sustain inter sectorial, inter- agency and international collaboration
11. Improve Human Resource base and management
12. Improve Monitoring and Evaluation system and Research capacity

The content of the report is categorized into four sections with sixteen chapters.

Section 1: includes the chapter 1 with introduction, background to the report and the overall summary of performance of the hospital in-line with each medium-term strategic objective.

Section 2: it comprises of chapters 2 to 6. Highlights the performance of the hospital under human resource, clinical care services, technical and general service as well as finance. It also points out the hospital's state of collaboration and support system.

Section 3: it contains chapters 7 to 15. Provides a detailed performance of the sub-BMCs/Units.

Section 4: it contains the chapter 16 and also outlines the hospital's challenges and mitigating strategies as well as the conclusion.

SECTION 1

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND

In line with the Cape Coast Teaching Hospital's 2016 to 2019 medium term Strategic Plan and that of Ministry of Health, the facility is expected to evaluate its performance yearly in line with the strategic objective to determine whether they are being achieved within the time frame set.

The 2017 performance report is the hospital's second evaluation report following the design of the four-year plan. As such, it provides the summary of performance (outcome and outputs in both qualitative and quantitative form) by the hospital as a facility and through the various Sub-BMCs, Units and Departments in line with each strategic objectives.

Further, the report provides a detailed comparative/trend analysis into the key statistical performance at CCTH and their impact on the health system in Ghana. Also, it determines the gaps/challenges/constraints that currently hinders on performance and threatens the achievement of the strategic plan in 2018 and 2019 with some mitigating strategies to address them.

The report ultimately, is to guide evidenced-based policy decision-making and planning at the facility, national and at the international level. . It also serves as an information reference document for clinical and health system research geared towards improvement of the health system in Ghana.

1.1 PROFILE OF CCTH

The Cape Coast Teaching Hospital is an agency directly under the Ministry of Health and the only tertiary facility in the Central Region of Ghana. With a current bed capacity of 400, the facility is mandated to provide tertiary clinical services, serve as a training centre for medical and post graduate programmes and to undertake research to improve the lives of the people. Established in August 1998 as a Regional Hospital and later upgraded to a Teaching Hospital status in March 2014 with a Board following the establishment of the School of Medical Science at the University of Cape Coast, Ghana.

CCTH received accreditation for postgraduate training by the Ghana College of Physicians and Surgeons. The hospital works in close collaboration with the University of Cape Coast College of Health and Allied Sciences and it is the main training center for students of the School of Medical Sciences of the University. Other schools under the College of Health and Allied Sciences that also work in collaboration with the hospital includes; School of Nursing and Midwifery as well as School of Health and Allied Sciences. These schools train students at both undergraduate and postgraduate levels. The hospital is geographically located at the northern part of Cape Coast (capital town of the central region of Ghana) and bounded on the North by Abura Township, on the South by Pedu Estate and 4th Ridge, Nkanfoa on the East and Abura / Pedu Estate on the West.

1.1.1 VISION

“A World-Class Leader in Tertiary Health Care, Medical Education and Research”

1.1.2 MISSION

CCTH exists as a public tertiary healthcare organization providing quality services to people in Ghana; employing the services of well trained, skilled, committed and motivated workforce using evidence-based practice and cutting-edge technology.

1.1.3 CORE VALUES

- Customer Focus & Community Relationship
- Excellence
- Ethical Behaviour
- Honesty
- Creativity
- Teamwork

1.2 MEDIUM-TERM STRATEGIC OBJECTIVES (2016 to 2019)

1. Increase the scope and improve the quality of services
2. Reduce communicable and non-communicable diseases
3. Improve governance, resource (human & financial) and management systems
4. Improve health research, teaching and excellence learning experience
5. Intensify support to the lower level of care and service delivery points
6. Improve infrastructure and equipment base for the delivery of quality service

1.3 SERVICES PROVIDED AT CCTH

Currently, the hospital runs Outpatient and Inpatient services in both general and specialized areas, diagnostic and rehabilitation services. The following are the services currently available as outlined in table 1.7.1.

Table 1.3. 1: Current Health Care Services

CLINICAL SERVICES		ADMINISTRATIVE & SUPPORT SERVICES
GENERAL CLINICAL CARE SERVICES		
1. General / Family Medical		1. Catering
2. Accident & Emergency Care		2. Transport
3. Wound Care Clinics		4. Laundry & Tailoring
3. General Paediatric Clinic		5. Mortuary
		6. ICT
SPECIALISED CLINICAL CARE SERVICES		7. Bio Medical Eng.
A. Internal Medical Clinics	D. Surgical Services	B. Estate
 Intensive Care Services	1. General surgery clinic - Thyroid & Breast (cancer & chemotherapy)	C. CSSD
1. Diabetic & Hypertension	2. Uro-Surgical Clinics	RESEARCH SERVICES
2. Sickle Cell Clinic	3. Neuro-Surgical Clinic	Host Research Activities

CLINICAL SERVICES		ADMINISTRATIVE & SUPPORT SERVICES
3. Endocrine Clinic	4. Burns & Plastic Surgical Clinic	Partner for Research
4. Gastro Intestinal Clinic	5. Orthopaedic Surgical clinic	
5. Dermatology Clinic	6. Paediatric surgical clinic	
6. Hepatitis Clinic	E. DEENT Services	
7. Cardiology Clinics	1. Dental & Maxillofacial Clinic	
8. Haemodialysis services	2. Eye Care	
A. Public Health Services	B. Ear, Nose and Throat clinic	
1. Child Welfare Clinic	F. Obstetric & Gynaecological Services	
2. Family Planning	1. Obs & Gynae emergencies	
3. HIV Counseling	2. Antenatal clinic	
4. TB Dot Centre	3. Post-natal clinic	
5. Adolescent Clinics	4. Gynaecology clinic	
A. Rehabilitation Services		
1. Physiotherapy		
2. Diet Therapy		
3. Clinical Psychology		
CLINICAL INVESTIGATION SERVICES		
H. Imaging	I. Laboratory Services	
1. MRI	1. Haematology	
2. CT Scan	2. Serology and Immunology	
3. Fluoroscopy	3. Pathology	
4. Mammography	4. Biochemistry	
	5. Microbiology	

1.4 PRIORITIES FOR 2017

1. Improve on Clinical Care for Health Services Delivery
2. Improve on Governance, Management and Leadership
3. Healthcare Technology/Infrastructure Improvement to support Quality Healthcare Delivery
4. Improve Supply Chain and Commodity Security
5. Improve on Finance/Audit
6. Support to Communities and Lower Level Care Facilities
7. Sustain Collaboration
8. Strengthen Human Resource for Health
9. Scale up Monitoring, Evaluation and Research

1.5 SUMMARY OF 2017 CCTH PERFORMANCE UNDER THE STRATEGIC OBJECTIVES

The hospital's performance for 2017 was evaluated against the 6 medium-term strategic objectives of the hospital. Table 1.5.1 below provides an overall summary at a glance, the performance of the hospital at facility level in terms of the outputs achieved and its translation into the outcomes recorded by the hospital. Further, the table also outlines the output achieved at the various Sub-BMC level. Most importantly, the table helps in identifying the areas that little attention is paid to, by either at the facility level or Sub-BMC level. The purpose of which is to identify such gaps and factor them into the next plan in 2018 as a facility/all levels.

Table 1.5. 1 : Summary of 2017 Performance Under the Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE	
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES	
FACILITY LEVEL OUTCOME/IMPACT	
i.	Percentage of clients satisfied with services was 96.8%
ii.	Percentage of Staff satisfied with working conditions was 55.9%
iii.	Access to OPD Services Improved by 7%
iv.	Access to admission Improved by 7.3%
v.	Institutional Death increased by 4.6% and death rate increase by 0.4
vi.	Average Length of Stay at the wards decreased by 0.8
vii.	Total Surgeries performed increased by 5.6%
viii.	Caesarean Section increased by 9.5%
ix.	Maternal mortality decreased by 2.4%
x.	Live births increased by 7%
xi.	Fresh still births decreased by 30.3%
xii.	Macerated Still Births decreased by 36.5%
xiii.	Total still births decreased by 33.5%
xiv.	Still birth rate decreased by 19/1000 births
xv.	Institutional under 5-years mortality rate decreased by 16/1000LB
xvi.	Total infant deaths decreased by 14.8%
xvii.	Institutional Neonatal death decreased by 13%
xviii.	% Tracer Drug Availability increased by 11.4%
xix.	Emergency drug stock was 65.6%
xx.	49% of Maternal Admissions were due to external Referrals
xxi.	Percentage bed occupancy was 53%
xxii.	Average length of stay (proxy C/S; Appendectomy; Severe malaria in children) was 4.0
xxiii.	Average length of stay at the emergency wards was 2.8
xxiv.	Maternal deaths audited was 27% (based on written report received)
xxv.	Couple year protection was 1507
xxvi.	Theatre and Recovery Wards Deaths Rate was 0.4
xxvii.	Percentage antibiotic prescribed was 15.2%
xxviii.	Percentage injectable prescribed 1.8%
FACILITY LEVEL OUTPUTS	
1.	Organized patients and staff satisfaction survey
2.	Continued the total nursing care practice
3.	24-hour services for non-insured medicines and non-medicine consumables was started in January 2017
4.	Clinical pharmacy practice at wards was strengthened with the employment of an additional clinical pharmacist
5.	Drug and Therapeutic committee activities intensified
6.	Started the process of Electronic (folder-less) patient records system in the hospital

2017 OUTCOME AND OUTPUT PERFORMANCE	
7.	DDNS' conducted peer reviews of wards using approved checklist quarterly
8.	Task team formed, guidelines and protocols developed towards the operationalization of the polyclinic
9.	Kybele recommendation implementation ongoing
10.	Protocols developed includes; <ul style="list-style-type: none"> - Protocol/Guidelines for nursing shift management - Shift assessment in nursing - 5 moments of hand hygiene - Principle for the prevention of 4 infection and urinary catheterization - Discharge protocol for the OBS & Gynae, surgical, Medical wards etc. - Steps for aseptic techniques in clinical procedure - Orientation of patients and relatives to ward environment - Protocol on orientation of new staff and students (at male surgical and NICU) - Safe birth checklist protocol being enforced
11.	Pathograph is being use in the management of labour
OUT-PATIENTS SUB-BMC	
12.	OPD attendance increased by 7%
13.	Institutional policy on colour-coding system of triaging of patients ongoing
14.	A total of 103 educational talks carried out at the Paediatric OPD as well as general daily health talk at all waiting areas
15.	OPD by special appointment was introduced
16.	Paediatric department partnered with the ENT unit to pilot a newborn screening for hearing impairment.
17.	Window for physically challenged, school children and elderly were reactivated for prompt triaging and consultation.
18.	OPD service brochure was designed, printed and circulated to referral facilities, clients and staff
19.	Created awareness on the prevention and management of diet related conditions through the various media.
ACCIDENT AND EMERGENCY SUB-BMC	
20.	Specialist Emergency services initiated.
21.	Procedural changes in flow of care at the instituted.
22.	Data collection now improved (259 procedures done were duly recorded)
23.	Emergency Drug box assessed, re-organized and re-stocked with essential medicines.
24.	8 mortality meetings held and deaths audited.
25.	37 clinical meetings held
DIAGNOSTICS SUB-BMC	
26.	New investigations/ tests were introduced at the Laboratory dept.
27.	The laboratory dept. participated in EQA for TB, Malaria and HIV.
28.	The laboratory dept. ensured adequate supply of blood and blood products at the hospital throughout 2017.
MATERNAL HEALTH SUB-BMC	
29.	Monthly maternal mortality conference – all maternal mortalities audited
30.	Enforces the practice of Skin to skin mother and child body contact immediately after delivery
31.	Organised weekly grand ward rounds
32.	Partitioning of Delivery Suite and O & G ward for privacy
33.	Effective collaboration of Doctors, Midwives and Nurses in direct patient care
34.	Implementation of the use of WHO safe childbirth checklist and discharge plan
CHILD HEALTH SUB-BMC	
35.	All Paediatric specialist clinics were strengthened
36.	Appointment card system has been introduced
37.	Mortality audits conducted for all child death at the directorate
38.	SCBU ward mortality decreased from 26.8% to 19.8%
39.	Paediatric ward mortality decreased from 5.7% to 4.1% of admissions
INTERNAL MEDICINE SUB-BMC	
40.	Continuous supervision ensured to improve the performance staff in rendering quality of care
41.	High Dependency Unit was created at both medical wards.

2017 OUTCOME AND OUTPUT PERFORMANCE
42. Ensured the use of the nursing process to aid in developing individualized care plans to improve on quality of nursing care
<i>SURGICAL SUB-BMC</i>
43. Scheduled a 24-hour duty roster to ensure doctor's presence at the surgical wards for prompt and quality care
44. Standard precautionary protocols developed and displayed at vantage places at the surgical department to serve as reminders
45. Some preoperative standard protocols have been designed and displayed to enhance work within the unit
46. New born hearing assessment was started at ENT on the 31st of October 2017
<i>PUBLIC HEALTH SUB-BMC</i>
47. Intensified the practice of male involvement in family planning services
<i>PHARMACY SUB-BMC</i>
48. Clinical pharmacy practice introduced covered 90% of the wards.
49. OPD Annex was refurbished and expanded to reduce waiting time of clients' services and the counselling of patients.
50. Weekly clinical meeting / training forum to build capacity of the entire pharmacy staff was improved with introduction of specialist lectures.
51. Drug information alerts were added to the bimonthly medicine bulletin for all clinicians to peruse
52. Pharmaco-vigilance activities and adverse drug reporting (ADR) was disseminated to all wards/units and ADR forms provided in jackets in the wards.
53. New sops for pharmacy practice in CCTH was developed and launched
54. The hospital medicine formulary for essential and non-essential medicines usage was adopted through the DTC.
55. Emergency medicines stocks (ward stocks) were reorganised and resupplied to most of the wards
56. Ward pharmacy services extended to cover holidays
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES
<i>FACILITY LEVEL OUTPUTS</i>
1. Infection prevention and control practice on-site training organised for delivery suite and OBS& Gynae, Paediatric and medical ward staff
2. Outsourced cleaning of the following departments to cleaning contractors; Surgical, Medical / wards, OBGYN, Paediatric ward (except NICU) and Corridors
3. Improve water distribution within the Hospital
<i>OPD SUB-BMC</i>
4. Collaborated with Cape FM and Radio Central for weekly health talks
<i>A&E SUB-BMC</i>
5. 1 infection prevention seminar organized for staff.
<i>DIAGNOSTICS SUB-BMC</i>
-
<i>MATERNAL HEALTH</i>
6. Sterilization of baby's cot sheet, and green towels for new born babies
7. Enforcement of infection prevention control practices
<i>CHILD HEALTH SUB-BMC</i>
8. Received 15 boxes of hand sanitizers from PZ Cussons to improve service delivery.
9. 103 Educational talks conducted at paediatric OPD
<i>INTERNAL MEDICINE SUB-BMC</i>
10. IPC on-site training organised for the staff
<i>SURGICAL SUB-BMC</i>
11. IPC protocol displayed appropriately and duly enforced
<i>PUBLIC HEALTH SUB-BMC</i>
12. Intensified surveillance of priority diseases through daily reviews and clinician sensitization.
13. Health education on current issues have been consistent.
14. Initiation of prompt treatment to new-born babies to reduced Mother to child transmission of HIV
15. Increased in TB case detection
<i>PHARMACY SUB-BMC</i>
-

2017 OUTCOME AND OUTPUT PERFORMANCE
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS
3.1 Improve on Governance and Management System
FACILITY LEVEL OUTPUTS
1. Inauguration of a new Hospital Board
2. Organized 1 board meeting, 7 directors meeting, 5 staff durbars and other scheduled committee meetings
3. Process for dashboard programming for correspondence began
4. Filing system reorganized and improvement in retrieval of correspondence
5. Service agreement signed with 2 garages (Asaquah motors & cape coast technical Toyota mechanic workshop)
6. Unserviceable vehicle boarded-off. Process for permission from MOH to dispose-off began
Institutional Policies & Agreements/MOUs
7. <i>Institutional Research Policy drafted</i>
8. <i>Institutional Monitoring and Evaluation Policy drafted</i>
9. <i>Institutional Transport Policy drafted</i>
10. <i>Human Resource Policy document developed</i>
11. <i>Staff Accommodation policy developed and Correspondence Management Policy developed</i>
12. <i>Correspondence Management Policy developed</i>
13. <i>MOU developed for Lab, Optometry & discussed with School of Allied Health, Kintampo. Also developed with NGOs.</i>
14. <i>CCTH signed an MOU with KNUST and 20 pioneer batch of pharm d students (doctor of pharmacy) were posted to do their final year (6th) in CCTH</i>
15. <i>Contract signed with MTN to improve internet access.</i>
16. <i>PPM contracts signed and implemented with external engineering companies (Lab equipment, laundry & CSSD equipment, Lift)</i>
17. <i>MOU on BOOT project signed</i>
Institutional Plans
18. <i>Collated and disseminated approved 2017 programme of work</i>
19. <i>Organized action plan and budget workshop for Business Managers and Heads of units</i>
20. <i>Developed and facilitated the signing of performance management contract documents between CEO and all Directors, Heads of Sub-BMCs, Departments and Units, Deputy Directors, Deputy Directors of Nursing Services, Business managers and Accountants.</i>
21. <i>Prompt submission of all mandated reports to Ministry of Health</i>
22. <i>Coordinated the preparation and submission of various proposals for sponsorship from various companies including MTN, Inestfly, Peace FM, Plan International Ghana, Movie House for the support of various infrastructure and equipment</i>
23. <i>Coordinated the implementation of all institutional projects</i>
24. <i>Coordinated all planned activity under MAF funding</i>
Institutional Monitoring and Evaluation
25. <i>CCTH led the development of 60 KPIs for all teaching hospitals in Ghana for performance reporting</i>
26. <i>Monitoring of 1st and 2nd quarters action plans and pow of 4 Sub-BMCs and 6 units</i>
27. <i>Successfully organized 2017 in-house and institutional annual performance review conference</i>
28. <i>Published the 2016 Annual Performance report into booklet</i>
29. <i>Monitored and evaluated all institutional projects</i>
30. <i>Data validation committee met monthly (12 meetings held)</i>
31. <i>Re-accreditation for surgery was obtained and accreditation for Obs/Gynae & Internal Medicine was sustained</i>
32. <i>Intensified decentralization strategy (Sub-BMC system)</i>
33. <i>Accreditation for post graduate training of Doctors, Nurses, and pharmacist has been obtained</i>
34. <i>Empanelled and inaugurated an Entity Tender Committee for the revised Law ACT 663 amended ACT 914</i>
35. <i>Undertook supplier registration and pre -qualification of all suppliers into categories for easy groupings with a total number of 36 suppliers registered for medicines and 56 for non-medicines,</i>
36. <i>Undertook a national competitive tendering for the procurement of medicines and non- medicines, which was published in the Daily Graphic and Ghanaian Times newspapers on the 3rd and 9th March respectively.</i>

2017 OUTCOME AND OUTPUT PERFORMANCE	
37.	Sectioning of store done into 6 sections to prevent stock out
38.	Employed electronic management system for stock and inventory management at the 24hr Pharmacy
39.	Nursing Directorate held the following meetings <ul style="list-style-type: none"> - 7 -meetings held with the DDNS' - 4 -meeting held with in-charges - 3 -meetings held with preceptors - 1- staff durbar organized for nurses - Also met with some staff at the departments (Obs & Gynae, delivery suite, theatre and A & E department)
OPD SUB-BMC	
40.	Monthly Sub-BMC management meetings held
41.	2 staff durbars and weekly clinical meetings held
A&E SUB-BMC	
42.	8 mortality meetings held and deaths audited
43.	37 clinical meetings held
44.	4 Sub-BMC Mgt. meetings held
45.	1 staff durbar organized for Sub - BMC
DIAGNOSTICS SUB-BMC	
46.	Set up Mortuary re-organization committee s
MATERNAL HEALTH SUB-BMC	
47.	Ensured full functioning of Delivery Suite theatre
48.	Held seven (7) Management meetings
49.	Held 1 staff durbar
50.	Held 2 joint Perinatal meetings
51.	Audited all Maternal Mortalities
52.	Held one (1) Maternal mortality conference
CHILD HEALTH SUB-BMC	
53.	4 MGT meetings were held.
54.	1 Departmental meeting organized
55.	2 Perinatal meetings held
56.	Applied for accreditation for Ghana College District rotation of residents
INTERNAL MEDICINE SUB-BMC	
57.	Ensured good collaboration with other disciplines
58.	9 monthly ward seminars were held in the year
59.	Regular ward/departmental/BMC management meetings held
SURGICAL SUB-BMC	
60.	Renewal of accreditation of surgery department by Ghana College of Physician and Surgeons
61.	Collaborations: <ul style="list-style-type: none"> - University of San Diego California – Team management in trauma - Stone Brook University – treating people with colors - University of Plymouth – through operation hernia - University of UTAH – fellowship for ENT consultant and ENT workshop - Czech Republic Embassy in Ghana in collaboration with Less Privileged Foundation to donate hearing assessment equipment (audiometer and otoacoustic emissions machine) to the ENT unit
PUBLIC HEALTH SUB-BMC	
62.	Strengthen Monitoring of public health activities
PHARMACY SUB-BMC	
63.	Ensured to effective operation at all the pharmacy units including the 24-hour retail pharmacy at CCTH to promote access to needed medication.
64.	The Unit continue to enforce protocol on Pharmacovigilance and Adverse Drug Reporting (ADR) through continuous collaboration with the Food and Drug Authority in Central Region and CCTH Drug and Therapeutics Committee.
3.2 Improve on Human Resource and Management System	
FACILITY OUTCOME/IMPACT	
i.	Total Staff increased by 10%
ii.	Nurse and Midwife: admission ratio was 1:17
iii.	Surgery - Surgeon Ratio was 1:160
iv.	Midwife: Delivery ratio was 1:29
v.	Prescriptions - Pharmacist Ratio was 1:12,159

2017 OUTCOME AND OUTPUT PERFORMANCE	
vi.	Proportion of staff appraised was 57%
vii.	Consultant: Resident Doctor ratio was 1:3
viii.	Doctor: Nurse/Midwife Ratio was 1:6
ix.	Doctor: Pharmacist Ratio was 8.1
FACILITY LEVEL OUTPUT	
1.	Temporal appointment of Specialist Anaesthesiologist to support patient care & Training
2.	Continue support of staff, especially Doctors and Nurse to pursue specialist courses to fill in the gaps of the needed professionals
3.	Staff welfare activities were pursued – Welfare Association being strengthened, put in place strategies to gradually renovate staff bungalows and flats
4.	Forty-seven (47) of our staff who were been paid through IGF were mechanized under the period
5.	127 Staff have had their grades changed through, Promotion – 108, Conversion – 5 and Upgrading – 14
6.	Successfully launched an electronic filing systems for HR set up
7.	Four biometric attendance devices were installed in the hospital to track attendance
8.	Conducted preparation – to – pension meeting for staff who were to retire in 2017
9.	Hospital security improved
10.	2 Induction and orientation sections organised for the newly employed staff
OPD SUB-BMC	
11.	Workshops on quality customer service and Infection prevention was organised for staff
A&E SUB-BMC	
12.	1 Staff durbar organized for sub BMC.
13.	5 Medical Officers recruited and posted to the unit
DIAGNOSTICS SUB-BMC	
14.	Three residents in training at the Pathology department
15.	Environmental Officer Posted to the Pathology Dept.
16.	Laboratory Staff benefitted from training programmes (QMS, TB, Malaria, HIV, Cholera, LIS & Blood Safety).
MATERNAL HEALTH SUB-BMC	
17.	Enforcement of total nursing care policy
18.	Staff were duly appraised.
CHILD HEALTH SUB-BMC	
19.	Lobbied for 3 MOs who were posted to the Sub - BMC
20.	All Staff were duly appraised.
INTERNAL MEDICINE SUB-BMC	
SURGICAL	
21.	Increase in staff strength especially Dental Surgeons Assistants.
PUBLIC HEALTH SUB-BMC	
-	
PHARMACY SUB-BMC	
-	
3.3 Improve on Finance Resource and Management System	
FACILITY OUTCOME/IMPACT	
i.	Total Drug Income GH¢ increased by 18.5%
ii.	Total Drug Purchase GH¢ decreased by 29.7%
iii.	Percentage of submitted claims paid was 58.68%
iv.	Debtors days was 283.22
v.	Creditors days was 184.73
vi.	Proportion of IGF revenue spent on PPM was 4.13%
vii.	Percentage IGF paid as compensation was 11.47%
viii.	Ratio of cash revenue to NHIA reimbursement was 1:1.62
FACILITY LEVEL OUTPUT	
1.	Used the knowledge acquired from the costing studies to adjust revenue
2.	3 quarters financial reports successfully validated and submitted
3.	GIFMIS rollout training done
4.	Excel training organised for finance unit staff
OPD SUB-BMC	
-	
A&E SUB-BMC	
-	
DIAGNOSTICS SUB-BMC	

2017 OUTCOME AND OUTPUT PERFORMANCE	
-	
MATERNAL HEALTH SUB-BMC	
-	
CHILD HEALTH SUB-BMC	
5.	All non-insured clients were duly made to pay deposit
INTERNAL MEDICINE SUB-BMC	
-	
SURGICAL SUB-BMC	
-	
PUBLIC HEALTH SUB-BMC	
-	
PHARMACY SUB-BMC	
6.	Pharmacy directorate continue undertake preparations of extemporaneous products such as the production of Nasal & Ear drops for the ENT Unit. (Spirit Ear Drops, Boric Acid Ear Drops, Ephedrine Nasal drops, etc.) as well as Liquid soap
7.	Drug net worth improved
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE	
4.1 Improve on Research:	
FACILITY LEVEL	
1.	Creation of R&D Unit for coordination of research activities of the hospital
2.	80 research applications were received (students, staff & others). 48 Student research were approved & conducted at CCTH and 16 research applications were approved at ERC sitting.
3.	R&D unit conducted a pre- e-health implementation survey
4.	Quality Assurance committee conducted patients and staff satisfaction survey
OPD SUB-BMC	
5.	Hosted 21 students, academicians and other researchers for research and started a research on Female Condom Utilization in CCTH
6.	One Client satisfaction conducted
7.	One Patients waiting time surveys conducted
A&E SUB-BMC	
-	
DIAGNOSTICS SUB-BMC	
8.	The laboratory dept. assisted/supported KCCR, NOGUCHI and students in conducting research
MATERNAL HEALTH SUB-BMC	
-	
CHILD HEALTH SUB-BMC	
9.	Started partnership with Haematology department to determine prevalence of sickle cell disease in children in Cape Coast.
10.	Partnered with the ENT department to pilot a new-born screening for hearing impairment
11.	24 operational research conducted. Some to help achieve Mother-Baby Friendly Hospital status.
INTERNAL MEDICINE SUB-BMC	
-	
SURGICAL SUB-BMC	
-	
PUBLIC HEALTH SUB-BMC	
-	
PHARMACY SUB-BMC	
12.	Pharmacy directorate conducted 2 surveys; one on RUM
4.2 Improve on Teaching and Learning:	
FACILITY LEVEL	
1.	40 security guards (both internal and private) trained in modern security techniques.
2.	The Nursing Directorate received and rotated; <ul style="list-style-type: none"> - 51 Rotation/National Service Personnel, - 1273 student nurses from various nursing schools in the region/country including 84 students from Nursing Training School, Teshie - 118 pre-clinical and nursing students from various volunteer groups.
3.	122 national service personnel received
OPD SUB-BMC	
4.	Hosted students on attachment and clinical practical from UCCSMS, Nursing Training Institutions and other health training facilities.

2017 OUTCOME AND OUTPUT PERFORMANCE	
A&E SUB-BMC	
5.	2-day workshop on resuscitation and advanced cardiac life support organized for the staff
6.	Training on modified South African Triage Scale (SATS) done and triaging system instituted
DIAGNOSTICS SUB-BMC	
-	
MATERNAL HEALTH SUB-BMC	
7.	Daily clinical teaching/tutorial sessions for the Sub-BMC
8.	CCTH – Kybele collaborative training in maternal and safe childbirth and quality improvement
CHILD HEALTH SUB-BMC	
9.	Emergency triage and treatment training held
10.	Daily teaching of House Officers, Physician Assistant Interns, Medical and Nursing Students
11.	Hosted and provided daily training for foreign students on volunteers programme
12.	Twice weekly morning presentations with practical input by Specialists
13.	Training in pain management with SIL
INTERNAL MEDICINE SUB-BMC	
14.	3 residents trained as certified ACLS providers
15.	40 nurses were trained on how to manage medical emergencies
16.	9 monthly ward seminars were held in the year
17.	Training of 20 nurse in intensive care to run HDU
SURGICAL SUB-BMC	
18.	Weekly refresher presentation on operating room techniques as well as other nursing and medical related topics was organized for all theatres and recovery Staff
19.	Two Ophthalmic Nurses were able to do their sixteen weeks internship at the unit
20.	Two Doctors of Optometry also did their nine months internship at the unit
21.	On-the-job training was given to 43 new nurses posted to the unit
22.	Critical care and perioperative nurses from Korle-Bu did their 12 weeks internship as part of their training
23.	Organised two CPD hands-on training on hernia mesh repair and management of hemorrhoids
24.	Held a two-day conference on trauma with the university of San Diego
PUBLIC HEALTH SUB-BMC	
25.	In-service training conducted for staff
PHARMACY SUB-BMC	
26.	Weekly clinical meeting / training forum to build capacity of the entire pharmacy staff was improved with introduction of specialist lectures
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS	
FACILITY LEVEL	
1.	Make the ambulance available to the peripheral facilities to improve referral system
2.	Support mentorship/outreach programme by the various department/sub-BMCs
OPD SUB-BMC	
-	
A&E SUB-BMC	
3.	Secured 2 telephone lines (one mobile and GOTA phone) to increase 24 hours to the A&E by peripheral facilities
DIAGNOSTICS SUB-BMC	
4.	Old cold room fixed and working (120 capacity)
5.	Conference room furnished and the Air Conditioner installed
6.	Twenty (20) laboratory stools were procured from PRA.
MATERNAL HEALTH SUB-BMC	
-	
CHILD HEALTH SUB-BMC	
7.	Feedback was always provided on phone to various facilities and personnel on referred cases
8.	Monitoring conducted on Integrated Management of Neonatal and Childhood Illnesses
INTERNAL MEDICINE SUB-BMC	
-	
SURGICAL SUB-BMC	
9.	Eye Screening Outreaches conducted at Communities, Churches & Schools
PUBLIC HEALTH SUB-BMC	

2017 OUTCOME AND OUTPUT PERFORMANCE	
10.	Increased and intensified the outreaching programme by the Public Health Unit
11.	Intensified FP education & promotion during outreach programme and at the clinic
PHARMACY SUB-BMC	
-	
OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE	
FACILITY OUTCOME/IMPACT	
i.	95% completion of Polyclinic
ii.	90% completion of ETAT Centre
iii.	98% completion of the Mothers' hostel
iv.	85% completion of the medical waste plant
v.	90% completion of the Hospital roads (Inner roads)
vi.	Phase 1 completion of the Mortuary cold room for unidentified
vii.	Percentage equipment down time was 7.6%
viii.	7.69% Down-time of the CT Scan machine
ix.	Equipment Utilisation was 93%
x.	PPM output was 80% achieved
FACILITY LEVEL	
1.	Construction of Polyclinic / general OPD
2.	Construction of Delivery Suite / Emergency Triage, Assessment and Treatment (ETAT) Centre to tackle maternal and neonatal deaths
3.	Construction of Mothers Hostel for Child Health by a philanthropist
4.	Construction of a Medical Waste Plant under UNDP funding and removal of mercury containing medical devices.
5.	Continue to provide infrastructure support for the training of Doctors & other health professionals
6.	Acquisition of additional medical equipment to aid patient care (Theatre Beds, Dialysis machines
7.	The Hospital pursued various activities –Legal, Advocacy, Media & Physical to the hospital land for future developments
8.	Repair of CT Scan machines after 3year of malfunction 100% but MRI STILL DOWN 5years after tried testing
9.	Planned preventive maintenance arrangements with servicing companies for equipment and vehicles
10.	New printer procured for general office
11.	Gota phones secured to improve coordination between the Private Security company and Hospital Security
OPD SUB-BMC	
-	
A&E SUB-BMC	
12.	A&E Theatre renovated
13.	Proposals written for the expansion of A&E facilities.
14.	2 patient monitors received.
15.	Procured 8 ceilings fans & 2 Air-conditioners for the unit
16.	Doctor's/ Nurses Restroom and Staff washrooms renovated
17.	General painting of the unit done.
DIAGNOSTICS SUB-BMC	
18.	Two new refrigerators and deep freezers provided to the blood bank
19.	Ten couches provided for mobile donation blood donation sessions.
MATERNAL HEALTH SUB-BMC	
20.	Liaising with management in the construction of ETAT Centre for triaging and managing maternal emergencies
CHILD HEALTH SUB-BMC	
21.	Mothers' Hostel sod-cutting and near completion by philanthropist (Mr. Anokye-Yeboah).
22.	1 incubator received from Kokrokoo Foundation
23.	Secured donation of two (2) oxygen concentrators with bubble CPAP machines from GAEDE Foundation.
24.	1 radiant warmer from MAF
25.	Secured donation of one (1) flat screen LCD TV from Francis Eshun Baidoo Foundation.
26.	Painting of the ward from a well-wisher, Mr. Gershon Sogbey.
27.	1 refrigerator & 1 flow meter from Mr. & Mrs. Marfo.
28.	Secured 2 flow meters from contributions given on World prematurity day and topped up by doctors.
29.	Did electrical works at the paediatric ward (SIL)
30.	Purchased 50 chairs for the unit (SIL)

2017 OUTCOME AND OUTPUT PERFORMANCE	
31.	1 radiant warmer received from Dr. Ngyedu
<i>INTERNAL MEDICINE SUB-BMC</i>	
32.	The use of SIL to beautify the ward
33.	The use of SIL to repair faulty electrical issues (sockets, lights, fans)
34.	The use of SIL to repair faulty plumbing
35.	High Dependency Unit area demarcated on the wards for seriously ill patients (for managing ward emergencies)
<i>SURGICAL SUB-BMC</i>	
36.	The wards and theater were painted
37.	Balconies netted forward discussions afterward rounds
38.	Surgical consulting rooms floors tilled at the OPD
39.	New air conditions fixed at the doctors resting room, consulting rooms and theater 2
40.	New air-conditioner bought by ENT Unit with support from Kofi Essuman Enterprise in Cape Coast for ENT Consulting Room
41.	Curtains, painting and tiling floors of ENT Consulting Rooms done by unit
42.	Tables procured by the Eye Unit with painting of the consulting rooms
<i>PUBLIC HEALTH SUB-BMC</i>	
-	
<i>PHARMACY SUB-BMC</i>	
-	

SECTION 2

CHAPTER TWO

HUMAN RESOURCE

2.1: INTRODUCTION

The hospital's Human Resource management's strategic approach is for acquiring, maintaining, motivating and developing employee in the organization to achieve stated goals. Human resource for Health has to do with engaging all employees in action with the primary aim to enhance quality of health.

2.2: STAFF STRENGTH ANALYSIS

The general staff strength of the hospital increased by 10% in 2017 compared to 2016. Largely, there has been an improvement in the human resource based, from nurses and doctors to radiology technicians. However, considering the continuous rise in the out-patient attendance and admissions in the hospital, there is more room for improvement of HR base for effective service delivery. Table 2.2.1 and 2.2.2 demonstrates the HR trend and overall totals of the cadres of staff at the hospital from 2014 to 2017.

Table 2.2. 1: Staff Strength Analysis

CADRE	2014	2015	2016	2017
Doctors	93	116	178	186
Radiology Technicians	1	3	3	5
General / Enrolled Nurses	249	317	535	554
Midwives	30	31	100	106
Pharmacist & Pharm Tech	8	11	10	15
Accountants & Finance Officers	14	14	14	18
Laboratory & Lab Tech	16	15	16	18
Health Services Administrators	3	5	4	8
Optometrist	1	2	2	2
Other GOG Pay Roll Staff	233	176	221	317
CCTH Pay Roll Staff	78	96	116	91
TOTAL STAFF	726	786	1,199	1320

Table 2.2. 2: Summary Of Human Resource Status

DIRECTORATE	2017 TOTAL
Administration & Support Services	287
Finance	25
Medical	321
Nursing	675
Pharmacy	19
Grand Total	1,327

2.2.1: STAFF STRENGTH ANALYSIS - DOCTORS

The hospital has seen improvement in the number of doctors across board over the years. As demonstrated in the table above. From the tables 2.2.1.1 and 2.2.1.2 below, the total number of doctors as at 2017 was 222. Out of the 45 Consultants, 25 of them are also

staff of the UCC-SMS. Also, out of the 69 Medical Officers in the hospital, 47 of them are also equally with the UCC-SMS. 25 of the Consultants were recorded to be at post as at the end of 2017.

Table 2.2.1. 1: Number of Doctors Available in the Hospital

No.	CATEGORY	Total
1.	Specialists	45 (25 SMS)
2.	Medical Officers	69 (47 SMS)
3.	Senior House Officers	17
4.	House Officers	91
	GRAND TOTAL	222

Table 2.2.1. 2: SMS Specialist Providing Services

NO.	CATEGORY	NO. AT POST
1.	Paediatrician	1
2.	Endocrinologist	1
3.	Ortholyrengologist (ENT)	1
4.	Hematologist	1
5.	Physician Specialist	5
6.	Microbiologist	1
7.	Neurosurgeon	1
8.	Obstetrics and Gynaecologist	4
9.	Orthopaedics Surgeon	2
10.	Plastic Surgeon	1
11.	General. Surgeon	3
12.	Pathologist	2
13.	Radiologist	2
	GRAND TOTAL	25

2.2.2: GAP ANALYSIS FOR SOME SELECTED CADRES

Yearly, the hospital provides an analysis of the HR gaps against the number required. This helps in planning and management. For instance, based on the analysis in the table below, the hospital lacks and is in high need of Specialist Anaesthesiologist, Intensivist and Nephrologist.

Table 2.2.2. 1: Gap Analysis for Some Selected Cadres

CADRE	NUMBER AT POST	NUMBER REQUIRED	GAP
Emergency Medicine Physician	1	3	2
Anaesthesiologist	0	2	2
Family Medicine Physician	1	3	2
Intensivist	0	2	2
Paediatric Surgeon	(1)	2	1
Cardiologist	1	2	1
Nephrologist	0	2	2
Neurologist	1	2	1
Urologist	1	2	1
Pharmacists	9	25	16
Biomedical Scientists	13	20	7

2.2.3: STAFF STRENGTH ANALYSIS – NURSES AND MIDWIVES

The general nursing staff numbers improved by 3.6% and the midwives also by 6% in 2017 compared to 2016. The table below provides the total nursing staff per specialty.

Table 2.2.3. 1: Staff Strength Analysis – Nurses and Midwives

CATEGORY	NUMBER
Community Health Nurses	9
Enrolled Nurses	99
Midwives	106
Registered Mental Health Nurse	9
Registered General Nurses	436
TOTAL	650

2.3 PROMOTIONS AND STAFF DEVELOPMENT

From January to December 2017, 127 Staff have had their grades changed through, promotion, conversion and upgrading. Fourteen (14) upgrading, Five Conversion (5) and One Hundred and eight (108) promotions were done during the period under review.

2.4 TURNOVER OF CLINICAL STAFF

Table 2.4. 1: Turnover Rate for Clinical Staff:

NO	CATEGORY	TOTAL NUMBER	TURNOVER IN NUMBERS
1.	CCTH Doctors (Excluding house officers)	114	0
2.	Nurses	650	19
3.	Pharmacists	18	0
4.	Laboratory Technician		1

2.5: HUMAN RESOURCE WASTAGE

During the period under review, thirteen (13) staff retired from service. One Account Officer died and one pharmacist resigned from the hospital. In all, the hospital recorded a total of 15 human resource wastage in 2017.

CHAPTER THREE

CLINICAL CARE SERVICES

3.1: INTRODUCTION

The chapter provides statistical performance of the hospital in the quest to providing quality clinical services. These are represented in graphs and tables in demonstration of performance trends. Comprises of the facility's performance from the outpatient through to the inpatients as well as the surgical and diagnostics service utilisation.

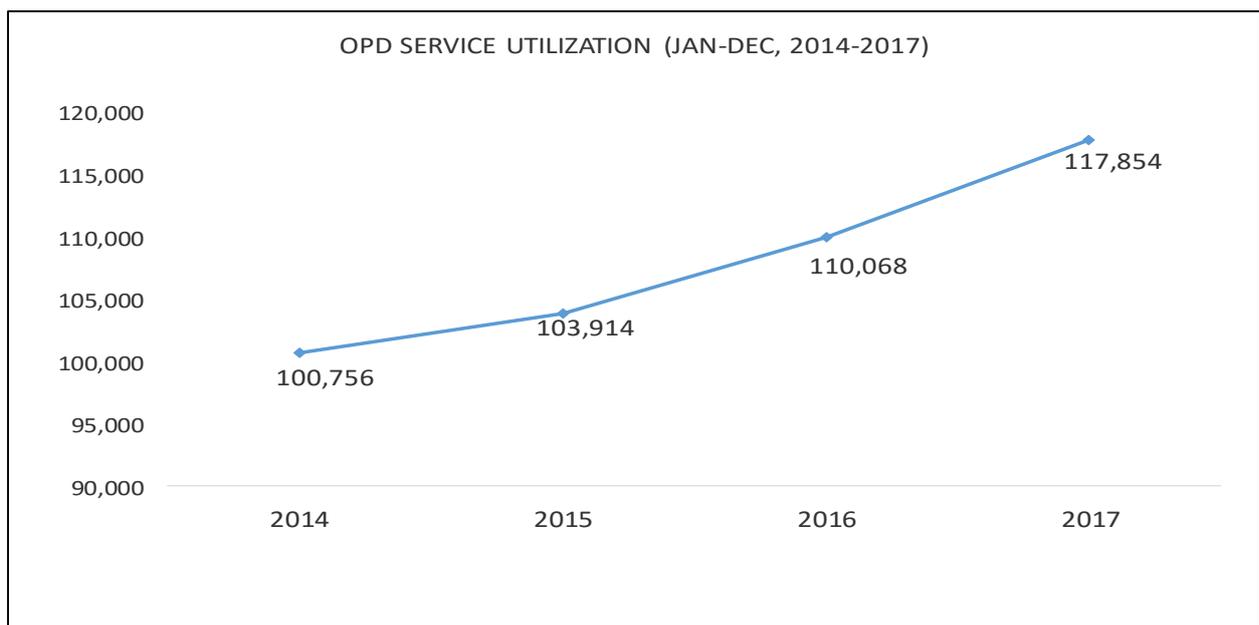
3.2 OUT-PATIENT SERVICES UTILIZATION

OPD Sub-BMC provided general outpatient, family medicine and physiotherapy services while the other clinical Sub-BMCs dealt with the specialist services.

3.2.1 TREND IN OPD UTILIZATION BY SPECIALTY/DEPARTMENTS

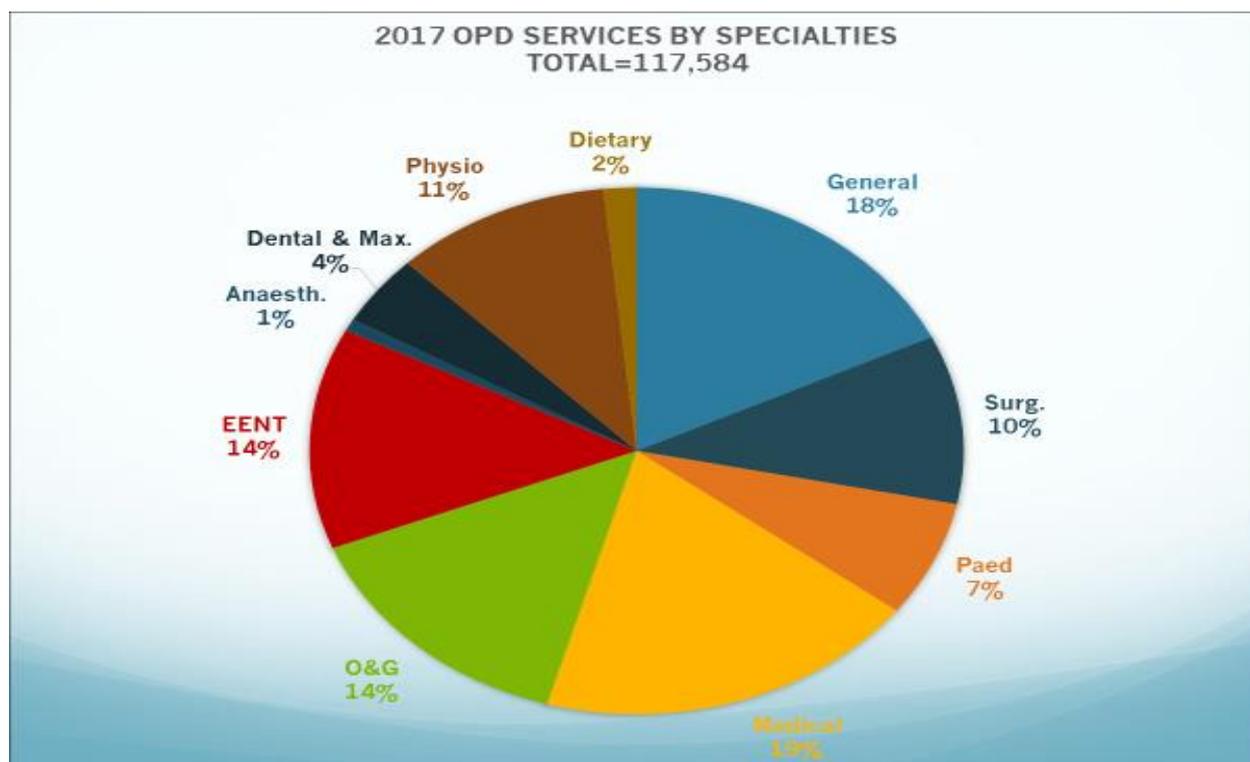
The outpatients' services utilisation at the facility has over the years seen a steady improvement. 7% increase have been recorded in the total outpatients utilisation in 2017 compared to 2016, represented in the figure 3.2.1.1 below.

Figure 3.2.1. 1: Trend in OPD Service Utilization:



From figure 3.2.1.2 below, the specialty services provided at the OPD, 19% of the services was utilised at the medical clinic. The Obs and Gynae as well as the EENT (Eye, Ear Nose and Throat) clinics recorded the same 14% of patients' utilisation. Surgical and Paediatrics recorded 10% and 7% respectively with the least utilised being the dietary representing 2%. 18% of the cases seen at the OPD are general cases. Such general cases could be attended to at the hospital's Polyclinic when made operational in 2018.

Figure 3.2.1. 2: OPD Utilization by Specialties



Generally, there has been an increase in attendance at the various clinics. The physiotherapy clinic recorded 12% reduction in its utilization. The TB cases also reduced by 7.1%. Anesthesia clinic equally recorded a reduction of 7.75% in the utilization. However, the HIV and Hepatitis B clients also increased by 12.9% and 12.7% respectively. All demonstrated in table 3.2.1.1 below.

Table 3.2.1. 1: Trend in OPD Utilization by clinic from 2014 to 2017

	CLINIC	2014	2015	2016	2017	% Diff.
1.	General	18,239	16,617	16,232	21,060	29.7% increase
2.	General Surgery	4,375	3,983	4,376	5,702	30% incr.
3.	Orthopaedic	1,466	1,913	2,223	2,347	5.6% incr.
4.	Paediatric	6,767	7,690	7,810	8,180	4.7% incr.
5.	Dermatology	324	357	330	359	8.8% incr.
6.	Uro-surgery	1,769	2,208	2,843	3,275	15.19% incr.
7.	Neuro-surgery	112	200	129	312	141.9% incr.
8.	Obstetrics & Gynaecology	15,515	20,322	15,536	17,147	10.4% incr.
9.	Asthma	357	297	511	787	54% incr.
10.	ENT	5,094	5,907	6,080	6,664	9.6% incr.
11.	Eye	5,872	6,600	8,420	9,348	11% incr.
12.	Cardiology	269	240	1,590	2,153	34.4% incr.
13.	Endocrinology	0	0	82	125	52.4% incr.
14.	Haematology	0	0	223	298	33.6% incr.
15.	STI / HI	5,112	5,895	5,377	6,068	12.9% incr.
16.	Tuberculosis	36	35	42	39	7.1% decrease
17.	Sickle Cell	0	135	454	650	43.2% incr.

	CLINIC	2014	2015	2016	2017	% Diff.
18.	Gastroenterology	175	170	560	690	23.2% incr.
19.	Anaesthesia	311	378	943	868	7.95% decrease
20.	Clinical Psychology	128	150	163	261	60.1% incr.
21.	Dental & Maxillofacial	2,325	4,165	4,294	5,112	19% incr.
22.	Plastic Surgery	-	176	564	601	6.6% incr.
23.	Adolescence Clinic	-	57	126	218	73% incr.
24.	Diabetes	9,135	9,201	9,309	9,966	71% incr.
25.	Hepatitis B	714	446	940	1,059	12.7% incr.
26.	Diet & Nutrition	1,008	1,743	1,417	1,916	35.2% incr.
27.	Physiotherapy	-	-	14,451	12,649	12.5% decrease

From the analysis in the table 3.2.1.2 below, there seem to be a 15.6% rise in the patients with renal problem who utilised the facility in 2017 and the dialysis section also increased by 15.6%. Minor procedures performed at the treatment room at the OPD also decreased by 7.2%. However, the laboratory and radiology recorded an increased in utilisation by 67.3% and 21.4% respectively.

Table 3.2.1. 2: Other OPD Services Utilisation By Area

CLINIC	2014	2015	2016	2017	% Diff.
Minor Procedures (Treatment Room)	3,733	8,706	9,932	9,218	7.2% decrease
Dialysis	1,185 Sessions (24 Patients)	2,181 Sessions (42 Patients)	3,857 Sessions (65 Patients)	4,457 Sessions (75 Patients)	15.6% increase (15.4% incr. in patients)
Radiology Investigation	12,792	10,816	14,286	17,342	21.4% incr.
Laboratory Investigations	118,392	142,070	159,372	266,635	67.3% incr.

Table 3.2.1.3 provides detailed analysis of the HIV and TB service utilisation at the hospital, disaggregating them into new cases, number of follow ups as well as the deaths that were recorded over the four-year trend.

Table 3.2.1. 3: Utilization of HIV/TB Services 2014-2017

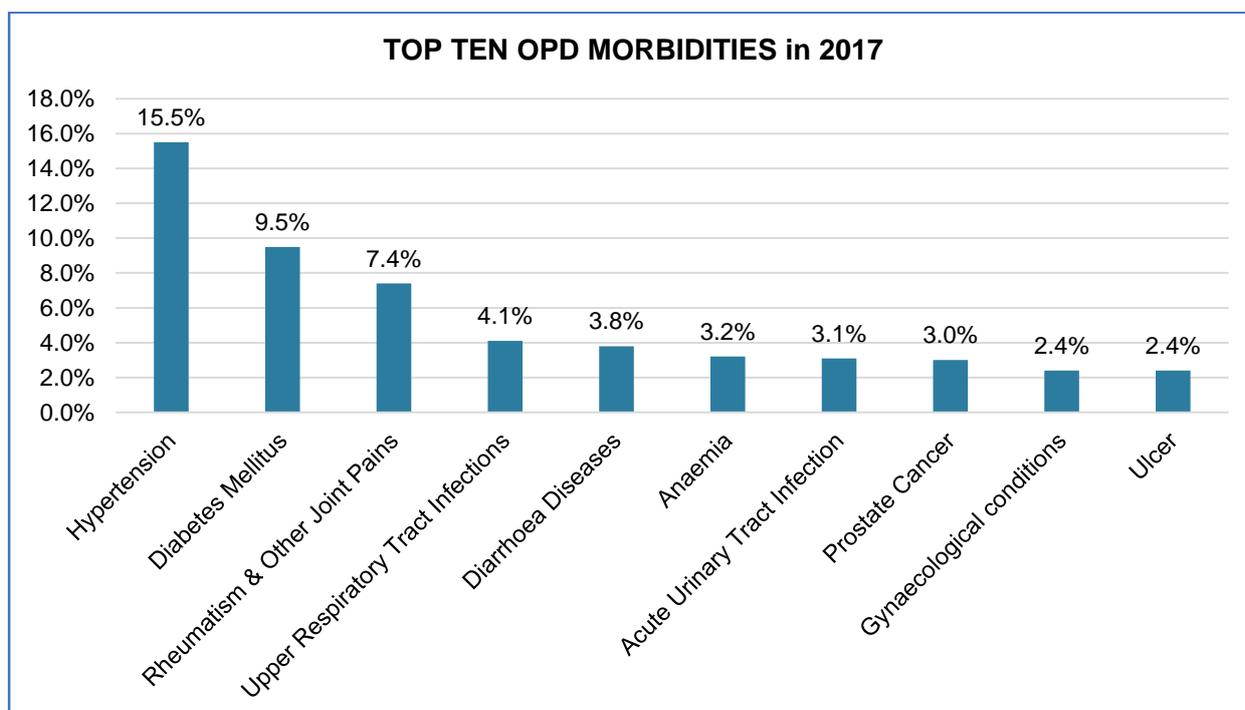
INDICATOR	2014			2015			2016			2017		
	Adult	Paed	Total									
No. Of New HIV Cases	189	20	209	264	34	298	217	27	244	223	30	253

INDICATOR	2014			2015			2016			2017		
	Adult	Paed	Total									
No. Of HIV Cases Receiving ARV	733	41	774	806	43	849	837	54	891	987	66	1,053
Clinical Follow Ups	4,807	305	5,112	5572	323	5,895	5,015	362	5,377	5657	411	6,068
Total Death	6	1	7	13	0	13	7	0	7	10	1	11
No. Screened for TB	1,023	79	1,102	1,089	78	1,167	4,439	283	4,722	1146	91	1,238
No. of Diagnosed TB	9	2	11	10	8	18	14	4	18	18	12	30
No. On Tb Treatment	9	2	11	10	8	18	14	4	18	9	11	20

3.3 TOP TEN OPD MORBIDITIES - 2017

Non-communicable diseases continue to fall among the top 3 disease conditions presented to the facility followed by communicable diseases. From the figure below, prostate cancer represented 3% and the 8th position in the top 10 morbidities at the OPD, with the least being ulcer related conditions, representing 2.4%. 15% of the clients who access care at the facility were on account of hypertensive disorders, followed by diabetes with 9.5%.

Figure 3.3. 1: Top Ten OPD Morbidities in 2017



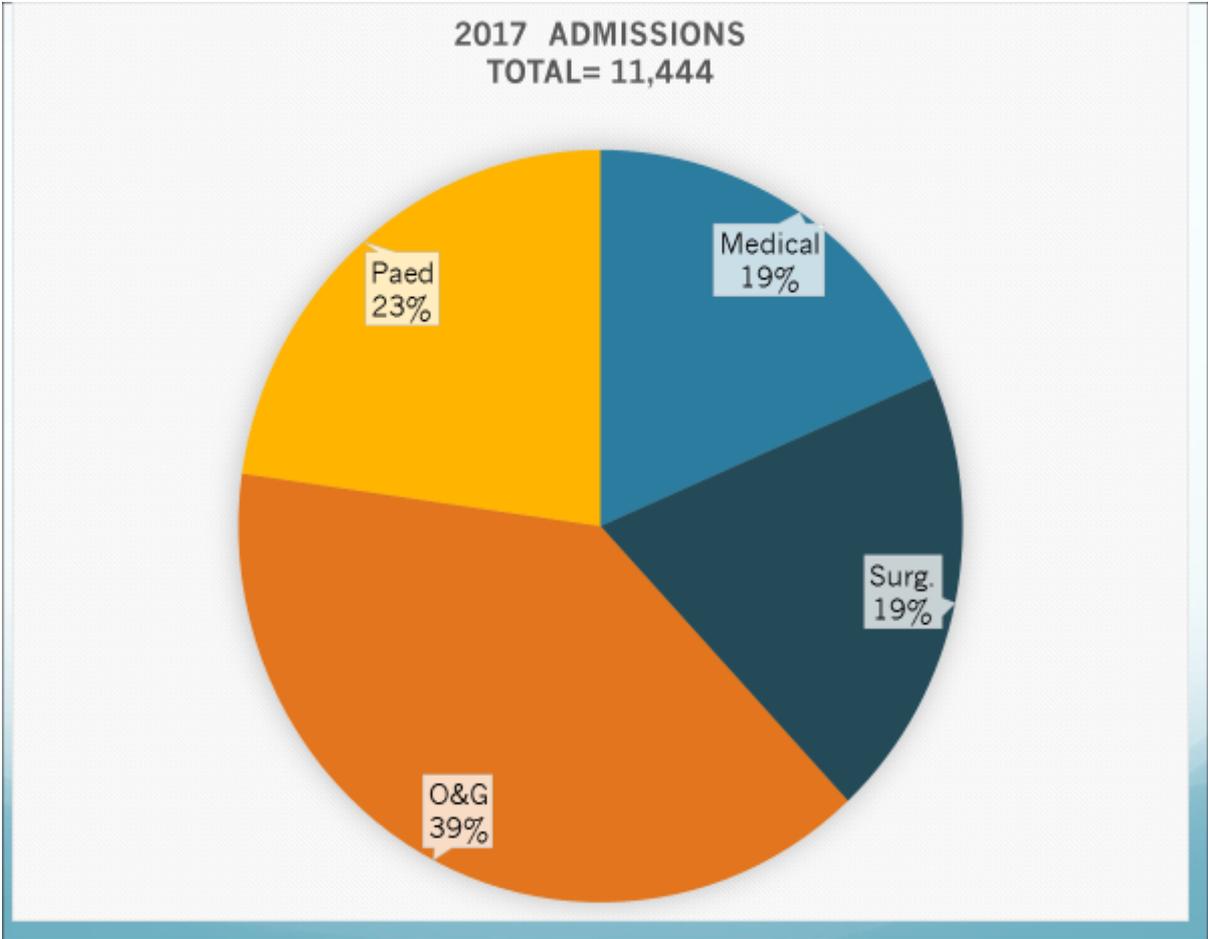
3.4: IN-PATIENT SERVICE UTILIZATION

The hospital’s bed capacity in 2017 remain 400. The hospital wards are managed under 4 main sub-BMCs. That is Child Health, Surgery, Internal Medicine and Maternal Health. The Average Length of Stay at the ward decreased by 0.8 [Average length of stay recorded was (C/S; Appendicectomy; Severe malaria in children) was 4.0 in 2017]. Total Surgeries performed also increased by 5.6% whilst Caesarean Section increased by 9.5%. The percent of bed occupancy was 53% in 2017. Additionally, the Average length of stay (C/S; Appendectomy; Severe malaria in children) was 4.0

3.4.1: ADMISSIONS

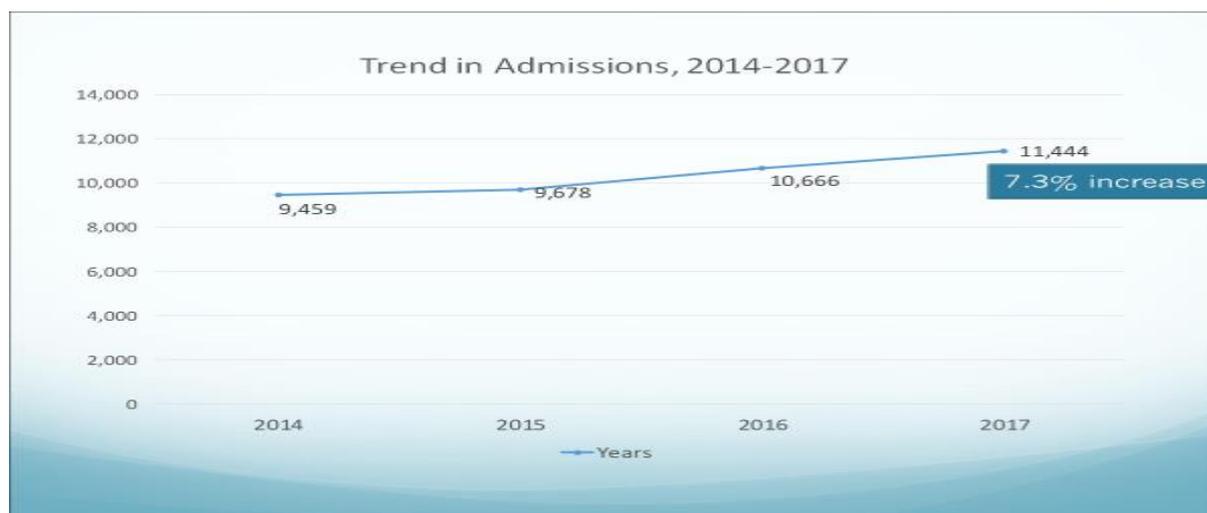
The hospital recorded a total of 11,444 admissions. From figure 3.4.1.1 below, maternal health recorded the highest percentage of admission representing 39% whilst the surgery and internal medicine ranked 19%. Second highest admission was recorded at the child health sub-BMC.

Figure 3.4.1. 1: Admission Percentage According to Specialties



There has been a 7.3% increase in the total admissions at the facility in 2017. The trend illustrated in figure 3.4.1.2 below showcase the steady increase in total admission at the facility from 2014 to 2017.

Figure 3.4.1. 2: Trend in Admissions from 2014 to 2017



3.4.2: TOP TEN CAUSES OF ADMISSION

Pregnancy complications within the past three years (2015 to 2017) remained the highest among the top 10 causes of admission at the facility representing 10.9% in 2017 from the table below. CVA is 1.5% and accounts for the 10th cause of admission. Although diabetes was recorded as the 2nd among the top 10 morbidities at the OPD, it ranked the 8th in terms of admission causes. Pre-maturity remain a great concern generally and accounts for the 3rd leading causes of admission at the facility in 2017.

Table 3.4.2. 1: Top Ten Causes of Admission:

	2015		2016		2017	
1.	Pregnancy Complications	690(7.1%)	Pregnancy Complications	1,060 (9.9%)	Pregnancy Complications	1,242 (10.9%)
2.	Hernia	441(4.6%)	Malaria	480 (4.5%)	Hernia	387 (3.4%)
3.	Malaria	237(2.4%)	Hernia	374 (3.5%)	Pre-Maturity	290 (2.5%)
4.	Neonatal Sepsis	214(2.2%)	Bronchopneumonia	302 (2.8%)	Bronchopneumonia	246 (2.1%)
5.	Anaemia	210(2.2%)	Anaemia	275 (2.6%)	Pneumonia	246 (2.1%)
6.	Pre-Maturity	178(1.8%)	Jaundice(Neo)	226 (2.1%)	UTI	234 (2.0%)
7.	Intestinal Obstruction	173(1.8%)	Uterine Fibroid	208 (2.0%)	Anaemia	197 (1.7%)
8.	Abortion Incomplete	161(1.7%)	UTI	201 (1.9%)	Diabetes Mellitus	183 (1.6%)
9.	Hypertension	143(1.5%)	Pre-Maturity	181 (1.7%)	Neonatal Jaundice	178 (1.6%)
10.	Pneumonia	139(1.4%)	Pneumonia	179 (1.7%)	CVA	171 (1.5%)

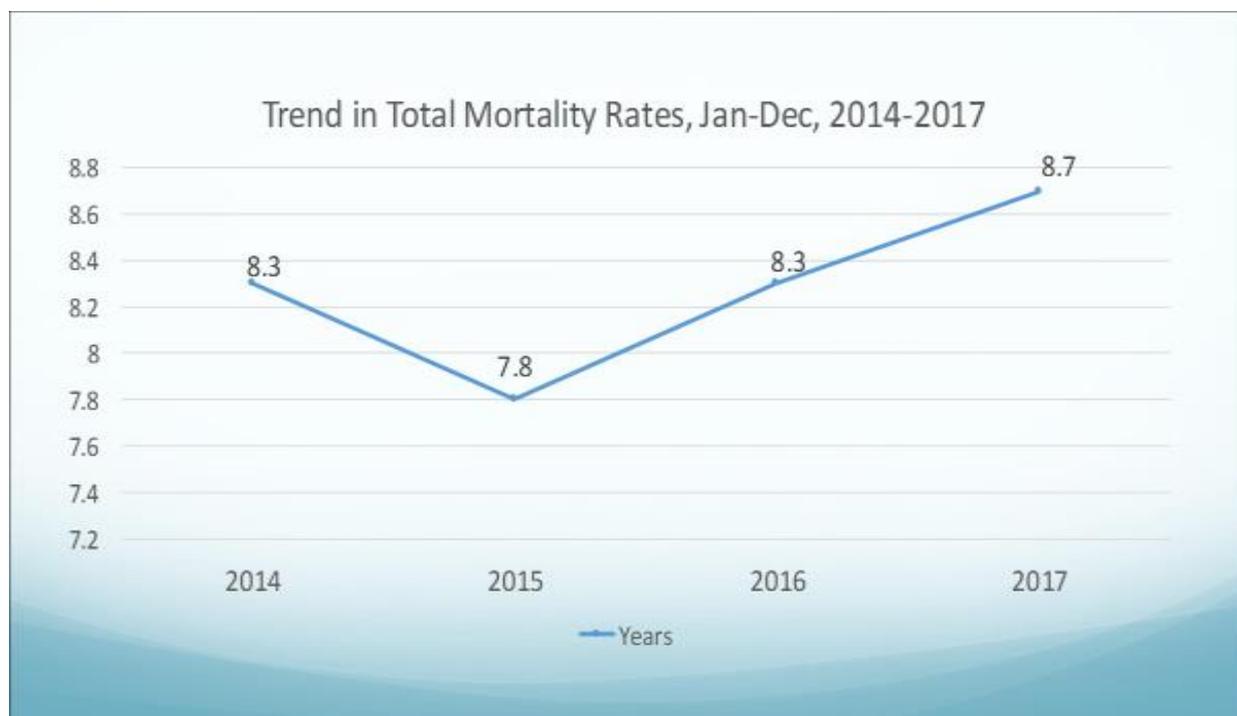
3.5: INSTITUTIONAL MORTALITY

Institutional mortality is one of the main indicators targeted yearly by the facility for improvement. As such, various strategies were adopted at the various sub-BMCs and as a facility to contribute to the outcome. The discussions below demonstrate how the hospital has performed as far as mortality is concerned.

3.5.1: TREND IN MORTALITY RATE (2014 TO 2017)

The Institutional death increased by 4.6% and the death rate also increased by 0.4 in 2017. The hospital is yet to record another reduction in its mortality since 2015. Figure 3.5.1.1 below is the mortality trend from 2014 till 2017 at the facility.

Figure 3.5.1. 1: Trend in Mortality Rate from 2014 to 2017



3.5.2 TOP TEN CAUSES OF INSTITUTIONAL MORTALITY

Although pre-maturity was recorded as the 3rd in the top causes of admission at the facility, unfortunately it was ranked the highest followed by neonatal sepsis in the top 10 causes of the institution's mortality for the four conservative years (2014 to 2017). Evidently, a great concern at all levels, sub-BMC, facility and at the national level. This needs the continuous stakeholder engagement and the implementation of targeted interventions to address the contributing factors across board. In 2017, kidney disease and Anaemia accounted for the 3rd and 10th leading causes of institutional mortality respectively, as detailed in table 3.5.2 below.

Table 3.5.2. 1: Top Ten Causes of Institutional Mortality

	2014		2015		2016		2017	
1.	Pre-maturity	73(11)	Pre-maturity	74(10.9)	Pre-maturity	95(12.7)	Pre-maturity	66(9.0)
2.	Birth Asphyxia	47(7)	Birth Asphyxia	41 (6.1)	CVA	48(6.4)	Neonatal Sepsis	60(8.2)
3.	Neonatal Sepsis	31(4.6)	CVA	28 (4.1)	HIV/AIDS	30(4.0)	Kidney Diseases	40(5.5)
4.	CVA	29(4.3)	Liver Failure	28 (4.1)	Kidney Diseases	30(4.0)	CVA	31(4.2)
5.	HIV/AIDS	28(4.2)	Anaemia	25 (3.7)	Pneumonia	26(3.5)	Birth Asphyxia	26(3.5)

	2014		2015		2016		2017	
6.	Liver Failure	21(3.1)	Pneumonia	23 (3.4)	Birth Asphyxia	20(2.7)	Pneumonia	26(3.5)
7.	Jaundice (Neonatal)	19(2.8)	Neonatal Sepsis	21 (3.1)	Hypertension	20(2.7)	CCF	23(3.1)
8.	Diabetes Mellitus	19(2.8)	Hypertension	15 (2.2)	Anaemia	18(2.4)	Broncho pneumonia	18(2.5)
9.	Anaemia	19(2.8)	Diabetes Mellitus	15 (2.2)	Neonatal Sepsis	18(2.4)	Hypertension	17(2.5)
10.	Intestinal Obstruction	16(2.1)	Meningitis	16(2.1)	Broncho pneumonia	18(2.4)	Anaemia	15(2.0)

Categorisation of the mortalities aid to identify areas with lapses or those that have improved over the four-year trend (2014 to 2017) at the facility. From table 3.5.2.2 below, there was a 21.3% of reduction in the clients declared death on arrival (those that could not be revived regardless of the medical intervention) at the Accident and Emergency unit. However, there was a 1.7% and 72.7% decrease in the deaths at the ward and at the theatre recovery wards respectively.

Table 3.5.2. 2: Institutional Mortality Categorisation

INDICATORS	2014	2015	2016	2017	% Diff.
Deaths(Ward)	667	676	746	733	1.7% decrease
Death(A&E)	331	280	336	398	18.5% increase
Death (Theatre)	2	3	4	14	250% increase
Death (Recovery ward)	6	5	11	3	72.7% decrease
Total Hospital Death	1,006	964	1,097	1,148	4.6% increase
Mortality Rate (%)	8.3	7.8	8.3	8.7	0.4 increase
Brought in Dead	134	158	240	189	21.3% decrease

Table 3.5.2.3 below, provides analysis of the cases dead before arrival to the facility. This has been disaggregated by age. Out of the 189 Brought in Dead (BID) cases, 67 of them were females and 122 were males. The age group with the highest BID cases were above 70 years and the least being 0-28 years of age as illustrated in the table. This evidently shows the level of attention being given to elderly people at home and the delay in helping them access health care.

Table 3.5.2. 3: Age group of BIDs - 2017

Age group	Male	Female	Total
0-28	1	1	2
1-11mths	5	0	5
1-4	4	4	8
5-9	2	2	4
10-14	2	5	7
15-17	7	0	7
18-19	3	1	4
20-34	32	9	41
35-49	25	13	38

Age group	Male	Female	Total
50-59	15	8	23
60-69	13	12	25
70+	13	12	25
Total	122	67	189

3.6: OBSTETRIC SERVICES

Generally, there has been an increase in the number of deliveries at the hospital. From table 3.6.1.1 below, Caesarean Section increased by 9.5% in 2017 and the total Maternal death remained the same with 41 in 2017 and 2016. 49% of Maternal Admissions in 2017 were due to external Referrals. Also, Midwife: Delivery ratio in 2017 was 1:29.

3.6.1 OBSTETRIC SERVICES INDICATORS

Table 3.6.1. 1: Obstetric Services Indicators:

INDICATORS	2013	2014	2015	2016	2017
Deliveries	2,656	2,618	2,854	2,904	3,055
Number of Babies	2,773	2,730	2,945	3,037	3,179
% Supervised Deliveries	100	100	100	100	100
% Caesarean Section	39%	35%	34%	38%	40%
Maternal Deaths	22	20	31	41	41
Maternal Mortality Ratio Per 100,000 Live Births	852	772	1,111	1,428	1,335
ANC Registrants	912	568	630	716	748
ANC Attendance	6,779	7,332	7,982	8,567	10,141

3.6.2: MATERNAL MORTALITY

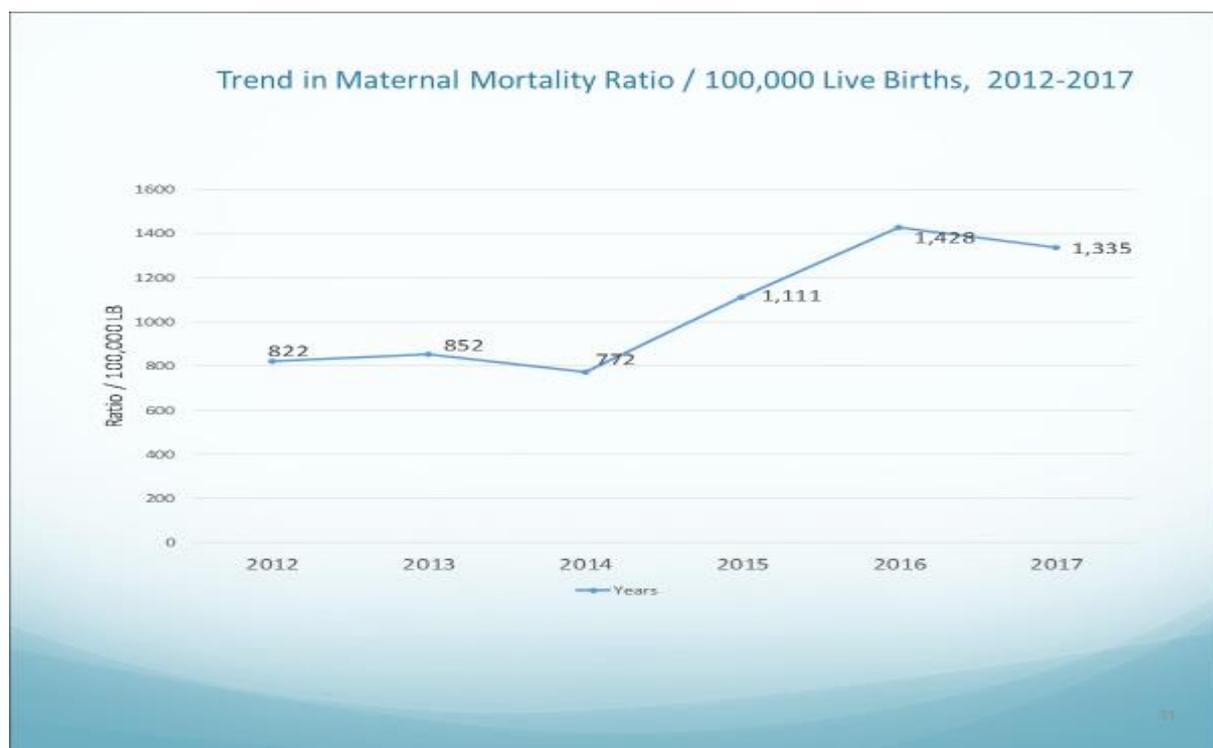
Maternal mortality remains facility, national and global concern. Strategies have been implemented across board to contribute to the reduction of maternal deaths at the facility. Such as the continuous training of the staff on emergency triaging and management of cases, improvement in infrastructure and medical equipment with the support of government and individuals. However, the maternal deaths at the facility continue to see no reduction since 2014 as demonstrated in figure 3.6.2.1 below.

Figure 3.6.2. 1: Trend in Maternal Mortality, 2012-2017



Although the maternal mortality ratio saw a reduction in 2017 in figure 3.6.2.2, the deaths still remains a great concern to the facility. As such, measures targeted at the contributing factors have been identified for implementation to improve the situation.

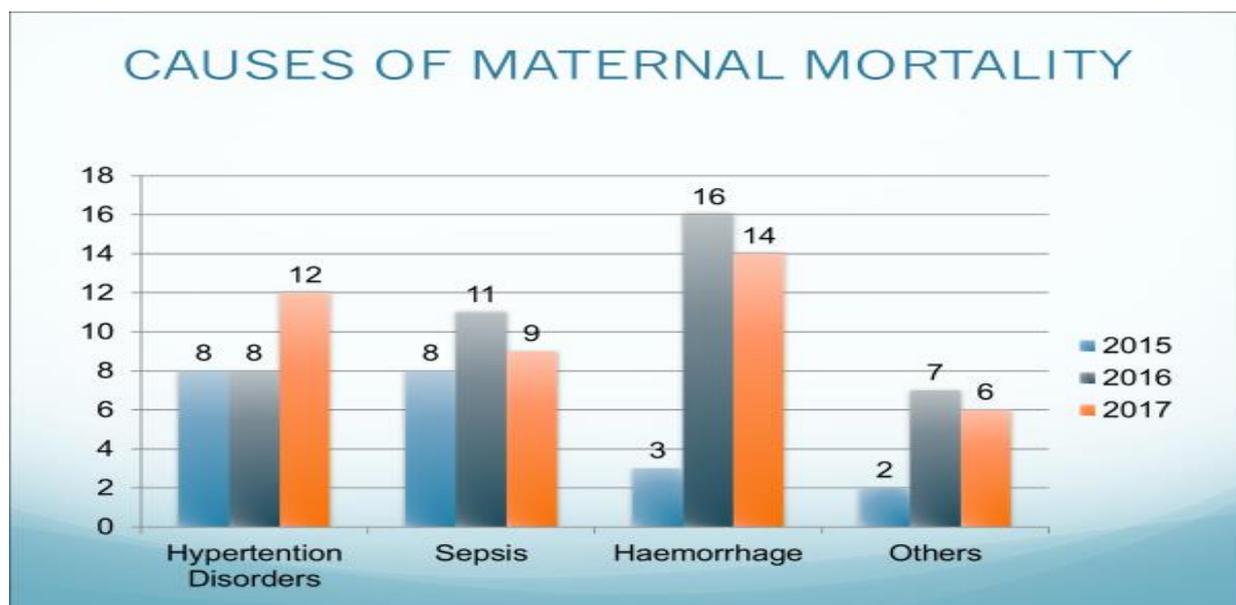
Figure 3.6.2. 2: Trend in Maternal Mortality Ratio / 100,000 Live Births, 2012-2017



3.6.3 CAUSES OF MATERNAL MORTALITY

Hypertension disorders, sepsis and haemorrhage since 2015 remained the top 3 causes of maternal death at the facility. In 2017, haemorrhage accounted for the leading cause of death with sepsis been the least of the top 3. This evidently calls for a holistic approach and the involvement of all key stakeholders to address. Figure 3.6.3.1 illustrate the trend of the causes of maternal mortality at the facility.

Figure 3.6.3. 1: Causes of Maternal Mortality



3.6.3: REFERRAL FACILITIES OF MATERNAL DEATHS

In general, according to the referral policy, the patients ought to be referred through the lower levels before ending up at a tertiary facility. However, it is difficult for most primary level facilities to adhere to that, considering the inadequate capacity across board and the urgency of the condition. As such, despite the geographical access challenge, patients are referred directly to CCTH, resulting in delay in arrival, thereby impacting on the survival chances of the patients, the table below provides a summary of some the facilities the maternal death cases were referred from in 2017.

Table 3.6.3. 1: Referral Facilities of Maternal Deaths

REFERRAL FACILITY	NO	REFERRAL FACILITY	NO
CCMH	4	Adisadel Urban Health Center	1
Saltpond Hospital	4	Wassa Akropong Gov't Hospital	1
Mercy Women Centre	4	Winneba Municipal Hospital	1
Ewim Polyclinic	3	Apam Gov't Hospital	1
ST. Luke Catholic Hospital	2	TOTAL	35
St. Francis Xavier Hospital, Assin Fosu	2	CCTH	6
Abura Dunkwa Hospital	2		41
Kissi Health Centre	2		
Ajumako Gov't Hospital	2		
St Francis Xavier Catholic Hospital	2		
Trauma & Specialist Hospital, Winneba	1		
Twifo Praso Gov't Hospital	1		
Our Lady of Grace Hospital, Asikuma	1		
Effia Nkwanta Hospital, Takoradi	1		

3.7 CHILD HEALTH SERVICES

Generally, Live births increased by 7% in 2017. Institutional under 5-years mortality rate decreased by 16/1000LB. Also, Fresh still births decreased by 30.3% whilst Macerated Still Births decreased by 36.5%. Total still births reduced by 33.5%. Additionally, the Total infant deaths decreased by 14.8%. The hospital equally recorded a reduction in institutional neonatal mortality by 13% in 2017.

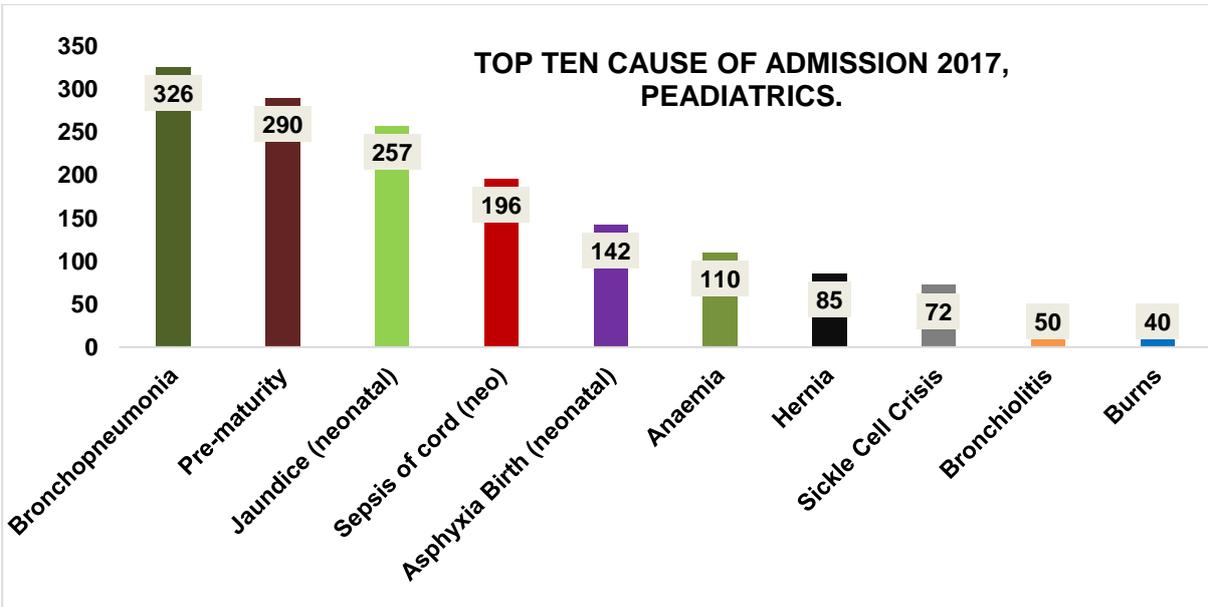
3.7.1 TOP 10 CAUSES OF CHILD HEALTH ADMISSION

Bronchopneumonia accounts for the leading cause of admission among children and represents 12.5% whilst pre-maturity was the second leading cause and account for 11.1%. The table and figure below illustrate the top 10 causes of child admission at the facility.

Table 3.7.1. 1: Top 10 Causes of Child Health Admission

S/NO	CAUSE OF ADMISSION	TOTAL ADMISSION	PERCENTAGE (%)
1.	Bronchopneumonia	326	12.5
2.	Pre-maturity	290	11.1
3.	Neonatal jaundice	257	9.9
4.	Sepsis	196	7.5
5.	Asphyxia (Neonatal)	142	5.5
6.	Anaemia	110	4.2
7.	Hernia	85	3.3
8.	Sickle Cell Crisis	72	2.8
9.	Bronchiolitis	50	1.9
10.	Burns	40	1.5
11.	Others	1,037	39.8

Figure 3.7.1. 1: Top 10 Causes of Child Health Admission



3.7.2 CHILD HEALTH PERFORMANCE INDICATORS

Performance of the hospital under the child health KPI has improved greatly in 2017. Still birth, infant and neonatal mortality have all seen a reduction in 2017 compared to the previous years (2013 to 2016) as displayed in the table below. However, these deaths are still unacceptable and there is still room for improvement.

Table 3.7.2. 1: Child Health Performance Indicators

INDICATORS	2013	2014	2015	2016	2017
NUMBER OF BABIES	2,773	2,730	2,945	3,027	3,179
LIVE BIRTHS	2,581	2,590	2,789	2,870	3,072
STILL BIRTHS	192 FSB – 90 MSB – 102	140 FSB – 65 MSB – 75	156 FSB – 96 MSB – 60	161 FSB – 76 MSB - 85	107 FSB – 53 MSB - 54
STILL BIRTH RATE PER 1000 LIVE BIRTH	69	51	53	53	34
INFANTS ADMISSIONS- INSTITUTIONAL	1,157	1,286	1,172	1,352	1,442
NUMBER OF < 5 DEATHS- INSTITUTIONAL (UNDER 5 MORTALITY RATE PER 1000 LB)	285 (U5MR 110)	254 (U5MR 98)	237 (U5MR 85)	250 (U5MR 87)	219 (U5MR 71)
INFANT DEATHS	272	221	213	236	201
NEONATAL DEATHS	143	189	173	207	180

Figures 3.7.2.1 through to 3.7.2.4 below, shows the graphical presentation of the neonatal mortality trend at the facility from 2014 to 2017. The rate fluctuated over the period but was brought down considerably in 2017 amidst the equipment and infrastructural challenges at the child health sub-BMC. The second figure also compared the top 10 causes of neonatal admission as against the top 10 causes of neonatal deaths. Although pre-maturity was the second leading cause of neonatal admissions at the facility, it was recorded as the leading cause of neonatal death followed by neonatal Jaundice. This evidently shows how much of attention needs to be given to the pre-term babies. The facility in the absence of an ultra-modern neonatal intensive care unit is unable to effectively save most of them due to lack of needed medical equipment. Hence, the need for support across board to help improve the survival chances of the babies.

Figure 3.7.2. 1: Rate of Neonatal Mortality, 2014-2017

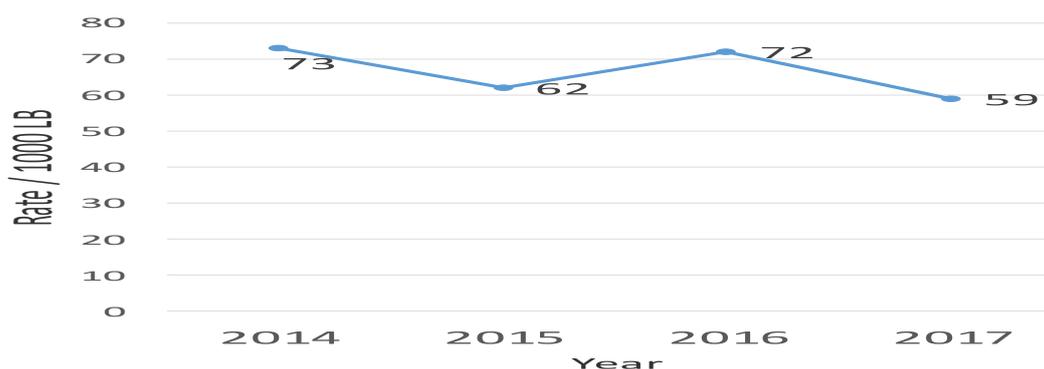


Figure 3.7.2. 2: Top 10 Causes of Neonatal Admissions and Neonatal Death In 2017

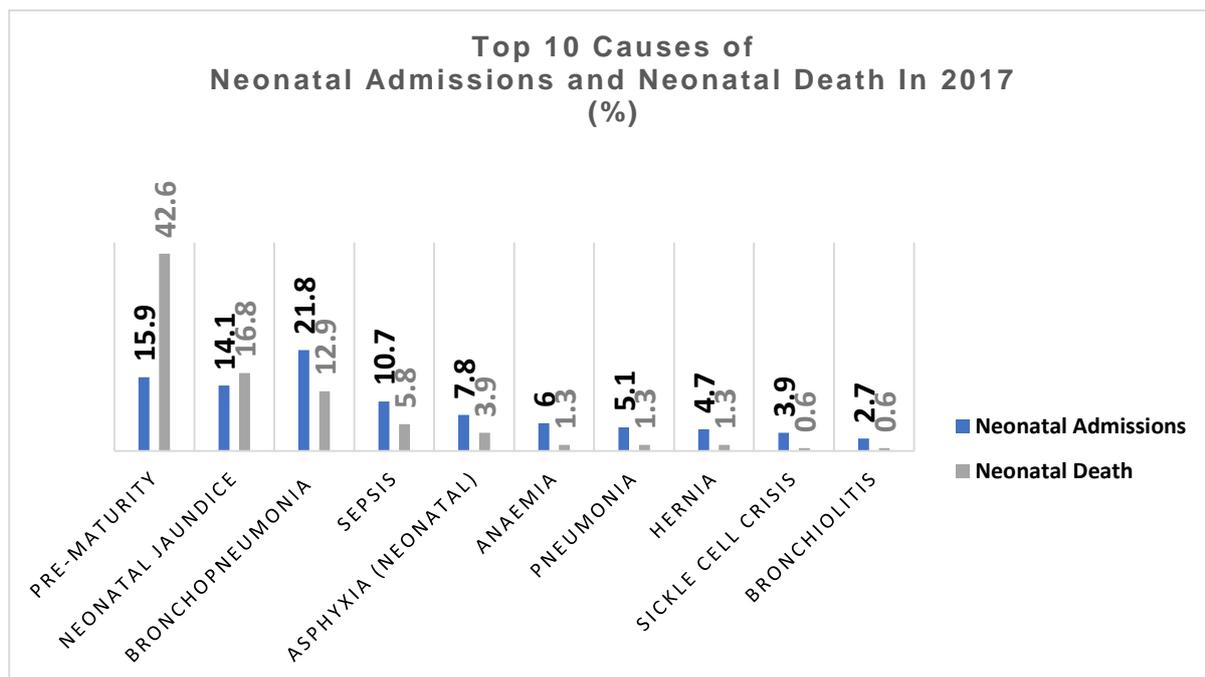
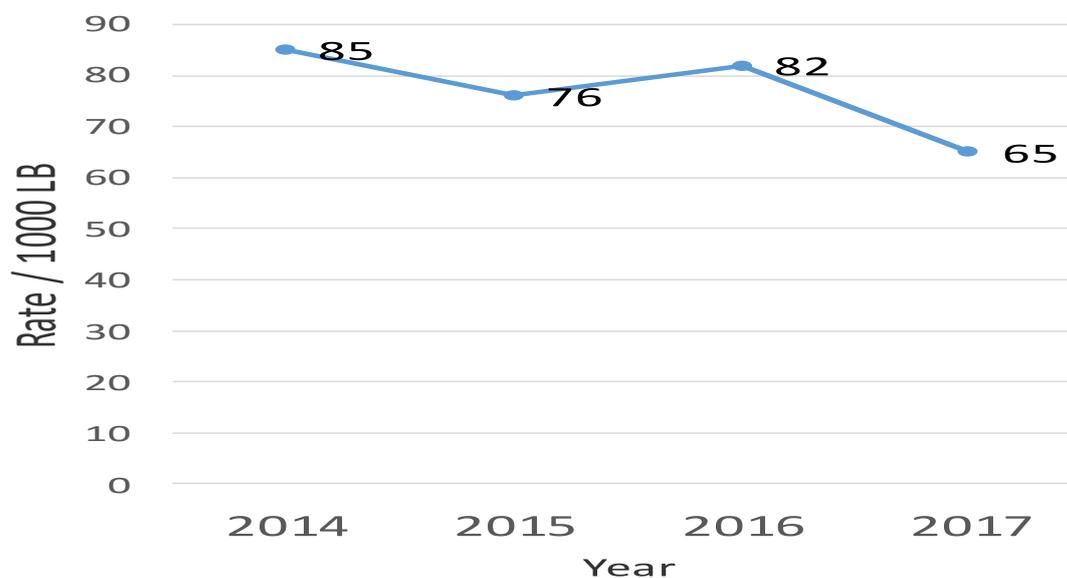


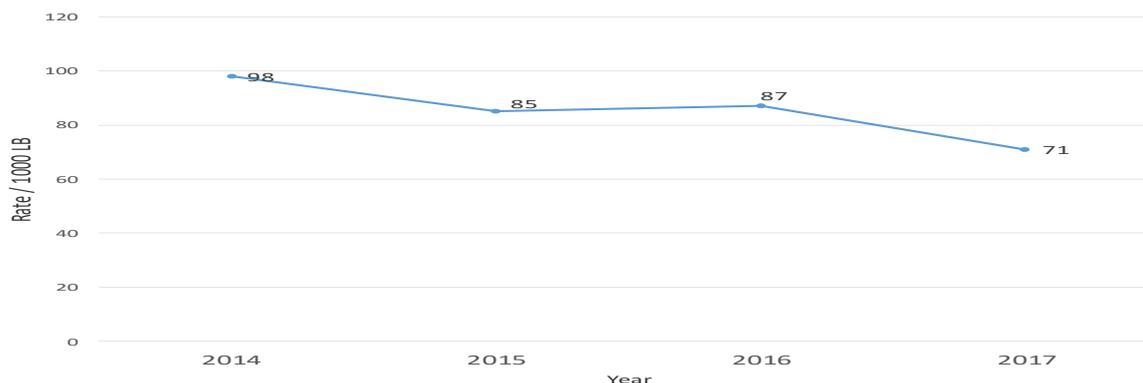
Figure 3.7.2. 3: Rate of <1-year Mortality, 2014-2017



3.7.3 UNDER 5 MORTALITY

Institutional under 5-years mortality rate decreased by 16/1000LB in 2017. Since 2014, the under 5-years mortality trend continuously fluctuated at the hospital as shown in figure 3.7.3.1 below. Stakeholder engagement need to be widened to sustain the gains whilst implementing additional strategies as a facility to reduce the numbers further.

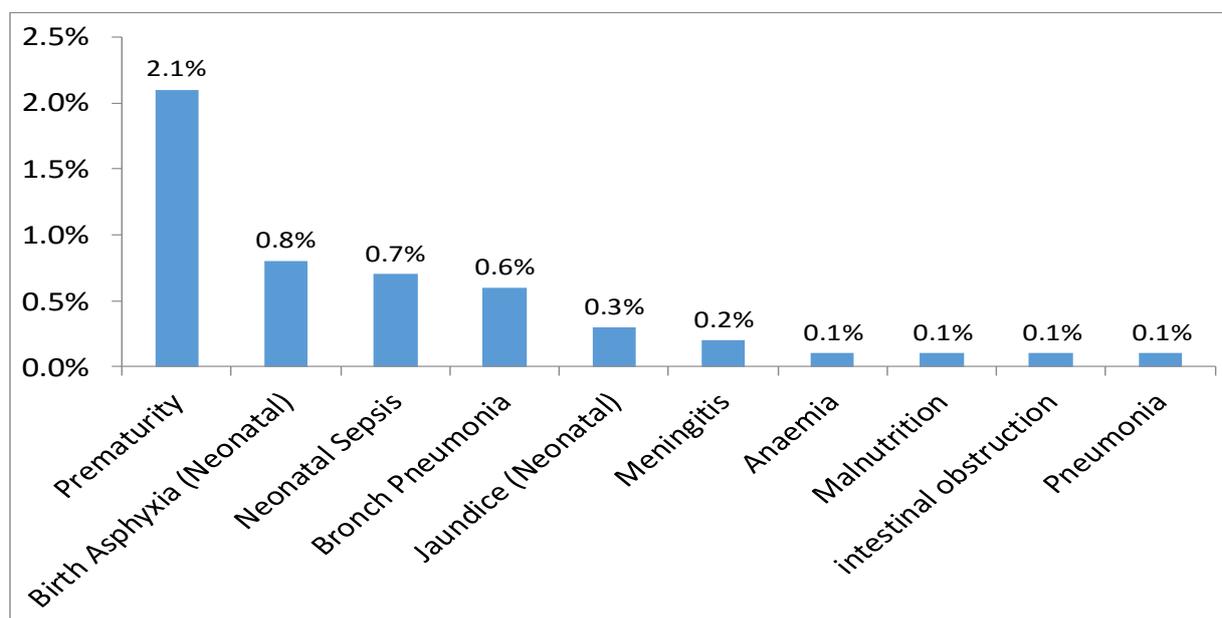
Figure 3.7.3. 1: Rate of Under 5 Years Mortality /1000 LB, 2014-2017



3.7.3.1 TOP TEN CAUSES OF < 5 MORTALITY IN 2017

In 2017, the hospital recorded prematurity as the leading cause of under 5-years institutional mortality representing 2.1%. From the analysis, it's been realized that, all the top 4 conditions contributing to the mortality are found among the neonates. This evidently means that improvement in the survival changes of neonate would largely impact on not only neonatal mortality but largely on under 5 mortalities as well. As such, all stakeholders need to support every attempt that would aid in the reduction of neonatal mortality even as other contributing factors are addressed.

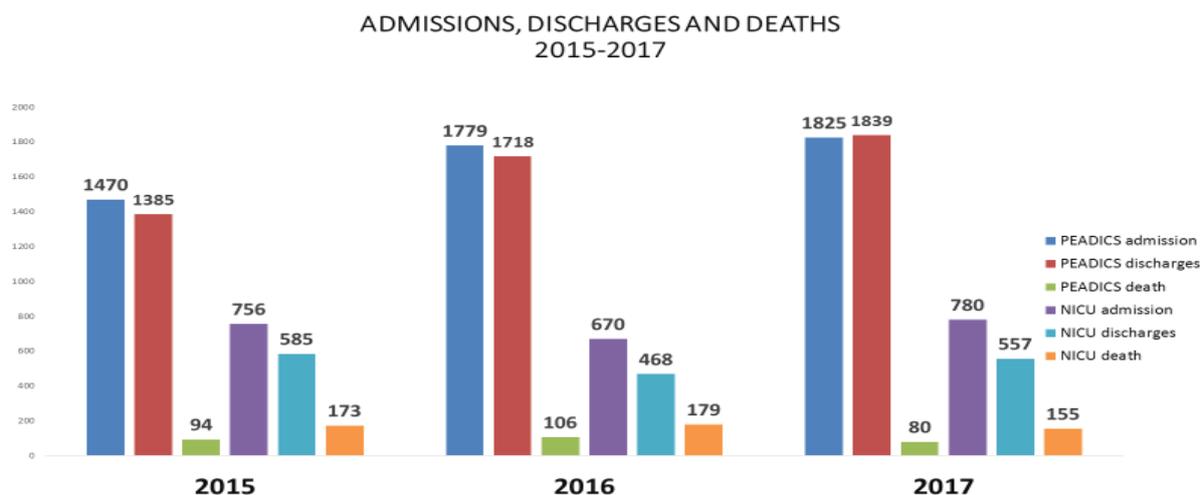
Figure 3.7.3.1. 1: Top Ten Causes Of < 5 Mortality in 2017



3.7.3.2: CHILD HEALTH – ANALYSIS OF ADMISSION, DISCHARGE AND DEATHS

The figure below provides a detailed comparative analysis of the total admissions under child health against the total discharges and death, from 2015 to 2017.

Figure 3.7.3.2. 1: Child Health – Analysis of Admission, Discharge and Deaths



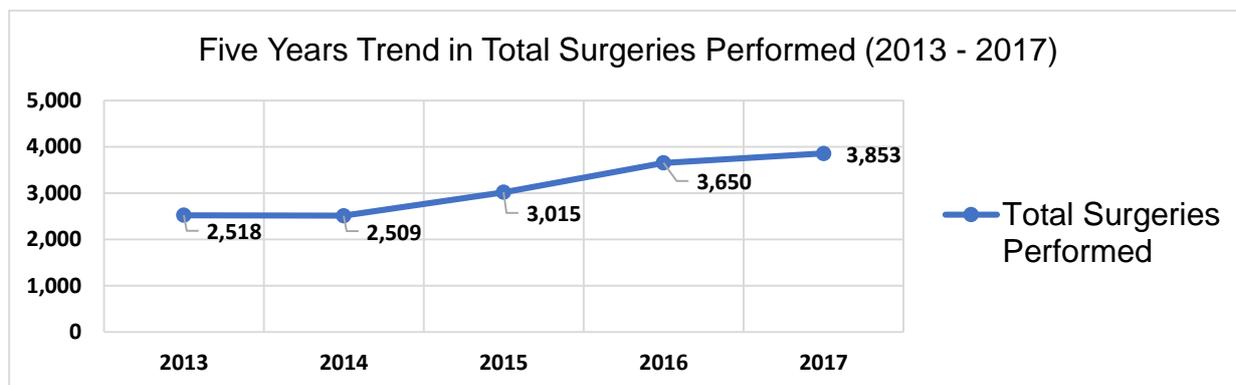
3.8: SURGICAL SERVICES

Under the existing organisational structure within the hospital, all the three theatres at the facility are under the surgical sub-BMC. In addition to the 2 surgical wards that manage all the surgical specialties.

3.8.1 THEATRE SERVICES UTILIZATION

Surgery is largely performed at the main Surgical Suite, the Delivery Suit Theatre or at the Accident and Emergency theatre. Since 2013, the hospital has steadily improved in the total number of surgeries performed as demonstrated in figure 3.8.1.1 below.

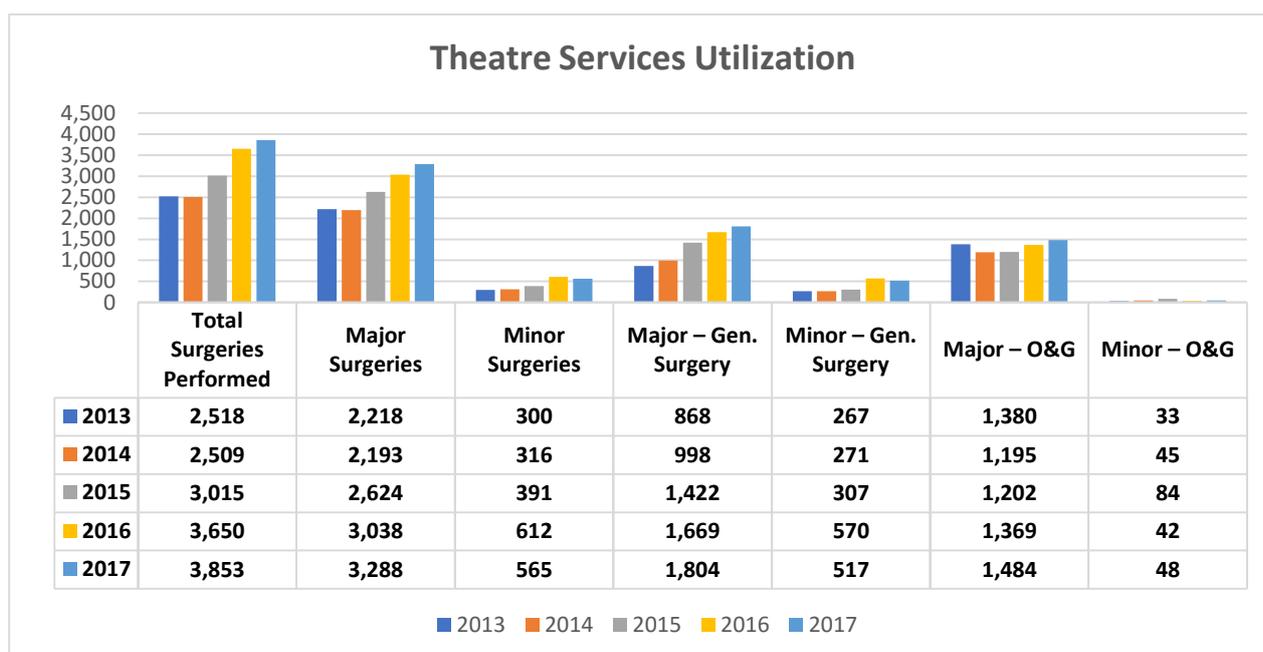
Figure 3.8.1. 1: Five Years Trend in Total Surgeries (2013 - 2017)



3.8.2: NUMBER AND TREND IN THEATRE SERVICES UTILIZATION

The overall surgeries performed increased by 5.6% in 2017. The major surgeries improved whilst there was a reduction in the minor surgeries in 2017. The Obstetric and Gynaecological surgeries increased both in their major and minor surgeries performed whilst the general surgery saw a slight reduction in the minor surgeries performed in 2017. As demonstrated in the figure 3.8.2.1 below.

Figure 3.8.2. 1: Number and Trend in Theatre Services Utilization



3.8.3: TOP TEN SURGICAL OPERATIONS

Caesarean section and hernia continue to account for the first and second leading causes of surgeries performed at the facility in 2017 and 2016 as analysed in table 3.8.3.1 below. Breast related conditions are gradually increasing over the years. In 2017, mastectomy was 1.8% and was recorded among the top 10 surgeries performed. Perhaps, research need to be conducted into why the increase in breast cancer in recent times to inform future decisions on how to manage and or reduce the prevalence.

Table 3.8.3. 1: Top Surgical Operations (2016 - 2017)

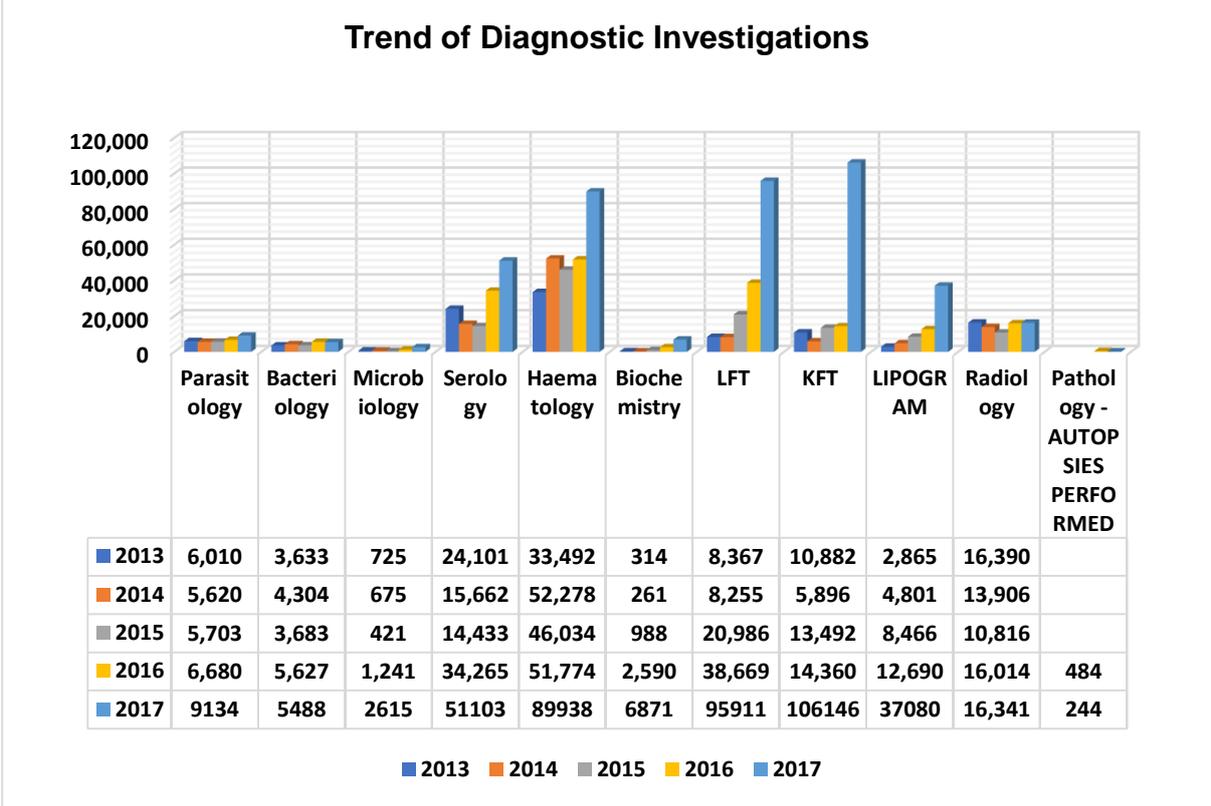
	Type of case- 2016	No. Performed	Type of case- 2017	No. Performed
1	Caesarian Section	1,113 (13% Increase)	Caesarean Section	1,219 (10% Increase)
2	Hernia- Reducible	258 (28% Increase)	Hernia- Reducible	264 (2% Increase)
3	Eye Surgeries	240 (138% Increase)	Laparotomy- Exploratory	240 (21% Increase)
4	Laparotomy- Exploratory	199 (3% Increase)	Eye Surgeries	230 (4% Decrease)
5	ENT Operations	136 (49% Increase)	ENT Operations	212 (56% Increase)
6	Plastics Surgeries	91 (60% Increase)	Plastics Surgeries	100 (10% Increase)
7	Operations on Fractures	78 (4% Decrease)	Operations on Fractures	87 (12% Increase)
8	Appendicectomy	77 (1% Decrease)	Myomectomy	80 (23% Increase)
9	Myomectomy	65 (1.8%)	Appendicectomy	72 (6% Decrease)
10	Removal of superficial Tumors	63 (1.7%)	Mastectomy	70 (1.8%)
	Total Operations	3,650	Total Operations	3,853

3.9: DIAGNOSTIC SERVICES UTILIZATION

Kidney function test was recorded as the leading (sharp increase) cause of diagnostic investigations conducted in 2017 whilst Liver function test was ranked second. There is worrying incidences of kidney and liver disease that are detected especially among patients with or without clinical signs and symptoms in recent times. Lifestyle, abuse of medications and other secondary disease conditions largely contribute to such phenomena. The hospital aside health talks at the OPD, organises outreach and screening programme periodically to educate, promote early detection and treatment. Figure 3.9.1 provides comparative analytical trend of the various diagnostic investigation conducted at the hospital from 2013 to 2017 and the trends.

Further, there was 49.6% decrease in the number of pathological autopsies performed as well as 2.5% reduction in Bacteriological investigations carried out at the laboratory in the 2017 compared to 2016. However, the general statistical performance of the diagnostic sub-BMC has seen great improvement especially in the number of clients screened for both kidney and liver functions. Also, the radiology unit recorded a 2.04% increase in the number of investigations carried out in 2017. Detailed analysis has been provided in figure 3.9.1 below.

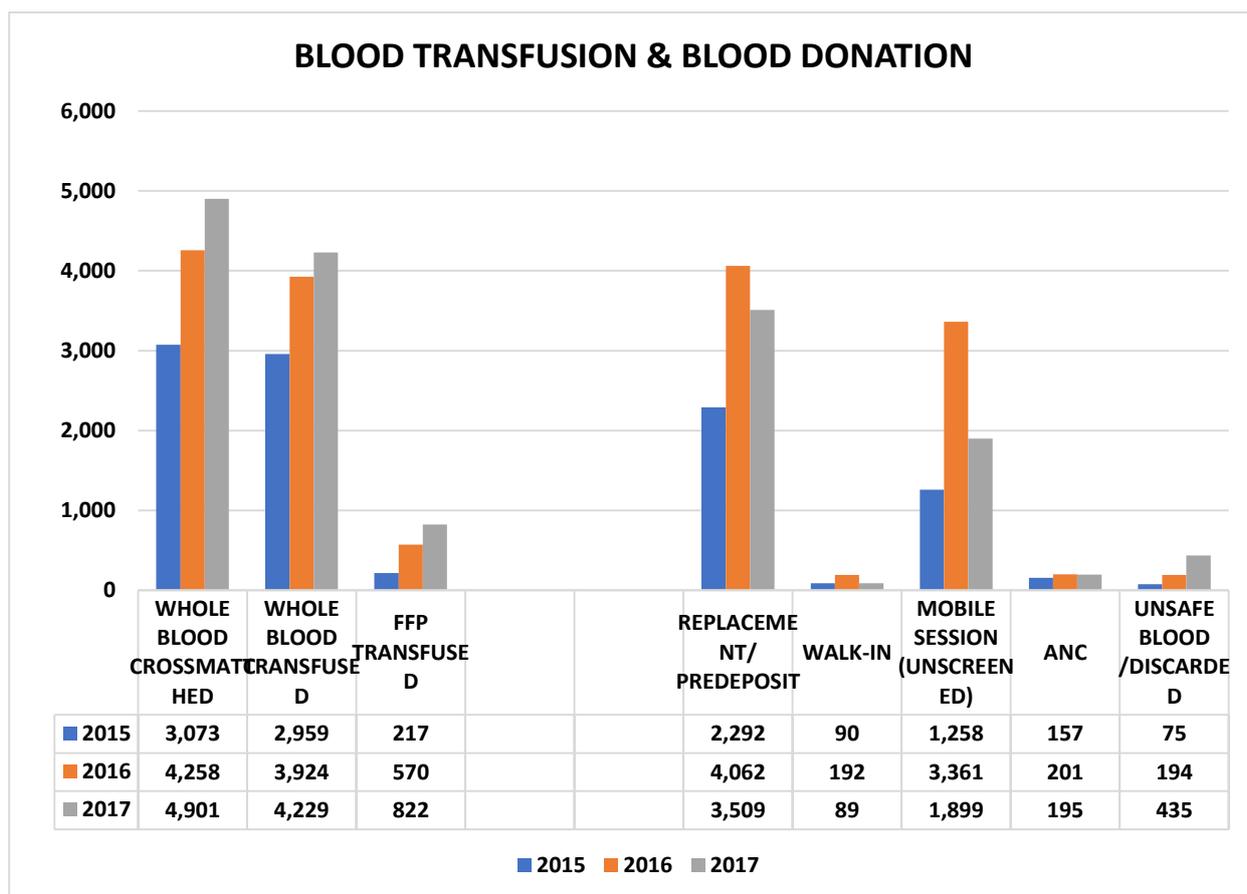
Figure 3.9. 1: Trend Analysis of the Various Diagnostic Investigations (2013 to 2017)



3.10 BLOOD TRANSFUSION AND BLOOD DONATION CATEGORIES

Generally, the number of clients transfused with blood and blood product increased over a 3-year period. However, there were variations in blood donation trends. The number of people who walk-in to donate have not been very encouraging. The most worrying public health concern is the number of the unsafe bloods from donors. The unsafe blood went up from 194 in 2016 to 435 in 2017 as illustrated in figure 3.10.1 below.

Figure 3.10. 1: Blood Transfusion and Blood Donation Categories



3.11 LABORATORY SAMPLES REFERRED OUTSIDE CCTH

The hospital currently does not have full capacity to carry out some of the medical diagnostic investigations. As such, transports samples for the testing of suspected cases like H1N1, Rubella, Ebola, Buruli Ulcer etc. to outside facilities/research centers for detection/confirmation. Table 3.11.1 below is the analysis of total number of laboratory samples referred to outside facilities from 2015 to 2017.

Table 3.11. 1: Laboratory Samples Referred to Outside Facilities

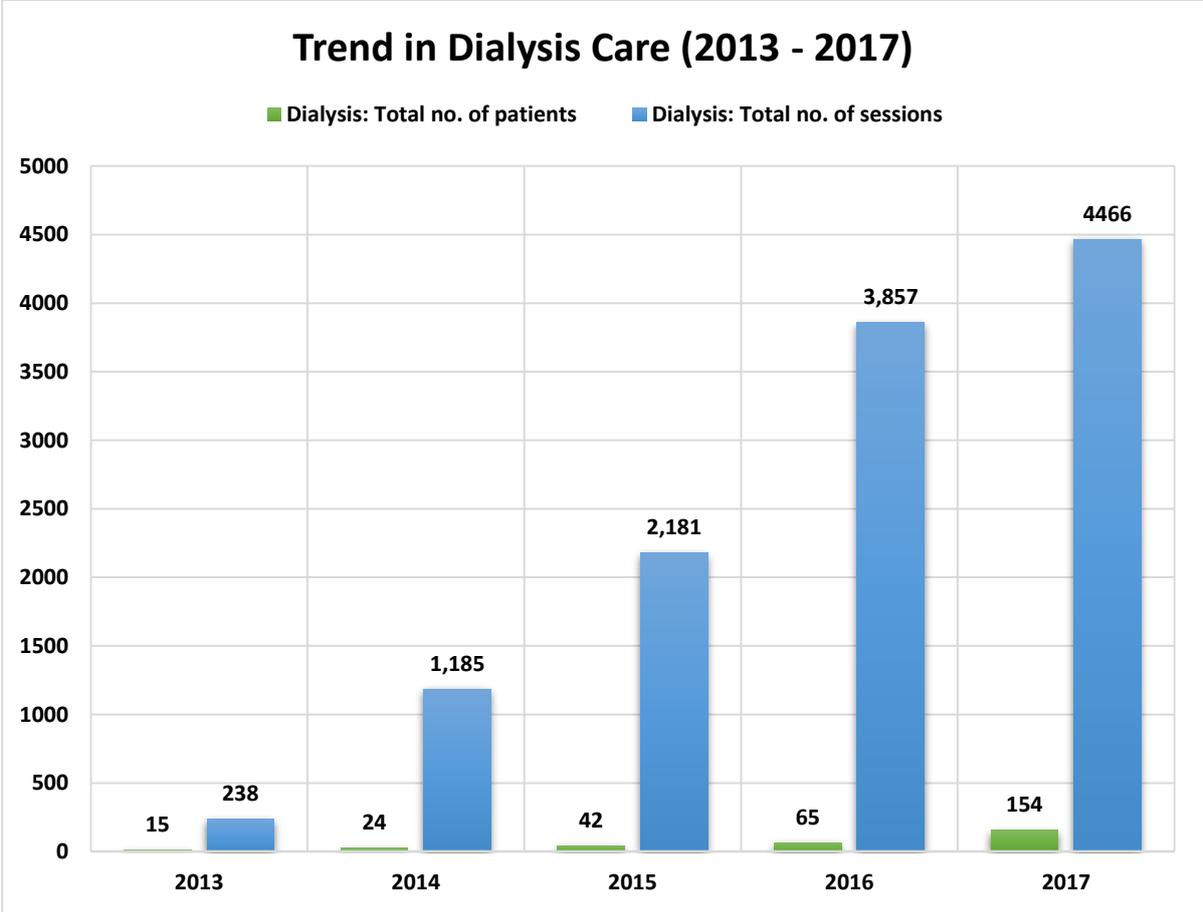
TESTS	2015	2016	2017
TB CULTURE (DR, DST)	10	10	4
H1N1 (INFLUENZA)	12	18	256
RUBELLA	1	8	7
EBOLA	0	0	0
BURULI ULCER			3 (1)

3.12: DIALYSIS SERVICES UTILIZATION

From earlier analysis on kidney rise to the analysis in figure 3.9.1 below, it is evident that there is continuous increase in renal conditions. In 2017, there was 136.9% increase in the number of clients who access renal dialysis at the facility compared to 2016. The capacity of the hospital to provide the dialysis services have improved through the support of management and external partners. This resulted in a 15.8% increase in the number of dialysis sections carried out at the unit although there is still more room for

improvement. The Hospital's Dialysis Center is the second largest renal facility in Ghana and it's a key referral facility for renal services. The center has since been in full operation after some refurbishment in August 2013 under Ghana-Japan collaboration (Tokushukai Medical Group) programme. The facility provides dialysis treatment for both acute and chronic kidney patients who are mostly resident in the Central and Western regions. The figure below provides a 5-year trend analysis of the clients and sections.

Figure 3.12. 1: Trend in Dialysis Care (2013 - 2017)



CHAPTER FOUR

TECHNICAL AND GENERAL SERVICES

4.1 INTRODUCTION

The Technical and general service in the hospital are provided mainly by the Technical Service Sub-BMC, Domestic Service Sub-BMC, General Administration Unit, with the Procurement and Hospital Store Units providing logistical support.

The Technical Service Sub-BMC deals with Estates, Equipment and ICT activities; Domestic Services Sub-BMC (Laundry, Tailoring, CSSD, Catering, Environmental Health and House Keeping services) whilst the General Administration Unit manages Transport, Security, General Secretarial services, and Medico Social Welfare.

Some achievements of the sub-BMC are as follow:

4.2 PHYSICAL INFRASTRUCTURE

- 🏠 Renovation of CCTH residential accommodation (selected bungalows - Numbers 5 and 6, and started the renovation on Blocks F & H – awarded on contract)
- 🏠 Construction of Phase 2 (Top Floor) of the 24-Hour Retail Shop building
- 🏠 Achieved 40% of planned preventive maintenance of hospital's physical infrastructure, fixtures & fittings
- 🏠 Achieved 50% of planned preventive maintenance of hospital's equipment and plants

4.3 ICT INFRASTRUCTURE

Various clinical activities were performed in 2017. Such as; engineering works. In addition to addressing the over 2,600 verbal maintenance requests as well as the over 4,200 formal requests.

1. Achieved 80% of planned preventive maintenance of hospital's ICT equipment and network
2. Extended HAMS software to other service areas and wards and facilitated the upgrading of the software to add new modules and resolving all operational challenges.
3. The ICT unit continued with its maintenance of three (3) major software used in the hospital. These are the HAMS, HR Management Software, and PHARMAS which was acquired in the last quarter of year 2016 for the 24-Hour Pharmacy and linked to the HAMS software.
4. Extended internet and intranet network to mortuary block, CSSD, Laundry, Kitchen and some new service locations with work almost completed on extension of internet and intranet network to CCTH Primary Care Facility (Polyclinic).
5. Significantly contributed to the implementation and rollout of Lightwave Health Information Management System (LHIMS) and Ghana Integrated Financial Management Information System (GIFMIS) project by providing additional hardware, intranet technical support, and assistance in training staff.
6. On hardware activities, the donation of additional switches, access points, server, tablets, laptops, desktop computers, scanners, printers and UPS under the

Lightwave Health Information Management System (LHIMS) and Ghana Integrated Financial Management Information System (GIFMIS) significantly increased the number of ICT equipment deployed in the hospital and the expansion of intranet network to cover most parts of hospital.

7. The ICT unit put in place new data back-up arrangements with multiple back-ups at different locations in the hospital following the crush of the hard drive onto which service data was backed-up resulting in loss of some service data and revenue. This new arrangement will prevent loss of service data and other back-up information.

4.4 EQUIPMENT UTILIZATION AND DOWN TIME ANALYSIS

Table 4.4.1 to table 4.4.3 below provides a detailed analysis of selected medical equipment down time and utilization in 2017. The Equipment Utilization Rate is the proportion of the available time in percentage that a piece of equipment functioned. Down time on the other hand, is the proportion of time a particular equipment is not available for usage as a result of breakdown.

Table 4.4. 1: Selected Equipment Downtime Analysis of Laboratory and Imaging Equipment

Laboratory Analyzer Type	DOWNTIME RATE	REMARKS
A. LABORATORY EQUIPMENT		
Immuno Analyzer (CD4)	0%	
Immuno Analyzer (CD4, CD3, CD8 & CD45)	100%	This analyzer was faulty and could not be used the whole year
Microbiology (Blood Culture)	0%	
Immuno Analyzer (Hormones)	0%	
HIV Viral Load	3.85%	This analyzer was faulty and out of use for 2 weeks
TB (PCR)	0%	
TB Culture	15.39%	This analyzer was faulty and out of use for 8 weeks
Haematology	0%	
Biochemistry	0.82%	This analyzer was faulty and out of use for 3 days
B. IMAGING EQUIPMENT		
CT-SCAN	7.69%	This was caused by interruption in power supply from ECG and breakdown of generator providing back-up power supply, and also a fault with the AVR system
MAGNETIC RESONANCE IMAGING (MRI)	100%	The contractor have not been able to hand over this equipment since construction and

Laboratory Analyzer Type	DOWNTIME RATE	REMARKS
		installation because of technical faults

Table 4.4. 2: Selected Equipment Utilization - Laboratory

Laboratory Analyzer Make & Model	Analyzer Type	Avg. Equipment Operating Hours Per Week	Avg. Number of Hours Equipment Was Used Per Week	Equipment Utilization Rate	REMARKS
A. LABORATORY EQUIPMENT					
Facs Count, Becton Dickinson	Immuno Analyzer (CD4)	8 hrs * 5 days (40 hours)	12 hours	5.6%	
Facs Calibur, Becton Dickson	Immuno Analyzer (CD4, CD3, CD8 & CD45)	8 hrs * 5 days (40 hours)	-	0%	Equipment was faulty
Bactec 9050, Becton Dickson	Microbiology (Blood Culture)	24/7 (168 hours)	168 hours	100%	
Cobas e411, Roche Hitachi	Immuno Analyzer (Hormones)	8 hrs * 5 days (40 hours)	40 hours	100%	
Cobas AmpliPrep & Cobas Tagman, Roche	HIV Viral Load	12 hrs * 7 days (84 hours)	84 hours	100%	
GeneXpert, Cepheid	TB (PCR)	10 hrs * 5 days (50 hours)	50 hours		
Bactec MGIT 960, Becton Dickinson	TB Culture	24/7 (168 hours)	24/7 (168 hours)	100%	
Sysmex, XS-500i	Haematology	24/7 (168 hours)	168 hours	100%	
Selectra Pros, ELITech Group	Biochemistry	12 hrs * 7 days (84 hours)	84 hours	100%	

Table 4.4. 3: Equipment Utilization - IMAGING

Equipment Type	Avg. Equipment Operating Hours Per Week	Equipment Utilization Rate for Year	REMARKS
CT-SCAN	50 hours (8 hrs * 5 days = 40 hrs + Emergency Calls: Approx. 10 hours per week)	34.76%	Low rate of utilization was as a result of the following: (i) Low number of radiographers trained/skilled in the use of CT-Scan Machine (ii) Low number Radiologists (iii) Frequent interruption in power supply from ECG and breakdown of generator providing back-up power supply on two occasions & fault with AVR
MAGNETIC RESONANCE IMAGING (MRI)	50 hours (8 hrs * 5 days = 40 hrs + Emergency Calls: Approx. 10 hours per week)	0%	The contractor has not been able to hand over this equipment since construction and installation because of technical faults

4.5: TRANSPORT SERVICES

The hospital currently has 11 vehicles. One of the vehicles, a pick-up serves as the official vehicle for the CEO, 1 pick-up also serves as a duty vehicle for all directors, and nine (9) others in the hospital pool whilst one has been declared un-serviceable pending auctioning. Table 4.5.1 and table 4.5.2 below shows details of number of vehicles, their age, manufacture, and types as well as the colour codes allocation by age of the vehicle during 2017 inventory.

Table 4.5. 1: Fleet Inventory-Vehicle

REG.	AGE	LOCATION	MAKE/TYPES	YEAR
GV 43-16	2	CEO	TOYOTA/Pickup	2016
GV 1422-15	3	POOL	NISSAN/Pickup	2015
GV 2451-14	4	POOL	FORD/Ambulance	2014
GV 427-14	4	POOL	NISSAN/Pickup	2014
GV 206	7	POOL	NISSAN/Pickup	2011
GC 7085-11	7	POOL	HYUNDAI/Bus	2011
GV 7086-11	7	POOL	HYUNDAI/Bus	2011
GV 72-10	8	GARAGED	GREATWALL/Pickup	2010

REG.	AGE	LOCATION	MAKE/TYPES	YEAR
GV 271-10	8	POOL	GREATWALL/Pickup	2010
GT 5648-09	9	POOL	TOYOTA/Pickup	2009
GV 699-W	13	POOL	PEUGEOT/Boxen (Hearse)	2005

Table 4.5. 2: Vehicle Inventory By Age Block

AGE BLOCK (YEARS)	ZONE	NUMBER
1-5	Green	4
6-9	Yellow	3
10 and above	Red	3

CHAPTER FIVE

FINANCIAL PERFORMANCE

5.1 INTRODUCTION

The finances of the hospital are from various sources. As such, there is an obligation to ensure efficient and effective management of the funds at the facility from both internal and the external sources. This chapter provides the summary of financial performance over a 4-year trend. It also demonstrates the percentage difference in performance in 2017 compared to 2016.

5.2 SOURCES OF FUNDING

The main source of fund that aids in the operations of the hospital is from the government of Ghana (GOG), in the form of employee compensation and Some Sector Budget Support (SBS) from Global Fund, DANIDA and EU for programme such as Malaria, TB care, and Millennium Accelerated Framework programme. However, the day-to-day running of the hospital is with the hospital's internally generated funds (IGF).

5.3 FINANCIAL PERFORMANCE HIGHLIGHTS (2014 TO 2017)

Aside the general improvement in financial management systems leading to minimal audit queries in 2017, the hospital also increased its revenue by 20.67% in 2017 whilst General expenditure increased by 7.78% in 2017. Expenditure on services increased by 21.49%. However, the total expenditure on medicines reduced by 7.7% in 2017. All audit recommendations were duly implemented by management. Detailed analysis is provided in table 5.3.1 below.

Table 5.3. 1: Financial Highlights (IGF) GH¢

Financial Highlights	PERF +/-	2017	2016	2015	2014
REVENUE					
SERVICES	+ 21.49%	12,497,893	10,287,152	7,559,080	5,048,006
MEDICINES	+ 18.50%	4,591,576	3,874,689	2,518,013	1,989,254
TOTAL	+ 20.67	17,089,470	14,161,833	10,077,093	7,037,261
EXPENDITURE					
SERVICES	+ 15%	11,304,559	9,829,251	6,440,080	4,618,233
MEDICINES	- 7.7%	2,723,225	2,949,233	2,542,074	1,969,146
TOTAL	+ 7.78%	14,027,784	12,778,483	8,982,154	6,587,379

5.4 TREND OF IGF BUDGET EXECUTION GH¢

From the analysis in table 5.4.1 below, out of the total revenue budgeted for 2017, 92.21% was realized whilst 76.79% of expenditure was executed from the budgeted expenditure in 2017. 90.56% of services budget was achieved whilst 83.53% was spent out of what was budgeted for service expenditure. Additionally, the hospital achieved 97.0% of its medical revenue budget. However, the facility executed only 57.53% of medical expenditure budget in 2017 as demonstrated in the table below.

Table 5.4. 1: Trend of IGF Budget Execution GH¢

Category	%(+/-)	2017 GH¢		2016 GH¢		2015 GH¢		2014 GH¢	
		Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
Revenue									
Services	90.56%	13,800,000	12,497,894	9,350,000	10,287,152	7,254,000	7,559,080	4,822,800	5,048,006
Medicine	97.0%	4,733,500	4,591,576	3,200,000	3,874,689	2,880,000	2,518,013	2,184,000	1,989,254
TOTAL	92.21%	18,533,500	17,089,470	12,550,000	14,161,833	10,134,000	10,068,093	7,006,800	7,037,260
Expenditure									
Services	83.53%	13,533,500	11,304,559	8,063,000	9,829,251	7,437,400	6,440,080	5,572,400	4,618,233
Medicines	57.53%	4,733,500	2,723,225	3,200,000	2,949,233	2,208,000	2,542,074	2,400,000	1,969,146
TOTAL	76.79%	18,267,000	14,027,784	11,263,000	12,778,483	9,645,400	8,982,154	7,972,400	6,587,379

5.5 IGF PERFORMANCE STRUCTURE GH¢

The hospital improved on its revenue under services and medicine by 21.4% and 18.5% respectively. However, out of pocket payment under services and medicine has reduced by 4.6% and 14.27% respectively. From table 5.5.1 below, there has been a 7.11% increase in NHIA component under services and that of the medicine under NHIA also increased by 26.56%.

Table 5.5. 1: IGF Performance Structure GH¢

Year	% Diff.	Services			% Diff.	Medicines		
		2017	2016	2015		2017	2016	2015
Total Revenue Earned	21.40% increase	12,488,758.29	10,287,152	7,550,080	18.50% increase	4,591,576.17	3,874,689	2,518,013
NHIA Component	7.11% Increase	68,561,94.33	6,401,246	4,853,810	26.56%	3,692,913.74	2,917,824	2,215,997
% NHIA Component	22.09 decrease	40.14%	62.23%	64.28%	53.68% decrease	21.62%	75.30%	88.00%
Out of Pocket Payment	45.67 increase	5,632,564.96	3,866,718	2,679,243	18.78 increase	898,662.43	756,596	291,117
% Out of Pocket	4.61 decrease	32.98%	37.59 %	35.48 %	14.27% decrease	5.26%	19.53%	11.56 %

5.6 REVENUE CONTRIBUTION BY SUB-BMC / DEPARTMENT / UNIT (GH¢)

72.3% of the revenue contribution from OPD services was realized from clients with NHIS. Dialysis services unfortunately is not covered by NHIS. As such, all revenue from dialysis services are out of pocket. This burdens the clients with kidney failure. Table 5.6.1 below provides a detailed analysis of revenue contribution from the various departments/Units within CCTH.

Table 5.6. 1: Revenue Contribution by Sub-BMC / Department / Unit GH¢

DEPARTMENT	OUT OF POCKET 2017	NHIS 2017	TOTAL 2017	ACTUAL 2016	ACTUAL 2015
OPD	546,243	1,426,677	1,972,919	1,693,451	1,321,423.45
DENTAL	82,514	38,508	121,019	180,820	150,212.43
EYE CARE	38,145	179,884	179,884	207,249	133,625.19
INVESTIGATIONS	1,697,127	-	1,697,127	985,145	567,841.77
EAR, NOSE & THROAT	16,694	79,021	95,715	87,902	186,069.24
SURGICAL	745,101	1,569,334	2,314,436	1,839,016	910,716.39
MEDICAL	521,534	1,101,088	1,622,622	1,321,301	1,171,193.96
OBS/GYNEA	346,660	1,440,223	1,786,889	1,472,884	1,069,238.50
CHILD HEALTH	73,044	868,128	941,172	901,565	555,834.98
PHYSIOTHERAPY	10,075	153,326	163,401	152,486	117,601.56
MORTUARY	253,472	-	253,472	269,311	212,648.56
DIALYSIS	879,303	-	879,303	748,219	464,541.18
OTHERS	422,654	-	422,654	408,613	698,132.68
MEDICINE	898,662	3,692,914	4,591,576	3,874,689	2,518,012.75
TOTAL	6,531,226	10,558,244	17,089,470	14,161,833	10,077,092.64

5.7 STATUS OF NHIS CLAIMS at CCTH:

Every year, the hospital struggle to execute budgeted plans since higher percentage of its internally generated funds is from NHIS claims payment. In 2017, the National Health Insurance Authority paid for only 6 months of the claims submitted. Below is a breakdown of payment and the number of month's payment that were carried forward into another year.

Table 5.7. 1: Status of NHIS Claims:

ITEM	2017	2016	2015
Claims Submitted	10,549,108	9,679,184	7,046,767
Claims Paid	9,121,870	6,289,301	4,172,737
Outstanding as At Close	8,041,109	7,241,822	4,583,583
No. of Month Outstanding	6	8	7

CHAPTER SIX

COLLABORATION AND SUPPORT

6.1 INTRODUCTION

The hospital in the quest to provide quality health care during the year under review collaborated with some organizations and sister institutions as well as benevolent individuals. The under listed organizations were the major collaborators during the period.

6.2 COLLABORATORS

Table 6.2. 1: Collaborator(s) and Supports Received in 2017

CCTH	Collaborator(s)	Support / Contribution
Facility level	UNDP	<ul style="list-style-type: none"> OPD received 19 Digital thermometers and 18 digital sphygmomanometers under the UNDP Waste Management and mercury free project
	MOH under MAF	1 radiant warmer for neonates
	Czech Republic embassy in Ghana in collaboration with Less Privileged Foundation an NGO at Elmina	Donation of hearing assessment equipment (audiometer and otoacoustic emissions machine) to CCTH in April, 2018
Maternal Health sub-BMC	Kybele	The Kybele organization collaborated with the Maternal and Child Health Sub-BMC to undertake series of medical and surgical interventions, especially training in maternal and safe childbirth and quality improvement
Child Health Sub-BMC	PZ Cussons	Received 15 boxes of hand sanitizers from to improve service delivery
	Mr. Anokye-Yeboah (philanthropist)	Mothers' Hostel sod-cutting and near completion
	Kokrokoo Foundation	1 incubator received from
	GAEDE Foundation	Donated two (2) oxygen concentrators with bubble CPAP machines
	Francis Eshun Baidoo Foundation	Donated one (1) flat screen LCD TV
	Mr. Gershon Sogbey	Painting of the ward
	Mr. & Mrs. Marfo.	1 refrigerator & 1 flow meter from
	Dr. Eric Ngyedu	Donated 1 radiant warmer
	General contribution	Secured 2 flow meters from contributions given on World prematurity day
Surgical Sub-BMC	University of San Diego California	Team management in trauma
	Stone Brook University	Treating people with color
	University of Plymouth	Through operation hernia

CCTH	Collaborator(s)	Support / Contribution
ENT Unit	University of UTAH	<ul style="list-style-type: none"> • Fellowship programme for ENT consultant s and organised ENT related workshop • 17 ENT complex surgeries were performed
Laboratory Department	Noguchi and KCCR	The Medical Laboratory of the hospital collaborated with Noguchi and KCCR on number of research activities
OPD sub-BMC	Novatis	Donated 1 nebulizer and 7 peak flow meters was donated
	Latter Day Saints	Donated 1-wheel chair received from
	UNDP	
	Radio Central and Cape FM	Collaboration for weekly health talks on radio
A&E sub-BMC	Dr. Pounds	Donation of some Medical Equipment

SECTION 3

CHAPTER SEVEN

OUT PATIENT SUB-BUDGET MANAGEMENT CENTRE

7.1 BACKGROUND

The Outpatient department (OPD) is the first point of call for the management day cases (out-patients based) in the hospital. The Sub-BMC has an oversight responsibility for all Specialist and General OPD services that is run by specialists, residents, consultants, medical officers from various departments. The department was managed by a 6-member team headed by one Family Physician. Other members of the team are 2 DDNS' (OPD, Polyclinic and Public Health Units), a Business Manager, an Accountant and a Pharmacist.

The aim of the department is to promote excellence in patient care by advancing the scope of practice in ensuring effective and efficient delivery of quality Health Care through decentralization. It has a total of 41 office space, 23 consulting rooms, 10 clients' waiting areas, 9 procedure rooms, 8 triage stations and 2 Pharmacies.

Below are the services the department provides:

7.2 OPD SERVICES

Table 7.2. 1: Types of OPD Clinic / Care Provided

NO.	SERVICE	NO.	SERVICE
1	General Medical Clinic	15	General Surgical Clinic
2	Hepatitis B & C Clinic	16	Urological Clinic
3	Gastroenterology Clinic	17	Neurosurgical Clinic
4	Endocrinology Clinic	18	Orthopaedic Clinic
5	Adolescent Clinic	19	ENT Clinic
6	Anaesthesia Clinic	20	Dental & Maxillofacial Clinic
7	Dermatology Clinic	21	Ophthalmology (Eye) Clinic
8	Cardiology Clinic	22	Breast and Thyroid clinic
9	Diabetes Mellitus Clinic	23	Renal / Dialysis Clinic
10	Asthma Clinic	24	Haematology Clinic
11	Sickle Cell Clinic	25	Physiotherapy Clinic
12	General Paediatric Clinic	26	ANC & PNC Clinic
13	Paediatric Surgery Clinic	27	Obstetrics & Gynaecology Clinic
14	Retroviral / STI Clinic		

7.3 OPD 2017 PERFORMANCE AGAINST CCTH STRATEGIC OBJECTIVES

Table 7.3. 1: Summary of OPD Performance Against CCTH Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE	
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES	
OUT-PATIENTS SUB-BMC	
1.	OPD attendance increased by 7%
2.	Institutional policy on colour-coding system of triaging of patients ongoing
3.	A total of 103 educational talks carried out at the Paediatric OPD as well as general daily health talk at all waiting areas
4.	OPD by special appointment was introduced
5.	Paediatric department partnered with the ENT unit to pilot a newborn screening for hearing impairment.
6.	Window for physically challenged, school children and elderly were reactivated for prompt triaging and consultation.
7.	OPD service brochure was designed, printed and circulated to referral facilities, clients and staff
8.	Created awareness on the prevention and management of diet related conditions through the various media.
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES	
1.	Collaborated with Cape FM and Radio Central for weekly health talks
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS	
3.1 Improve on Governance and Management System	
1.	Monthly Sub-BMC management meetings held
2.	2 staff durbars and weekly clinical meetings held
3.2 Improve on Human Resource and Management System	
22.	Workshops on quality customer service and Infection prevention was organised for staff
3.3 Improve on Finance Resource and Management System	
-	
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE	
4.1 Improve on Research:	
13.	Hosted 21 students, academicians and other researchers for research and started a research on Female Condom Utilization in CCTH
14.	One Client satisfaction conducted
15.	One Patients waiting time surveys conducted
4.2 Improve on Teaching and Learning:	
27.	Hosted students on attachment and clinical practical from UCCSMS, Nursing Training Institutions and other health training facilities.
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS	
-	
OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE	
-	

7.4 SUMMARY OF OPD PERFORMANCE

The total OPD attendance increased by 7% in 2017 whilst the referral -in also increased by 7.8% compared to 2016. The daily average outpatient visit was 323 (excludes walk in visits at the Laboratory, X-ray and the Physiotherapy units). Out of the total attendance, 62% were female whilst 38% were males. The specialist clinic with the highest attendance in 2017 was the Obstetrics and Gynaecology Clinic with 17,147 attendants. However, the hospital continues to receive general medical cases that could otherwise be attended to at a polyclinic level. Such cases went up by 29.7%. From the analysis in table 7.4.1 below, majority of the clinics increased their client base in 2017. However, there is a great concern in the 12.9% and 12.7% increase in HIV and Hepatitis B cases respectively.

Evidently, targeted strategies such as awareness creation on conditions that are of public health concern need to be intensified.

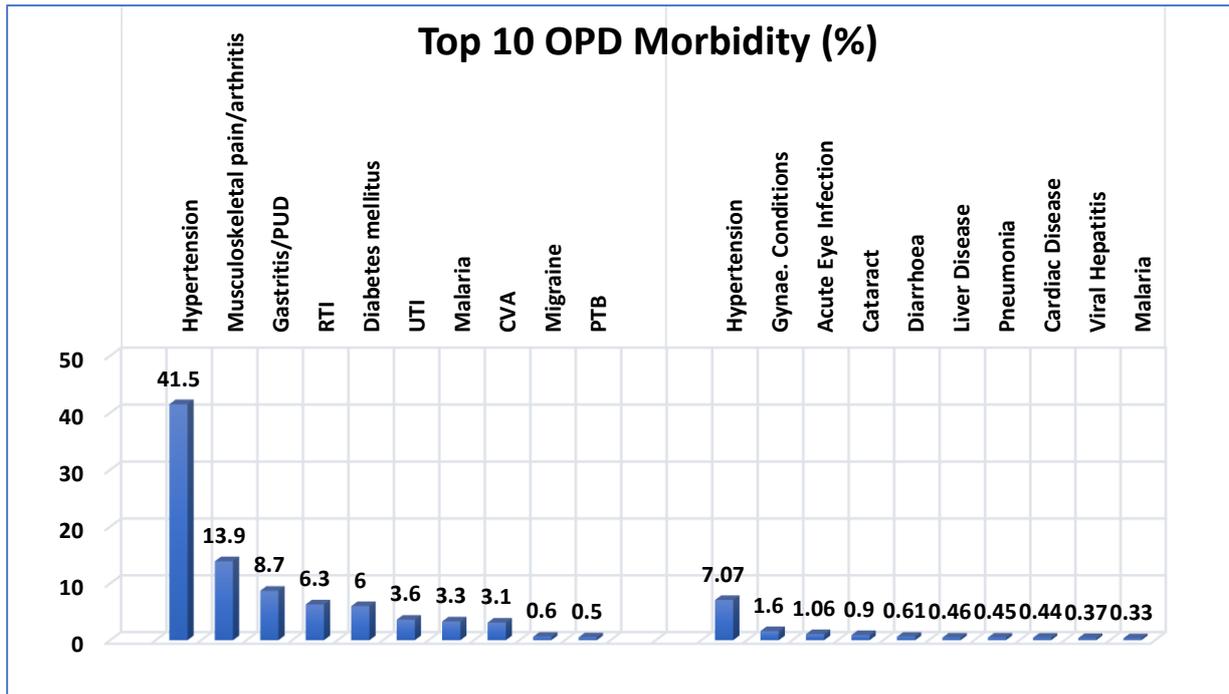
Table 7.4. 1: OPD Service Statistical Performance By Clinical

	TYPE CLINIC	2014	2015	2016	2017	% Diff.
1.	General Medical	18,239	16,617	16,232	21,060	29.7% increase
2.	General Surgery	4,375	3,983	4,376	5,702	30% incr.
3.	Orthopaedic	1,466	1,913	2,223	2,347	5.6% incr.
4.	Paediatric	6,767	7,690	7,810	8,180	4.7% incr.
5.	Dermatology	324	357	330	359	8.8% incr.
6.	Urological	1,769	2,208	2,843	3,275	15.19% incr.
7.	Neuro-surgery	112	200	129	312	141.9% incr.
8.	Obstetrics & Gynaecology	15,515	20,322	15,536	17,147	10.4% incr.
9.	Asthma	357	297	511	787	54% incr.
10.	ENT	5,094	5,907	6,080	6,664	9.6% incr.
11.	Eye	5,872	6,600	8,420	9,348	11% incr.
12.	Cardiology	269	240	1,590	2,153	34.4% incr.
13.	Endocrinology	0	0	82	125	52.4% incr.
14.	Haematology	0	0	223	298	33.6% incr.
15.	STI / HIV	5,112	5,895	5,377	6,068	12.9% incr.
16.	Tuberculosis	36	35	42	39	7.1% decrease
17.	Sickle Cell	0	135	454	650	43.2% incr.
18.	Gastroenterology	175	170	560	690	23.2% incr.
19.	Anaesthesia	311	378	943	868	7.95% decrease
20.	Psychology	128	150	163	261	60.1% incr.
21.	Dental & Maxillofacial	2,325	4,165	4,294	5,112	19% incr.
22.	Plastic Surgery	-	176	564	601	6.6% incr.
23.	Adolescent	-	57	126	218	73% incr.
24.	Diabetes	9,135	9,201	9,309	9,966	71% incr.
25.	Hepatitis B & C	714	446	940	1,059	12.7% incr.
26.	Diet & Nutrition	1,008	1,743	1,417	1,916	35.2% incr.
27.	Physiotherapy	-	-	14,451	12,649	12.5% decrease

7.5 TOP 10 OPD MORBIDITY

Non-communicable diseases have gradually become a major concern in many countries including Ghana. For 2 conservative years (2016 and 2017), CCTH recorded Hypertension as the leading cause of OPD morbidities. Figure 7.5.1 below provides a 2-years trend in OPD morbidity.

Figure 7.5. 1: Top 10 OPD Morbidity

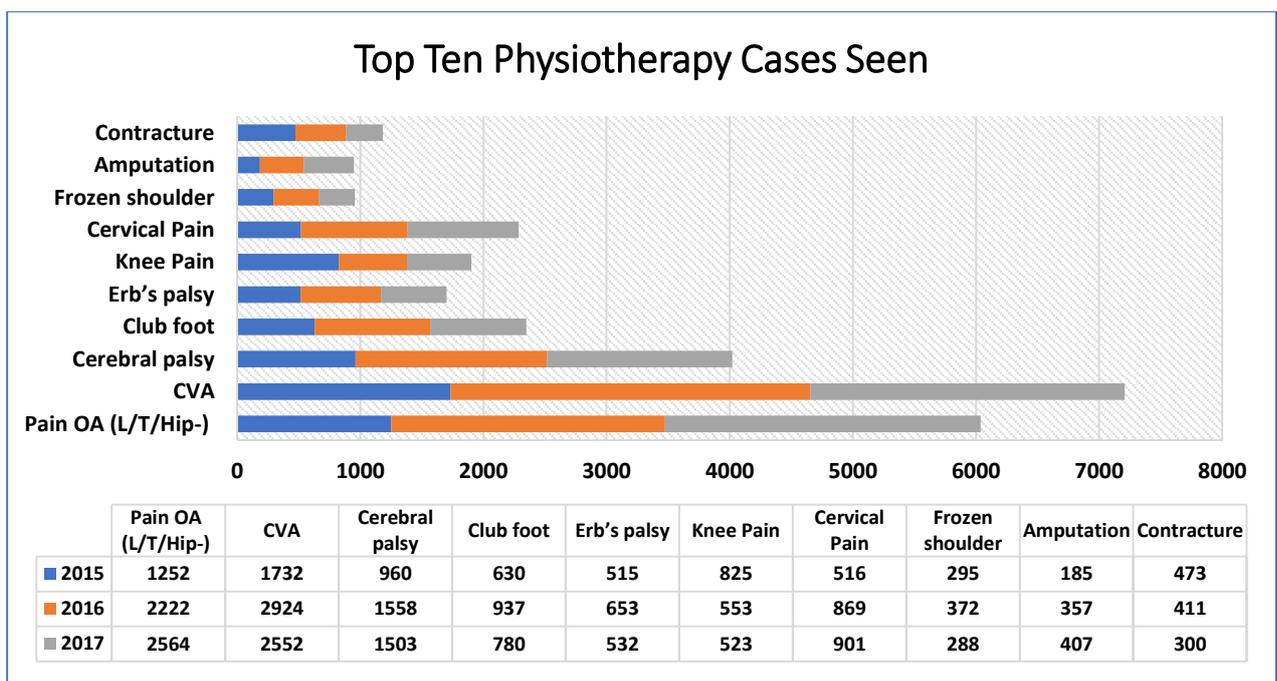


7.7 PHYSIOTHERAPY

The Physiotherapy unit provides rehabilitation services to clients from all specialties. They generally assist those who are physically challenged due to illness or trauma to be functionally independent for their daily activities. In 2017, the unit's clients reduced by 12.5%.

Musculoskeletal pain and CVA related cases were the top 10 leading causes of physiotherapy in 2017. Figure 7.7.1 below demonstrates a 3-year trend of the top 10 conditions that accounted for clients being referred to physiotherapy unit.

Figure 7.7. 1: Top Ten Physiotherapy Cases Seen



7.6 COLLABORATIONS

1. 1 nebulizer and 7 peak flow meters were donated by Novatis
2. 1-wheel chair received from Latter Day Saints
3. 19 Digital thermometers and 18 digital sphygmomanometers were received under the UNDP Waste Management project
4. Collaboration with Radio Central and Cape FM for weekly health talks

CHAPTER EIGHT

ACCIDENT AND EMERGENCY SUB-BMC

8.1 INTRODUCTION

Accident & Emergency Sub-BMC offers 24-hour emergency services to people of the Central Region and beyond. The department uses the colour coding system of triaging to triage all clients to determine the urgency and how a case ought to be managed. The Accident and Emergency as a Sub-BMC was inaugurated on 20th July 2016 together. The Directorate started full operationalization as a Sub-BMC on 1st August 2016.

8.2 A&E SUB-BMC's 2017 PERFORMANCE AGAINST CCTH STRATEGIC OBJECTIVE

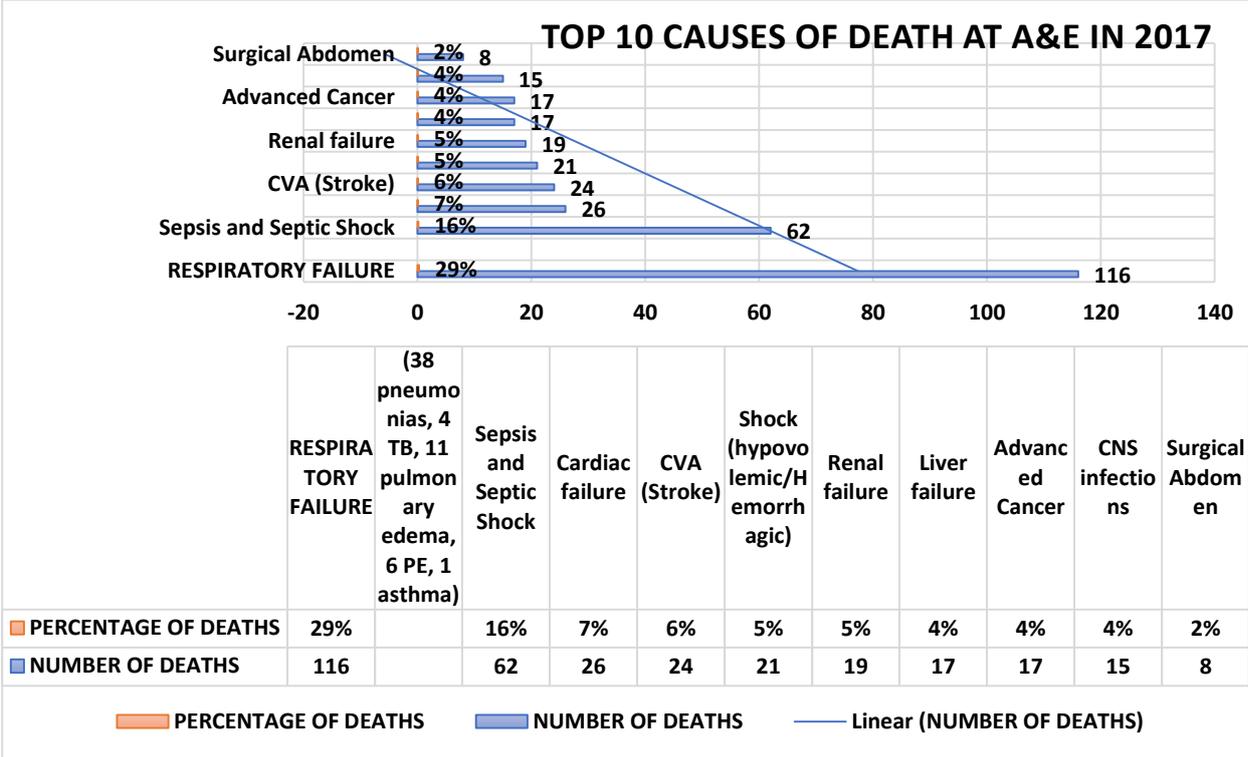
Table 8.2. 1: A&E sub-BMC's 2017 Performance Against CCTH Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES
ACCIDENT AND EMERGENCY SUB-BMC
1. Specialist Emergency services initiated.
2. Procedural changes in flow of care at the instituted.
3. Data collection now improved (259 procedures done were duly recorded)
4. Emergency Drug box assessed, re-organized and re-stocked with essential medicines.
5. 8 mortality meetings held and deaths audited.
6. 37 clinical meetings held
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES
1. 1 infection prevention seminar organized for staff.
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS
3.1 Improve on Governance and Management System
1. 8 mortality meetings held and deaths audited
2. 37 clinical meetings held
3. 4 Sub-BMC Mgt. meetings held
4. 1 staff durbar organized for Sub - BMC
3.2 Improve on Human Resource and Management System
1. 1 Staff durbar organized for sub BMC.
2. 5 Medical Officers recruited and posted to the unit
3.3 Improve on Finance Resource and Management System
-
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE
4.1 Improve on Research:
-
4.2 Improve on Teaching and Learning:
1. 2-day workshop on resuscitation and advanced cardiac life support organized for the staff
2. Training on modified South African Triage Scale (SATS) done and triaging system instituted
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
1. Secured 2 telephone lines (one mobile and GOTA phone) to increase 24 hours to the A&E by peripheral facilities
OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
1. A&E Theatre renovated
2. Proposals written for the expansion of A&E facilities.
3. 2 patient monitors received.
4. Procured 8 ceilings fans & 2 Air-conditioners for the unit
5. Doctor's/ Nurses Restroom and Staff washrooms renovated
6. General painting of the unit done.

8.3 TOP 10 CAUSES OF DEATH AT A&E IN 2017

Renal failure, liver failure and advanced cancer as analysed in earlier chapters of this report accounts for the 6th to 8th leading causes of death at the hospital’s emergency unit. Representing 5% and 4% respectively from the figure below. 29% of all the deaths that occurred at the emergency unit was due to respiratory failure followed by septic shock with 16%. Key stakeholders’ engagement need to be intensified to identify and implement strategies that would improve the survival chances of patients when accessing emergency services at the facility. Figure 8.3.1 shows the top 10 leading causes of death at the hospital emergency unit in 2017.

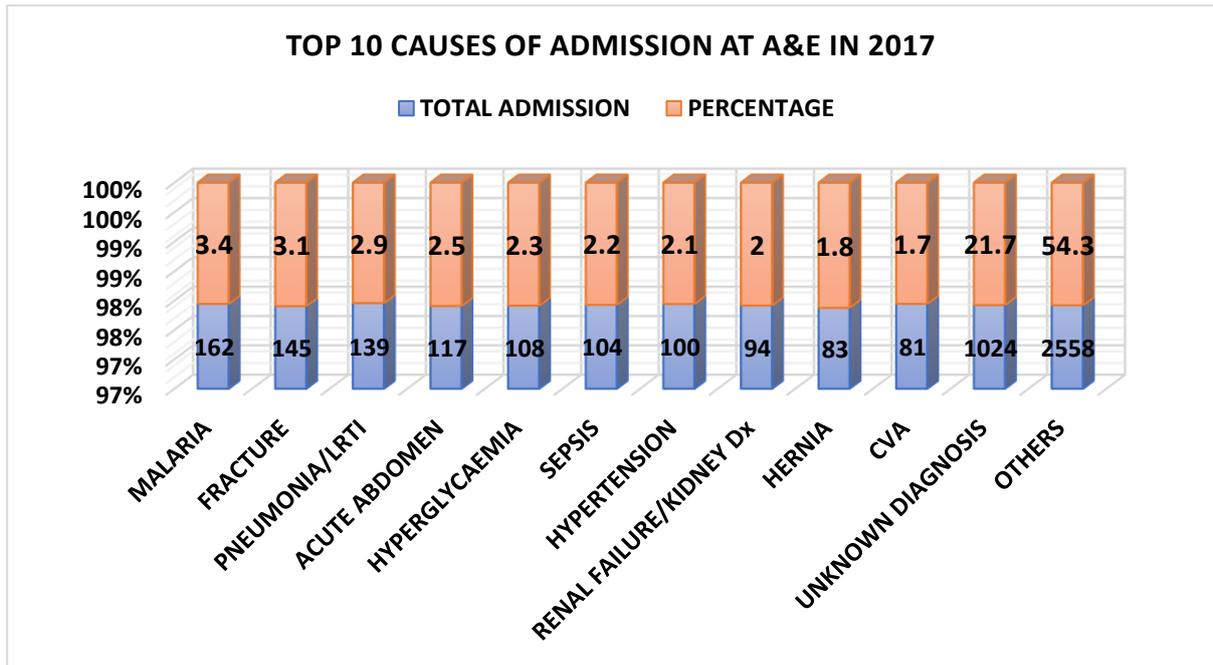
Figure 8.3. 1: Top 10 Causes of Death At A&E In 2017



8.4 TOP 10 CAUSES OF ADMISSION AT A&E IN 2017

In 2017, Malaria and Fractures from road traffic accidents accounted for the top 2 leading causes of admission to the emergency unit at CCTH. Representing 3.4% and 3.1% respectively. Acute abdomen is the 10th ranked cause of death at the emergency unit. However, it is the 3rd leading cause of emergency admissions at the unit as demonstrated in figure 8.4.1 below.

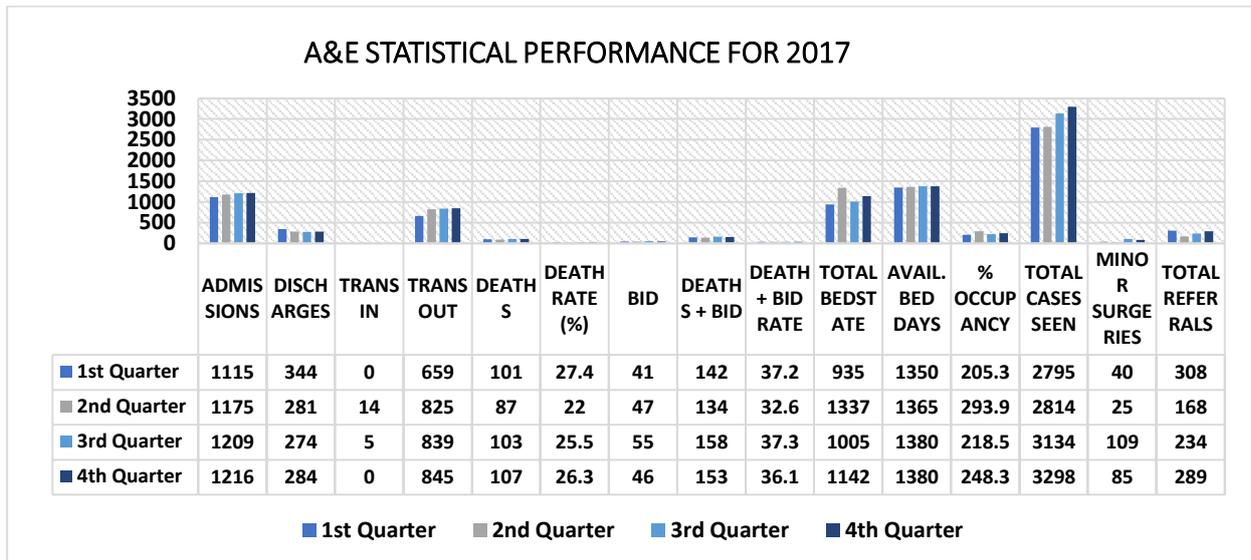
Figure 8.4. 1: Top 10 Causes of Admission At A&E In 2017



8.5 A&E STATISTICAL PERFORMANCE FOR 2017

The highest referral into the emergency unit was recorded within the 1st and 4th quarter of 2017. Also, the highest number of deaths and total attendance were recorded in the 4th quarter of 2017. Total number of cases brought in dead fluctuated over the months with the highest recorded within the 3rd quarter. Figure 8.5.1 below provides a detailed analysis of the statistical performance of the A&E as a sub-BMC within 2017.

Figure 8.5. 1: A&E Statistical Performance For 2017



CHAPTER NINE

DIAGNOSTIC SERVICES SUB-BMC

9.1 INTRODUCTION

The Diagnostic Service activities in the hospital are provided by the following departments;

1. Medical Laboratory
 - i. Haematology, Biochemistry, Microbiology services (Bacteriology, Parasitology & Serology)
 - ii. Pathology
2. Radiology.

9.2 PERFORMANCE OF DIAGNOSTICS SUB-BMC AGAINST CCTH STRATEGIC OBJECTIVES

Table 9.2. 1: Performance of Diagnostics Sub-BMC Against CCTH Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES
DIAGNOSTICS SUB-BMC
57. New investigations/ tests were introduced at the Laboratory dept.
58. The laboratory dept. participated in EQA for TB, Malaria and HIV.
59. The laboratory dept. ensured adequate supply of blood and blood products at the hospital throughout 2017.
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES
-
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS
3.1 Improve on Governance and Management System
65. Set up Mortuary re-organization committee s
3.2 Improve on Human Resource and Management System
23. Three residents in training at the Pathology department
24. Environmental Officer Posted to the Pathology Dept.
25. Laboratory Staff benefitted from training programmes (QMS, TB, Malaria, HIV, Cholera, LIS & Blood Safety).
3.3 Improve on Finance Resource and Management System
-
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE
4.1 Improve on Research:
16. The laboratory dept. assisted/supported KCCR, NOGUCHI and students in conducting research
4.2 Improve on Teaching and Learning:
-
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
12. Old cold room fixed and working (120 capacity)
13. Conference room furnished and the Air Conditioner installed
14. Twenty (20) laboratory stools were procured from PRA.
OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
43. Two new refrigerators and deep freezers provided to the blood bank
44. Ten couches provided for mobile donation blood donation sessions.

9.3 TREND DIAGNOSTIC INVESTIGATIONS (2013 to 2017)

Kidney function test was recorded as the leading (sharp increase) cause of diagnostic investigations conducted in 2017 whilst Liver function test was ranked second. There is worrying incidences of kidney and liver disease that are detected especially among patients with or without clinical signs in recent times. Lifestyle, abuse of medications and other secondary disease conditions largely contribute to such phenomena. The hospital aside health talks at the OPD, organises outreach and screening programme periodically to educate, promote early detection and treatment. Figure 3.9.1 to figure 3.9.9 provides comparative analytical trend of the various diagnostic investigation conducted at the hospital from 2013 to 2017 and the trends.

There was 49.59% decrease in the number of pathological autopsies performed as well as 2.47 reduction in Bacteriological investigations carried out at the laboratory in the 2017 compared to 2016. However, the general statistical performance of the diagnostic sub-BMC has seen great improvement especially in the number of clients screened for both kidney and liver functions. Also, the radiology unit recorded a 2.04% increase in the number of investigations carried out in 2017. Detailed analysis has been provided in figure 9.3.1 below

Figure 9.3. 1: Trend Diagnostic Investigations

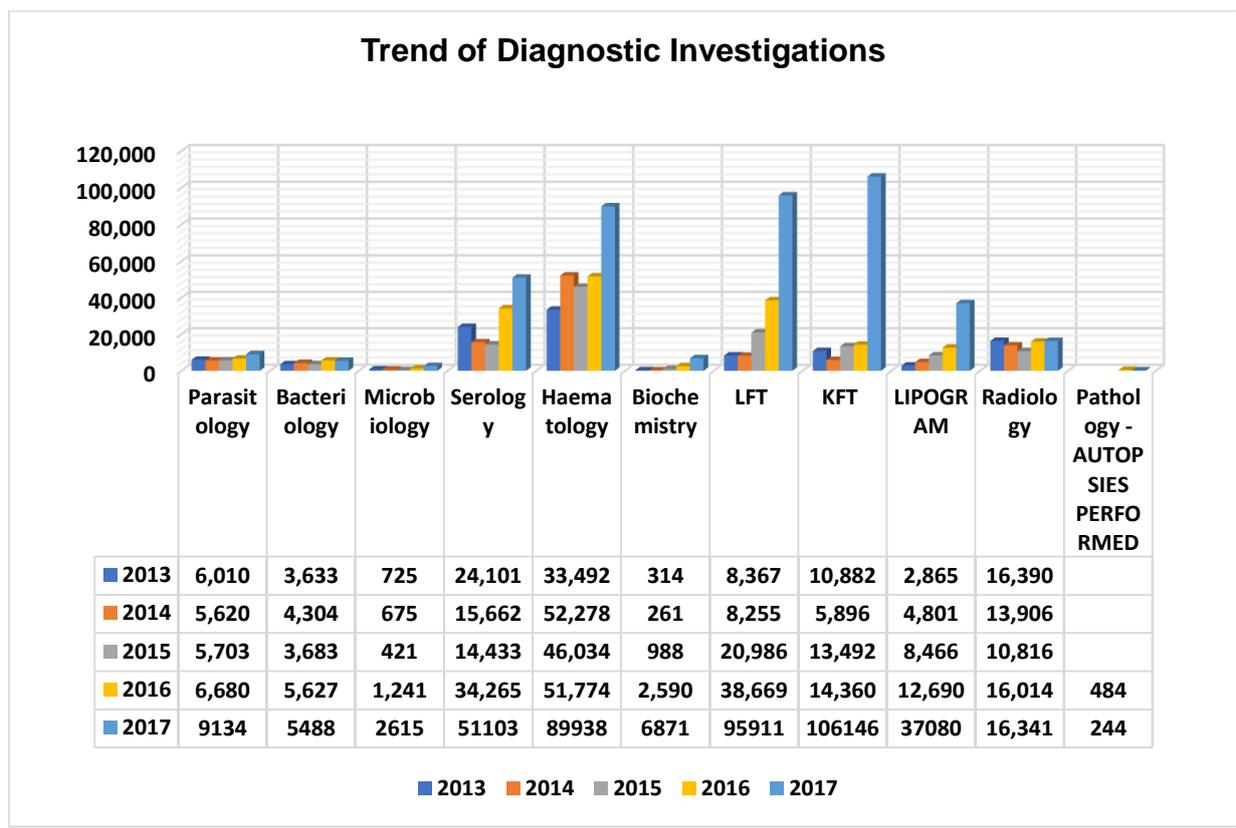


Figure 9.3. 2: Microbiology (Parasitology)

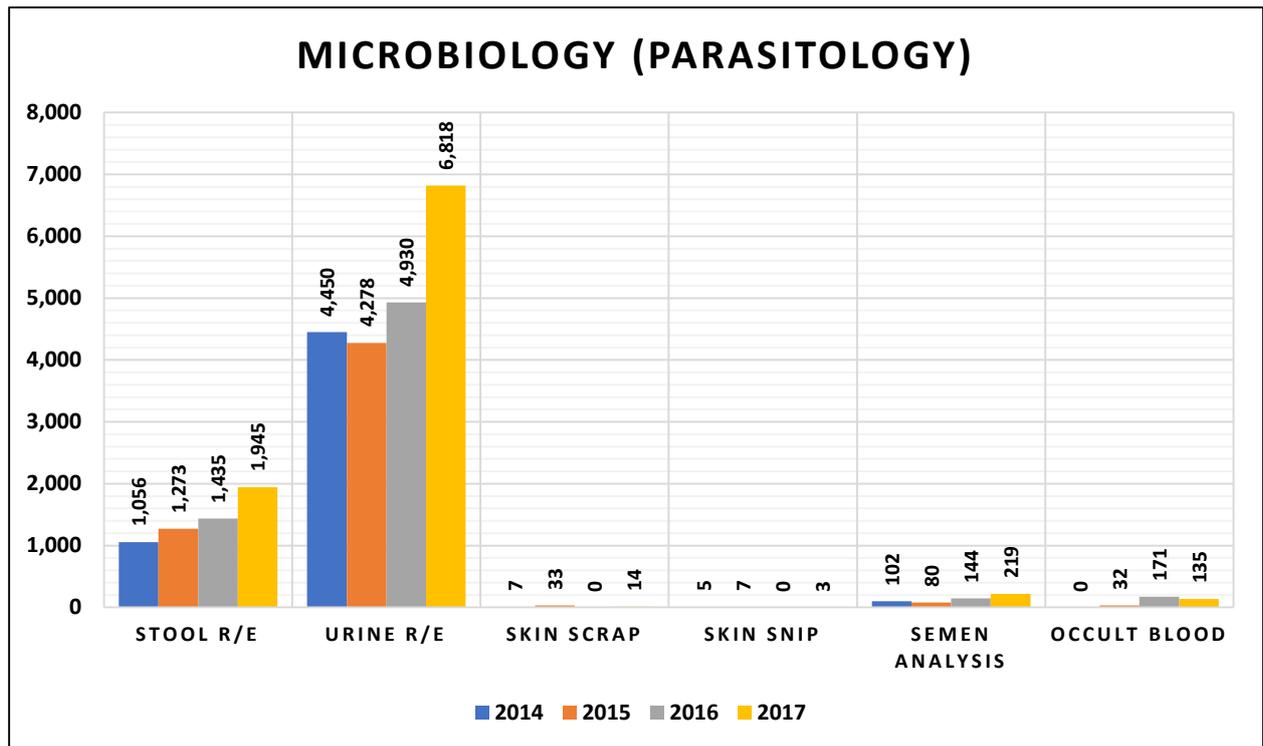


Figure 9.3. 3: Microbiology - BACTERIOLOGY

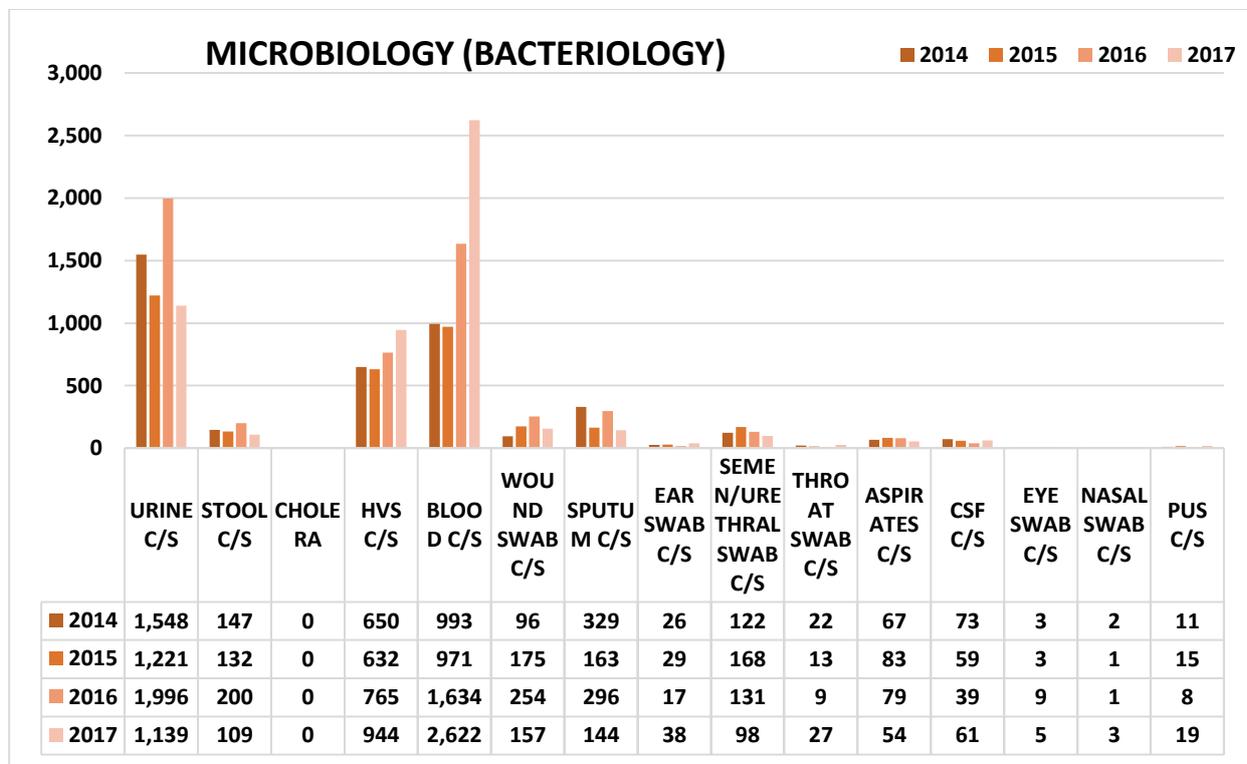


Figure 9.3. 4: Microbiology - MICROBIOLOGY

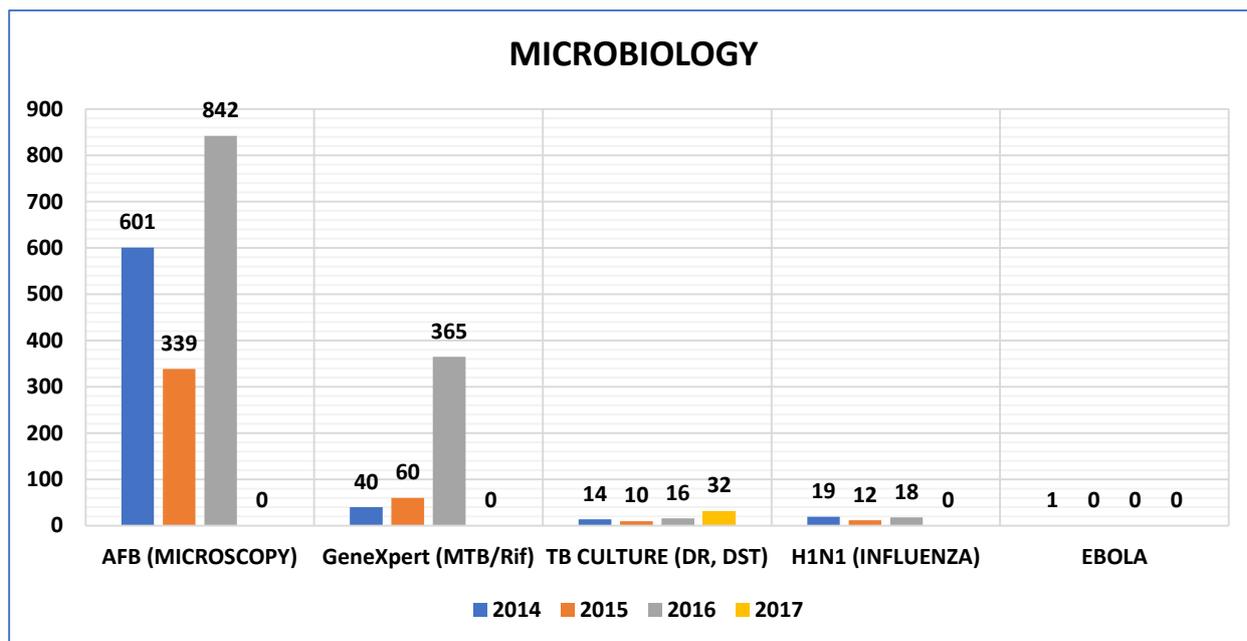


Figure 9.3. 5: Microbiology - SEROLOGY

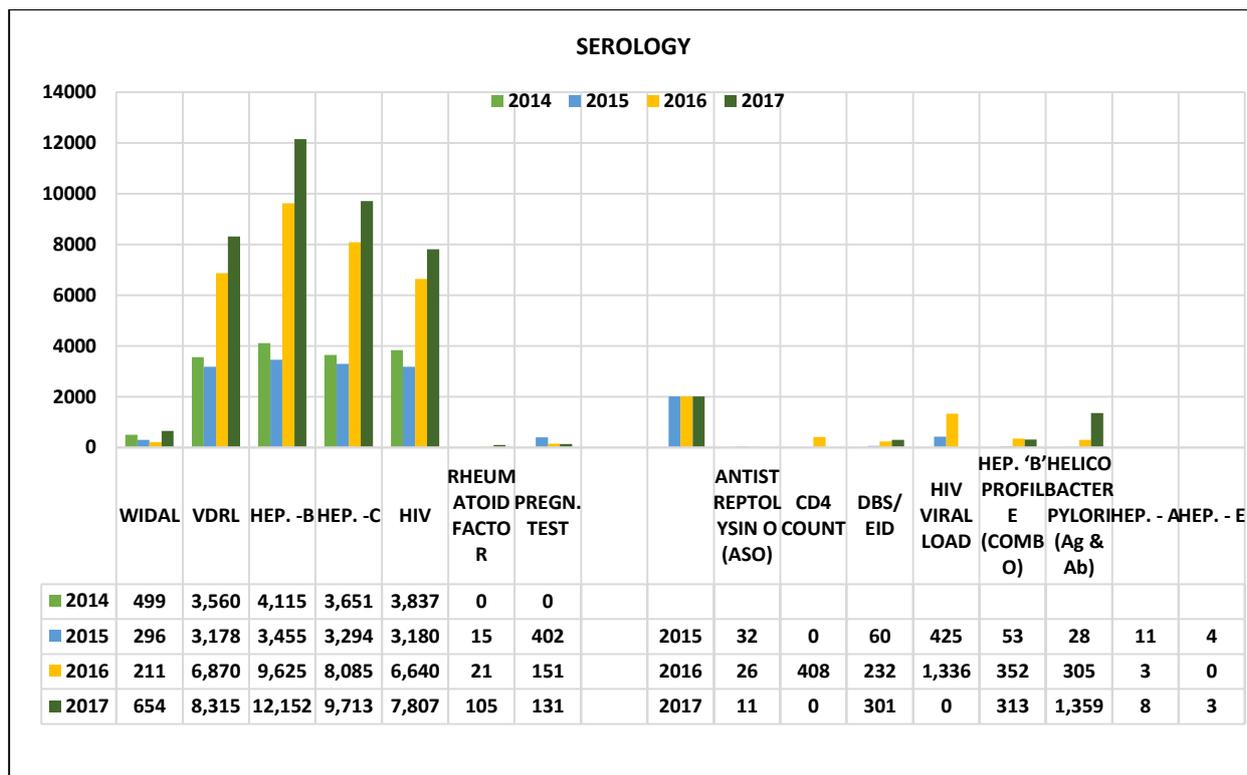


Figure 9.3. 6: Haematology

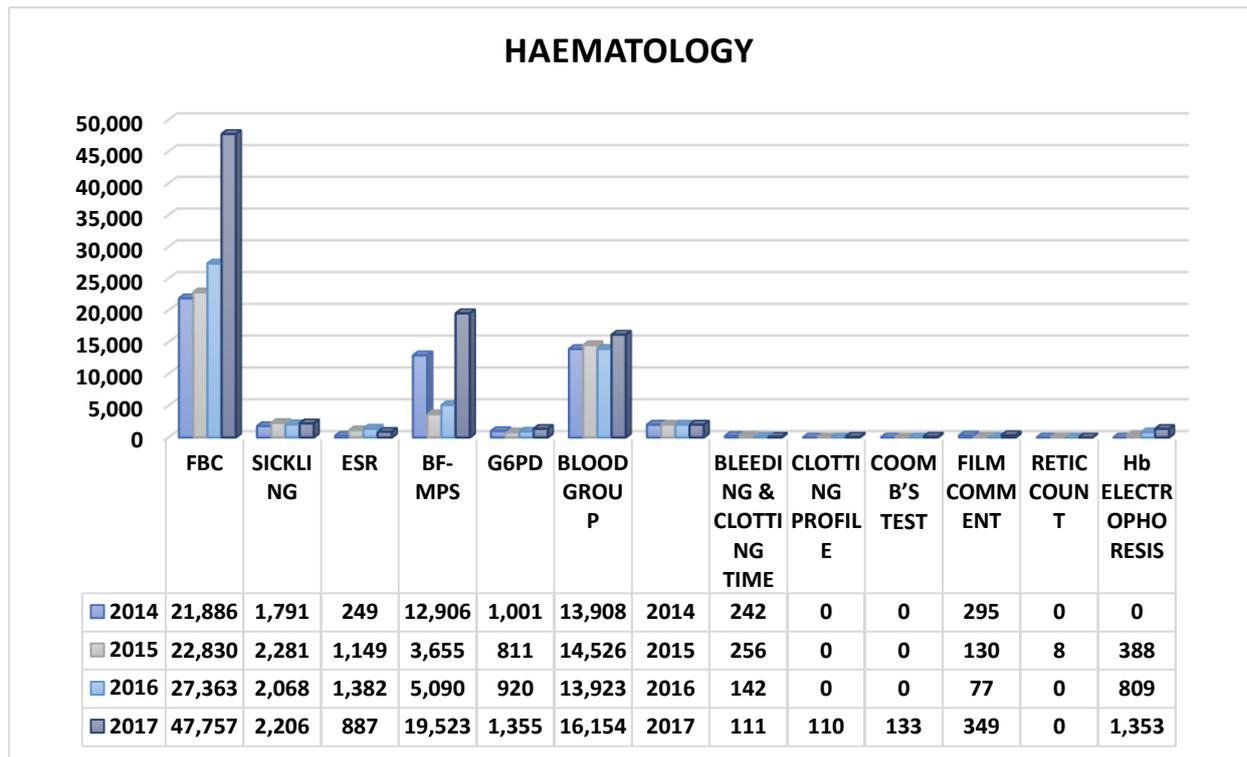


Figure 9.3. 7: Biochemistry

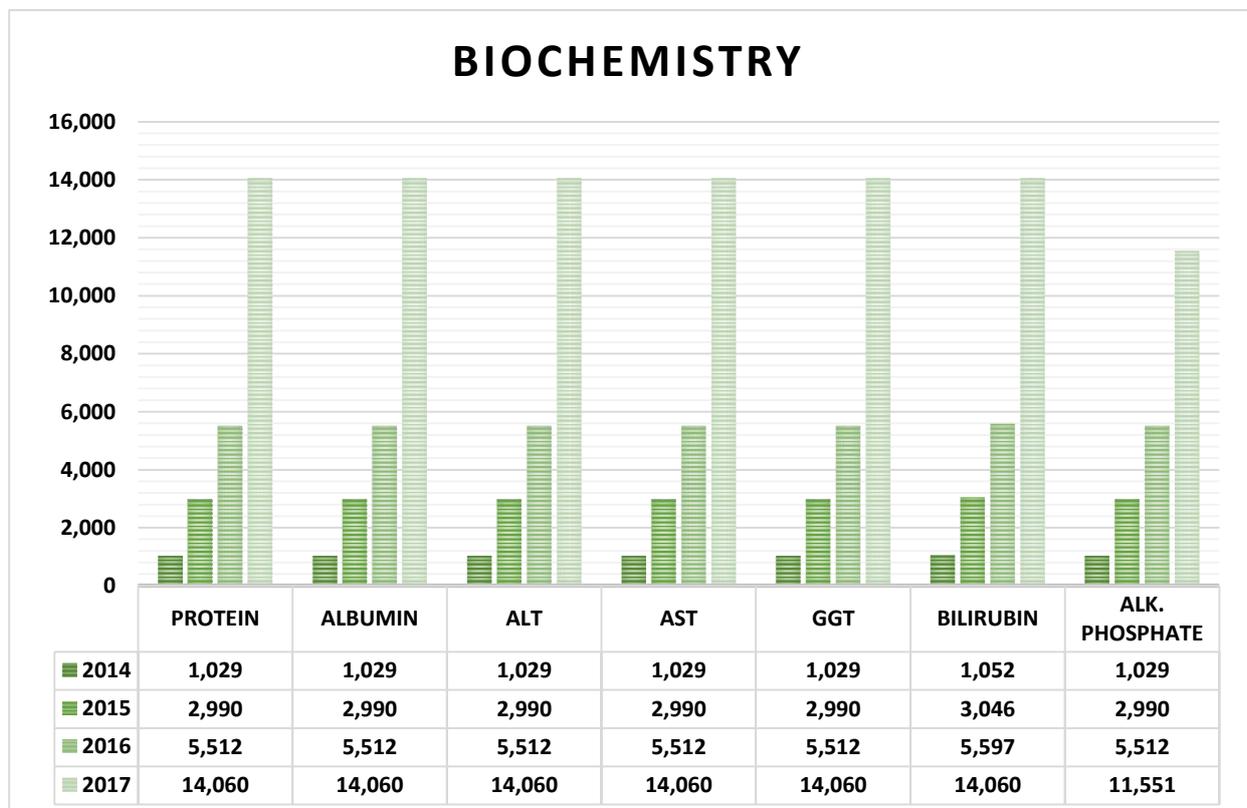


Figure 9.3. 8: Kidney Function Test (KFT)

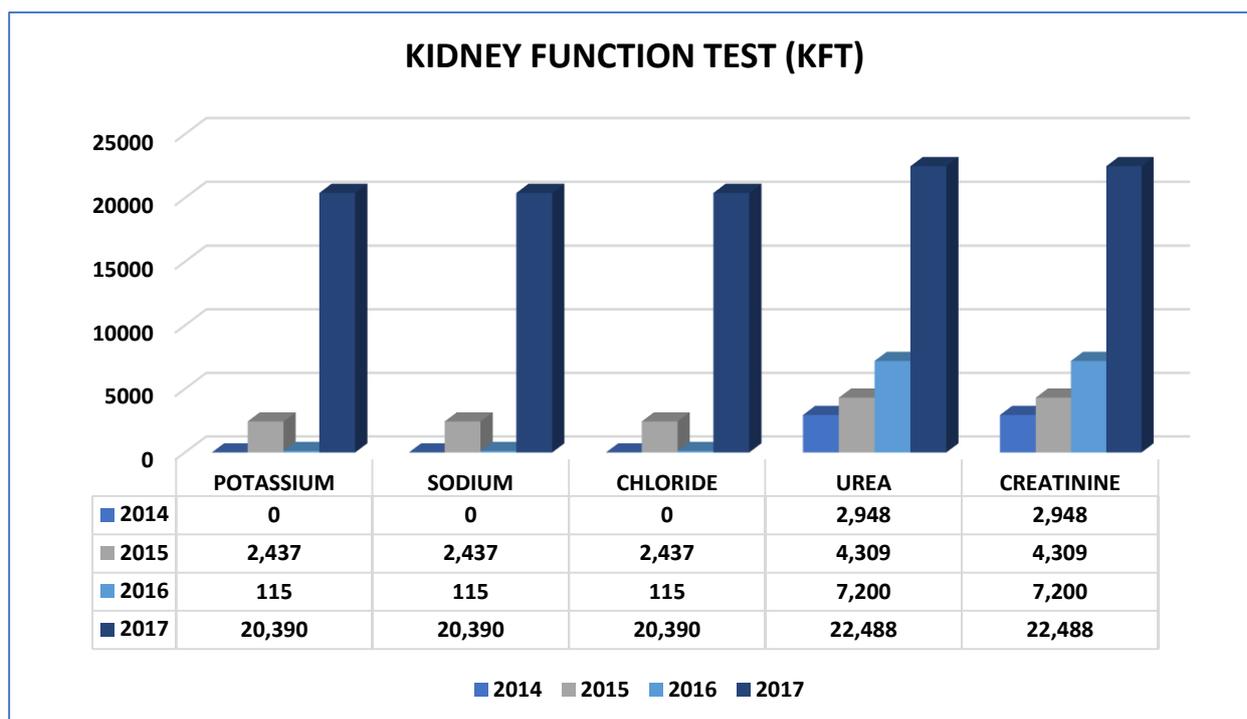
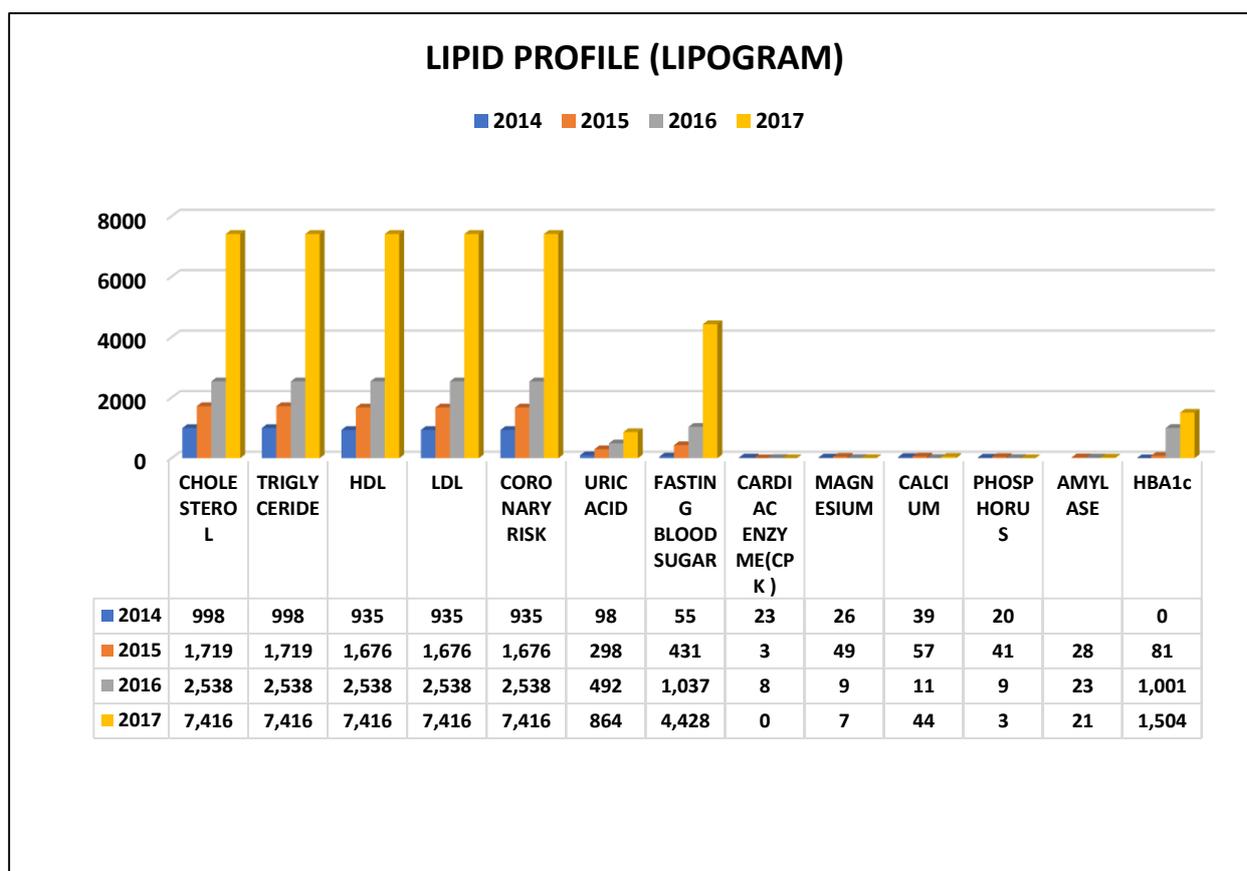


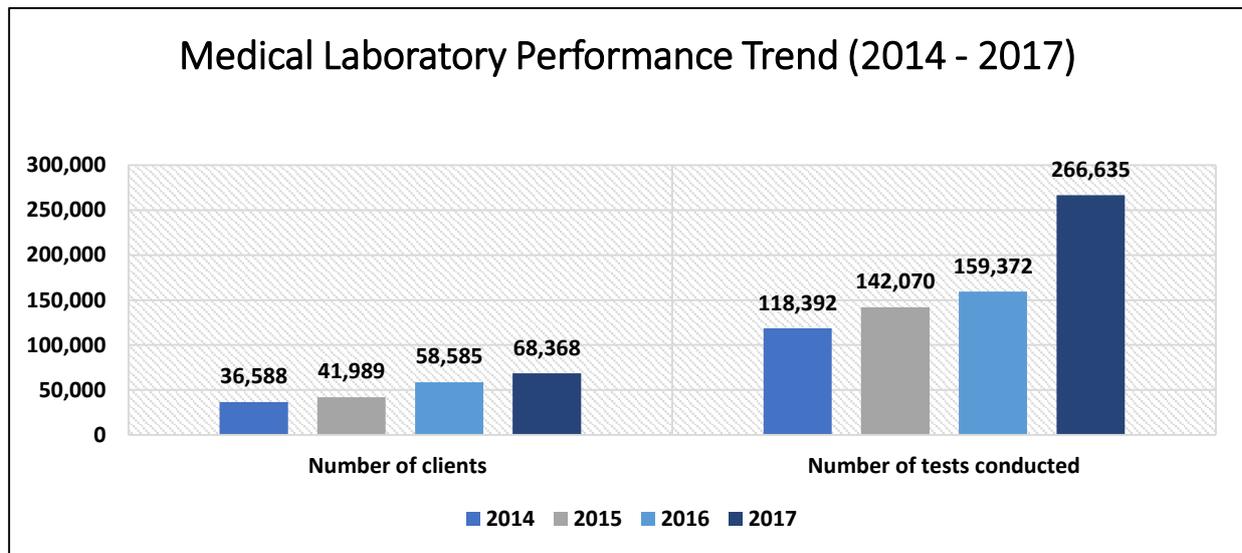
Figure 9.3. 9: Lipid Profile (LIPOGRAM)



The general performance by the hospital’s medical laboratory improved over the years. The number of clients who access the services as well as the number of investigations carried out continuously increased. In 2017, the number of clients’ increased by 11.6% whilst the number of laboratory investigations carried out also increased by 67.3%

compared to 2016 performance. Figure 9.3.10 below shows a four-year trend on performance at the medical laboratory from 2014 to 2017.

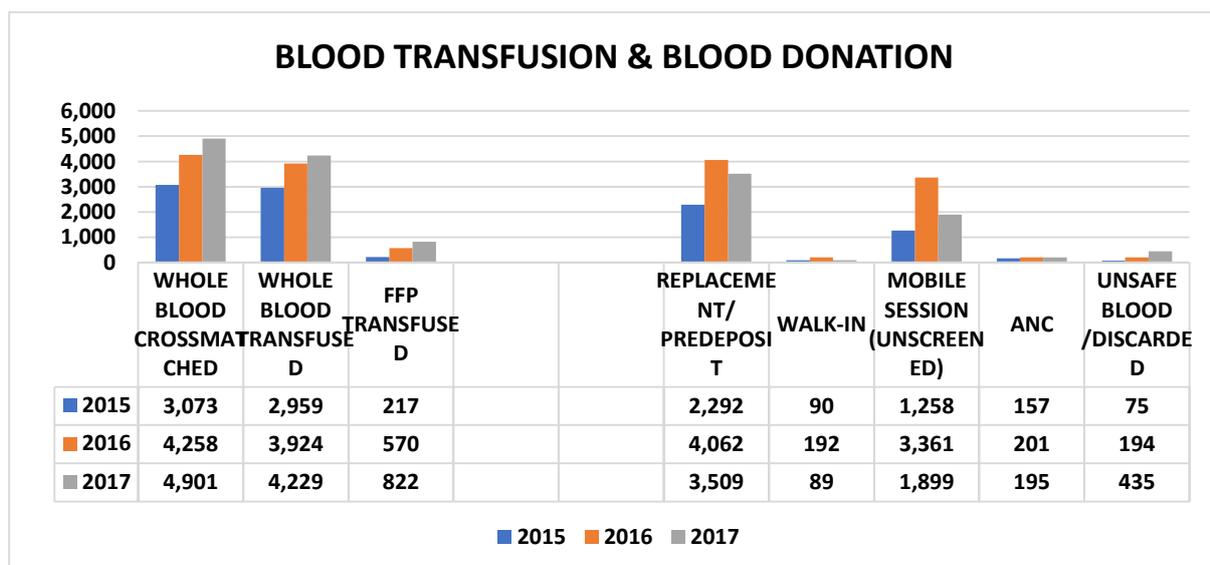
Figure 9.3. 10: Medical Laboratory Performance Trend (2014 - 2017)



9.4 BLOOD TRANSFUSION & BLOOD DONATION

Yearly, a lot of patients are transfused with blood and blood components to increase their chances of survival. As such the facility is always concern about the availability of needed blood. However, the number of people who walk in to donate blood mostly are not adequate, hence the continuous organisation of outreach to promote blood donation among the public. Sadly, in 2017 for instance out of the blood donated, 435 pints were unsafe and therefore discarded. Blood replacement trends also reduced in 2017 compared to 2016. The analysis in figure 9.4.1 shows the trend and state of blood transfused against the blood donated and discarded from 2015 to 2017.

Figure 9.4. 1: Trend of Blood Transfusion and Blood Donation (2015 – 2017)

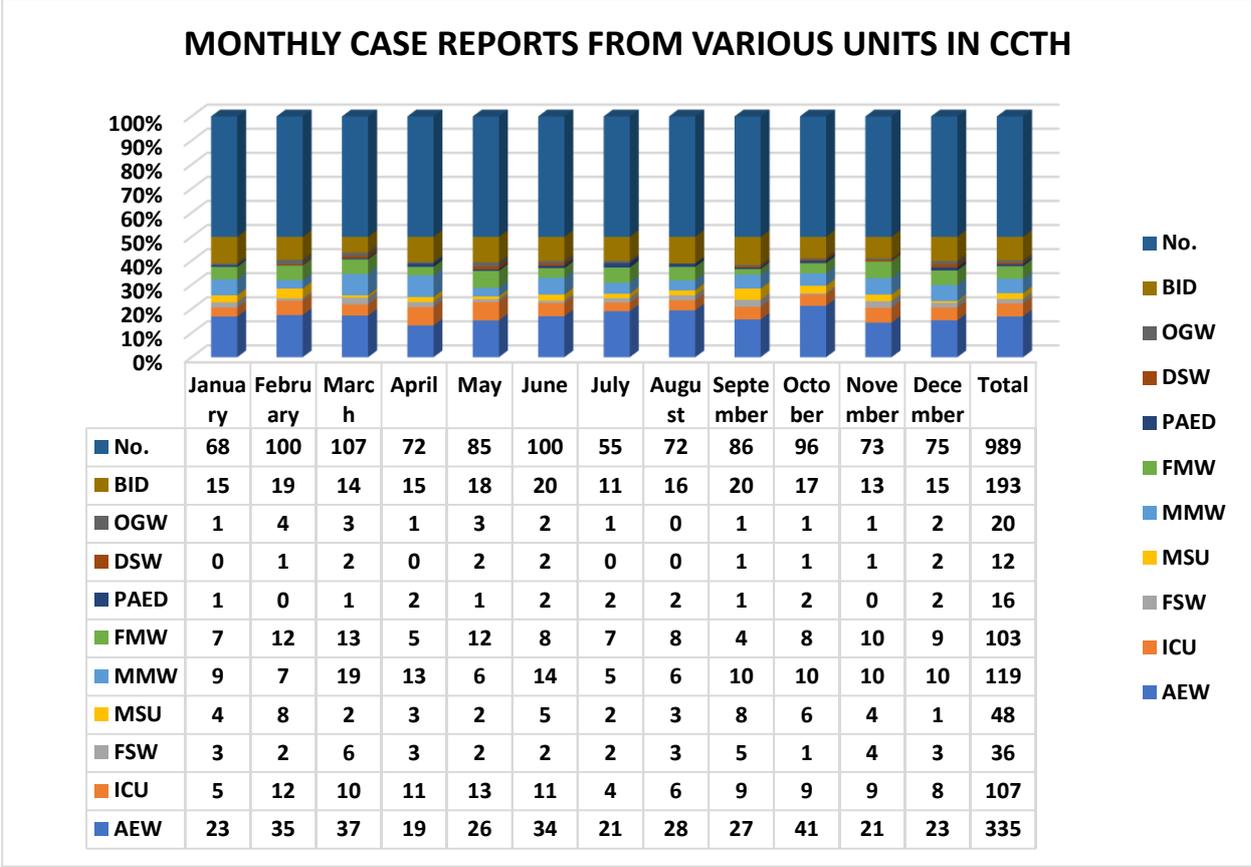


9.5 PATHOLOGY SERVICES

The pathology department performed a total of 244 autopsies with 153 being males and 91 being females. Out of the 244 autopsies, 156 were Coroner’s cases (Medicolegal

Cases) whilst 88 were hospital cases (permission). Figure 9.5.1 below provides detailed analysis and monthly trend of cases received from the various wards.

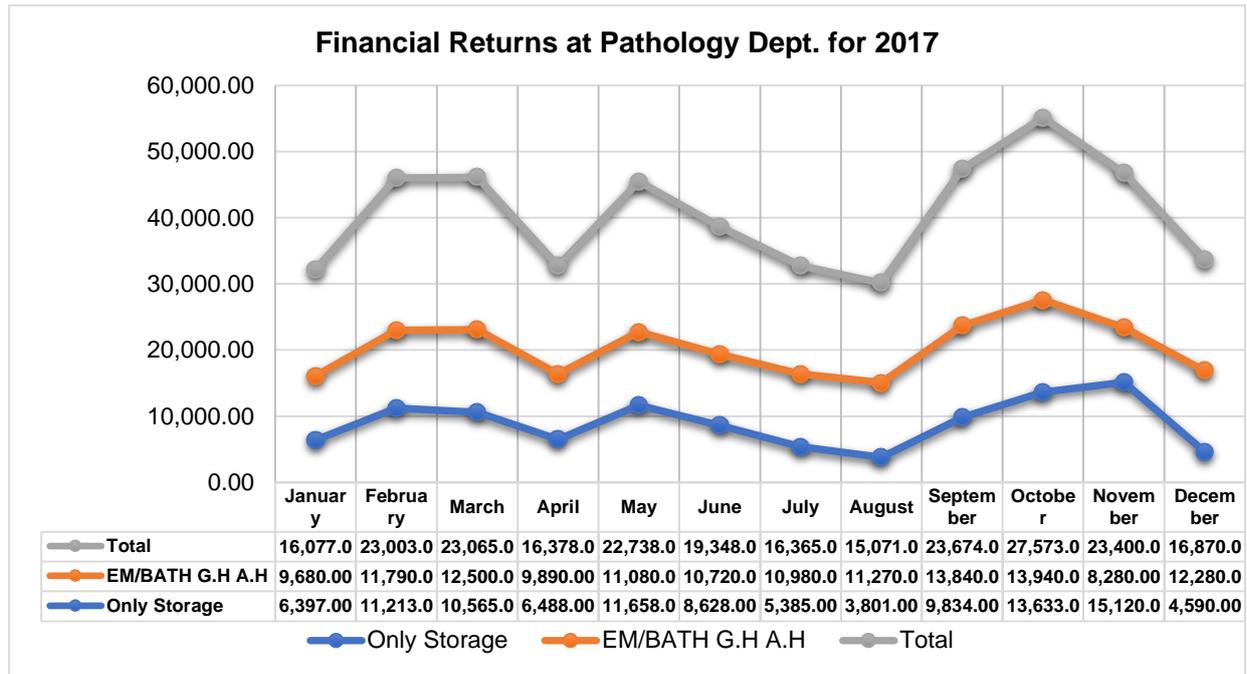
Figure 9.5. 1: 2017 Monthly Case Reports from Various Units In CCTH



9.6 FINANCIAL RETURNS AT PATHOLOGY DEPT. FOR 2017

The pathology department also contributes financially through its services to the facility’s annual revenue. Generally, revenue from the department fluctuated over the months in 2017. Blow is a graphical representation of the financial trends over the months in 2017.

Figure 9.6. 1: Financial Returns at Pathology Dept. for 2017



CHAPTER TEN

MATERNAL HEALTH SUB-BMC

10.1 INTRODUCTION

The Obstetrics & Gynaecology (OBGY) Sub-BMC of CCTH is a comprehensive clinical department that provides investigative, treatment and emergency services for a whole range of Obstetric and Gynaecological conditions backed by research. The Sub-BMC covers; O & G Ward, Delivery Suite, Delivery Suite Theatre and Recovery Ward, Antenatal & Postnatal Clinics (ANC & PNC) and Gynaecological Clinic. The Sub-BMC is manned by a management team made up of the Head of Department, a Lead Clinician, DDNS, Business Manager, Pharmacist, and an Accountant. Other consultants and head of various clinical teams support the Sub-BMC.

10.2 PERFORMANCE OF MATERNAL HEALTH SUB-BMC AGAINST CCTH STRATEGIC OBJECTIVES

Table 10.2. 1: Performance of Maternal Health Sub-BMC Against CCTH Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES
MATERNAL HEALTH SUB-BMC
1. Monthly maternal mortality conference – all maternal mortalities audited
2. Enforces the practice of Skin to skin mother and child body contact immediately after delivery
3. Organised weekly grand ward rounds
4. Partitioning of Delivery Suite and O & G ward for privacy
5. Effective collaboration of Doctors, Midwives and Nurses in direct patient care
6. Implementation of the use of WHO safe childbirth checklist and discharge plan
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES
1. Sterilization of baby's cot sheet, and green towels for new born babies
2. Enforcement of infection prevention control practices
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS
3.1 Improve on Governance and Management System
1. Ensured full functioning of Delivery Suite theatre
2. Held seven (7) Management meetings
3. Held 1 staff durbar
4. Held 2 joint Perinatal meetings
5. Audited all Maternal Mortalities
6. Held one (1) Maternal mortality conference
3.2 Improve on Human Resource and Management System
1. Enforcement of total nursing care policy
2. Staff were duly appraised.
3.3 Improve on Finance Resource and Management System
-
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE
4.1 Improve on Research:
-
4.2 Improve on Teaching and Learning:
1. Daily clinical teaching/tutorial sessions for the Sub-BMC
2. CCTH – Kybele collaborative training in maternal and safe childbirth and quality improvement
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
-
OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE

2017 OUTCOME AND OUTPUT PERFORMANCE

1. Liaising with management in the construction of ETAT Centre for triaging and managing maternal emergencies

10.3 OPD ATTENDANCE FOR MATERNAL HEALTH

There was general improvement in the obstetrics, Gynaecological and postnatal cases management at the OPD in 2017. The antenatal attendance went up by 18.3 % whilst the postnatal attendance recorded the 0.4% increase as presented in table 10.3.1 below.

Table 10.3. 1: OPD Attendance for Maternal Health

TYPE OF CLINIC	2015	2016	2017
ANC	8117	8567	10,141 (18.3%↑)
PNC	2430	2750	3314 (20.5% ↑)
Gynae	4761	4075	4092 (0.4%↑)
TOTAL	15308	15261	17547 (Target 16800) (≈ 15%↑)

10.4 MATERNAL IN-PATIENT STATISTICAL PERFORMANCE

Maternal health admissions due to referrals has reduced by 17.4% in 2017. However, the total admission increased by 5.0%. The average length of stay also reduced by 0.8 whilst bed occupancy also reduced by 8.1% as shown in the table below.

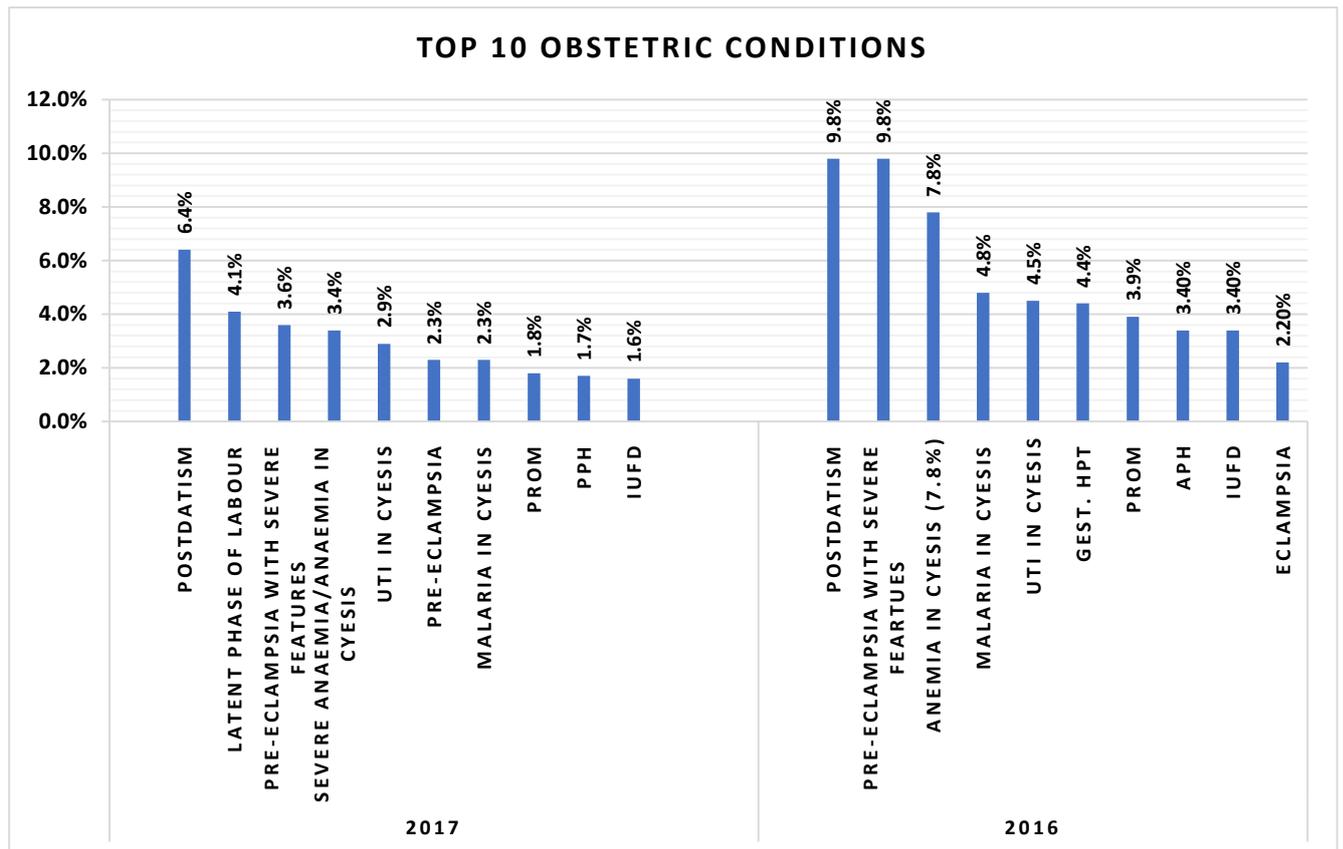
Table 10.4. 1: In-Patient Statistics

DETAILS	2016	2017
Admission	1713	1799
Discharges	2475	2653
Trans-In	1364	1484
Trans-Out	598	635
Referrals	1023	845
Average Daily Occupancy	33	29
% Bed Occupancy	73.3	65.2
Average Length of Stay	4.8 days	4.0 days

10.5 TOP 10 OBSTETRIC CONDITIONS

The comparative graph below demonstrates the 2016 and 2017 trend of the top 10 obstetrics case admissions. Most pregnant women experience postdatism and it largely accounts for the leading cause of obstetric admission at the facility. Pre-eclampsia in 2017 was the 3rd leading cause of admission as compared to 2016 where it was ranked 2nd. As shown in the figure below.

Figure 10.5. 1: Top 10 Obstetric Conditions

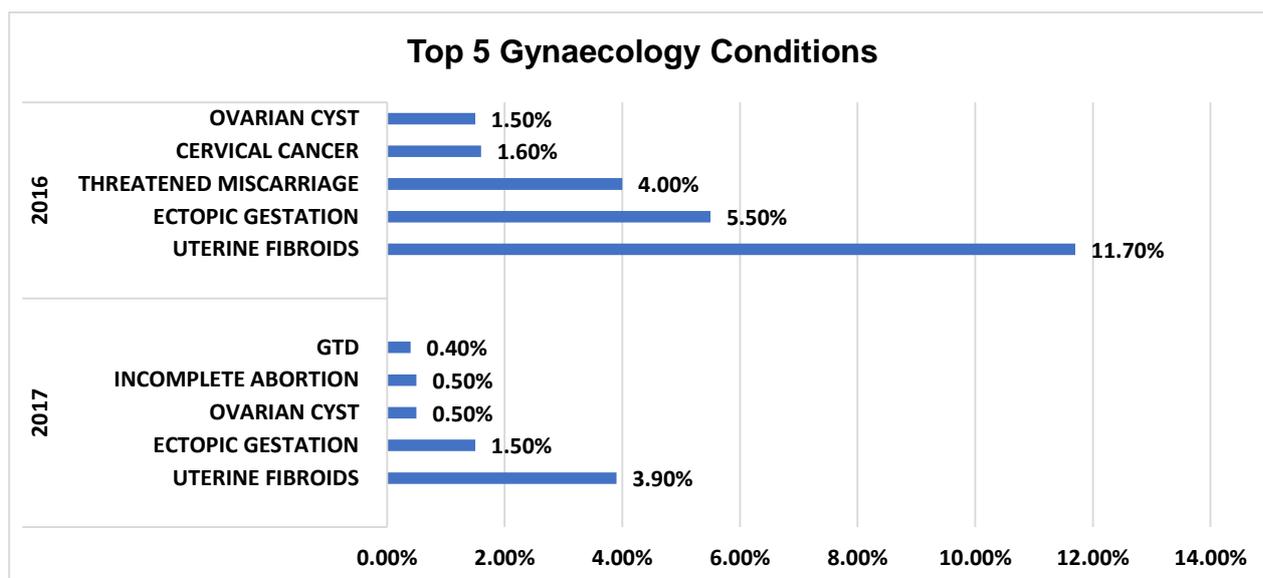


10.6 GYNAECOLOGICAL SERVICE

10.6.1 TOP 5 GYNAECOLOGY CONDITIONS

A lot of women go through challenges of uterine fibroid. Fibroid is the leading cause of Gynaecological admissions at the facility as shown in the figure below. Ectopic gestation which is of great concern to many women is also the second leading cause of Gynaecological admission at CCTH.

Figure 10.6. 1: Top 5 Gynaecology Conditions



10.7 TOP 5 GYNAECOLOGY SURGICAL PROCEDURES PERFORMED

There was 31.4% reduction in the Gynaecological related surgeries performed in 2017 although new/additional surgeries were introduced and performed like vault repair and laparoscopic surgery. Below in table 10.7.1 is a comparative analysis.

Table 10.7. 1: Gynae Surgical Procedures Performed (2016 & 2017)

Procedures	2016	2017
Myomectomy	119	67
Exploratory lap (±salpingectomy)	89	17
TAH	35	51
Ovarian Cystectomy	19	15
Vaginal Hysterectomy	14	11
Polypectomy	2	1
VVF repair	1	0
Vaginoplasty	0	2
DD&C + endometrial sampling	0	1
Vault repair	0	1
Marsupialization	0	2
Laparoscopy	0	2
Examination under anaesthesia (± cystoscopy/ biopsy)	0	2
TOTAL	255	175

10.8 MATERNAL HEALTH KEY PERFORMANCE INDICATORS

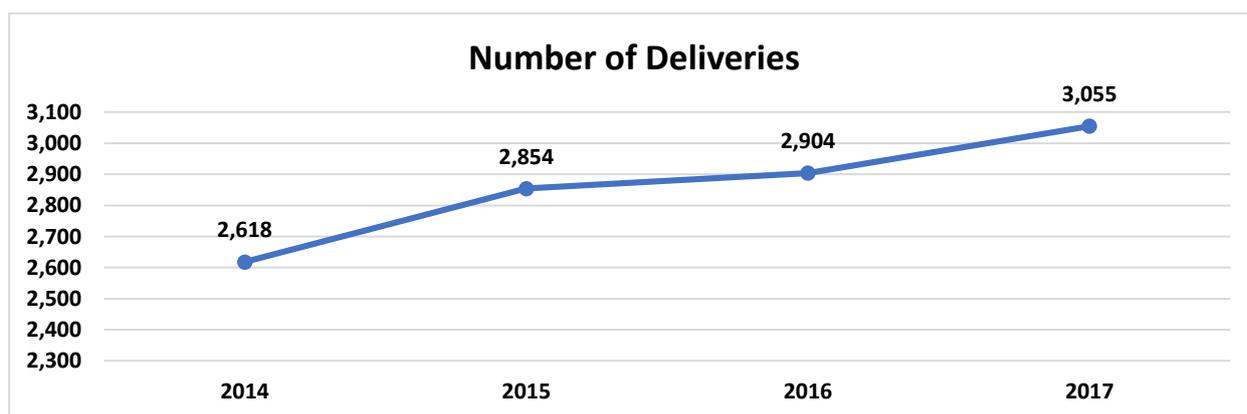
From the analysis in table 10.8.1 below, Caesarean Section at the sub-BMC have increased by 9.5% in 2017 whilst maternal death remained same as compared to 2014 (41 deaths). However, total still birth have reduced by 33.5% with 30.3% reduction in fresh still births and 36.5% reduction in Macerated still births in 2017. The survival chances of the babies have improved as such resulted in 7% increase in the Live births recorded in 2017.

Table 10.8. 1: Maternal Health Key Performance Indicators

INDICATOR	2014	2015	2016	2017
Deliveries	2,618	2,854	2,904	3,055
Number of babies	2,730	2,945	3,037	3,179
Live births	2,590	2,789	2,870	3,072
Still births	140 (FSB-65, MSB-75)	156 (FSB-96, MSB-60)	161 (FSB - 76, MSB - 85)	107 (FSB - 53, MSB - 54)
% Caesarian Section	35%	34%	38%	40%
Still birth rate per 1000 LB	54	56	56	34 (≈39.2% ↓)
Number of maternal death	20	31	41 (35% increase)	41 (2.4% Decrease)
Maternal mortality ratio per 100,000 LB	772	1,111	1,428	1,335
ANC REGISTRANTS	568	630	716	748
ANC ATTENDANCE	7,332	7,982	8,567	10,141

Since 2014, the number of supervised deliveries has progressively improved. In 2017, the total deliveries increased by 5.2% at the facility. The graph below shows a four-year trend of deliveries at CCTH.

Figure 10.8. 1: Trend in Number of Deliveries (2014 – 2017)



The total number of women who go through spontaneous vaginal delivery remains higher at CCTH. However, the number that undergo caesarean section is gradually increasing over the years. In 2017, 39.5% of the deliveries were through C/S as demonstrated in the figure below.

Figure 10.8. 2: Forms of Delivery (2014 – 2017)

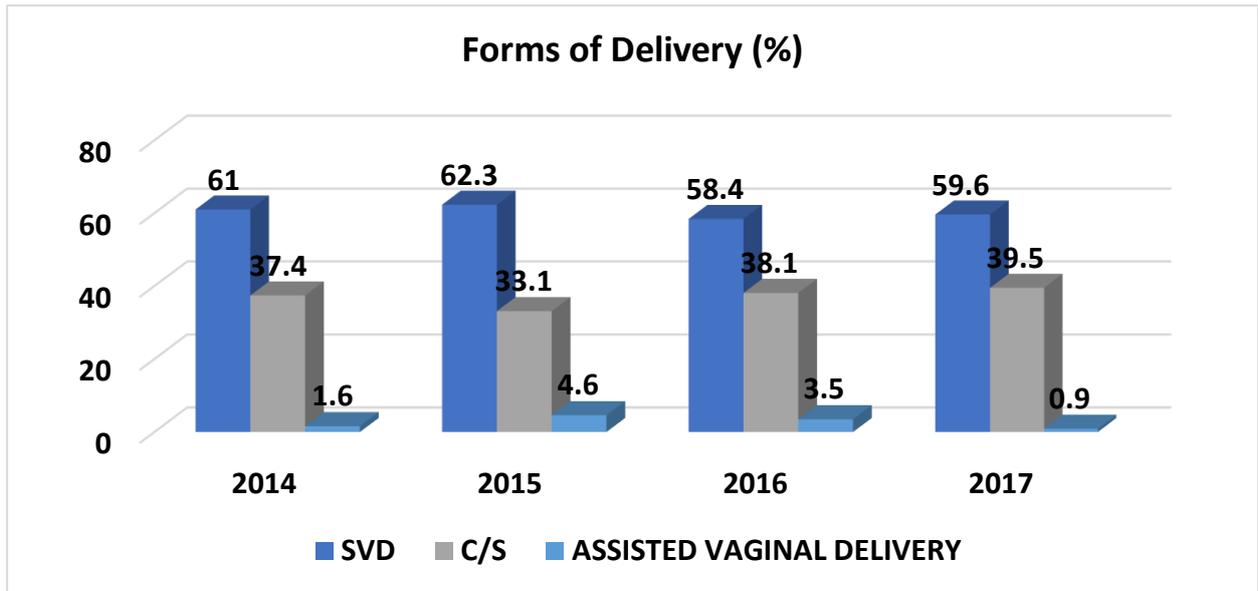
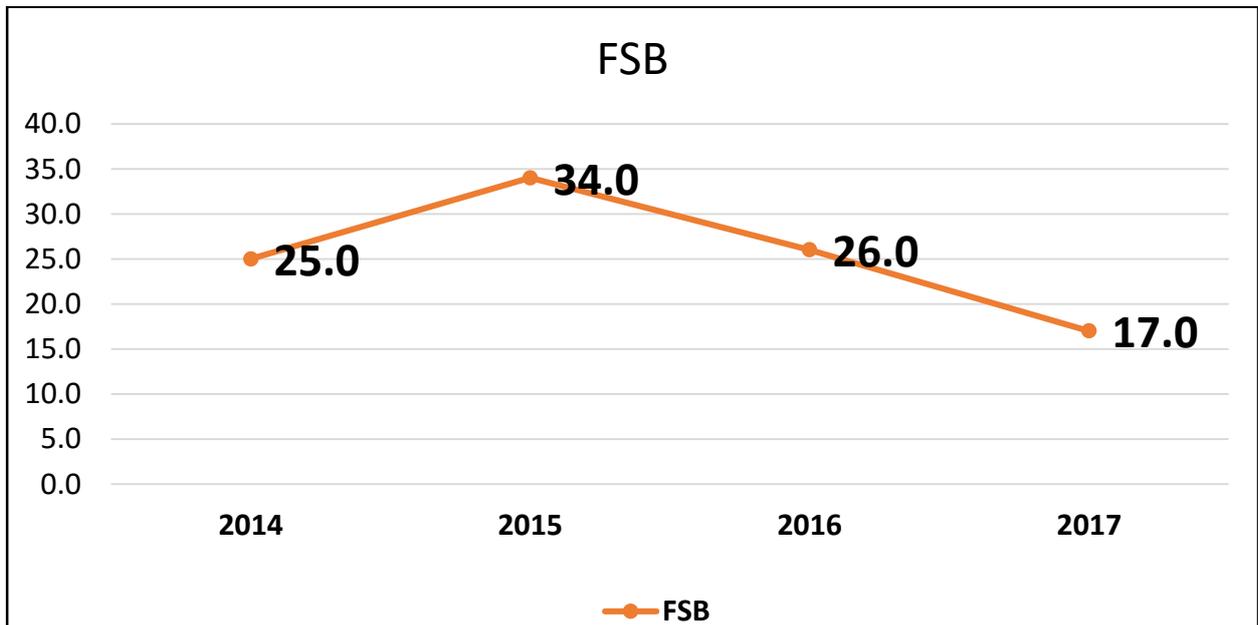


Figure 10.8.3 below provides a four-year trend analysis of the state of the fresh still births recorded at the facility. From the figure, the hospital has seen an improved and a steady reduction since 2015 to 2017 in the number of FSB. However, there is still room for more improvement as every life is important.

Figure 10.8. 3: % Trend in Fresh Still Birth (2014 – 2017)



10.9 MATERNAL MORTALITY

2017 maternal mortality remain 41 as the previous year. However, the ratio slightly reduced from 1428/100, 000LB in 2016 to 1335/100, 000LB in 2017 although the deaths are still of great concern to all key stakeholders. Figure 10.9.1 and 10.9.2 below illustrates a four-year maternal mortality trend at the facility.

Figure 10.9. 1: Trend in Maternal Mortality Ratio / 100,000 Live Births

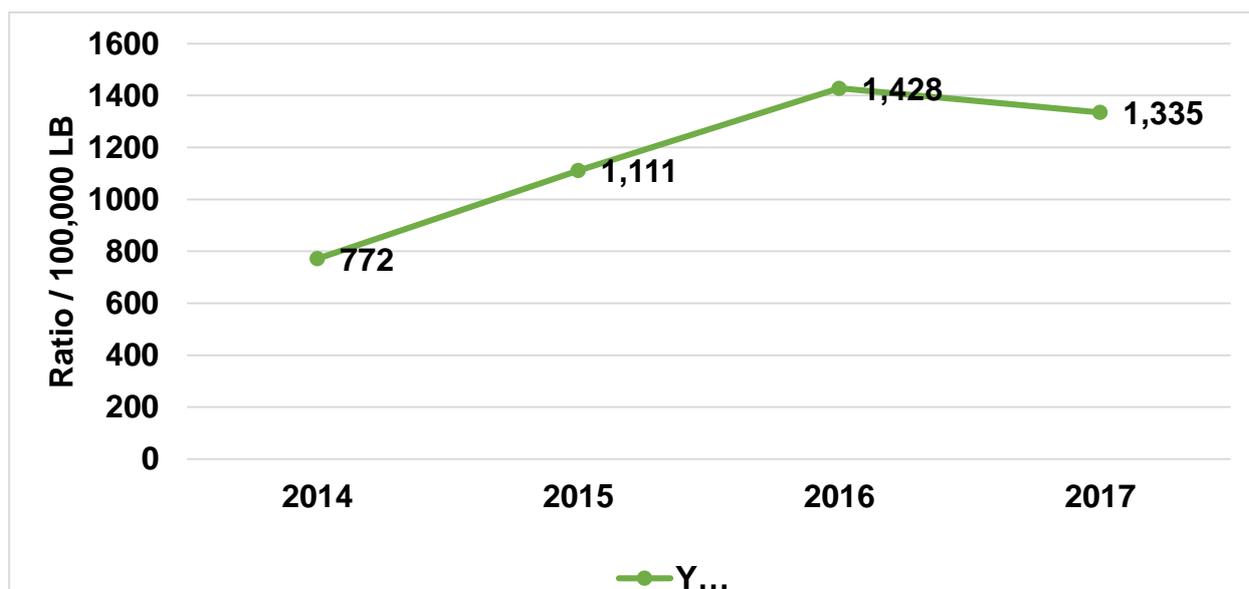
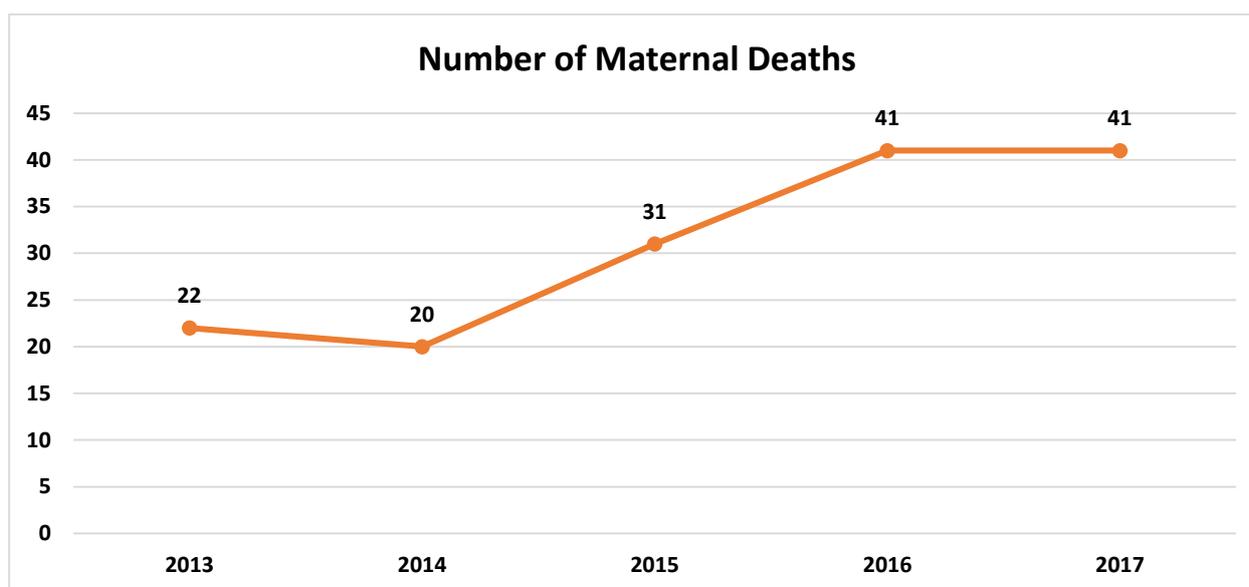


Figure 10.9. 2: Trend of Maternal Mortality (2014 to 2017)



10.9.1 TOP CAUSES OF MATERNAL MORTALITY

Haemorrhage continuously account for the leading cause of maternal death and represent 34.1% among the top 3 causes of maternal deaths at the facility. This evidently shows how important access to blood and blood product are important to the survival of the clients. Hypertension which generally accounts for the leading cause of OPD morbidity is also the 2nd leading cause of death among pregnant women. A holistic approach with evidenced based practice and continuous stakeholders' engagement and support would help improve the survival chances of many pregnant women going through child labour. The table below shows the trend of the top 3 causes of maternal deaths.

Table 10.9.1. 1: Top Three Causes of Maternal Mortality

CAUSE MATERNAL MORTALITY	2017		2016
			%
Hemorrhage	14	34.1%	38%
Hypertensive Disorders of Pregnancy	12	29.3%	19%
Sepsis	9	22.0%	26%
Others	6	14.6%	17%

10.10 REFERRAL FACILITIES OF THE MATERNAL DEATHS

CCTH recorded 6 Institutional Maternal mortality in 2017. Out of the 41 maternal deaths recorded, 35 of them were cases referred from the peripheral facilities as listed in the table below. The concern the facility has is the inadequate capacity at those peripheral facilities to manage the cases which result in the referrals to CCTH regardless of the geographical distance. Such incidence in most cases reduce the chances of survival of the patients due to delay in transport as well as other contributing delay factors.

Table 10.10. 1: Referral Facilities of The Maternal Deaths

REFERRAL FACILITY	NO	REFERRAL FACILITY	NO
CCMH	4	Adisadel Urban Health Center	1
Saltpond Hospital	4	Wassa Akropong Gov't Hospital	1
Mercy Women Centre	4	Winneba Municipal Hospital	1
St. Francis Xavier Hospital, Assin Fosu	4	Apam Government Hospital	1
Ewim Polyclinic	3	TOTAL (REFERRALS)	35
ST. Luke Catholic Hospital	2	CCTH	6
Abura Dunkwa Hospital	2	GRAND TOTAL	41
Kissi Health Centre	2		
Ajumako Gov't Hospital	2		
Trauma & Specialist Hospital Winneba	1		
Twifo Praso Gov't Hospital	1		
Our Lady of Grace Hospital, Asikuma	1		
Effia Nkwanta Hospital, Takoradi	1		

10.11 OBS & GYNAE SURGERIES PERFORMED

There was 201.4% increase in the number of major maternal health related surgeries performed in 2017 with C/S leading. In 2017, the department also carried out 1 sterilization procedure on a consented client. Figure 10.11.1 and table 10.11.1 below provides a detailed analysis of the surgeries performed under maternal health.

Figure 10.11. 1: Major Obs & Gynae Surgeries Performed

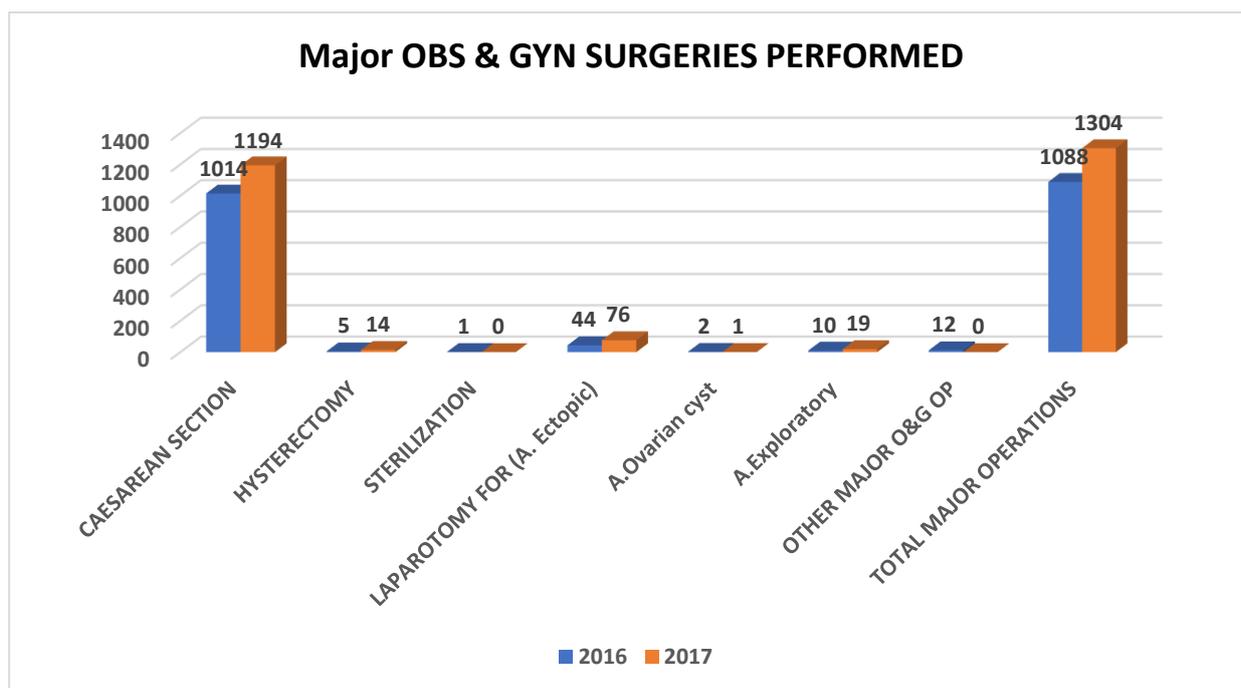


Table 10.11. 1: Minor OBS & GYN Surgeries Performed

TYPE OF SURGERY	2016	2017
Cerclage	13	11
Manual Removal of Placenta	0	2
Excision of Bartholin Cyst	2	2
Removal of Cervical Polyp	2	2
Secondary Suturing (Abd)	3	5
Suturing Cervical Tear	2	8
Cervical Biopsy	3	1
Suction Curettage	4	0
Evacuation of Uterus	0	4
Examination Under Anesthesia	0	3
**Other Minor O&G Operations	9	3
Total Minor Operations	38	41
TOTAL (MAJOR + MINOR SURGERIES)	1126	1345

CHAPTER ELEVEN

CHILD HEALTH SUB-BMC

11.1 BACKGROUND

Child health directorate is one of the clinical Directorates of Cape Coast Teaching Hospital. It was inaugurated on the 20th of July 2016. Children up to age of 16 years are admitted for various reasons- surgical, Orthopaedic, Eye, ENT and babies as well as medical cases. The directorate also has a Special Care Baby Unit which serves as a referral Centre for newborns in Central and Western Regions and lower parts of Ashanti. The Management team of the Sub-BMC comprises the Head, the DDNS, Business Manager, Accountant, and a Pharmacist.

11.2 CHILD HEALTH SUB-BMC'S 2017 PERFORMANCE AGAINST CCTH STRATEGIC OBJECTIVES

Table 11.2. 1: Child Health Sub-BMC's 2017 Performance Against CCTH Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES
CHILD HEALTH SUB-BMC
1. All Paediatric specialist clinics were strengthened
2. Appointment card system has been introduced
3. Mortality audits conducted for all child death at the directorate
4. SCBU ward mortality decreased from 26.8% to 19.8%
5. Paediatric ward mortality decreased from 5.7% to 4.1% of admissions
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES
1. Received 15 boxes of hand sanitizers from PZ Cussons to improve service delivery.
2. 103 Educational talks conducted at paediatric OPD
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS
3.1 Improve on Governance and Management System
1. 4 Management meetings were held.
2. 1 Departmental meeting organized
3. 2 Perinatal meetings held
4. Applied for accreditation for Ghana College District rotation of residents
3.2 Improve on Human Resource and Management System
1. Lobbied for 3 MOs who were posted to the Sub - BMC
2. All Staff were duly appraised.
3.3 Improve on Finance Resource and Management System
1. All non-insured clients were duly made to pay deposit
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE
4.1 Improve on Research:
1. Started partnership with Haematology department to determine prevalence of sickle cell disease in children in Cape Coast.
2. Partnered with the ENT department to pilot a new-born screening for hearing impairment
3. 24 operational research conducted. Some to help achieve Mother-Baby Friendly Hospital status.
4.2 Improve on Teaching and Learning:
1. Emergency triage and treatment training held
2. Daily teaching of House Officers, Physician Assistant Interns, Medical and Nursing Students
3. Hosted and provided daily training for foreign students on volunteers programme
4. Twice weekly morning presentations with practical input by Specialists
5. Training in pain management with SIL

2017 OUTCOME AND OUTPUT PERFORMANCE	
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS	
1.	Feedback was always provided on phone to various facilities and personnel on referred cases
2.	Monitoring conducted on Integrated Management of Neonatal and Childhood Illnesses
OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE	
1.	Mothers' Hostel sod-cutting and near completion by philanthropist (Mr. Anokye-Yeboah).
2.	1 incubator received from Kokrokoo Foundation
3.	Secured donation of two (2) oxygen concentrators with bubble CPAP machines from GAEDE Foundation.
4.	1 radiant warmer from MAF
5.	Secured donation of one (1) flat screen LCD TV from Francis Eshun Baidoo Foundation.
6.	Painting of the ward from a well-wisher, Mr. Gershon Sogbey.
7.	1 refrigerator & 1 flow meter from Mr. & Mrs. Marfo.
8.	Secured 2 flow meters from contributions given on World prematurity day and topped up by doctors.
9.	Did electrical works at the paediatric ward (SIL)
10.	Purchased 50 chairs for the unit (SIL)
11.	1 radiant warmer received from Dr. Ngyedu

11.3 CHILD HEALTH KEY PERFORMANCE INDICATORS

The hospital has recorded a reduction in Institutional under 5-years mortality rate by 16/1000LB in 2017. Also, there was 13% decrease in institutional neonatal death and a 14.8% reduction of the infant death at the facility in 2017 as demonstrated in table 11.3.1 below.

Table 11.3. 1: Child Health Key Performance Indicators

INDICATORS	2013	2014	2015	2016	2017
NUMBER OF BABIES	2,773	2,730	2,945	3,027	3,179
LIVE BIRTHS	2,581	2,590	2,789	2,870	3,072
STILL BIRTHS	192 FSB – 90 MSB – 102	140 FSB – 65 MSB – 75	156 FSB – 96 MSB – 60	161 FSB – 76 MSB – 85	107 FSB – 53 MSB – 54
STILL BIRTH RATE PER 1,000 LB	69	51	53	53	34
INFANTS ADMISSIONS- INSTITUTIONAL	1,157	1,286	1,172	1,352	1,442
NUMBER OF < 5 DEATHS- INSTITUTIONAL PER 1,000 LB	285 U5MR-110	254 U5MR-98	237 U5MR-85	250 U5MR-87	219 U5MR-71
INFANT DEATHS	272	221	213	236	201
NEONATAL DEATHS	143	189	173	207	180

11.4 SUMMARY OF CHILD HEALTH PERFORMANCE FOR 2017

Table 11.4.1 provides a detailed statistical performance of the child health sub-BMC in 2017. The bed compliment at the special baby care unit (SCBU) was 24 whilst that of Paediatric unit was 48. In the same light, bed occupancy was 59.1% at the Paediatric unit whilst SCBU recorded 53.2%.

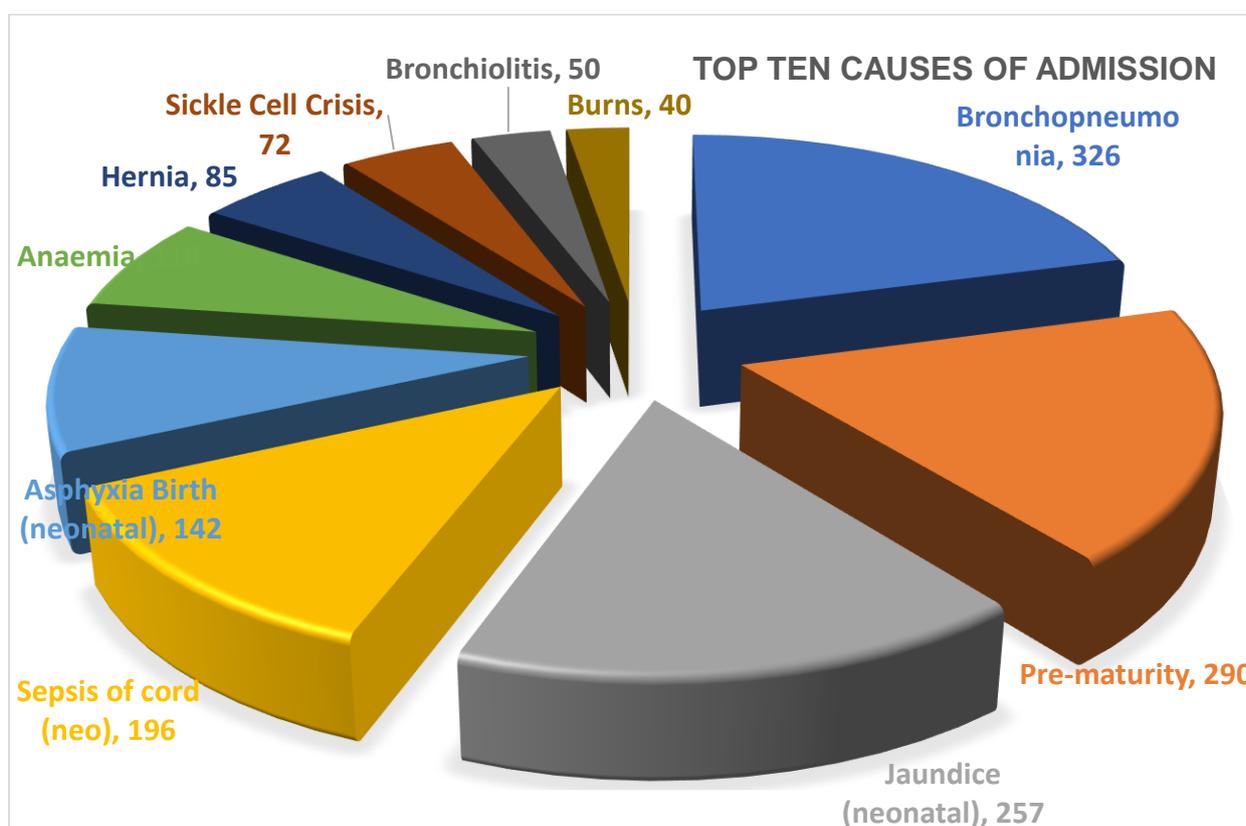
Table 11.4. 1: Summary of Child Health Performance For 2017

Ward	Total Admission	Discharge	Av. D Occ.	% Bed Occup.	Av. Length of stay	Death	Death Rate	Bed compliment
Paediatric	1,825	1,839	28	59.1	5.4	80	4.1	48
SCBU	780	557	13	53.2	6.5	155	19.8	24

11.5 TOP TEN CAUSES OF PAEDIATRIC ADMISSIONS

The analysis in figure 11.5.1 below illustrates the top child health admissions in 2017 where Bronchopneumonia and pre-maturity are leading. Neonatal jaundice and sepsis are also of great concern as they account for the 3rd and 4th leading causes of admission at the child health sub-BMC.

Figure 11.5. 1: Top Ten Causes of Paediatric Admissions



11.6 TOP CAUSES OF PAEDIATRIC MORTALITY

Neonatal sepsis, pre-maturity and neonatal Asphyxia accounts for the top 3 leading causes of child mortality over the years and is of high concern to all key stakeholder both at facility and national level. Although the hospital put-in its best to improve the survival chances of the neonate, the facility does not have a neonatal intensive care unit and the needed medical equipment to effectively manage such neonatal cases are inadequate. Various forms of support from all stakeholders and partners would go a long way to save the lives of the babies. Figure 11.6.1 and figure 11.6.2 below shows the top causes of child mortality in 2017 as well as the trend in under 5 mortalities from 2014 to 2017.

Figure 11.6. 1: Top Causes of Paediatric Mortality

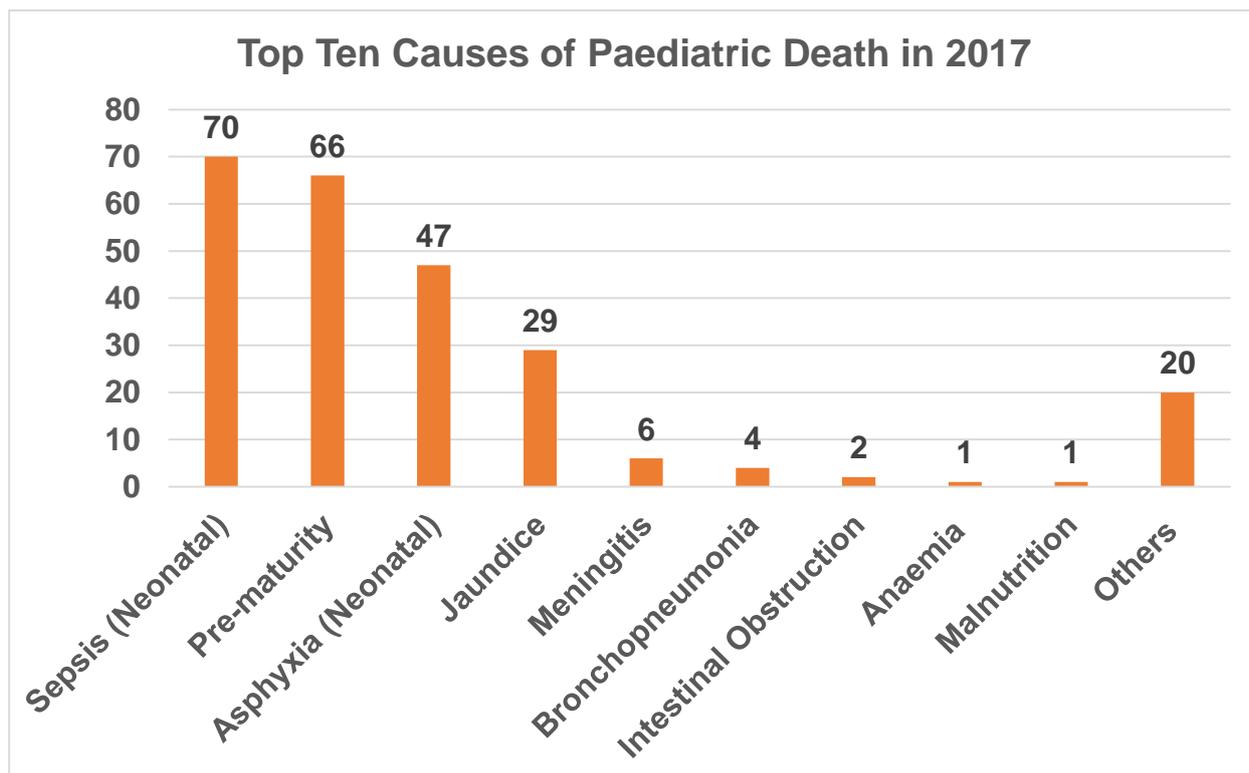
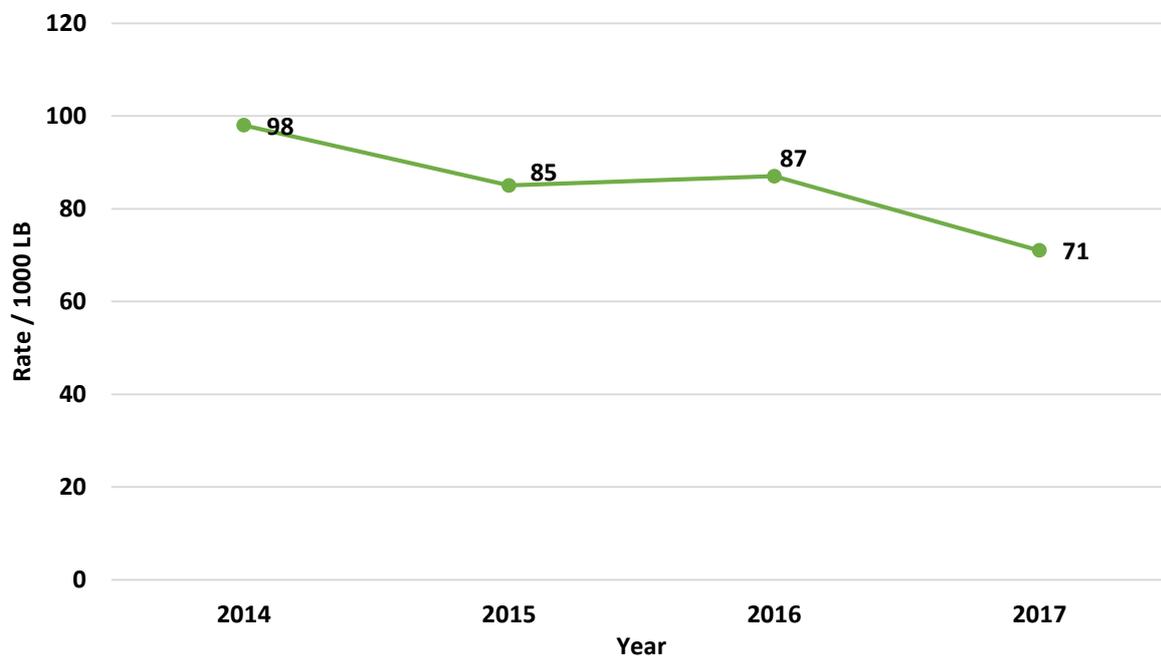


Figure 11.6. 2: Rate of Under 5 Years Mortality (/1000 LB) From 2014 - 2017



CHAPTER TWELVE

INTERNAL MEDICINE SUB-BMC

12.1 INTRODUCTION

Internal Medicine Sub BMC has a total bed complement of 97. The areas under the Sub-BMC includes; Male Medical ward, Female Medical Ward, Intensive Care Unit, Dialysis, Executive suite

12.2 INTERNAL MEDICINE SUB-BMC'S PERFORMANCE AGAINST CCTH STRATEGIC OBJECTIVES

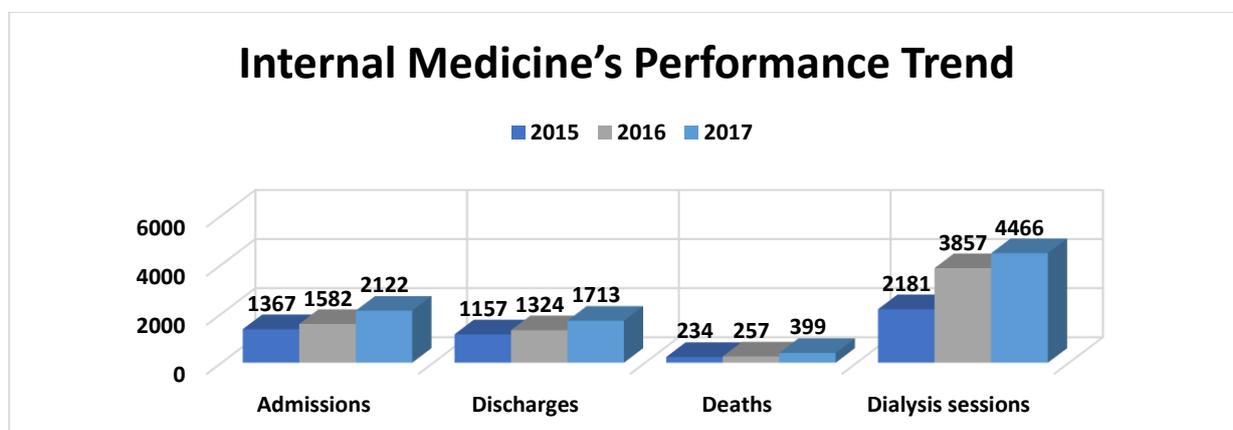
Table 12.2. 1: Internal Medicine Sub-BMC's 2017 Performance Against CCTH Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES
INTERNAL MEDICINE SUB-BMC
1. Continuous supervision ensured to improve the performance staff in rendering quality of care
2. High Dependency Unit was created at both medical wards.
3. Ensured the use of the nursing process to aid in developing individualized care plans to improve on quality of nursing care
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES
1. IPC on-site training organised for the staff
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS
3.1 Improve on Governance and Management System
1. Ensured good collaboration with other disciplines
2. 9 monthly ward seminars were held in the year
3. Regular ward/departmental/BMC management meetings held
3.2 Improve on Human Resource and Management System
-
3.3 Improve on Finance Resource and Management System
-
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE
4.1 Improve on Research:
-
4.2 Improve on Teaching and Learning:
1. 3 residents trained as certified ACLS providers
2. 40 nurses were trained on how to manage medical emergencies
3. 9 monthly ward seminars were held in the year
4. Training of 20 nurse in intensive care to run HDU
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
-
OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
1. The use of SIL to beautify the ward
2. The use of SIL to repair faulty electrical issues (sockets, lights, fans)
3. The use of SIL to repair faulty plumbing
4. High Dependency Unit area demarcated on the wards for seriously ill patients (for managing ward emergencies)

12.3 INTERNAL MEDICINE'S 3-YEAR PERFORMANCE TREND

Generally, the analysis in figure 12.3.1 shows an improved trend over the 3-year period. The increasing dialysis section shows an evidence of efficiency in the use of the dialysis machine to manage the patients with kidney failure at the dialysis unit. However, the sub-BMC has also recorded a 0.2% increase in its total deaths for 2017.

Figure 12.3. 1: Internal Medicine's 3-Year Performance Trend



12.4 INTERNAL MEDICINE'S STATISTICAL PERFORMANCE FOR 2017

In 2017, the intensive care unit recorded the highest death rate of 49.6% with 2 deaths recorded at the executive suite. Overall, 399 deaths were recorded at the internal medicine sub-BMC in 2017. The highest length of stay of 7.8 was recorded at the female medical ward whilst male medical ward recorded the least of 5.8. The table below provides a detailed analysis of performance for 2017.

Table 12.4. 1: Internal Medicine's Statistical Performance for 2017

WARD	ADM	DISCH	Av. D. Occupancy	% Bed Occupancy	Average Length of Stay	DEATH	DEATH RATE
Male Medical	932	773	15	34.3	5.8	148	15.6%
Female Medical	943	828	16	37.5	7.8	123	12.6%
Intensive Care Unit	142	11	3	41.7	6.7	126	49.6%
Executive Suite	105	101	2	57.0	6.1	2	1.9
TOTAL	2122	1713				399	

12.5 COMMON CAUSES OF ADMISSION AT INTERNAL MEDICINE

Non-communicable diseases continuously account for admission with Hypertension leading the top 10. In 2016 and 2017, Diabetes related admission has also increased greatly which is of great concern. The table below provides a trend analysis of the top causes of admission into the internal medicine sub-BMC over the past four-years.

Table 12.5. 1: Trend of The Top Causes of Admissions at Internal Medicine

Disease	2014	2015	2016	2017	2017
Hypertension	171	155	170	Hypertension	444
Diabetes Mellitus	111	107	145	Diabetes Mellitus	318
Pneumonia	89	89	111	Pneumonia	309
Cerebrovascular Accident	74	57	101	Cerebrovascular Accident	207
Congestive Cardiac Failure	112	29	85	Congestive Cardiac Failure	170
Kidney Disease (CKD)	-	-	121	Kidney Disease (CKD)	145
Anemia	112	76	151	Anemia	138
UTI	-	-	-	UTI	138
Malaria	48	53	102	Malaria	100
HIV	66	68	73	HIV	84
Liver Cirrhosis	5	3	2		35
Sickle Cell Disease	57	24	36		158

CHAPTER THIRTEEN

SURGICAL SUB-BMC

13.1 BACKGROUND

The surgical Sub-BMC has a bed complement of Seventy-Seven (77) and comprises male and female surgical wards, general operating theaters and the recovery unit. The Surgical Sub-BMC's mandate is to provide specialist surgical services, outreach and a supporting role to the rest of the surgical service within its catchment area and beyond, as well as support clinical teaching / training and Research. It is composed of General Surgery, Orthopaedics, Uro-surgery, Neurosurgery, Plastic & Reconstructive surgery, Ear Nose and Throat (ENT), Ophthalmology, Dental and Maxillofacial surgery, Theater and Anaesthesia.

13.2 SURGICAL SUB-BMC'S PERFORMANCE AGAINST CCTH STRATEGIC OBJECTIVES

Table 13.2. 1: Surgical Sub-BMC's 2017 Performance Against CCTH Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES
SURGICAL SUB-BMC
1. Scheduled a 24-hour duty roster to ensure doctor's presence at the surgical wards for prompt and quality care
2. Standard precautionary protocols developed and displayed at vantage places at the surgical department to serve as reminders
3. Some preoperative standard protocols have been designed and displayed to enhance work within the unit
4. New born hearing assessment was started at ENT on the 31st of October 2017
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES
1. IPC protocol displayed appropriately and duly enforced
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS
3.1 Improve on Governance and Management System
1. Renewal of accreditation of surgery department by Ghana College of Physician and Surgeons
2. Collaborations:
3. University of San Diego California – Team management in trauma
4. Stone Brook University – treating people with colors
5. University of Plymouth – through operation hernia
6. University of UTAH – fellowship for ENT consultant and ENT workshop
7. Czech Republic Embassy in Ghana in collaboration with Less Privileged Foundation to donate hearing assessment equipment (audiometer and otoacoustic emissions machine) to the ENT unit
3.2 Improve on Human Resource and Management System
26. Increase in staff strength especially Dental Surgeons Assistants.
3.3 Improve on Finance Resource and Management System
-
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE
4.1 Improve on Research:
-
4.2 Improve on Teaching and Learning:
1. Weekly refresher presentation on operating room techniques as well as other nursing and medical related topics was organized for all theatres and recovery Staff
2. Two Ophthalmic Nurses were able to do their sixteen weeks internship at the unit
3. Two Doctors of Optometry also did their nine months internship at the unit
4. On-the-job training was given to 43 new nurses posted to the unit

2017 OUTCOME AND OUTPUT PERFORMANCE	
5.	Critical care and perioperative nurses from Korle-Bu did their 12 weeks internship as part of their training
6.	Organised two CPD hands-on training on hernia mesh repair and management of hemorrhoids
7.	Held a two-day conference on trauma with the university of San Diego
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS	
1.	Eye Screening Outreaches conducted at Communities, Churches & Schools
OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE	
1.	The wards and theater were painted
2.	Balconies netted forward discussions after ward rounds
3.	Surgical consulting rooms floors tilled at the OPD
4.	New air conditions fixed at the doctors resting room, consulting rooms and theater 2
5.	New air-conditioner bought by ENT Unit with support from Kofi Essuman Enterprise in Cape Coast for ENT Consulting Room
6.	Curtains, painting and tiling floors of ENT Consulting Rooms done by unit
7.	Tables procured by the Eye Unit with painting of the consulting rooms

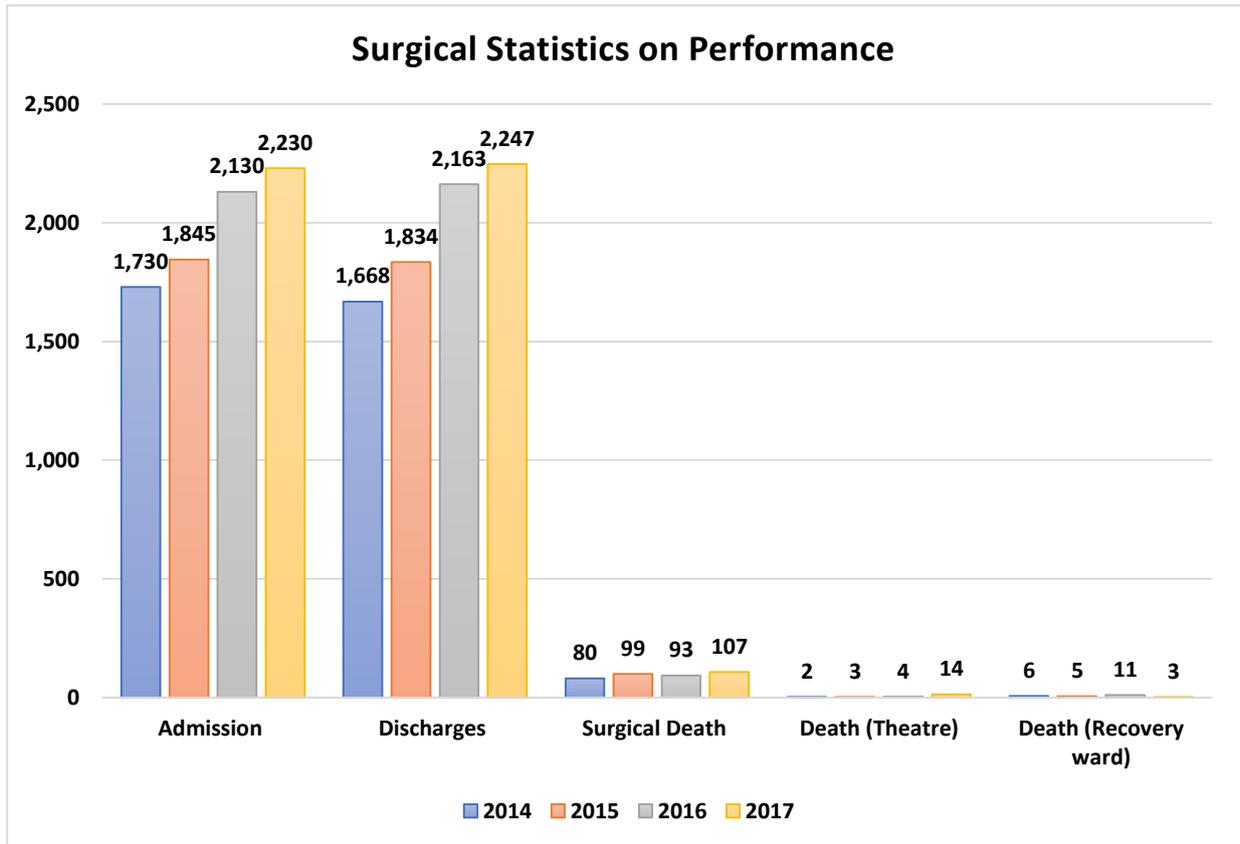
13.3 SURGICAL SUB-BMC STATISTICS ON PERFORMANCE

Surgical sub-BMC recorded 107 deaths, representing 15.1% increase over 2016. The admission trend improved over the four-year period. However, the death toll at the theatre continued to increase from 2014 to 2017. Table 13.3.1 and figure 13.3.1 below demonstrates a four-year trend of statistical performance of the sub-BMC.

Table 13.3. 1: Surgical Statistics on Performance

Indictor	2014	2015	2016	2017
Admission	1,730	1,845	2,130	2,230
Discharges	1,668	1,834	2,163	2,247
Surgical Death (MSW + FSW+ Surgical Suite + Recovery Ward+ ICU surgical cases+ Paedics surgical cases)	80	99	93	107 (FSW = 31, MSW = 46, ICU = 12, Paedics = 1, S/S = 14, Recovery = 3)
Death (Theatre)	2	3	4	14
Death (Recovery ward)	6	5	11	3

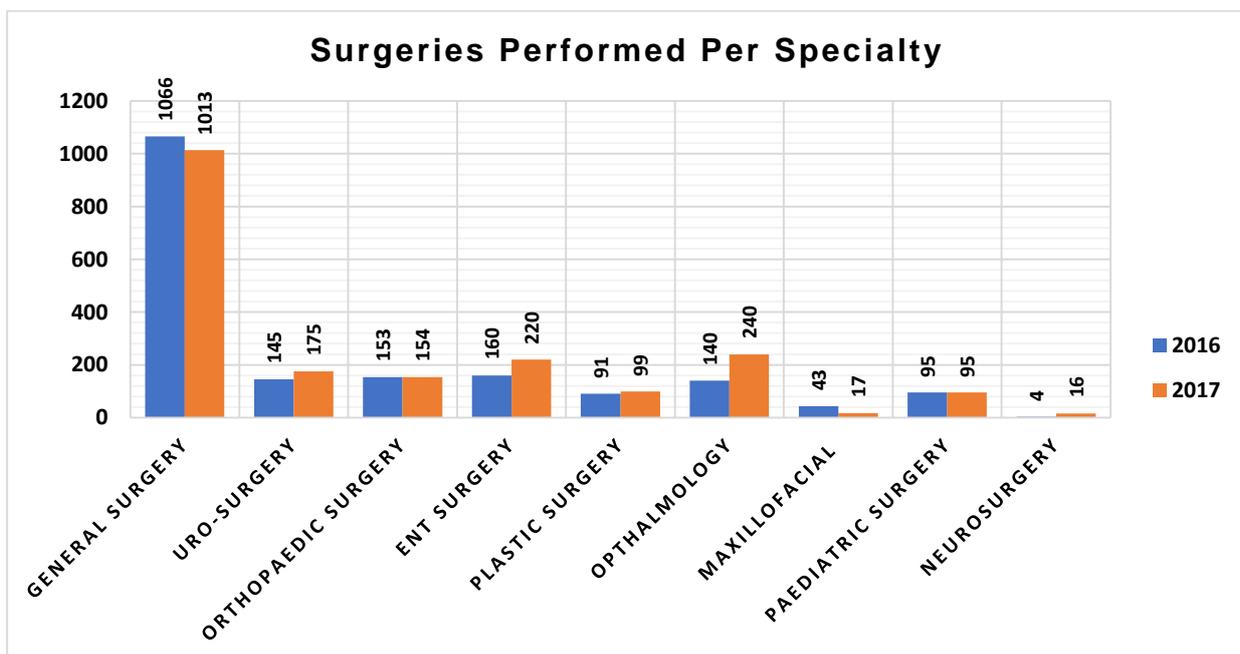
Figure 13.3. 1: Surgical Statistics on Performance



13.4 SURGERIES PERFORMED PER SPECIALTY

Generally, there has been an improvement in the number of surgeries performed by most of the surgical specialties. However, in 2017, general surgical department as well as the maxillofacial department saw a reduction of 4.97% and 60.47% respectively. Figure 13.4.1 below provides a 2-year trend of surgeries performed by the various specialty.

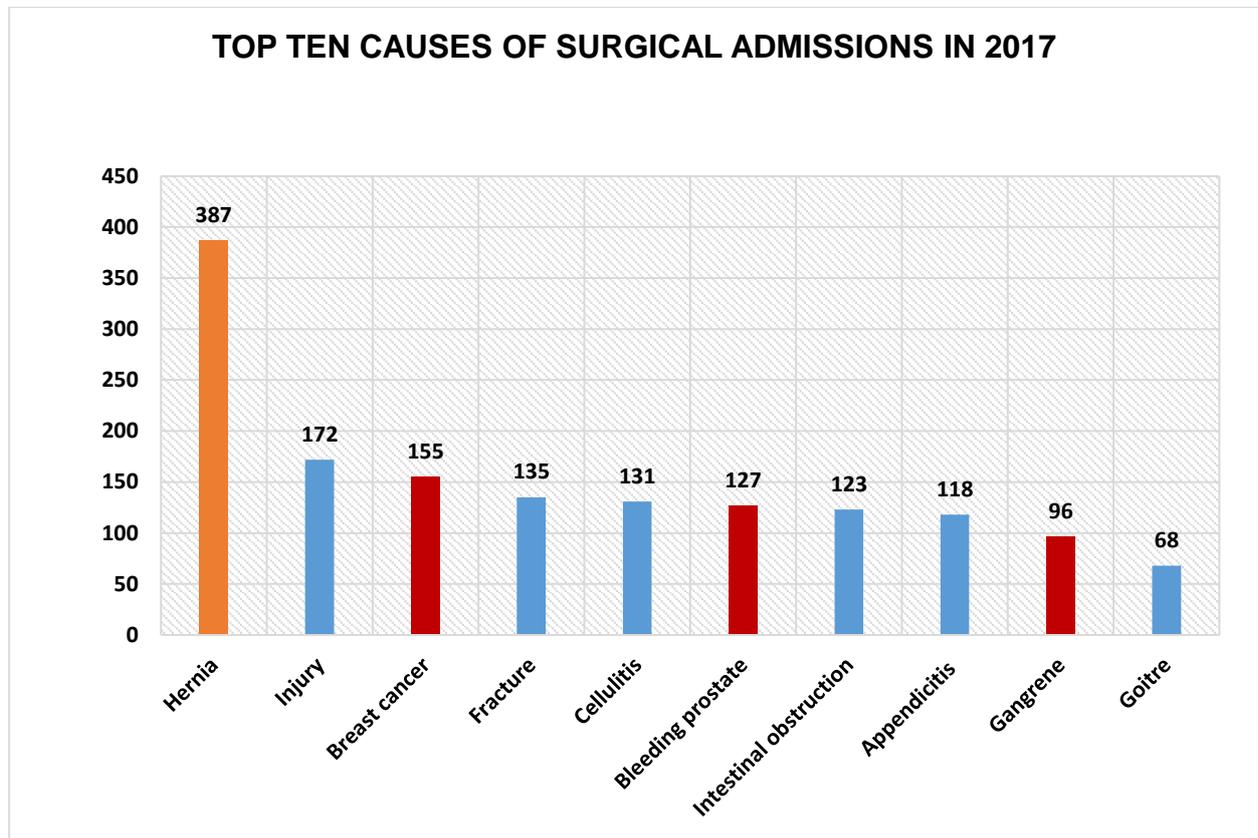
Figure 13.4. 1: Surgeries Performed Per Specialty



13.5 TOP TEN CAUSES OF SURGICAL ADMISSIONS IN 2017

Although hernia remained the leading cause of surgery at the facility. There is a worrying increase in the number of breast cancer incidence as well as that of bleeding prostate and diabetic gangrene. In 2017, goiter was also among the top 10 surgical conditions accounting for admission. Figure below shows the graphical presentation of the top 10 causes of surgical admission.

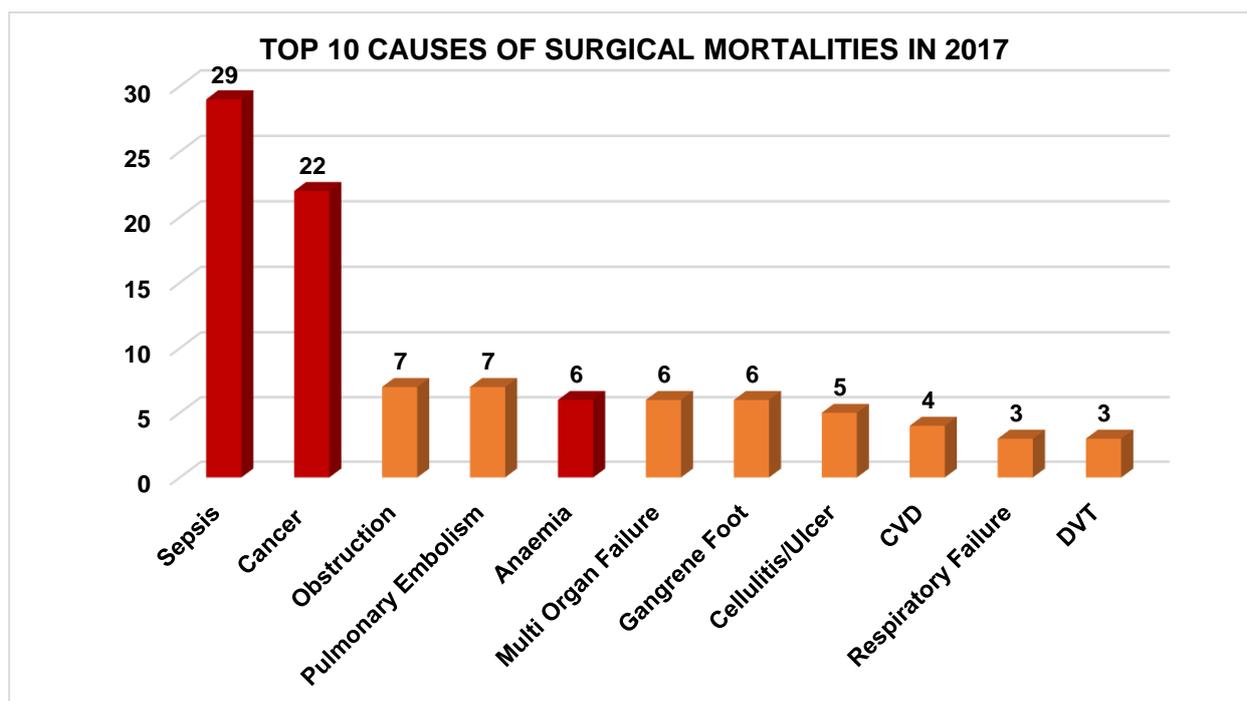
Figure 13.5. 1: Top Ten Causes of Surgical Admissions In 2017



13.6 TOP 10 CAUSES OF SURGICAL MORTALITIES IN 2017

Among all the surgical mortalities recorded in the facility, sepsis accounted for the highest cause of death. Most of the cancer cases undetected early also accounted for the leading cause of mortality with the least cause in 2017 being deep vein thrombosis (DVT). The figure below shows the causes of the surgical mortality for 2017.

Figure 13.6. 1: Top 10 Causes of Surgical Mortalities In 2017



13.7 DENTAL, EYE EAR NOSE & THROAT (DEENT) DEPARTMENT UNDER SURGICAL SUB-BMC

13.7.1 BACKGROUND OF THE DEENT DEPARTMENT

The DEENT is a new Sub-BMC that management seeks to carve out of the bigger Surgical Sub-BMC. This is because the DEENT involves many areas quite different from mainstream Surgery E.g. Dentistry, Audiology, Speech Therapy, Optometry (dispensing and sale of spectacles etc.) These specialties would be better managed under a different sub-BMC. The sub-BMC provides Dental and Maxillofacial services as well as Eye, Ear Nose and Throat services hence, the name DEENT.

13.7.2 SURGERIES PERFORMED BY DEENT DEPARTMENT IN 2017

A total of 371 major surgeries were performed by the DEENT sub-BMC with the minor surgeries being 1315. Unlike the other clinics under the DEENT, the Dental clinic performed a lot of procedures at the unit and are normally recorded as minor surgeries. They recorded the highest minor surgeries carried out at the DEENT sub-BMC in 2017 according to analysis in table 13.7.2.1 below.

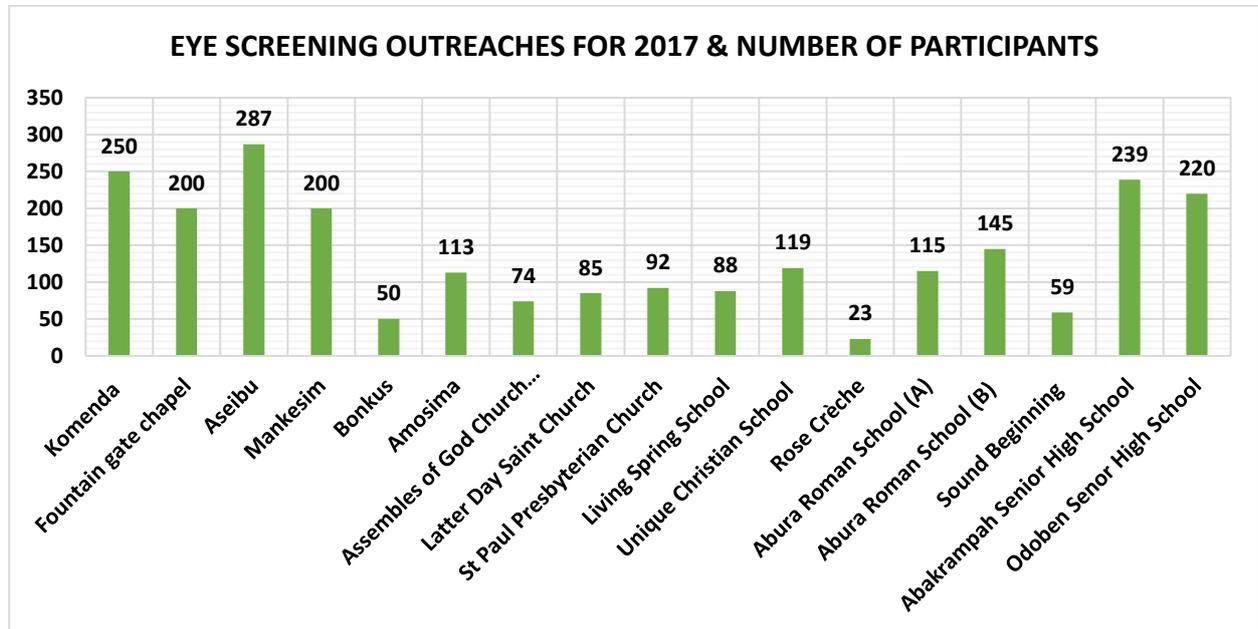
Table 13.7.2. 1: Surgeries Performed by DEENT Department In 2017

UNIT	MAJOR	MINOR
Dental	44	1170
Eye	187	53
ENT	140	92
TOTAL	371	1315
Refractions	-	1,098
Automated visual field Assessment	-	8
Binocular vision Assessment	-	1

13.8 PERFORMANCE FROM OUTREACH PROGRAMME

The eye clinic annually carries out outreach programme by providing eye screening services to the community, churches and selected schools. The figure bellow demonstrates the total number of people who benefited from the exercise in 2017.

Figure 13.8. 1: Performance from Outreach Programme



CHAPTER FOURTEEN

PUBLIC HEALTH SERVICES

14.1 INTRODUCTION

Public Health Unit contributes to the improvement of health and well-being of the population of all age groups through: Preventive, Promotional, Rehabilitative and Curative Services.

Services provided at the unit includes;

1. Health Promotion
2. Immunization
3. Child Welfare Clinic
4. Family Planning
5. Adolescent Health Services
6. Counselling Services
7. Some aspects of Post Natal Services
8. School Health
9. Home Visits
10. Sickle Cell Clinic
11. TB Management
12. Disease Surveillance
13. HIV Clinic

14.2 PUBLIC HEALTH UNIT'S 2017 PERFORMANCE AGAINST CCTH STRATEGIC OBJECTIVES

Table 14.2. 1: Public Health Unit's Performance Against CCTH Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES
PUBLIC HEALTH UNIT
1. Intensified the practice of male involvement in family planning services
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES
1. Intensified surveillance of priority diseases through daily reviews and clinician sensitization.
2. Health education on current issues have been consistent.
3. Initiation of prompt treatment to new-born babies to reduced Mother to child transmission of HIV
4. Increased in TB case detection
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS
3.1 Improve on Governance and Management System
1. Strengthen Monitoring of public health activities
3.2 Improve on Human Resource and Management System
-
3.3 Improve on Finance Resource and Management System
-
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE
4.1 Improve on Research:
-
4.2 Improve on Teaching and Learning:
1. In-service training conducted for staff
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
1. Increased and intensified the outreaching programme by the Public Health Unit
2. Intensified FP education & promotion during outreach programme and at the clinic

2017 OUTCOME AND OUTPUT PERFORMANCE

OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE

14.3 IMMUNISATION TREND (EPI)

In 2017, the institutional Public Health Unit at the hospital recorded 21% reduction in tetanus vaccination among pregnant women whilst that of the non-pregnant women increased by 21.1%. Generally, the number of immunisation carried out in 2017 has reduced. For instance, BCG and Polio immunisation reduced by 10.5% and 11.3% respectively. Number of clients immunised with yellow fever also decreased by 20.8% compared to 2016. Detailed analysis of immunisation trend over 4-years has been presented in table 14.3.1 below.

Table 14.3. 1: Four-Year Immunisation Trend

Vaccines	2014	2015	2016	2017	% Diff.
BCG	3044	3326	3565	3190	10.5% decrease
Polio	4927	4509	5088	4514	11.3% decrease
Pentavalent (1-3)	1844	1686	2496	1881	24.6% decrease
Rota (1&2)	1532	1414	1226	1596	30%.2 increase
MCV	1024	1686	2496	-	
Yellow Fever	256	241	332	263	20.8% decrease
MMR	36	31	20	-	
Td1/Td2	1308	1302	962	-	
Vitamin 'A' 100,000 IU	209	371	332	251	24.4% decrease
Vitamin 'A' 200,000 IU	300	819	1496	364	75.7% decrease
Maternal VIT A	1605	1132	1224	1426	16.5% increase
Pneumococcal Vaccine	-	1686	1842	1879	2% increase
M.R. 1	-	241	256	258	0.8% increase
M.R 2	-	161	164	218	32.9% increase
Tetanus Pregnant	-	1302	1307	1032	21% decrease
Tetanus Non-Pregnant	-	245	275	333	21.1% increase

14.4: CHILD WELFARE SERVICES

The child welfare clinic which is a very important service provided to the under 5 years children recorded a 48.4% reduction in the number of registrants from all the age ranges in table 14.4.1 below. Also, the total attendance to the CWC has also reduced by 6.3% in 2017 compared to 2016.

Table 14.4. 1: Age Range and Trend of The Child Welfare Service

AGE	2015	2016	2017
Registrants			
0-11	279	398	190
12-23	109	199	107
24-59	13	21	22
Total	401	618	319
Attendance			
0-11	3306	3338	3064
12-23	497	680	655
24-59	82	87	129

Total	3885	4105	3848
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14.5 INTEGRATED DISEASE SURVEILLANCE AND RESPONSE

Disease surveillance is one of the mandates of the Public Health Unit. The system is always on the look-out for disease outbreaks. In 2017, out of 1796 influenza-like illness suspected and investigated, 11 of them were confirmed positive at the laboratory. Also, from the 2 cholera cases investigated, 1 was confirmed positive. Out of the Yellow fever and measles cases suspected and investigated, non- was confirmed positive in 2017. The table below provides a detailed analysis of the diseases surveyed in 2017 and their outcome.

Table 14.5. 1: Surveillance Activities

	No. Suspected	No Investigated	Lab Confirmed
Measles	3	3	0
Yellow Fever	1	1	0
Meningitis	3	1	1
Cholera	2	2	1
Influenza Like Illness	1796	211	11
Neonatal Tetanus	0	0	0
Acute Viral Hepatitis	2790	2790	340
Malaria	2925	2925	659
Human Rabies	2	0	0

14.6 INFLUENZA SENTINEL SURVEY

As a sentinel site for influenza, samples from suspected clients have over the years been sent to Noguchi Memorial Institute for confirmation. The table below shows the trend in the various samples sent..

Table 14.6. 1: Influenza Sentinel Survey

	2016	2017
INFLUENZA LIKE ILLNESS		
RTI	100	2025
Samples Sent	18	187
Positive Cases	0	10
SARI		
RTI Admitted	0	76
Samples Sent	0	24
Positive Cases	0	1

14.7 ADOLESCENT SERVICES

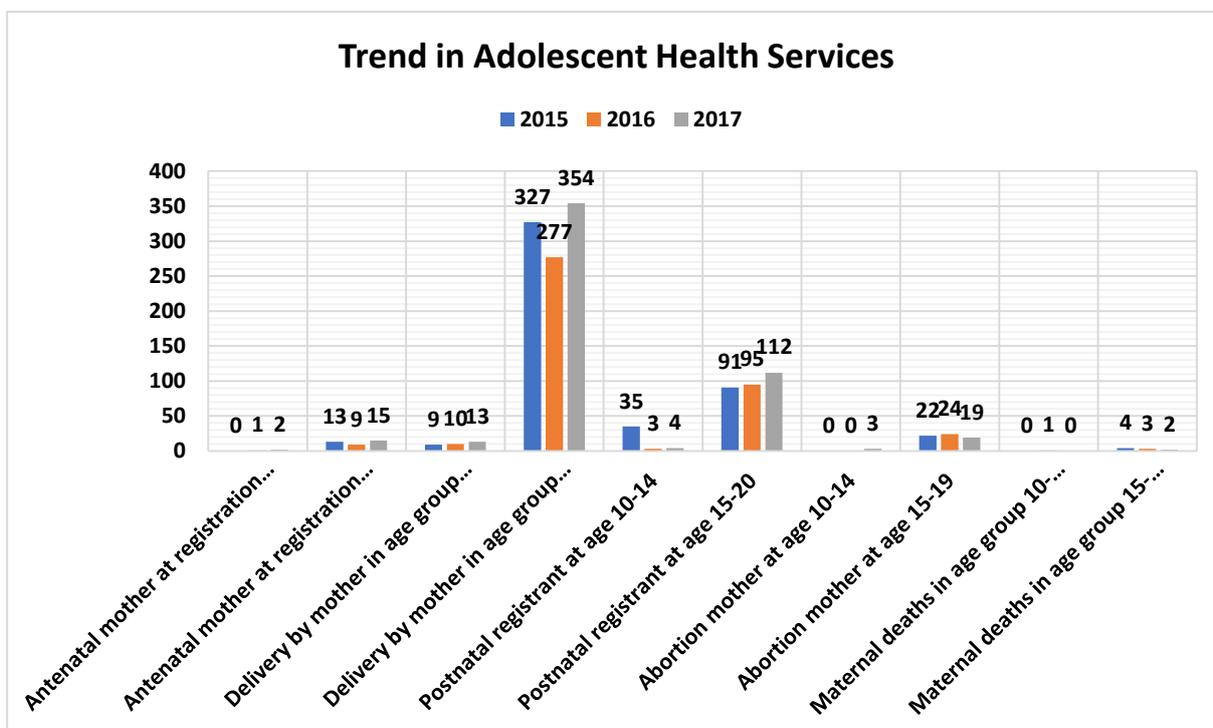
Out of the 354 pregnant teenagers (15 to 19 years) 2 of them lost their children through child birth in 2017. Pregnancy among the age group between 15 to 19 years increased by 27.8% in 2017. However, Abortion among the age group between 15 to 19 years have also reduced by 20.8% in 2017. The Public Health Unit continue to create awareness on the risks and challenges that are associated with being sexually active as a teenager. Family planning methods are also promoted to adolescents who are unable to abstain from sex to reduce the risk of sexually transmitted diseases and teenage pregnancy.

Table 14.7.1 and figure 14.7.1 below provides a 3-year trend of the age groups in adolescent health services.

Table 14.7. 1: Age Groups and Trend in Adolescent Health Services

	2015	2016	2017	% Diff.
Antenatal mother at registration - 10-14	0	1	2	
Antenatal mother at registration - 15 - 19	13	9	15	66.7% incr.
Delivery by mother in age group 10-14 years	9	10	13	30% incr.
Delivery by mother in age group 15-19 years	327	277	354	27.8% incr.
Postnatal registrant at age 10-14	35	3	4	
Postnatal registrant at age 15-20	91	95	112	
Abortion mother at age 10-14	0	0	3	
Abortion mother at age 15-19	22	24	19	20.8% decr.
Maternal deaths in age group 10-14 years	0	1	0	
Maternal deaths in age group 15-19 years	4	3	2	

Figure 14.7. 1: Age Groups and Trend in Adolescent Health Services



14.8 FAMILY PLANNING

There is a general decrease in the number of family planning service utilization at the hospital in 2017. No female opted for the female condom at the facility compared to 2016 value of 12 females. Demand for male condom has equally reduced by 63.6% in 2017 which is a great concern considering the continuous increase in HIV and Hepatitis B. Overall, the public health unit recorded a reduction of 18.9% in family planning acceptability in 2017 compared to 2016. Acceptability of the short-term and long-term family planning methods have generally improved in 2017 as demonstrated in table 14.8.1 and table 14.8.2 as well as a graphical presentation in figure 14.8.1 below.

Table 14.8. 1: Family Planning Acceptors

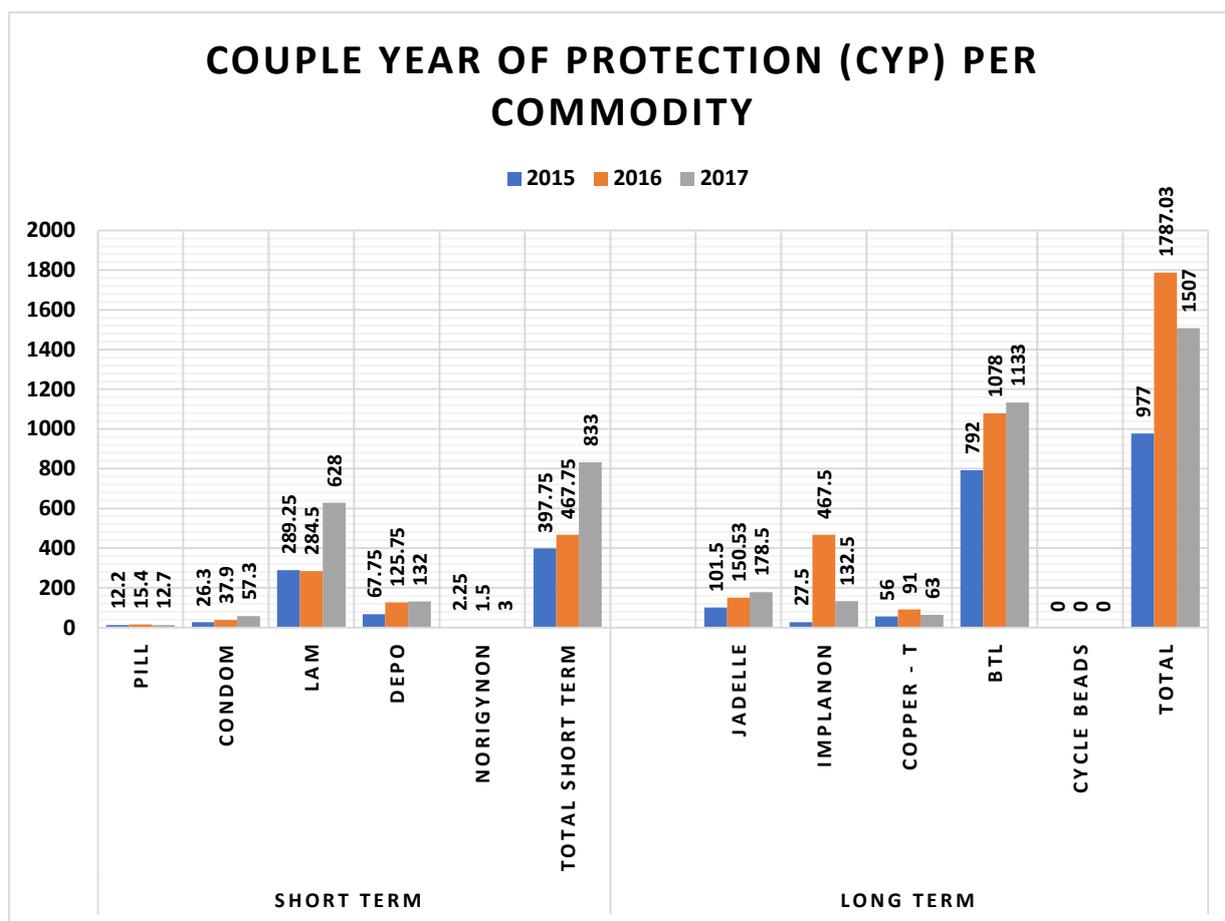
Acceptors	2015	2016	2017
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Condom M	105	258	94
Condom F	16	12	0
Copper T	15	29	14
Depo Provera	130	297	89
Jaddelle	29	45	41
Implanon	11	131	45
Cycle Beads	0	0	0
Micro G	17	37	22
Micro N	9	12	5
Lus	-	7	0
Mini Lap/BTL	72	98	103
VASECTOMY	1	0	0
Norigynon	17	6	10
Emergency Contraceptives (Postinor)	0	0	0
LAM	1157	1138	1256
Total	1579	2070	1679

Table 14.8. 2: Trend of Family Planning Acceptor and CYP

	2015	2016	2017
COMODITY	C.Y. P	C.Y. P	C.Y. P
SHORT TERM			
PILL	12.2	15.4	12.7
CONDOM	26.3	37.9	57.3
LAM	289.25	284.5	628.0
DEPO	67.75	125.75	132.0
NORIGYNON	2.25	1.5	3.0
TOTAL	397.75	467.75	833.0
LONG TERM			
JADELLE	101.5	150.53	178.5
IMPLANON	27.5	467.5	132.5
COPPER - T	56	91	63
BTL	792	1078	1133
CYCLE BEADS	0	0	0
TOTAL	977	1787.03	1507

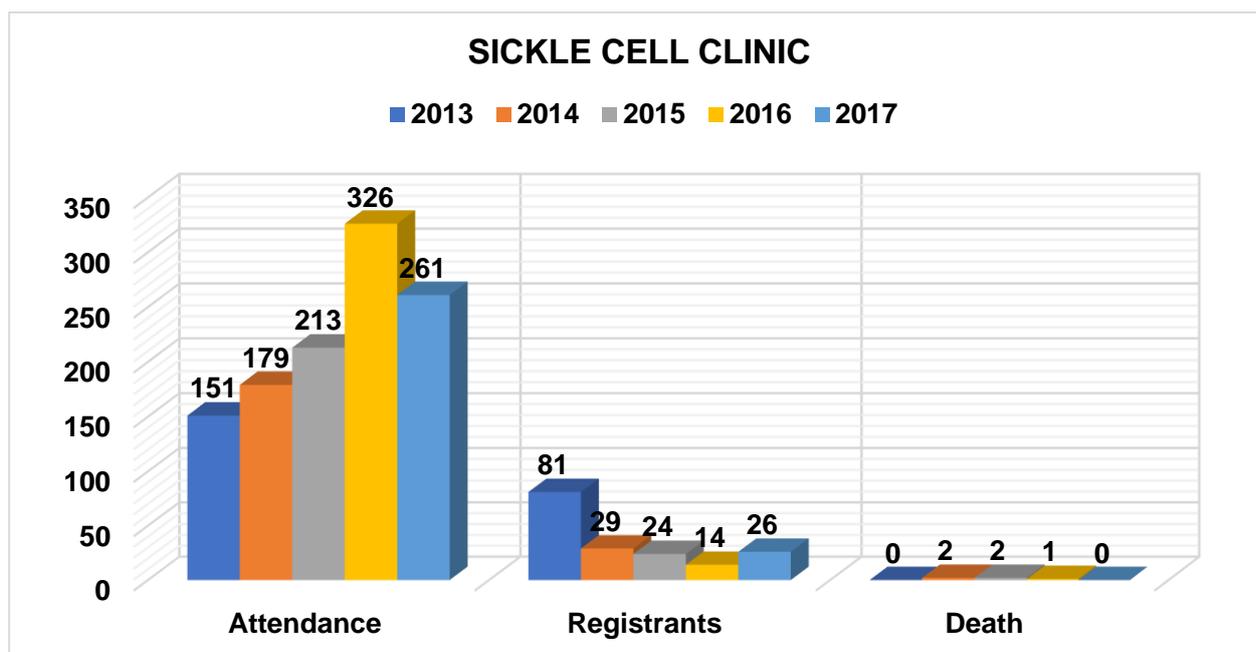
Figure 14.8. 1: Couple Year of Protection (CYP) Per Commodity



14.9 SICKLE CELL CLINIC

The clinic provides specialised OPD service to people living with sickle cell disease to learn to live with and manage the condition as they go about pursuing their individual dreams in life. The attendance of the Sickle cell client progressively went up between 2013 to 2016 but decreased by 19.9% in 2017. However, there was no death recorded at the facility among the sickle cell patients in 2017 as illustrated in figure 14.9.1 below.

Figure 14.9. 1: Five-year Trend in Performance at the Sickle Cell Clinic



14.10 HEALTH PROMOTION ACTIVITIES FOR 2017

The public health unit embarks on various health promotion exercises annually. In 2017, they organised health talks on varied topics of public health concern. They also regularly organised early morning health talk at the OPD (for 144 times). The unit further carried out 226 focused client education in 2017 as shown in the table below.

Table 14.10. 1: Health Promotion Activities For 2017

Activities	Frequency	No. of Audience
OPD Talk	144	2632
Radio Discussion	36 Sessions	Public
Durbars	0	0
School Health Talks	24	700
Focus Client Education	226	1156
Peer-Group Education	3	73

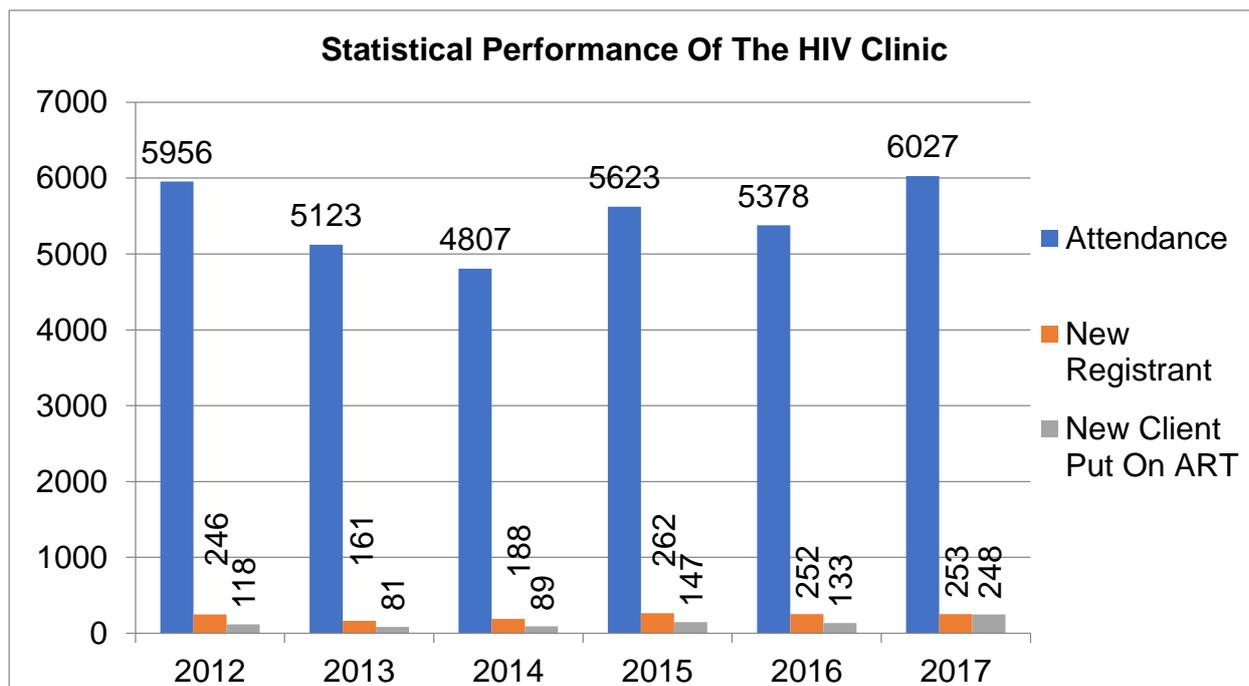
14.11 HIV / AIDS CLINIC

The number of persons diagnosed with HIV increased by 12% in 2017. HIV/AIDS is of great public health concern. The hospital public health unit implements HIV standard operating protocols to minimize mother to child transmission and also conducts screening among individuals exposed or at risk. They periodically embark on outreach programme to promote the use of protection/condoms as well as education on lifestyle changes of the public, all to control the spread and promote early detection and management of the disease.

14.11.1 STATISTICAL PERFORMANCE OF THE HIV CLINIC

Total attendance at the HIV clinic also went up in 2017. The clinic registered 253 new clients and continued with 3629 old clients. 248 clients were put on treatment as compared to 133 in 2016. The clinic recorded 11 deaths as compared to 10 in 2016. The figure below provides a graphical presentation of a 6 years trend analysis.

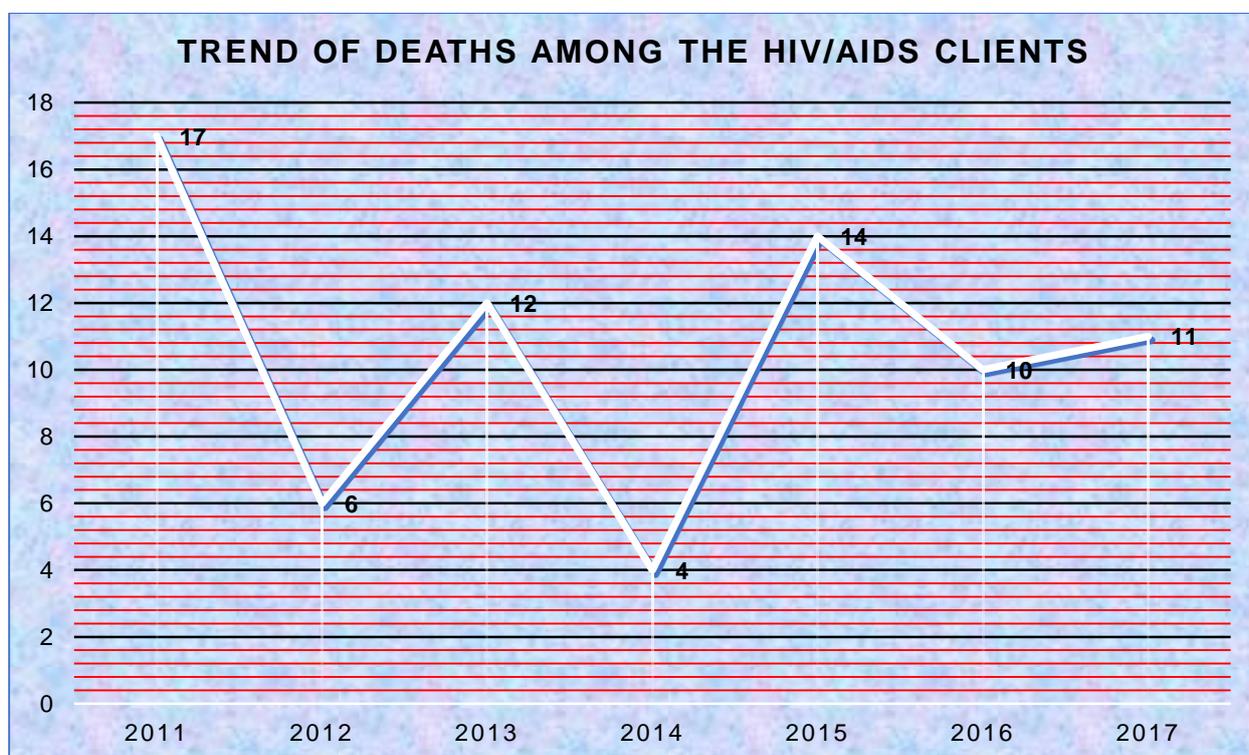
Figure 14.11.1. 1: Statistical Performance of The HIV Clinic (2012 to 2017)



14.11.2 TREND OF DEATH OF HIV/AIDS CLIENTS

The institutional mortality trend among HIV clients have been fluctuating since 2011 to 2017. However, the highest death was recorded in 2011 with 17 deaths. In 2017, 11 HIV clients died. The figure below shows 6-years trend of mortality among HIV clients.

Figure 14.11.2. 1: Trend of Death of HIV/AIDS Client From 2011 to 2017



14.11.3 HIV/AIDS CLIENTS AND THERAPY

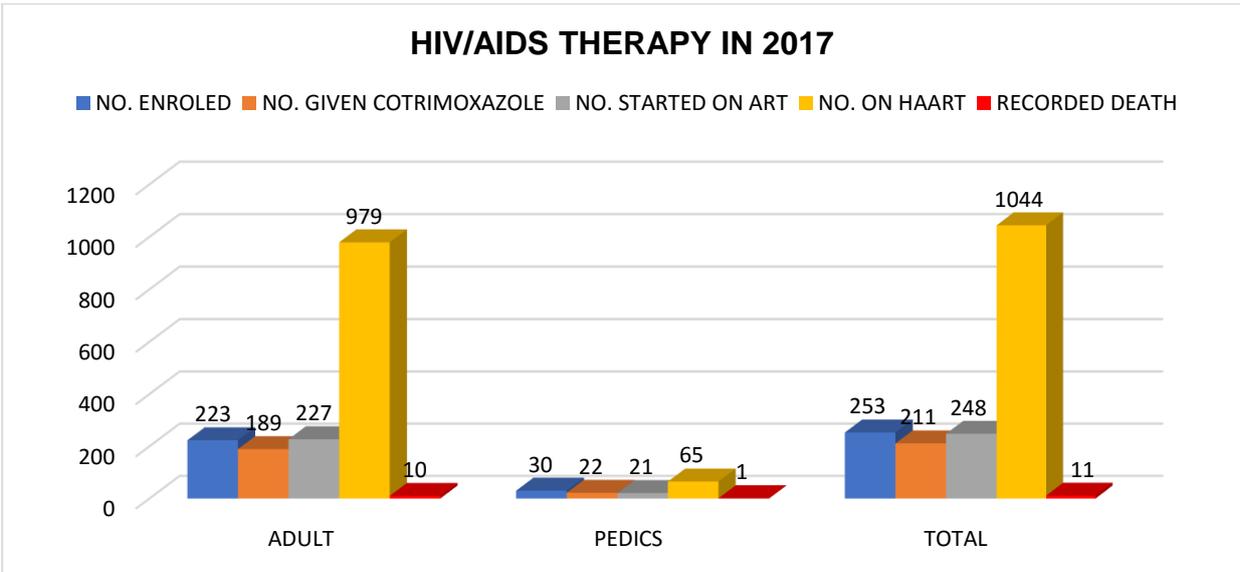
A total of 253 HIV clients were enrolled in 2017, out of which 211 were placed on ART. 11 of the clients were also recorded dead in 2017, out of that, 10 were adults and 1 was

a child. Table 14.11.3.1 and figure 14.11.3.1 provides a trend analysis of clients on therapy.

Table 14.11.3. 1: HIV/AIDS Clients and Therapy

Indicators	SEX	ADULT	PEDICS	TOTAL
NO. ENROLED	M	67	17	253
	F	156	13	
NO. GIVEN COTRIMOXAZOLE	M	64	11	211
	F	125	11	
NO. STARTED ON ART	M	65	11	248
	F	162	10	
NO. ON HAART	M&F	979	65	1044
RECORDED DEATH	M	3	1	11
	F	7	0	

Figure 14.11.3. 1: HIV/AIDS Therapy in 2017



14.12 PMTCT-TREND ANALYSIS

The implementation of the Preventing Mother to Child Transmission of HIV and Hepatitis B is one of the strategies to control the spread of the viral disease to the child. As such, the public health unit has been enforcing the protocol over the years. In 2017, all Antenatal clients were counselled and tested. Out of the 748 tested, 8 of them tested positive in 2017. The table below provides a detailed analysis of PMTCT trend from 2014 to 2017.

Table 14.12. 1: Pregnant Mother to Child Transmission (PMTCT)

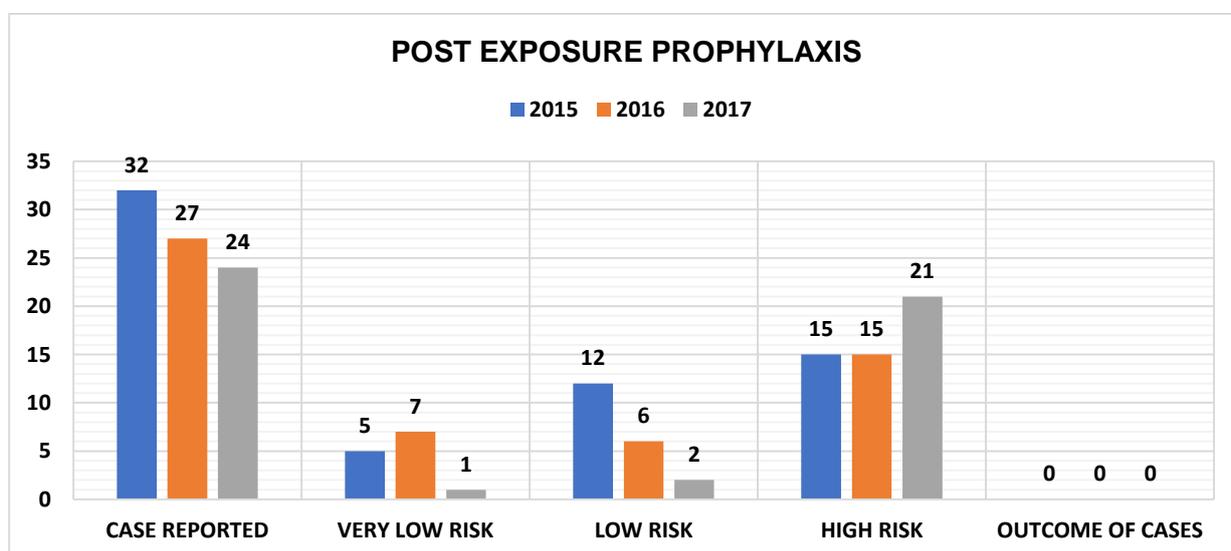
Indicators	2014	2015	2016	2017
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Number of ANC Registrants	569	565	716	748
Number Tested & Received Posttest Counselling	613	595	716	748
Percentage (%) of Clients Tested	613 (100%)	584 (98.2%)	716 (100%)	748 (100%)
Number Positive	19	20	4	8
Number Positive at 34wks	-	0	0	2
Number Given ARVs	39	36	6	16
Number of Babies on ARVs	-	20	15	20
Number of EID Tested	-	58	48	69
Number of EID Positive (6wks -18mths)	-	3	4	10
Given ARVs as Prophylaxis	18	16	-	-

14.13 POST EXPOSURE PROPHYLAXIS

HIV Prophylaxis services is provided to personnel with work related exposure to the virus as well as individuals exposed through rape. The treatment is administered to minimize the chances of the victims from contracting the disease. Since 2015, the number of cases reported decreased. However, the clients who were of high risk increased in 2017. Fortunately, none of the reported cases tested positive over the 3-year period. The trends have been presented in the figure below.

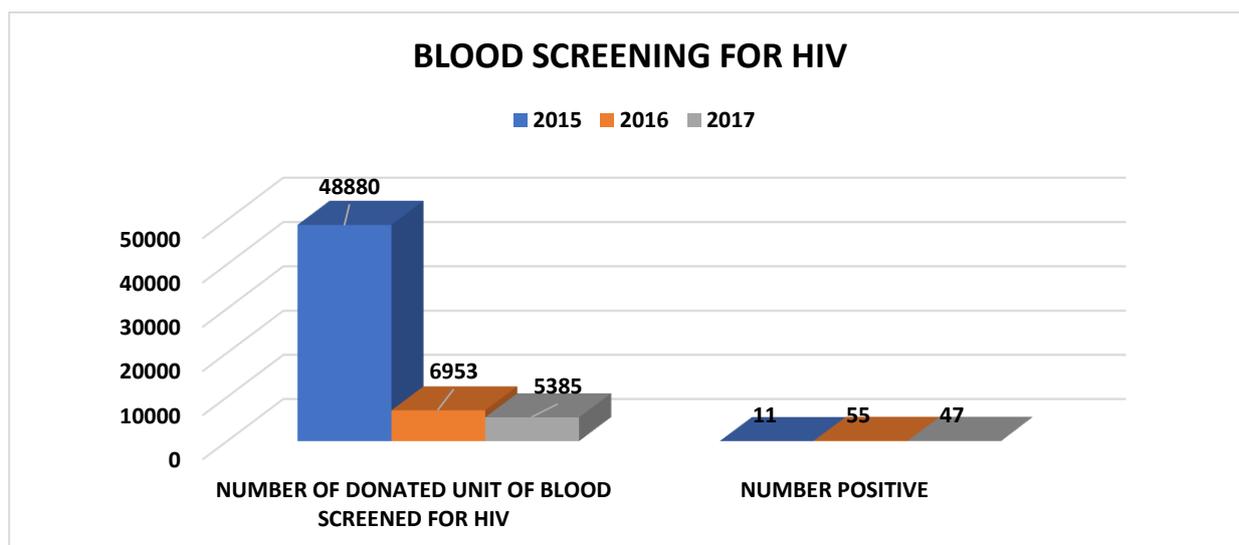
Figure 14.13. 1: Post Exposure Prophylaxis



14.14 BLOOD SCREENING FOR HIV

Every blood donated are supposed to be screened for HIV and other infections. Over the past 3 years, there has been a decline in the number of blood donated. However, out of the 5,385-blood donated, 47 of them tested positive to HIV in 2017 which is a slight decrease compared to 2016. The trend analysis is illustrated in the figure below.

Figure 14.14. 1: Blood Screening For HIV



14.15 TUBERCULOSIS STATISTICS

The T.B Unit has always been actively involved in all activities including HIV screening, training activities, diagnosis and management of TB clients. Below is the data for activities covered in 2017. There is a very good TB/HIV collaboration.

Table 14.15. 1: Tuberculosis Statistics For 2017

Category of cases	2015	2016	2017
New Smear positive	6	7	4
Smear negative	17	26	23
EPTB	8	6	8
Relapse/Return after Defaulter	2	1	2 Def.
TTT after failure	0	0	0
Other previously diagnosed	0	1	0
Total cases	33	41	37
Outcomes			
Cured	6	6	Pending
Treatment completed	25	28	
Died	1	6	
Treatment fail	0	0	
Default	0	0	
Loss to follow	1	1	
Cure rate%	75%	75%	
Treatment success %	93.9%	82.9%	

A total number of 141 clients were diagnosed with TB in the facility. Out of that, 37 were managed at CCTH whilst 99 of them were referred out to other facilities closest to them. 5 clients also died at the ward as illustrated in the tables 14.15.2 and 14.15.3 below.

Table 14.15. 2: CCTH TB Referrals

Cases	SEX	NUMBER
ADULT	MALE	59
	FEMALE	29
PAEDICS	MALE	5
	FEMALE	6
TOTAL	M&F	99

Table 14.15. 3: TB Point of Diagnosis in 2017

2017 TB POINT OF DIAGNOSIS			
OPD	59	Home Visit	2
ART	19	Paediatric Clinic/War	2
ANC	1	Female Wards	27
Diabetics	1	Male Wards	20
TOTAL CASES	141 (99 Referred)		

CHAPTER FIFTEEN

PHARMACY SUB-BMC

15.1 INTRODUCTION

The pharmacy sub-BMC management is headed by a Director with the mandate of coordinating continuous availability of medicines in the management of patients. The directorate provides services at OPD, ward as well as a 24-hour services at the emergency. Recently, the directorate with the support of the hospital management created a 24-hour retail pharmacy at the hospital to promote access to all categories of medicine to all regardless of it being covered by NHIS or not.

15.2 PHARMACY DIRECTORATE'S PERFORMANCE AGAINST CCTH STRATEGIC OBJECTIVES

Table 15.2. 1: Pharmacy Directorate's 2017 Performance Against CCTH Strategic Objectives

2017 OUTCOME AND OUTPUT PERFORMANCE
CCTH Objective 1: INCREASE THE SCOPE AND IMPROVE THE QUALITY OF SERVICES
PHARMACY SUB-BMC
1. Clinical pharmacy practice introduced covered 90% of the wards.
2. OPD Annex was refurbished and expanded to reduce waiting time of clients' services and the counselling of patients.
3. Weekly clinical meeting / training forum to build capacity of the entire pharmacy staff was improved with introduction of specialist lectures.
4. Drug information alerts were added to the bimonthly medicine bulletin for all clinicians to peruse
5. Pharmaco-vigilance activities and adverse drug reporting (ADR) was disseminated to all wards/units and ADR forms provided in jackets in the wards.
6. New sops for pharmacy practice in CCTH was developed and launched
7. The hospital medicine formulary for essential and non-essential medicines usage was adopted through the DTC.
8. Emergency medicines stocks (ward stocks) were reorganised and resupplied to most of the wards
9. Ward pharmacy services extended to cover holidays
CCTH OBJECTIVE 2: REDUCE COMMUNICABLE AND NON-COMMUNICABLE DISEASES
-
CCTH OBJECTIVE 3: IMPROVE GOVERNANCE, RESOURCE (HUMAN & FINANCIAL) AND MANAGEMENT SYSTEMS
3.1 Improve on Governance and Management System
1. Ensured to effective operation at all the pharmacy units including the 24-hour retail pharmacy at CCTH to promote access to needed medication.
2. The Unit continue to enforce protocol on Pharmacovigilance and Adverse Drug Reporting (ADR) through continuous collaboration with the Food and Drug Authority in Central Region and CCTH Drug and Therapeutics Committee.
3.2 Improve on Human Resource and Management System
-
3.3 Improve on Finance Resource and Management System
1. Pharmacy directorate continue undertake preparations of extemporaneous products such as the production of Nasal & Ear drops for the ENT Unit. (Spirit Ear Drops, Boric Acid Ear Drops, Ephedrine Nasal drops, etc.) as well as Liquid soap
2. Drug net worth improved
OBJECTIVE 4: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE LEARNING EXPERIENCE
4.1 Improve on Research:
1. Pharmacy directorate conducted 2 surveys; one on RUM
4.2 Improve on Teaching and Learning:

2017 OUTCOME AND OUTPUT PERFORMANCE
PHARMACY
1. Weekly clinical meeting / training forum to build capacity of the entire pharmacy staff was improved with introduction of specialist lectures
OBJECTIVE 5: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
-
OBJECTIVE 6: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
-

15.3 RATIONAL USE OF MEDICINE (RUM)

The rational use of drugs requires that patients receive medicines appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and the community, (WHO 1988).

Inappropriate use of medicines or overuse of medicines according to WHO may harm the patients, lead to poor outcomes and also adverse drug reactions. There is therefore the need for health institutions to do regular monitoring of RUM indicators to help identify inadequacies that when rectified would help to improve on service delivery.

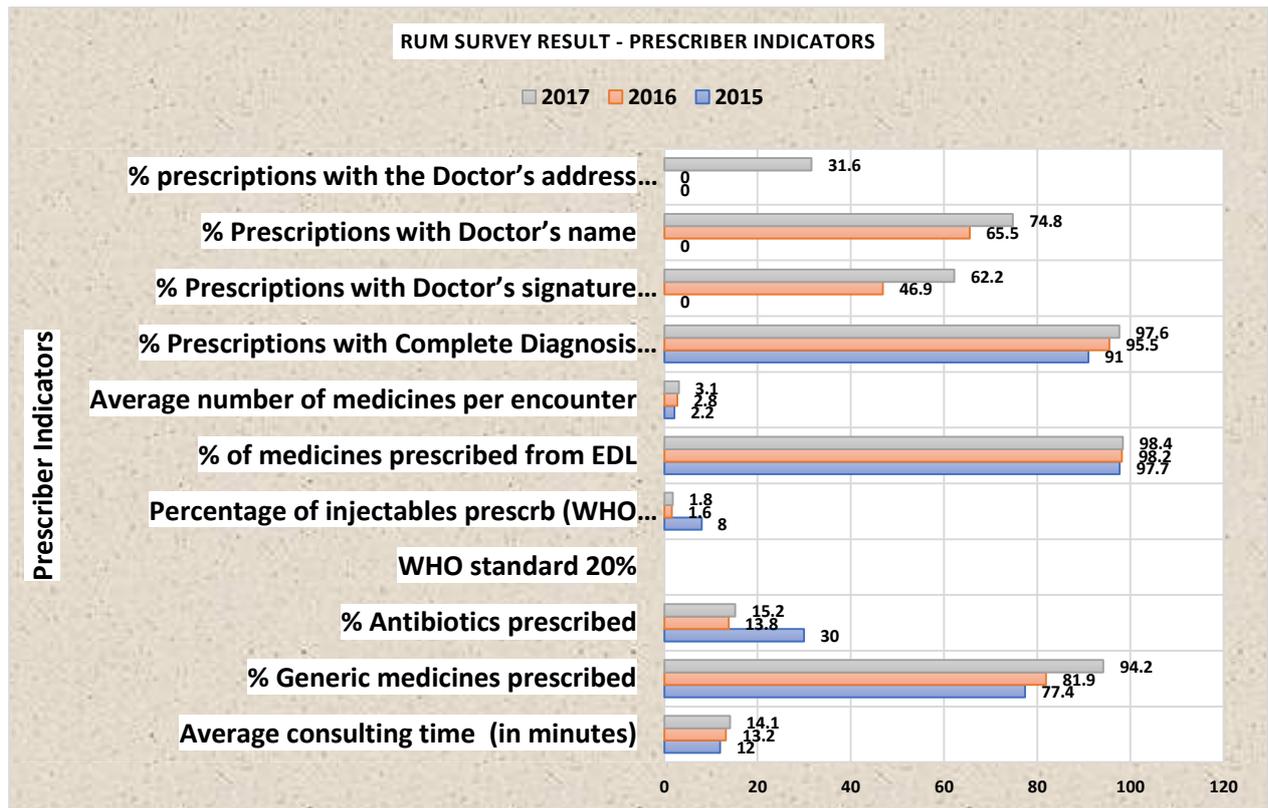
RUM survey have been conducted regularly in CCTH over the past years as a collaboration between Drug and Therapeutics Committee and the Pharmacy Directorate.

Results are usually disseminated to all clinical staff and measures are put in place to improve on the performance.

15.3.1 RUM SURVEY

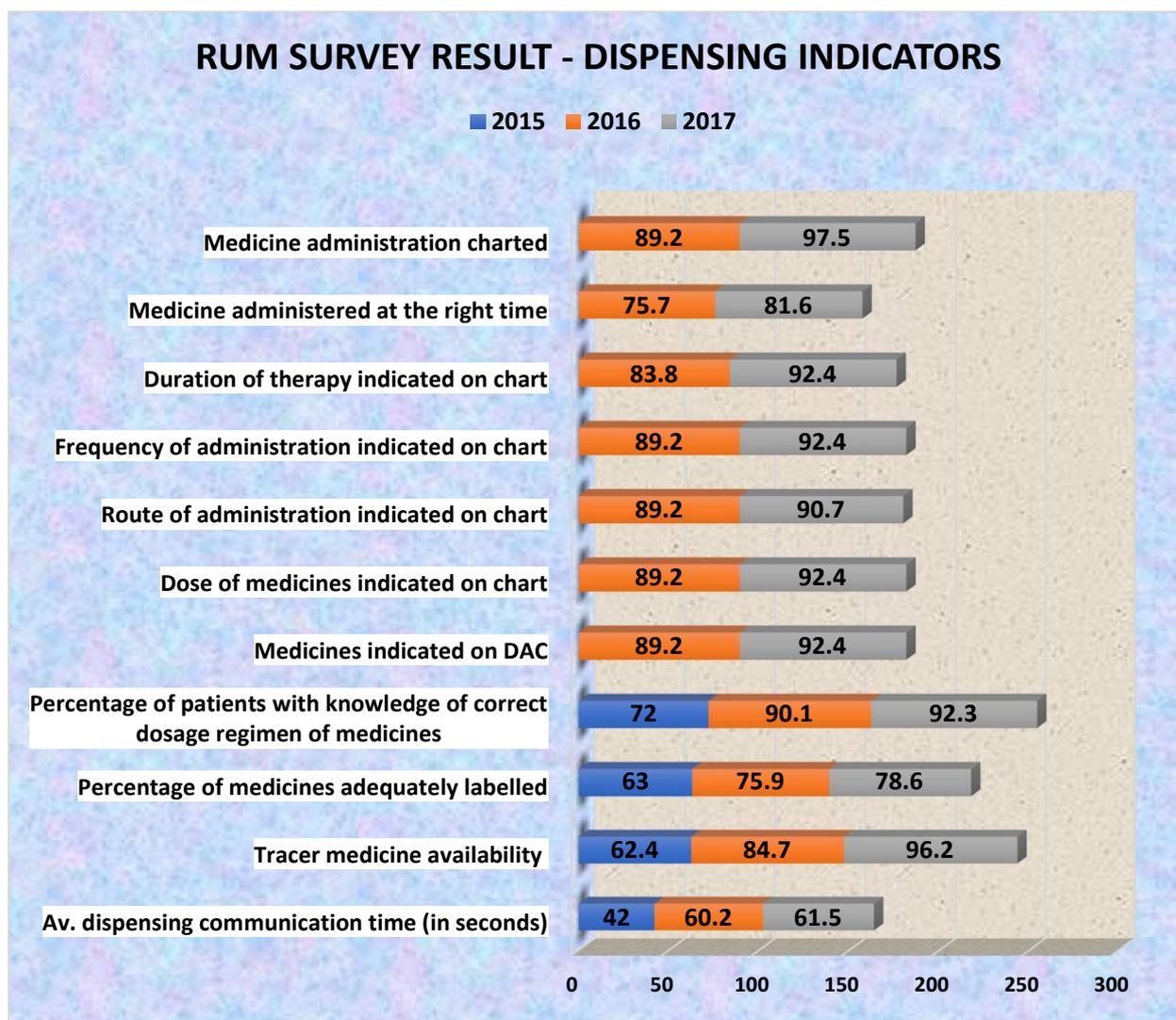
The result from the survey among prescribers on rational use of medicine indicated that the percentage of prescriptions with doctors' name on, increased by 9.3% in 2017. The trend in doctors writing the diagnosis on prescriptions gradually has improved over the last 3-years. Antibiotic prescription has also reduced significantly from 30% in 2015 to 15.2% in 2017 although still high compared to 2016 figure of 13.8%. The average number of medicine per encounter was 3.1 in 2107 as illustrated in figure 15.3.1.1 below.

Figure 15.3.1. 1: RUM Survey Result - Prescriber Indicators



As a dispensing site, the results from the RUM survey indicated 61.5 seconds as the average dispensing communication time. 78.6% of the medicines were labeled appropriately before they were issued to the clients. It was also found out that 81.6 % of the medicines ordered were administered at the right time on the wards. Further, the tracer medicine availability was 96.2%. Figure 15.3.1.2 provides detailed analysis below.

Figure 15.3.1. 2: RUM Survey Result - Dispensing Indicators



15.4 PERFORMANCE TRENDS INDICATORS

In 2017, the general performance of the pharmacy sub-BMC improved. The directorate recorded 96.15% of tracer drug availability in 2017 as compared to 84.78% in 2016. There was also an improvement in the clinical pharmacy practice on the wards from 70% to 90% in 2017 as demonstrated in the table below.

Table 15.4. 1: Performance Trends Indicators

Indicator	2016	2017
% Tracer Medicines Avail.	84.78	96.15
Clinical Pharmacy Practice on Wards	70	90
No of Drug Bulletins issued	6	6
No of Students trained	18	41
Total no of prescriptions served	-	109,557
No of Researches conducted	2	2
Prescriptions per Pharmacists ratio	-	1: 13,694

SECTION 4

CHAPTER SIXTEEN

CHALLENGES, MITIGATING STRATEGIES AND CONCLUSION

Table 16. 1: CHALLENGES AND MITIGATING STRATEGIES

CHALLENGES	MITIGATION STRATEGIES
High Institutional Maternal Mortality and Neonatal Deaths	Dialogue with GHS to support periphery referring facilities through training and MOs support
Delay in NHIS reimbursement	Continuous dialogue with NHIA
Illegal sale, development and encroachment of hospital lands	To pursue legal & advocacy, walling off encroachers on CCTH Lands
Staff in Accommodation	Pursue the PPP agreement for the construction of additional accommodation units
Inadequate and ageing equipment e.g. Medical Oxygen Plant, Power Generators, Laundry and CSSD equipment, etc.	Lobby MOH for replacement of obsolete equipment and machinery (Laundry, CSSD, Generator Sets, Oxygen Plants,). Feasibility to develop a replacement proposal for the replacement of the oxygen plant. Currently, arranged with Air-liquid for the supply of oxygen bottles
Absence of NICU	Additional equipment to make the current SCBU more operational / Construction of a modern NICU
Absence of a Relative Hostel	Pursue PPP & Gov't completion of Ghana @ 50 hostel started
Overcrowding, congestion and inadequate triage space at the Accident & Emergency ward	Expansion of A & E to the level of Teaching Hospital
MRI machine still not functioning and handed over for service after 4 years	Get AGVAD contractors to repair and hand over MRI from MOH
Congestion at the OPD, Obstetrics & delivery suite units	Complete CCTH Primary Health Care & ETAT / Emergency Obstetrics Block Facility

16.2 CONCLUSION

The overall performance of the facility has improved. However, there is still room for improvement. There was improved access to services provided at the facility. Further, the facility also recorded improvement in most of the institutional child health indicators like the still birth, neonatal deaths and under 5 mortalities. Although the maternal mortality rate reduced, the absolute number was the same as the previous year. There is the need for more support from the key stakeholders across board as well and individual / partners to acquire the needed medical equipment and infrastructure that would enable the facility to effectively manage all cases and thereby improve the survival chances of the clients who access care at CCTH. The gaps identified would also be appraised and targeted in the subsequent plans to work towards the achievement of the hospital's medium-term strategic plan in 2019.