

CAPE COAST TEACHING HOSPITAL



2023 ANNUAL PERFORMANCE REPORT

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LIST OF ACRONYMS

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

40.	HIM	-	Health Information Management
41.	HIV	-	Human Immunodeficiency Virus
42.	HMS	-	Hyperactive Malarial Splenomegaly
43.	HO	-	Health Objective
44.	HOs	-	House Officers
45.	HR	-	Human Resource
46.	ICT	-	Information Communication and Technology
47.	ICU	-	Intensive Care Unit
48.	IGF	-	Internally Generated Fund
49.	IPC	-	Infection Prevention and Control
50.	LB	-	Live Birth
51.	LFT	-	Liver Functioning Test
52.	KFT	-	Kidney Functioning Test
53.	KHRC	-	Kintampo Health Research Centre
54.	MCH	-	Maternal and Child Health
55.	MO	-	Medical Officer
56.	MOH	-	Ministry of Health
57.	MMR	-	Maternal Mortality Rate
58.	MVPE	-	Malaria Vaccine Pilot Evaluation
59.	MSB	-	Macerated Still Birth
60.	NABCO	-	Nation Builders Corps
61.	NHIA	-	National Health Insurance Authority
62.	NHIS	-	National Health Insurance Scheme
63.	NICU	-	Neonatal Intensive Care Unit
64.	NMIMR	-	Noguchi Memorial Institute for Medical Research
65.	OBS & Gynae	-	Obstetrics and Gynaecology
66.	OPD	-	Out-patient Department
67.	PMTCT	-	Prevention of Mother-to-Child Transmission
68.	PNC	-	Postnatal Clinic
69.	PPB	-	Policy Planning and Budget
70.	PPM	-	Planned Preventive Maintenance / Measure
71.	RCH	-	Reproductive and Child Health
72.	RTI	-	Respiration Tract Infection
73.	RUM	-	Rational Use of Medicine
74.	SATS	-	South African Triage Scale
75.	SB	-	Still Birth
76.	SCBU	-	Special Care Baby Unit
77.	SMS	-	School of Medical Science
78.	SMO	-	Senior Medical Officer
79.	STI	-	Sexually Transmitted Infections

- 80. SVD - Spontaneous Vagina Delivery
- 81. TB - Tuberculosis
- 82. THs - Teaching Hospitals
- 83. U5MR - Under-Five Mortality Rate
- 84. UCC - University of Cape Coast
- 85. UTI - Urinary Tract Infection

ACKNOWLEDGEMENT

The hospital's Board and Management would like to sincerely thank all parties involved for their various contributions to the year's accomplishments. Sincere gratitude is extended to the Sub-BMC management teams and the Heads of Units for their hard work and contributions. Also, to the hardworking and dedicated employees for their dedication to guaranteeing high-quality healthcare services to patients and clients. Additionally, worthy of recognition is the group that diligently produced an extensive report detailing the hospital's performance in 2023.

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MESSAGE FROM THE CHIEF EXECUTIVE



The year 2023 marks the Silver Jubilee of the hospital since its commissioning on 12th August 1998 as the first among the series of Ultra-Modern Regional Hospitals constructed by the Government of Ghana in the late 1990s. We celebrate not just the accomplishment of the past years, but 25 years of unwavering commitment of the hospital to delivering quality healthcare, advancing medical education, and fostering groundbreaking research.

What began in 1998 as a modern regional hospital with 226 beds and a modest staff of 140 has grown into a teaching hospital of national and international repute. The hospital's transformation into a teaching institution in partnership with the University of Cape Coast School of Medical Sciences (UCC-SMS) marked a significant milestone. Since 2014, CCTH has remained committed to its mission of providing comprehensive medical services while training the next generation of healthcare professionals as well as focusing on research whose outcome led to the improvement of the quality of services rendered to patients. Today, as one of the teaching hospitals in the country, CCTH serves as the apex referral center for the Central, Western, and Western North Regions of Ghana and beyond. Our unique location along the Lome-Abidjan corridor enhances our ability to deliver critical emergency services to a diverse population.

The hospital's collaboration with UCC-SMS has yielded remarkable outcomes. To date, this partnership has resulted in the graduation of 564 medical students, with 352 more undergoing clinical training at the CCTH. Beyond undergraduate education, the facility has expanded its postgraduate programs, creating an enabling environment for advanced medical training. The accreditations from the Ghana Colleges of Physicians and Surgeons, Nurses and Midwives, and the Medical and Dental Council reaffirm the status of CCTH as a premier institution for medical education and research.

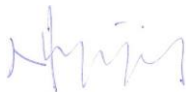
Notwithstanding, the transition to a teaching hospital brought its share of challenges. However, through the implementation of the first and second 5-year Medium-Term Strategic Plans (2016–2020 and 2021–2025), CCTH has made significant strides in addressing these issues. From upgrading the infrastructure to enhancing human resources and expanding research capacity, the hospital has seen continuous

improvement in its operations and service delivery. This progress is significantly attributed to our decentralized governance system, which has empowered operational units to innovate and streamline decision-making.

The success of CCTH would not be possible without the support of our partners. The University of Cape Coast - School of Medical Sciences (UCC-SMS) is our main collaborator enabling the hospital to provide tertiary clinical service, teaching, learning and research. Organizations such as the Cure Blindness Project, Operation Smile Ghana, the University of UTAH, MEDEVAC Foundation have enriched our capacity to deliver specialized care. Additionally, donations from the African Diaspora Development Institute (ADDI), Ghana Gas Limited, MTN Foundation, Internal Organization for Migration (IOM), One Less Drop, Less Privileged Foundation, Kokrokoo Foundation, Rebecca Foundation, Ahomka Foundation, etc. have all enhanced the hospital's ability to serve its patients and clients. To all our partners, I extend my heartfelt gratitude to them and thank them for believing in our vision and commitment to serve humanity and inspire us to strive for even greater heights.

Despite the achievements, CCTH faces some significant challenges, these include inadequate infrastructure, aging equipment, absence of critical facilities like a Neonatal Intensive Care Unit (NICU), Trauma & Emergency Centre, overcrowding at our outpatient and emergency centers remains a pressing concern. Management is working diligently to address these issues through strategic partnerships and advocacy for government support.

As we look to the future, I am confident that, with your continued support, CCTH will reach even greater heights. Together, we will achieve our vision of becoming a world-class leader in tertiary healthcare, medical education, and research.



.....
DR. ERIC KOFI NGYEDU
CHIEF EXECUTIVE OFFICER

PREFACE

The hospital organised a two-day review meeting on its 2023 Annual Performance from Wednesday 28th to Thursday, 29th February 2024 which was aimed at assessing the performance achieved in 2023 as well as identify the major issues that impeded the achievement of the targets set for the year under review. It also aimed at evaluating how well the hospital was performing in its Medium-Term (2020 – 2025) Strategic Objectives.

This report is divided into 4 sections with a total of twenty (20) chapters;

- Section One (1) with two chapters. The first chapter gives an introduction and background to the report as well as a summary of the performance in 2023 aligned with the six strategic objectives of the hospital. The second chapter reports the 25th Anniversary celebration activities.
- Section Two (2) contains chapters three (3) to seven (7) and it gives details on Human Resource performance, summary of Clinical Services performance, Technical, General and Domestic Services performances, Financial performance, and Key Collaborations & Support in the year under review.
- Section Three (3) gives an overview of the various Sub-BMC / Units' specific performances in addition to Pharmaceutical Services captured under chapters eight (8) through to nineteen (19).
- Section Four (4) contains Chapter twenty (20) which is a summary of challenges encountered and the mitigating strategies, the way forward for the year 2024 and the conclusion.

SECTION 1 _ BACKGROUND

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND

The Cape Coast Teaching Hospital in 2020 developed its second Medium-Term (2020 to 2025) Strategic Plan and 2023 was its fourth year of implementation. The annual review of the hospital's performance is essential as it helps to assess the outputs and outcomes under each strategic objective and the key issues to improve performance and sustain the gains. This report presents a summary of the performance achieved by the hospital in 2023 in comparison with previous years. Also contained in the report are the challenges faced by the hospital in the year under review and the mitigating strategies implemented. The report is to guide Management in decision-making and effective planning process while also serving as a reference document for health research among others.

1.1 PROFILE OF CCTH

The Cape Coast Teaching Hospital, formerly known as the Central Regional Hospital was established in August 1998. It gained the status of a Teaching Hospital on March 21st 2014 when the School of Medical Science was established at the University of Cape Coast. In an attempt to fulfil and implement the mandates of teaching hospitals as enshrined in the Ghana Health Service and Teaching Hospital ACT 525, CCTH provides advanced medical services, and train medical as well as postgraduate students while also undertaking researches geared towards providing evidence to support decision making and enhance quality of lives.

The Hospital has received numerous accreditations from the Ghana College of Physicians and Surgeons and the Medical and Dental Council for the training of health professionals in areas such as Surgery, Obstetrics and Gynaecology, Urology, Orthopaedics, etc. Additionally, CCTH acts as a training facility for undergraduate and graduate students from the Ghana College of Nursing and Midwifery, School of Nursing and Midwifery, School of Health and Allied Sciences, as well as final-year students in the PHARM D program at Kwame Nkrumah University of Science and Technology (KNUST) and UCC.

The hospital has a bed capacity of four hundred (400) which serves the people of Central Region, Western Region and beyond. Geographically, the hospital is situated in the northern section of Cape Coast, the capital of the Central Region of Ghana. It is bordered on the north by Abura Township, on the south by Pedu Estate and 4th Ridge, on the east by Nkanfoa, and on the west by Abura.

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 and beyond; employing the services of well-trained, skilled, committed and motivated workforce using evidence-based technology.

1.1.3 CORE VALUES

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

1.2 MEDIUM-TERM STRATEGIC OBJECTIVES (2020 -2025)

1. Increase access to specialist service delivery
2. Improve quality of health care delivery.
3. Improve infrastructure and equipment base for the delivery of quality service
4. Strengthen governance system
5. Improve health research, teaching and excellence in learning
6. Intensify support to the lower level of care and service delivery points

1.3 SERVICES PROVIDED AT CCTH

The Cape Coast Teaching Hospital provides both general and specialty in-patient and out-patient treatments in addition to diagnostic and rehabilitation services. Table 1.3.1 below lists specifics about the clinical services the hospital provides.

Table 1.3. 1: Current Health Care Services

CLINICAL SERVICES		
GENERAL CLINICAL CARE SERVICES		
<ol style="list-style-type: none"> 1. General / Family Medical 2. Accident & Emergency Care 3. Wound Care Clinics 4. General Paediatric Clinic 		
SPECIALISED CLINICAL CARE SERVICES		
A. Internal Medical Clinics	B. Surgical Services	C. Anaesthesia & Critical Care Services
<ol style="list-style-type: none"> 1. Intensive Care Services 2. Diabetic & Hypertension 3. Sickle Cell Clinic 4. Endocrine Clinic 5. Gastro Intestinal Clinic 6. Dermatology Clinic 7. Hepatitis Clinic 	<ol style="list-style-type: none"> 1. General surgery clinic - Thyroid & Breast (cancer & chemotherapy) 2. Uro-Surgical Clinics 3. Neuro-Surgical Clinic 	<ol style="list-style-type: none"> 1. Anaesthesia services 2. Intensive care service

CLINICAL SERVICES		
8. Cardiology Clinics 9. Haemodialysis services 10. Oncology Clinic 11. Asthma 12. Renal	4. Burns & Plastic Surgical Clinic 5. Orthopaedic Surgical clinic 6. Paediatric surgical clinic 7. Colorectal clinic	
C. Child Health Services	C. DEENT Services	D. Public Health Services
1. General Paediatric 2. Neonatal Care 3. Paediatric Asthma 4. Paediatric Neurology 5. Paediatric Endocrine 6. Paediatric Renal 7. Paediatric Cardiology 8. Paediatric Sickle Cell 9. Paediatric Oncology 10. Paediatric Endocrine 11. Osteogenesis Imperfecta Multi-Disciplinary Service	1. Dental & Maxillofacial Clinic 2. Eye Care 3. Ear, Nose and Throat clinic 4. Orthodontist services	1. Child Welfare Clinic 2. Family Planning 3. HIV Counselling 4. TB Dot Centre 5. Adolescent Clinics
E. Rehabilitation Services	F. Obstetric & Gynaecological Services	
1. Physiotherapy 2. Diet Therapy 3. Clinical Psychology 4. Speech Therapy 5. Community Psychiatry	1. Obstetric & Gynaecologic Emergencies 2. Antenatal clinic 3. Post-natal clinic 4. Gynaecology clinic 5. Reproductive Endocrinology and Fertility Services 6. Gynae Oncology Clinic 7. Feto-Maternal Medicine Services 8. Urogynaecology services	
CLINICAL INVESTIGATION SERVICES		
G. Imaging	H. Laboratory Services	
1. MRI 2. CT scan 3. Fluoroscopy 4. Mammography	1. Haematology 2. Serology and Immunology 3. Pathology 4. Biochemistry 5. Microbiology 6. ELISA test 7. Infectious markers 8. Tumour/oncogenic markers 9. Fertility markers 10. Thyroid and cardiac profile	

1.4 PRIORITIES FOR 2023

- i. Scale up existing Sub-Specialist Services
- ii. Improve Clinical Pharmacy and Specialist Pharmaceutical Services.
- iii. Introduce new Specialized Services
- iv. Reorganization of Outpatients Services.
- v. Strengthen Clinical Services.
- vi. Development and implementation of protocols for quality care
- vii. Expansion of existing Infrastructure and Equipment
- viii. Retooling of Equipment and Furniture
- ix. Development of New Infrastructure with Equipment
- x. Development of Capacity (knowledge and skills) of Staff to Improve Performance.
- xi. Expansion of Revenue Base
- xii. Introduction of Welfare Packages
- xiii. Recruitment
- xiv. Strengthening Internal Management System
- xv. Development and Enforcement of Policies
- xvi. Improve Security of the Hospital Land
- xvii. Support the Training of Undergraduate and Postgraduate Health Professionals
- xviii. Improve on Partnership Training Programs (Local & International)
- xix. Improve on the Conduct of Research
- xx. Strengthen Outreach Services and Coordination.

1.5 SUMMARY OF 2023 CCTH PERFORMANCE UNDER THE STRATEGIC OBJECTIVES

The hospital's overall performance in terms of key outputs and outcomes is highlighted in Table 1.5.1 below in line with the six medium-term strategic objectives of the hospital.

Table 1.5. 1: Summary of 2023 Performance under the Strategic Objectives

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
HOSPITALWIDE LEVEL							
Access	2019	2020	2021	2022	2023	Target	Remarks
i. Total OPD Attendance	168,056	125,772	152,364	170,441	172,839	CCTH = 15% ↑	1.41% ↑ Target not met
ii. OPD cases seen per doctor	1:1098	1:749	1:952	1:1033	1:843	THs= 1:1080	Decr Target not met
iii. Total Specialist OPD attendance	90,667	69,603	79,752	82,557	84,886	CCTH = 15% ↑	2.8% ↑ Target not met

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
iv. OPD Cases seen per specialist	1:1259	1:1024	1:1286	1:1086	1:816	THs= 1:1255	Decr Target not met
v. Total Referrals–In	6778	3609	6,209	3,777	7,383	-	18.9% ↑
vi. Total Patients admission	11,088	10,578	12,930	12,622	12,557	CCTH = 5% ↑	0.51% ↓ Target not met
vii. Percentage of patients admitted due to external referrals	40.4%	21.6%	18.81%	19.27%	40.63%	-	Incr
viii. Percentage of neonatal admissions due to external referrals	27.2%	25.5%	15%	13.80%	11.24%	THs = 30%	Incr Target not met
ix. Percentage of maternal admissions due to external referrals decreased	27.2%	21.2%	23%	26.71%	72.74%	THs = 60%	Incr Target exceeded
x. Nurse and Midwife admission ratio	1:16	1:13	1:13	1:13	1:14	incr	
xi. Percentage bed occupancy	55%	55.5%	52.20%	54.0%	57.5%	THs = 75%	Incr Target not met
xii. Total surgical operations	4,815	3,883	5,961	5,357	5,824	CCTH = 10% ↑	8.7% ↑ Target not met
xiii. Surgery to Surgeon ratio	127:1	108:1	199:1	179:1	108:1	THs = 250:1	Decr Target not met
xiv. Total deliveries	3,027	2,883	3055	3,269	2,877	CCTH = 5% ↑	11.99% ↓ Target not met
xv. Delivery to midwife ratio (all midwives at the institution)	20:1	18:1	15:1	14:1	15:1	THs = 20:1	Incr
xvi. Couple year protection	1,562.5	1,891.2	2,233	2,626	2,075	TH = 2,500	Target not met
xvii. Caesarean section rate	41.2%	53.3%	51.4%	50.4%	52.69%	TH = 40%	Incr Target not met
xviii. % Tracer Drug Availability	88.5%	84.62%	95%	86.2%	93.10%	CCTH = 100% TH = 90%	Incr CCTH target not met THs target met
xix. Prescription to pharmacy ratio	8,288:1	9425:1	6,422:1	6,495:1	6,643:1	TH = 12000:1	Incr Target not met
xx. Percentage antibiotic prescribed	16.18%	17.1%	11.6%	8.5%	10.25%	TH = 35%	Incr Target met

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
xxi. Percentage Injectable	5.8%	24.2%	1.6%	7.23%	10.54%	TH = 10%	Incr Target not met
xxii. Utilization of Pharmaceutical Care interventions	99%	11.5%	21.2%	22.6%	22.4%	TH = 30%	Target not met
xxiii. Utilisation of laboratory services	62.5%	260.3%	221.3%	524%	505.1%	TH = 60%	Decr Target met
xxiv. Total laboratory Investigation	291,677	241,858	180,415	558,298	519,363	CCTH = 10% ↑	Decr Target not met
xxv. Utilisation of radiological services	86.9%	530.7%	87%	123.3%	114.41%	TH = 60%	Decr Target met
xxvi. Radiology investigation	20,285	23,697	20,587	20,787	22,758	CCTH = 10% ↑	9.48% ↑ Target not met
HOSPITALWIDE LEVEL OUTPUTS							
Successfully performed first Cornea transplant with seven (7) patients benefiting							
Introduced the following services;							
<ul style="list-style-type: none"> • Epileptic clinic under Neurology services • Introduce PCR Laboratory services 							
Operationalized the Polyclinic to deal with walk in cases							
Introduced advanced anaesthetic techniques such as Epidural analgesia							
Strengthened appointment system for specialist clinics at the OPD level							
Intensified pre-operative assessment by Peri-Operative Nurses							
Expanded the scope of sub-specialist services							
<ul style="list-style-type: none"> • Upgraded CT-Scan services with a new 32 slides equipment • Upgraded Ultrasound scan services with Ultrasound Suite and multi-purpose ultrasound machines 							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
HOSPITALWIDE LEVEL							
Impact	2019	2020	2021	2022	2023	Target	Remarks
i. Total Institutional Death	1,307	1,379	1,306	1,072	994	CCTH = 5% ↓	7.3% ↓ Target met
ii. Institutional death rate	10.3%	12.3%	11%	8.5%	8.4%	THs = 5%	Decr Target not met
iii. Theatre Death Rate	0.6%	0.1%	0.4%	0.1%	0.1	THs = 0.5%	Target met
iv. Low birth rate	16.1%	16.8%	19.4%	20.5%	23.2%	THs = 12%	Incr Target not met
v. Stillbirth rate (/1000LB)	42	31	42	35	37	THs = 15	Incr Target not met
vi. Total Fresh Still birth	39	38	43	54	42	-	22.2% ↓
vii. Total Macerated Still Birth	87	52	85	86	63	-	26.7% ↓
viii. Institutional Maternal mortality ratio (/100,000LB)	925	903	1,050	1,186	681	THs = 300	Decr but was not Target met

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
ix. % of maternal mortalities audited	100%	100%	100%	100%	100%	THs = 100%	Sustained
x. Number of institutional maternal deaths	28	26	32	39	20	CCTH = 50% ↓	48.7% ↓
xi. Institutional infant mortality rate (/1000LB)	91	89	88	77	67	THs = 15	Decr but was not Target met
xii. Number of Infant deaths	272	284	267	252	197	-	21.8% ↓
xiii. Institutional neonatal mortality rate (/1000)	80	81	78	67	58	TH = 25	decr
xiv. Number of institutional neonatal deaths	239	233	239	219	170	CCTH = 5% ↓	22.4% ↓ and target met
xv. Under-five mortality rate (/1000LB)	101	106	95	80	72	-	Decr
xvi. Number of Institutional under-five mortality	301	307	290	264	213	CCTH = 5% ↓	19.3% ↓ and target met
xvii. Average length of stay (<i>Proxy-C/S, Appendectomy, severe malaria in children</i>)	5.6	5.9	5.6	5.5	5.6	-	Incr
xviii. Partograph use rate	46.12%	48.7%	48.5%	47.6%	62.01%	THs = 60%	Incr Target met
xix. Surgical site infection rate	0.27	12.61%	-	-	0	THs = 5%	Target met
xx. Average length of stay at the Emergency ward	3.0	2.0	2.9	1.0	1.1	THs = 2.0	Incr but target was met
xxi. Availability and access to appropriate hand hygiene institution	0.15	0.21	0.18	0.23	0.23	-	
xxii. Number of hands washing basins	240	368	368	433	433	-	
xxiii. Availability and appropriate disposal of waste	0.6	-	-	-	-	TH = 4	

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
xxiv. Number of waste disposal bins	270	270	270	-		-	
xxv. Availability of toilet institution	0.23	0.43	0.42	0.41	0.37	THs = 0.25	decr
xxvi. Total number of functioning toilets at the institution	92	173	169	165	165	-	2.3% decr
xxvii. Percentage of clients satisfied with overall services at the institution	97%	93.4%	84.3%	-	82.2%	THs = 95%	Decr compared to 2021 Target was met
xxviii. Adverse Events Recorded	153	159	46	19	26	THs = 40	36.8% ↑ but target was met
HOSPITALWIDE LEVEL OUTPUTS							
Established 6 high dependency units (HDUs) to strengthen comprehensive HDU services at the hospital <ul style="list-style-type: none"> 2 HDU units at medical department nearing full set up 2 HDU units set up at surgical department 2 HDU units set up at A&E department 							
Improved tracer availability from 86.25% in 2022 to 93.1% in 2023							
Conducted one Quality Assurance monitoring exercise which was followed by a forum							
Organized in-service training for staff on customer care, quality assurance, Basic Life Support and IPC							
Conducted audit of all deaths e.g., Maternal, Child Health and A&E, Surgery							
Decline in the maternal mortality ratio from 1,186/100,000LB in 2022 to 681/100,000LB in 2023							
Conducted weekly and monthly analysis and interpretation of surveillance data e.g., on influenza-like illness (ILI) and severe acute respiratory infections (SARI)							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
HOSPITALWIDE LEVEL ACTIVITY OUTPUTS							
Output	2019	2020	2021	2022	2023	Target	Remarks
i. Equipment Down time (proxy: CT SCAN)	0%	0%	82.5%	100%	0%	THs = 5%	Decr and target was met
ii. PPM (Planned Preventive Maintenance) Output achieved	80%	75%	61.7%	50%	55% d	THs = 80%	Incr but target was not met
iii. Equipment Utilisation (Proxy: CT SCAN)	83.1%	98.72%	21.4%	0%	14.17%	THs = 90%	Incr but target was not met
HOSPITALWIDE LEVEL OUTPUTS							
Construction of an infectious disease centre <ul style="list-style-type: none"> Construction at 100% completion 							
A&E expansion project ongoing. <ul style="list-style-type: none"> Construction at 40% completion 							
Renovation of the current Covid-19 Treatment Centre completed <ul style="list-style-type: none"> Renovation work at 100% completion with polyclinic commenced 							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE

Construction of a relative hostel to provide decent and affordable accommodation for our clients.

- Construction at 70% completion

Construction of an Eye Centre

- Construction at the first slabs level (40% complete)

Refurbished the Executive Suite for VVIP Services

- work at 98% completion

❖ Acquired the following equipment to improve service delivery;

- New Generator set of 300KVA to improve backup power
- New oxygen plant (30m²/h)
- Full set of Laundry

CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM

4.1: Governance Related Performance

HOSPITALWIDE LEVEL ACTIVITY OUTPUTS

Output	2019	2020	2021	2022	2023	Target	Remarks
i. Number of Board meetings held	4	4	1	4	4	CCTH = 6	Target not met
ii. Number of additional accreditations secured	2	0	0	3	3	-	Total of ten (10) accreditations; a. The 3 accreditations in 2023 are; Dental & Maxillofacial from GCPS, advanced midwifery from GCNM, otorhinolaryngology from (WACPS). b. The other 7 are; Accreditation in Urology, Orthopaedics, General Surgery, Internal Medicine, Neurosurgery, Obstetrics & Gynaecology, Group accreditation for Family Medicine (Cluster of Hospitals) from GCPS

HOSPITALWIDE LEVEL OUTPUTS

Celebrated the hospital's 25th Anniversary and held a grand durbar in September 2023

Established the Human Resource Management Directorate

Created the Cooperate Affairs Unit to improve publicity of the Hospital

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE

Various workshops and short course attended (Local & International) by Senior Managers, Consultants and Specialists to upgrade their skills and capacity

Quarterly reviewed the 2023 procurement plan to ensure items not captured in the procurement plan were captured whenever the need arises.

Conducted a suppliers' forum

Prepared Procurement Plan for 2024.

Ensured timely and accurate replenishment of required stock in order to avoid over and under stock.

Organised the hospital's 2022 annual performance review conference in March 2023

Conducted quarterly monitoring of the implementation status of the hospital's annual programme of work and report and reported appropriately to key stakeholders to guide decision and future plans

Continued to collaborate with the following organisations to improve service delivery;

- Himalayan Cataract Project/National Cataract Outreach Program to provide free cataract surgeries
- Operation-Smile Ghana to provide free Cleft Lip and Palate surgeries
- University of UTAH to perform ENT surgeries
- University of Cape Coast School of Medical Science

4.2: Human Resource Related Performance

HOSPITALWIDE LEVEL

Indicator	2019	2020	2021	2022	2023	Target	Remarks
i. Total number staff	1,627	1792	2,051	1,915	1,915	-	1.41% ↑
ii. % change in total number of staffs	22.8% incr	10.1% incr	14.5% incr	6.6% decr	1.41%	-	decr
iii. Number of staffs sponsored for training	50	77	60	57	115	-	101.8% ↑
iv. Proportion of Staff appraised	39%	45.13%	30.9%	45.21%	36.62%	TH = 100%	Decr and target was not met
% of staff retained after study leave	100%	100%	-	-	-	-	
v. Workplace related injury resulting in death or incapacitation	0%	0%	0%	0%	0%	THs = 1%	
vi. Total staff injury recorded	20	146	298 <small>(24-injury & 274 – COVID-19 infected)</small>	115 <small>(20-injury & 95 – COVID-19 infected)</small>	26 <small>Excludes COVID-19 infection</small>	-	
vii. Health workers who benefited from occupational health and safety interventions	100%	100%	100%	100%	100%	-	
viii. Total number of Covid-19 Infection among CCTH Staff	-	131	274	95	0	-	

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
ix. Percentage of staff satisfied at the institution	62.5%	46.5%	-	-	22.7%	THs = 70%	Decr compared to 2020 target was not met
x. Percentage of health staff with accidental needle injury	0.1%	0.67%	1.1%	0.78%		THs = 1%	Incr Target not met
xi. Consultant to resident doctor ratio	1:4	1:5	1:1.4	1:1.9	1:1.4	THs = 1:3	Decr
xii. Doctor to Nurse and midwife ratio	1:5	1:5	1:7	1:4	1:4	THs = 1:5	Target met
xiii. Delivery to midwife ratio (i.e., all midwives at the institution)	20:1	18:1	15:1	14:1	15:1	-	Decr
xiv. Delivery to midwife ratio (i.e., productivity of the midwives at only the delivery suite)	75:1	70:1	46:1	50:1	55:1	-	Incr
xv. Doctor to pharmacist ratio	8.5:1	9:1	6.4:1	7.5:1	8.5:1	THs =10:1	Incr Target not met
xvi. Prescription to pharmacy ratio	8,288:1	9,425:1	6,422:1	6,495:1	6,643:1	THs = 12000:1	Incr Target not met
xvii. Number of welfare packages available for staff	1	1	1	-	-	-	
xviii. Surgeon to surgery ratio	127:1	108:1	199:1	179:1	108:1	THs = 250:1	Decr Target not met
xix. Nurse and midwives to admission ratio	1:16	1:13	1:13	1:13	1:14	-	incr
HOSPITALWIDE LEVEL OUTPUTS							
The total number of staffs increased in 2023 by 1.41% from 1,915 in 2022 to 1,942							
Appointed the following to improve on governance system at the following;							
<ul style="list-style-type: none"> ● A Director of Human Resource Management ● Three Chief Nursing and Midwifery Officers 							
Recruited a total of 109 staff of different cadre to improve service delivery							
<ul style="list-style-type: none"> ● Medical Officers – 22 ● Enrolled Nurses – 2 ● Community Health Nurse – 1 ● Professional Nurses – 62 							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE

- Midwives – 7
- Medical Counter Assistant -3
- Porters – 2
- Orderlies – 10

Successfully managed staff records and removed staff who left the facility from the payroll to units to prevent financial loss to the government

Conducted two promotional interviews with 386 staff benefitting from it

- Promotion – 310
- Upgrading – 54
- Conversion – 12
- Appointment – 10

4.3 Finance related performance

HOSPITALWIDE OUTCOME/IMPACT

indicator	2019	2020	2021	2022	2023	Target	Remarks
Revenue Proxy							
i. Total Revenue GH¢	69,606,362	92,745,562.00	103,822,986.92	131,305,508.02	165,283,960.03	CCTH = 25% ↑	25.9% incr Target met
ii. % change in the hospital's revenue	22.6% (incr)	33.2% (incr)	11..9% incr	26.5% incr	25.9% incr	CCTH = 25% ↑	Target met
iii. Proportion of total revenue generated from partners/donors	0.65%	0.78%	0.9%	11.08%		-	
iv. Proportion of total revenue from IGF	31%	24%	23.1%	24.4%	29.32%	-	Incr
v. IGF Revenue	21,579,680.33	22,268,693.6	24,217,381.36	32,100,188.39	48,472,268.32	CCTH = 25% ↑	51.0% ↑ Target met
vi. % change in IGF revenue	+ 13.9%	+ 3.2%	+73.9%	+32.6%	+51.0%	CCTH = 25% ↑	Incr Target met
vii. Total service income	15,832,185	15,089,523.72	15,816,701.56	22,786,950.76	34,979,685.32	-	53.5% ↑
viii. Proportion of IGF revenue generated from services	73.4%	67.8%	67%	70.99%	72.2%	-	incr
ix. Total Drug Income GH¢	5,747,495	7,179,169.88	8,400,679.80	9,313,237	13,492,583.00	-	51.0% ↑
x. Proportion of IGF revenue generated from pharmaceutical services	26.6%	32.2%	33%	29.01%	27.8%	-	decr
xi. Ratio of cash revenue to	1.32:1	0.85:1	1.1:1	1.61:1	0.995:1	-	Decr

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
NHIA reimbursement							
Expenditure Proxy							
i. Total Expenditure GH¢	20,761,126.11	24,832,641.11	24,665,476.40	30,816,999	42,103,946	-	
ii. Proportion of IGF spent on PPM	3.51%	3.8%	5.4%	3.53%	3.55%	THs = 5%	Incr but target not met
iii. Percentage IGF paid as compensation	9.55%	10.82%	9.4%	8.93%	8.55%	THs = 10%	Decr Target met
Other Indicators							
i. Percentage of submitted claims paid	21.89%	11.2%	53.1%	65.97%	108.6%	THs = 75%	Incr Target met
ii. Debtors' days	393	215	194	126.78	-27.98	THs = 90	
iii. Creditor's days	175	182	224.8	233.77	234.37	THs = 120	Incr
iv. Ratio of cash revenue to NHIA reimbursement	1.32:1	0.85:1	1.1:1	1.61:1	0.995:1	-	Incr
v. Percentage of NHIA Claims Submitted on time	100%	100%	100%	100%	100%	-	
vi. Percentage of rejection on claims submitted to NHIS	0%	0%	0%	0%	0%	-	
vii. Proportion audit recommendations implemented	100%	100%	100%	100%	100%	THs = 100%	
viii. Number of Audit Committee meetings	5	4	4	2	3	4	Incr but target not met
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING							
5.1 Improve on Research:							
HOSPITALWIDE LEVEL							
Indicator	2019	2020	2021	2022	2023	Target	Remarks
i. Operational research conducted	6	2	14	9	15	TH = 4	Decr
ii. Total number of researches conducted	13	50	60	-	-	-	

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
iii. Number of researches published	10	15	12	17	8	TH = 20	Decr
iv. No. of Research Applications received at the Facility	92	112	135	200	296	-	Incr
v. No. of Researches Approved	80	110	121	187	248	-	incr
vi. % of research applications approved by the facility/ERC	87%	98.2%	89.6%	93.5%	83.8%	-	Decr
Received a total of 296 research applications out of which 248 were granted approval							
A total of 8 researches were published in various journal by staff. These are;							
<ol style="list-style-type: none"> 1. Exertional Dyspnea incidentally diagnosed in sarcoidosis: A teaching Hospital Experience. DOI: 10.1155/2023/8689352 2. Bilateral Tubal Ectopic pregnancy: A case Report .DIO: 10.60014/PMJG.V12I1.312 3. A rare case of conjunctive rhinosporidiosis mimicking a neoplasm in Ghana: DOI: 10.600014/pmjpg.VIli2.290. 4. Clinical autopsy as an outcome measure and tool for quality improvement at the Cape Coast Teaching Hospital. DOI: 10.60014/pmjpg.VIli2.293. 5. The importance of post-discharge surgical site infection surveillance: an exploration of surrogate outcome validity in a global randomized controlled trial (FALCON). Lancet Glob Health 2023; 11: e1178–79 DOI: 10.1016/S2214-109X(23)00256-5 6. Strategies to randomize and monitor biases and imbalances by arm in surgical cluster randomized trials evidence from CHEETAh, a trial in seven low- and middle-income countries. Trials (2023) 24:259. DOI: 10.1186/s13063-022-06852-2 7. Adaptation of the Wound Healing Questionnaire universal-reporter outcome measure for use in global surgery trials (TALON-1 study): mixed-methods study and Rasch analysis. DOI:10.1093/bjs/znad058 8. Reducing the environmental impact of surgery on a global scale: systematic review and co-prioritization with healthcare workers in 132 countries. DOI:10.1093/bjs/znad092 							
32 staff were applied to the hospital's ethical review board for clearance and they were granted approval to conduct their studies. The table below details the topic of the research and the applicant;							
NAME OF APPLICANT(S)	RESEARCH TOPIC						
Rita Darko	Practice of Family Centred Care in Adult Intensive Care Unit of The Cape Coast Teaching Hospital.						
Dr Yvonne Ayerki Nartey	Screening and Treatment Opportunity Project for Hepatitis C Virus Infection in Ghana (Stop-Hep C Ghana)						
Dr Emmanuel Ofori	Hippo Study; A Global Prospective Cohort Study on Inguinal Hernia Surgery						
Julius Kevor	Prevalence of Idiopathic Scoliosis and Its Associated Risk Factors Among Students in The Cape Coast Metropolis: A 5-Year Retrospective Study in Two Tertiary Hospitals						
Gifty Ampadu	Nurse- Lead Self- Management Intervention for People Living with Cancer at Cape Coast Teaching Hospital						
Afia Serwaa Bonsu	Experiences of Pain Management of Persons Living with Sickle Cell Disease at The Cape Coast Teaching Hospital.						
Evelyn Eyeson Baawa	Evaluation of The Implementation of The South African Triage Scale at Cape Coast Teaching Hospital						
Maureen S. Akah	Knowledge, Attitude, And Practices of Exclusive Breastfeeding Among Career Mothers at The Cape Coast Teaching Hospital”						

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
Nancy Baker	Childbirth Experiences Among Primiparous Mothers Attending Postnatal Care at Cape Coast Teaching Hospital						
Basiratu Ahmed-Dadzie	Knowledge and Utilization of Partograph Among Midwives at The Cape Coast Teaching Hospital Delivery Suite.						
Adriana Bentil	Causes and Factors of Stillbirth and Neonatal Death Among Pregnant Women in Maternity and Delivery Ward at Cape Coast Teaching Hospital						
Philemon Mwintige	Antibiotic Resistance Profile of <i>Enterobacteriaceae</i> Bacteria Isolated at Cape Coast Teaching Hospital						
Prof. Akakpo Patrick	Phenotypic and Genetic Markers of Wilms Tumour At Cape Coast Teaching Hospital						
Mr. Safianu Osman	Awareness and Acceptability of Edible Insect-Based Foods (EBIFS) Among Pregnant Women – An Exploratory Study at A Tertiary Health Center in Ghana.						
Emmanuel Antiri	Prevalence, Clinical Features and Survival Outcomes of Patients with Haematological Malignancies at Cape Coast Teaching Hospital, Ghana – A Retrospective Study						
Edward Morkporkpor A.	Review of Blood Donors and Evaluation of Transfusion Reactions at A Tertiary Hospital in Ghana- A Haemovigilance Initiative						
Theresah Amoah Esther Oppong Millicent Egyir	Assessing the Knowledge and Practices of Essential Newborn Care by Midwives in Cape Coast Teaching Hospital at Cape Coast Metro Hospital						
Mr Bashirudeen Kofi Mensa Essel	Prevalence of The Co-Inheritance of Glucose-6-Phosphate Dehydrogenase (G6pd) Deficiency and Sickle Cell Trait (SCT) Among Blood Donors and Transfusion Outcomes at The Cape Coast Teaching Hospital: A Cross-sectional Study						
Cynthia Teye-Topey	Post-Operative Wound Care Practices Among Nurses in Cape Coast Teaching Hospital.						
Dr. Robert Incoom	Antibiotic Prescribing in Primary Healthcare: A Point Prevalence Survey Study (APC-PPS)						
Evans Acquah	Assessment of Biochemical Indices of Patients with Metastases Cancer In Cape Coast Teaching Hospital						
George Akafity	Fever of Unknown Origin (FUO) Due to Infections in Low and Low-Middle Income Countries: A Multicenter Retrospective Observational Study						
Philemon Mwintige	Antibiotic Resistance Profile of Enterobacteriaceae Bacteria Isolated at Cape Coast Teaching Hospital						
Dr Joyce Ashong	Sickle Cell Disease Follow Up Study: Factors Contributing to The Default of Patient Clinic Visit at Cape Coast Teaching Hospital, Cape Coast, Ghana						
Julius Blewu Kevor	Prevalence of Idiopathic Scoliosis and Its Associated Risk Factors Among Students in The Cape Coast Metropolis: A 5-Year Retrospective Study in Two Tertiary Hospitals						
Lydia Brewu	Family Preparedness on Post Discharge Care for Small Babies Following Hospitalization at Neonatal Intensive Care Unit (NICU); Cape Coast Teaching Hospital						
Prince Okai	The Nurses Perspective Regarding Resuscitation; A Study at The Cape Coast Teaching Hospital						
Daniel Edem Azumah	Assessment of Diagnostic Efficiency of Expert MTB-RIF in The Pulmonary <i>Mycobacterium Tuberculosis (MTB)</i> Diagnosis at Cape Coast Teaching Hospital (CCTH)						
Dr Emmanuel Owusu Ofori	Cobes, Surgical Preventive Health Education and Rural Health in Ghana: The Case for Rural Medicine Residency Programs						
Kwabena Nimako	Prevalence of Non-Communicable Diseases Among People Living With HIV						
Makafui S. C-J. K. Dayie	Outcome of Dead Space Management for Chronic Osteomyelitis Using Antibiotic-Impregnated Plaster of Paris Beads in Cape Coast Teaching Hospital						
5.2 Improve on Teaching and Learning:							
HOSPITALWIDE LEVEL							
Indicator	2019	2020	2021	2022	2023	Target	Remarks
i. Resident pass rate	100%	-	91%	87.5%	94.7%	THs= 60%	Incr and target met

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
ii. Number enrolled in postgraduate colleges	48	-	38	47	84	-	incr
iii. Consultant to Resident Doctor ratio	1:4	1:5	1:1.4	1:1.9	1:1.4	THs = 1:3	decr
iv. Proportion/number of clinical staffs enrolled in postgraduate colleges	-	23	38	47 25 – Dr. 7 = Pharm. 2 = Midwives 13 Prof. Nurses	28 Dr – 27 Nurses – 1	-	decr
HOSPITALWIDE LEVEL OUTPUTS							
Sustained already acquired accreditations with colleges and institutions. They are;							
<ul style="list-style-type: none"> i. Accreditation in Urology from Ghana College of Physicians and Surgeons ii. Accreditation in Orthopaedics from Ghana College of Physicians and Surgeons iii. Accreditation in General Surgery from Ghana College of Physicians and Surgeons iv. Accreditation in Internal Medicine from Ghana College of Physicians and Surgeons v. Accreditation in Neurosurgery from Ghana College of Physicians and Surgeons vi. Accreditation in Obstetrics & Gynaecology from Ghana College of Physicians and Surgeons vii. Group accreditation for Family Medicine (Cluster of Hospitals) 							
Received the following accreditations in 2023;							
<ul style="list-style-type: none"> i. Accreditation in advanced midwifery from the Ghana College of Nursing and Midwifery ii. A two- year provisional from Ghana College of Physicians and Surgeons (GCPS) for Dental Residency Training iii. Rotational Accreditation in otorhinolaryngology from West African College of Physicians and Surgeons (WACPS) for ENT Residency Training 							
Initiated processes to secure accreditation for the training of postgraduate pharmacists and Anaesthesia							
Various workshops and short course attended (Local & International) by Senior Managers, Consultants and Specialists to upgrade their skills and capacity							
A total of one-hundred and seventy (170) staff were granted approval to pursue various programs							
<ul style="list-style-type: none"> ● 58 Medical Doctors ● 39 Professional Nurses ● 34 Midwives ● 1 Health Research Officer. 							
Staff at the laboratory participated in EQA for TB, Malaria, HIV & SARS-COV-2							
Organized in-service training for nurses and midwives on customer care/quality assurance/professional ethics							
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS							
Indicator	2019	2020	2021	2022	2023	Target	Remarks
Number of outreach visits carried out	100%	100%	100%	100%	100%	THs = 16%	
Outreach visits carried out	174	164	398	1,063	324	-	69.5% decr

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE

Total number of outreaches planned visits carried out	174	164	398	1,063	324	-	69.5% decr
Number of Beneficiaries recorded	13,873	8,276	20,415	38,896	33,003	THs= 11,215	15.2% decr

HOSPITALWIDE LEVEL OUTPUTS

- Provided mentorship to lower-level health facilities in Central Region
- Provided HIV viral load and E.I.D services for all ART sites in Central Region
- Supplied blood and blood products to private and lower-level facilities within the Cape Coast Metropolis
- Undertook medical outreaches to communities as part of the activities earmarked for the hospital's 25th Anniversary Celebration
- Provided continuous support to lower facilities on phone and visits to site
- Some lab Staff served as Regional OTSS and EQA supervisors

- Outreach support to peripheral institutions
- a. Total outreaches carried out: = 324
 - ✓ Outreaches (communities)
 - Total Community/ Church = 300
 - Number of People = 30,621
 - ✓ Outreaches (Schools)
 - Total number of Schools visited = 6
 - Number of beneficiaries/pupils = 546
 - ✓ Outreaches to Organizations
 - Number of organisations = 18
 - Number of beneficiaries = 1,836

Collaborative outreaches organised in 2023

Department/ Sub-BMC	Outreach	No. Communities or organizations/ schools	No. Screened	No. Booked/R eferred	Surgeries/Blood Donation
Eye & Public Health	Cataract	209 (9 districts)	16,793	-	1,712
ENT Unit	ENT	5	596		-
Dental & Maxillofacial	Dental	2	181		-
Surgery & Public Health	Plastic Surgery	2	112		49
Transfusion Medicine & Public Health	Blood Donation	37	3,070		2119
Surgery & Public Health	Orthopaedic Surgery	2	502		45
Oncology & Public Health	Breast Cancer	42	8,027	396	
OPD Sub-BMC & Public Health	General Screening				-
	• Diabetes	1	618	15	

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE

		• <i>Hypertension</i>		722	35	
	Speech & Language Therapy	organizations	18	1,836	-	-
	DEENT Sub-BMC	DEENT	6	546		
	Total		324	33,003	446	3,925

SECTION 2 _ ANNIVERSARY REPORT

CHAPTER TWO

25TH ANNIVERSARY CELEBRATION

2.1 INTRODUCTION

12th August 2023 marked 25 years since the Hospital was established as a regional hospital under the leadership of His Excellency Rt. Lieutenant Jerry John Rawlings. The silver jubilee was celebrated under the theme '25 years of Quality Health Care - Repositioning for Excellence". To commemorate the anniversary, the hospital organized a series of events which were geared towards highlighting the hospital's growth, its significant contributions and impact as well as its commitment towards the delivery of quality healthcare to the people of Cape Coast, Ghana and beyond. The events started in May and culminated in a grand durbar in September.

2.2 ACTIVITIES ORGANISED TO MARK THE CELEBRATION

The events held to commemorate are as follows;

2.2.1 BLOOD DONATION EXERCISES

The hospital embarked on a series of blood donation drives to several communities within the central region to mark its silver jubilee. The purpose of this exercise was to encourage the public to support this life-saving cause and to increase awareness of the importance of blood donation in saving lives. The response was encouraging as numerous volunteers came forward to donate their blood. Because of this, the hospital did not face shortage of blood or blood products and was able to provide blood to other facilities.

2.2.2 MEDICAL OUTREACHES

A medical outreach program was held to provide free health screening and consultations for the people of Kissi in the Komenda Eguago Edina Abirem (KEEA) district of central region and in the hospital for the general public. This endeavor demonstrated the hospital's commitment to extending healthcare services beyond its walls and reaching those in need. A total of 2,500 individuals were screened for various range of medical conditions, including diabetes, syphilis, hepatitis B and C, eye high blood pressure, and BMI. Those who required additional examinations were referred to the hospital.

Pictures from the Medical Outreaches



2.2.3 OPEN-DAY & PRESS SOIREE

An open-day and press soiree was organized to engage the general public and the press. The occasion offered the opportunity to showcase the hospital's history, achievements over the past 25 years, challenges being faced and its future plans. Further, the media was granted the chance to interact with hospital management to learn about the hospital's service delivery system. They were also given guided tours of critical areas in the hospital to appreciate the roles and the issues being encountered by the hospital. Equally, the hospital opened its gates to schools and the general public to visit some selected service areas and engage with the various service providers, such as doctors, nurses, pharmacists, administrative staff, etc. Below are some pictures from the press soiree.

Pictures from the opening day and press Soiree



2.2.4 ANNIVERSARY LECTURE

The 25th anniversary lecture was held on Wednesday 9th August, 2023 at the Ridge Royal Hotel. The lecture created a platform for the hospital and its stakeholders to reflect on the 25 years of existence of the Institution, the past, and the present. It gave an opportunity to deliberate into future prospects that will reposition the hospital towards achieving the desired excellence.

The lecture also brought about relationship strengthening between academia, service delivery and with the community. The focus was to shape future interventions to promote inclusive growth to maximize the impact. The lecture topics included;

1. Historical Antecedent, Transition to Teaching Hospital, Current Situation of the Hospital and Future.
2. Clinical/Scientific Lecture:
 - i. Lecture on Electronic Health Record System, implementation and its impact on service delivery: the experience of a Tertiary Hospital in Ghana.
 - ii. Epidemiological lecture on HIV, Cervical Cancer and TB related research
 - iii. Clinical lecture on training of Nurses and Midwives and the role of preceptors related research
 - iv. Training Lecture on Postgraduate training and the role of CCTH
3. Legacy Project Implementation and Sustainability and

4. Policy Related Lecture with a panel discussion on Financing Tertiary Healthcare Services in Ghana - Policy Options.

The anniversary lecture was Chaired by Hon. Tina Naa Ayeley Mensah, the former Deputy Minister of Health and brought together various participants and dignitaries. Notable were Prof. Samuel Debrah – the Chairman of Ghana College of Physician and Surgeons, Dr. Daniel Asare, the first CEO of CCTH and the board chair of Health Facility Regulatory Agency (HeFRA), Chief Executive Officers of sister Teaching Hospitals and the University of Ghana Medical Center (UGMC), CCTH Board Members, Mr. Eric Nsiah Boateng, the Head, Monitoring and Evaluation at the Ministry of Health, Representatives from the University of Cape Coast Medical School and Nursing School, Cape Coast Nursing & Midwifery Training College. Also, in attendance were traditional rulers, Management Members of CCTH, Heads of Units/Sub-BMCs, and the Media.

Pictures from the Anniversary Lectures







2.2.5 FUN GAMES

A number of games and sporting activities were held as part of the hospital's silver jubilee celebration to promote wellness and foster unity and friendship among staff. This included football, volleyball, table tennis, draft, ludu, oware, lime/egg/and spoon race and cards. Eight teams (groupings of Sub-BMCs/Units and an external team) competed for a cup in football and valley ball. The competition commenced with the first football kick taken by the Board Chairman and the ultimate cup was won by the Diagnostics and Imaging Team. The volleyball competition was won by Pharmacy and Administration Team whereas and the Tennis ball competition was also won by the Director of Pharmacy. The other games were won by various individual groupings. The winners of the football and volleyball competitions received a cup each and competitors for the other games received medals.

Pictures From the Fun Games





2.2.6 DONATION TO SPECIAL HOMES

As part of the anniversary celebrations and as a means to fulfil some of its corporate social responsibilities, the hospital made some donations to Ahotorkrom Special Children Home, Ankaful Prisons (Annex and Condemn) as well as Ankaful Psychiatry Hospital. Items donated included assorted toiletries, food/beverage items, clothes, sanitary items, cleaning materials and medicines. This brought joy and relief to the beneficiaries and staff of the facilities.

Pictures from the Donations





2.2.7 CLEAN-UP EXERCISE

The hospital undertook a one-day clean-up exercise within its compound and surroundings as part of its commitments of ensuring a sustainable environment. The exercise which was led by the hospital's management saw the participation of majority of staff, clearing litter and debris from public spaces, as well as scrubbing and disinfecting opening spaces. This initiative aimed to promote cleanliness and hygiene in the hospital and surrounding areas, reflecting the hospital's holistic approach to health.

Pictures from the Clean-up Exercise





2.2.8 FLOAT / HEALTH WALK

The CEO led staff of the hospital in a vibrant float to mark the anniversary. The float featured banners and placard with inscriptions on various health topics such as childhood cancer. The event attracted one of the largest crowds as part of the anniversary celebration.



2.2.9 GRAND DURBAR

The anniversary was climaxed with a colorful durbar on 20th September, 2023 at the GRNMA Hotel – Cape Coast. Participants were received from sister Agencies, Hospitals,

Health Training Institutions & Colleges, Accreditation Councils, Regulatory Bodies, Organizations & Companies, Traditional Rulers and, Health Partners, also some sponsors of the programme graced the occasion. In addition, former staff of the hospital, retirees, general staff as well as members of the general Public were in attendance.

The Central Regional Minister represented the Vice President as the Special Guest and the Minister for Health was represented by the Deputy Minister as the Guest of Honour. The Board Chairman, Ehunabobrim Prah Agyensaim VI chaired the occasion with the support of the CEO and other dignitaries on the dais.

A variety of activities such as Cultural Display, Choir Ministration, Cutting of Anniversary Cake and Popping of Champaign took place at the programme. Awards were also given to past Board Members & Management Teams, Partners of the Hospital, Supporting Organizations, Retired Staff, and some Philanthropists.

Goodwill messages were also received from representatives of sister Teaching Hospitals, Health Training Institutions, Colleges and Partners.





SECTION 3 _ GENERAL OVERVIEW

CHAPTER THREE

HUMAN RESOURCE

3.1 INTRODUCTION

Human resource is considered as one of the valuable inputs of the health system especially in hospitals as their roles, skills and knowledge contributes immensely to the performance of hospitals and the health system at large. As such, the Management of CCTH strives to put in place innovative strategies and approaches that would lead to improvement of the capacity of staff as evident in the current medium-term (2020 to 2025) strategic plan as well as the yearly human resource needs assessment of the hospital, all geared towards the attainment of the objectives of CCTH and the health sector. The chapter provides detailed performance report of the human resource in 2023 in comparison with the previous years.

3.2 STAFF STRENGTH ANALYSIS

The total number of staffs in 2023 increased by 1.41% (from 1,915 in 2022 to 1,942 in 2023) as shown in figure 3.2.1. Total permanent staff were 94% (1,817), 4% (69) IGF staff (CCTH staff) and 1.65% (32) UCC & other Seconded staff.

The number of staffs in the Nursing Directorate dropped immensely by 8% (from 1,049 in 2022 to 965 in 2023). Similarly, the Pharmacy Directorate saw a decline of 6.7% in the total number of staff (from 45 in 2022 to 42 in 2023). However, the other Directorates recorded some increase in their staff strength.

Though the total number of doctors declined by 25.8% (from 376 in 2022 to 279 in 2023) during the period, Consultants, Specialists and Medical Officers numbers went up by 100%, as compared to the number of residents and specialists which saw a dip in their numbers as seen in Table 3.2. 4.

Similar to 2022, there was a general reduction in the total number of nurses in 2023 (from 1,048 in 2022 to 936 in 2023). The number of Professional Nurses dropped by 4.7% (from 808 in 2022 to 702 in 2023), the number of Midwives decreased by 16.5% (from 231 in 2022 to 193 in 2023).

The Nurse and Midwife admission ratio went up from 1:13 to 1:14 in 2023. There was an increase in the institutional deliveries to midwife's ratio at the institutional level (from 14:1 in 2022 to 15:1). Similarly, the deliveries to midwife's ratio at the delivery suite also went up (from 50:1 in 2022 to 55:1).

Pharmacists in 2023, reduced by 4.5% (from 22 in 2022 to 21 in 2023). Prescription to Pharmacist's ratio however went up from 6,495:1 in 2022 to 6,643:1 in 2023. Figure 3.2. 1 to Figure 3.2. 3 and Table 3.2.1 to Table 3.2 3 provides a trend analysis of the hospital's staff strength.

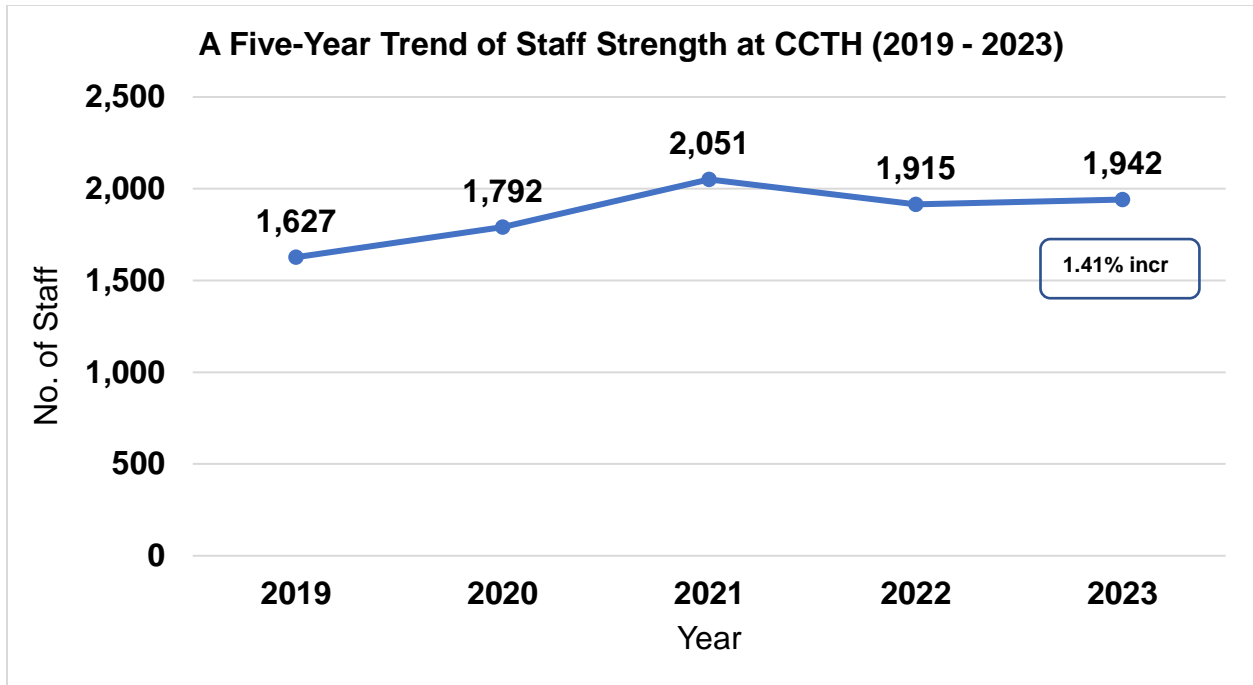


Figure 3.2. 1: A Five-Year Trend of Staff Strength at CCTH (2019 - 2023)

Table 3.2. 1: Breakdown of Total Staff Classification by Directorates

Directorate	Permanent	Secondment	UCC SMS	CCTH Staff (IGF)	NABCO Extension	Total
Administration	307	4	-	32	18	361
Finance	54	0	-	0	6	60
Medical	451	1	27	25	0	504
Nursing	965	0	-	0	0	965
Pharmacy	30	0	-	12	0	42
Human Resource	10	0	-	0	0	10
TOTAL	1,817	5	27	69	24	1,942

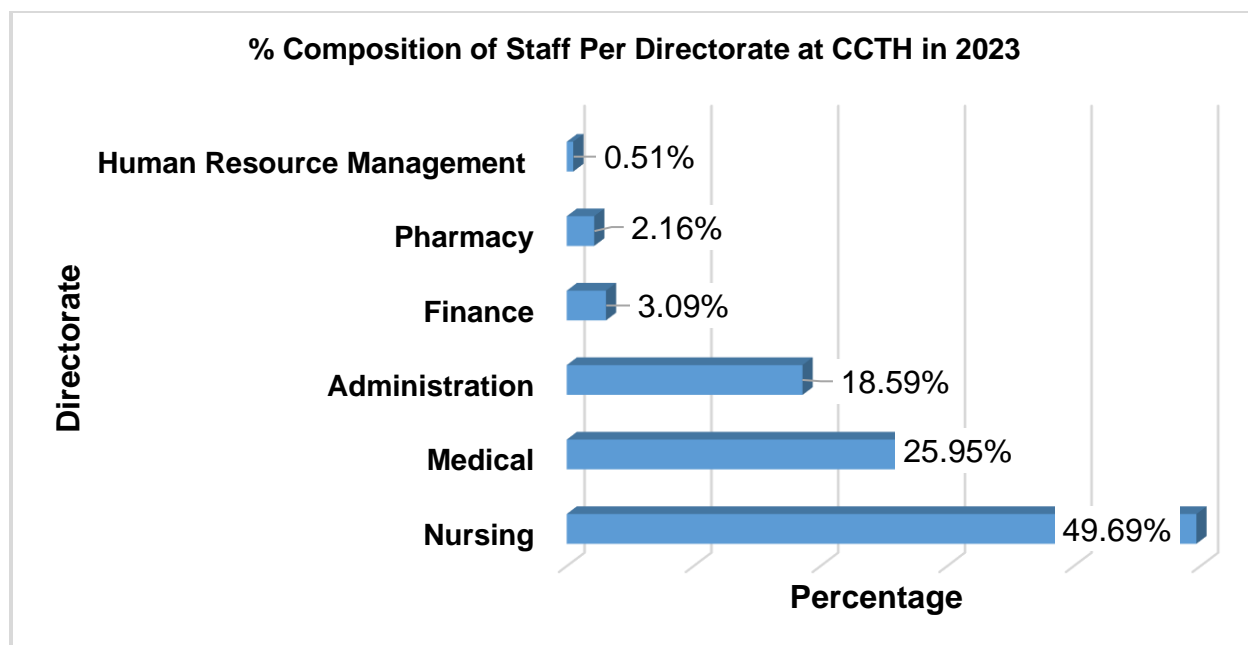


Figure 3.2. 2: Percentage Composition of Staff by Directorates at CCTH for 2023

Table 3.2. 2: Annual Trend of Staff by Directorates at CCTH (2019 – 2023)

DIRECTORATE	2019	2020	2021	2022	2023	REMARKS
Nursing	845	918	1,062	1,049	965	8.0% decr
Medical	392	450	547	448	504	12.5% incr
Administration	308	332	336	324	361	11.4% incr
Finance	43	51	57	49	60	22.4% incr
Pharmacy	39	41	49	45	42	6.7% decr
Human Resource Management	-	-	-	-	10	Established in 2023
Grand Total	1,627	1,792	2,051	1,915	1,942	1.41% incr

Table 3.2. 3: Trend of Staff Cadre at CCTH (2019 – 2023)

Cadre	2019	2020	2021	2022	2023	Remarks
Doctors	266	291	299	376	279	25.8% decr
Radiographers	5	6	6	5	14	180% incr
Professional Nurses	562	643	784	737	702	4.7% decr
Enrolled Nurses	85	70	69	71	37	47.9% decr
Midwives	152	164	199	231	193	16.5% decr
Pharmacist	18	18	25	22	21	4.5% decr
Pharmacist Tech	7	7	7	8	6	25.0% decr
Accountants & Finance Officers	27	31	47	42	44	2.4% incr
Laboratory & Lab Tech	18	51	46	76	77	1.3% incr
Health Services Administrators	7	9	13	12	12	
Optometrist	2	2	6	6	7	16.7% incr
Other GOG Pay Roll Staff	417	501	278	236	516	118.6% incr
CCTH Pay Roll Staff	61	76	49	51	93	92.2% incr
Total Staff	1,627	1,792	2,051	1,915	1,942	1.41% incr

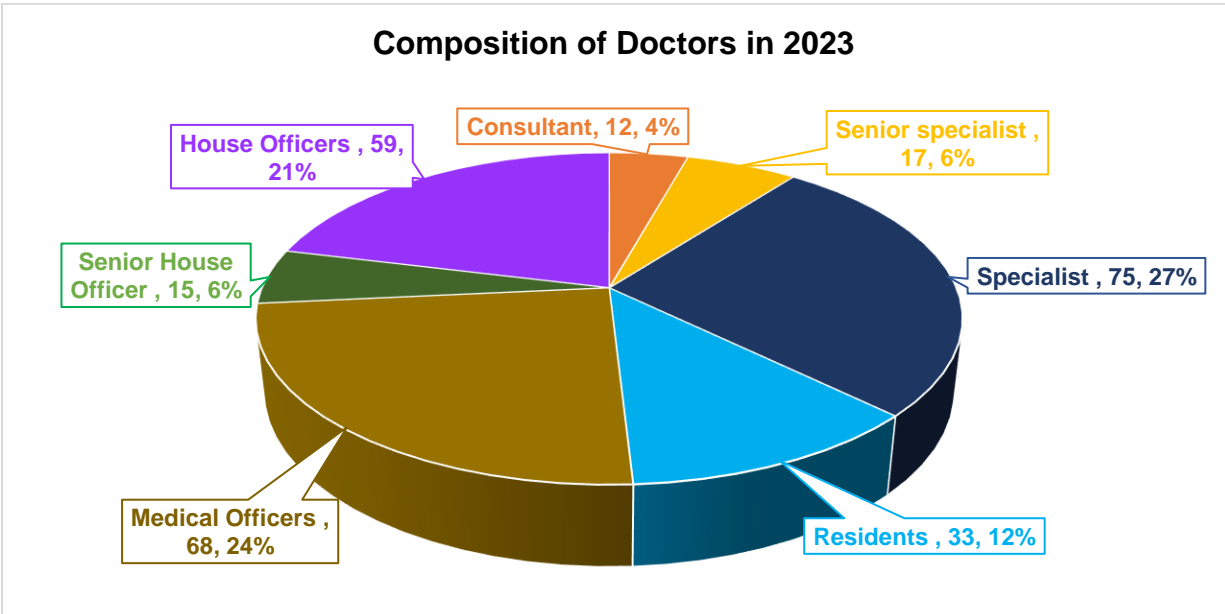


Figure 3.2. 3: Composition of Doctors in 2023

Table 3.2. 4: Trend of Doctors Composition from 2019 – 2023

CATEGORY	2019	2020	2021	2022	2023	REMARKS
Consultants	4	4	6	6	12	100% incr
Senior Specialist	8	9	21	21	17	19.0% decr
Specialists	60	55	49	49	75	53.1% incr
Residents	48	62	38	50	33	34% decr
Medical Officers	33	38	46	39	68	74.4% incr
House Officers	113	123	139	155	74	52.3% decr
TOTAL	266	291	299	376	279	25.8% decr

Table 3.2. 5: Trends of Specialists Available at CCTH (2019 – 2023)

SPECIALTY	2019	2020	2021	2022	2023
Anaesthesia	1	2	1	1	3
Cardiology	1	1	1	-	1
Chemical Pathology	1	-	-	-	-
Child Health	7	9	4	-	8
Clinical Microbiology	1	2	1	-	-
Community Medicine	1	-	-	-	-
Emergency Medicine	2	2	1	2	2
Endocrinology	1	1	1	1	1
Gastroenterology	-	-	-	-	1
Nephrology	-	-	-	-	1
Paediatric Surgeon	-	-	-	-	1
Pathologist/Laboratory Medicine	-	-	-	-	7
ENT	2	2	1	-	3
Family Medicine	2	2	2	4	5
Haematology	2	2	2	3	1
Internal Medicine	6	-	6	-	--
Maxillofacial	3	-	2	-	2
Microbiology	1	2		-	1
Medical Oncology	-	-	1	-	1
Radiation Oncologist	-	-	-	-	1
Neurosurgery	1	1	1	-	2
Oral Pathology	-	-	1	-	-
Otorhinolaryngology	-	-	1	-	-
Obstetrician & Gynaecologist	13	11	8	-	13
Ophthalmology	3	3	3	3	2
Trauma & Orthopaedics Specialist	2	2	4	2	3

SPECIALTY	2019	2020	2021	2022	2023
Physician specialist	-	7	-	9	12
Pathology	2	3	6	5	-
Plastic Surgery	1	-	1	-	-
Radiology	3	3	3	-	5
Surgery	13	13	10	-	19
Urology	2	2	1	1	2
Specialist Orthodontist	-	-	-	-	2
Dermatology	-	-	-	-	1
Grand Total	72	58	62	87	100

Table 3.2. 6: Trend of Nurses and Midwives by Category (2019 – 2023)

CADRE	2019	2020	2021	2022	2023	REMARKS
Professional Nurses	562	643	784	737	702	4.7% decr
Enrolled nurse	85	70	71	71	37	47.9% decr
Community Health Nurse	10	7	7	9	4	55.6% decr
Midwives	152	164	199	231	193	16.5% decr
TOTAL	724	807	1,061	1,048	936	10.7% decr

Table 3.2. 7: Specialists Nurses in 2023

SPECIALTY	2023
Neonatal Intensive Care	3
Oncology	2
Paediatric Nursing	3
Total	8

Table 3.2. 8: HR Performance under Teaching Hospital's (THs) KPIs

KPIs	2019	2020	2021	2022	2023	Remarks	Target	Measurement
OPD cases seen per doctor	1:1098	1:749	1:952	1:1033	1:843	Decr	THs = 1:1080	Total no. of client attending OPDs / Total no. of Drs

KPIs	2019	2020	2021	2022	2023	Remarks	Target	Measurement
OPD Cases seen per specialist	1:1259	1:1024	1:1286	1:1086	1:816	decr.	THs = 1:1200	Total no. of OPD client attending specialist clinics / Total no. of specialist/Snr. Specialists/Consultants
Consultant Resident Doctor ratio	1:4	1:5	1:1.4	1:1.9	1:1.4	decr	THs = 1:3	Total number of consultants and snr specialist/ Resident Doctors
Doctor to Nurse/ Midwives Ratio	1:5	1:5	1:7	1:4	1:4	decr	THs = 1:5	Total number of doctors in the hospital / Total of Nurses
Nurse and Midwife admission ratio	1:16	1:13	1:13.2	1:13	1:14	Incr	THs = 1:25	Total no. of clients admitted / total no. of nurses and midwives
Doctor Pharmacist Ratio	8.5:1	9:1	6.4:1	7.5:1	8.5:1	incr	THs = 10:1	Total number of Doctors/Total Pharmacist in the Hospital
Prescription to pharmacy ratio	8,288:1	9,425:1	6,422:1	6,495:1	6,643:1	incr	THs = 12000:1	Total no. of prescription served/ total no. of pharmacists
Deliveries to midwives' ratio at the Facility	20:1	18:1	15:1	14:1	15:1	incr		Total Number of deliveries / Total No. of midwives
Deliveries to midwives' ratio at the	75:1	70:1	46:1	50:1	55:1	incr		

KPIs	2019	2020	2021	2022	2023	Remarks	Target	Measurement
Delivery Suite								

3.3 STAFF GAP ANALYSIS AND INTERVENTION IN 2023

Gap analysis of the human resource of institutions is crucial to enable the identification of staff cadre which are inadequate or are lacking to help meet the goals of the organization. CCTH in developing its strategic plan (2020-2025) identified the need to attain a total of 2500 staff of different cadre to deliver various sub-specialty services at the facility.

Similarly, the hospital plans to train 194 Specialists, 15 Consultants, 154 Nurse Specialists, 14 Pharmacist Specialists and 48 Allied Health Specialists in addition to other cadre by the end of 2025 to help actualise the goals and vision of the institution. Table 3.3. 1 to Table 3.3.4 presents the gap analysis for some of the staff cadres of the hospital.

Table 3.3. 1: Gap Analysis for Doctors

CADRE	NUMBER REQUIRED	NUMBER AVAILABLE			GAP IN 2023	NUMBER UNDER TRAINING IN 2023
		2021	2022	2023		
Medical Officers	56	28	33	68	+12	-
Maxillofacial surgeon	5	2	2	2	-3	1
Specialist Community Oral Health /Dentist	6	0	1	-	-	-
Specialist Orthodontist	2	1	1	2	0	-
Specialist Restorative Dentistry	4	0	-	0	-4	-
Cardiologist	4	1	1	1	-3	-
Dermatologist	2	1	1	1	1	-
Doctor Anaesthetist	27	1	1	3	-24	-
Emergency Medicine Physician	22	2	2	2	-20	3
Endocrinologist	2	1	1	1	-1	-
Family Physician	7	4	4	5	-2	1

CADRE	NUMBER REQUIRED	NUMBER AVAILABLE			GAP IN 2023	NUMBER UNDER TRAINING IN 2023
		2021	2022	2023		
Gastroenterologist	4	1	1	1	-3	-
Infectious Disease Specialist	4	0	-	-	-4	-
Nephrologist	3	0	0	1	-2	-
Neurosurgeon	2	1	1	2	0	2
Obstetrician & Gynaecologist	21	9	9	13	-8	6
Ophthalmologist	16	3	3	2	-14	3
Paediatric Endocrinologist	2	0	-	-	-2	-
Paediatric Nephrologist	2	0	-	-	-2	-
Paediatric Neurologist	2	0	-	-	-2	-
Paediatric Oncologist	2	0	-	-	-2	-
Paediatrician (General)	9	3	2	8	-1	4
Pathologist/Laboratory Medicine	6	5	5	7	+1	1
Physician Specialist (Medicine)	32	9	5	12	-20	1
Respiratory Physician	2	0	-	-	-	-
Rheumatologist	2	0	-	-	-	-
Specialist Haematology	5	3	3	1	-4	-
Specialist Microbiology	5	2	1	1	-4	-
Trauma & Orthopaedic Specialist	6	2	3	3	-3	-
Urologist	4	1	3	2	-2	-
General Surgeon	11	2	8	19	+8	2
Paediatric Surgeon	8	0	(1)	1	-7	-

CADRE	NUMBER REQUIRED	NUMBER AVAILABLE			GAP IN 2023	NUMBER UNDER TRAINING IN 2023
		2021	2022	2023		
Clinical Medical Physicist	8	0	-	-	-	-
ENT specialist	5	2	3	3	-2	2
Radiologist	7	2	2	5	-2	3
Radiation Oncologist	9	1	1	1	-8	3
Specialist, Psychiatry	-	-	1	-	-	-
Oncologist	4	-	-	-	-4	-

NB: (+) represents Surplus to requirement and (-) represents Deficit.

Table 3.3. 2: Staff Gap Analysis of Nurses and Midwives

CATEGORY	Minimum Required	Available	Gap
Midwives	234	193	-41
Community Health Nurse (all level)	19	15	-4
General Nurses	955	596	-359
Critical Care Nurse	183	19	-164
Emergency Nurse	5	2	-3
ENT Nurse	8	6	-2
Oncology Nurse	8	3	-5
Ophthalmic Nurse	10	8	-2
Peri-Operative Nurse	32	15	-17
Mental Health Nurses	14	17	+3
Neonatal Intensive Care	5	5	0
Nephrology Nurse	8	2	-6
Paediatric Nurse	5	8	+3
Paediatric Oncology	1	3	+2
Public Health Nurse	12	5	-7

CATEGORY	Minimum Required	Available	Gap
Speech Therapist	2	2	0
Orthopaedic	1	0	-1
TOTAL	1502	899	-603

NB: (+) represents Surplus to requirement and (-) represents Deficit.

Table 3.3. 3: Gap Analysis for Pharmacists

CADRE	Minimum Required	NUMBER AVAILABLE					GAP IN 2023
		2019	2020	2021	2022	2023	
Pharmacists	57	18	15	22	22	21	-36
Pharmacy Technician	38	7	7	8	8	6	-32
Pharmacy Specialist - Oncology	6	-	-	-	-	-	-6
Pharmacy Specialist- Infectious Diseases	5	-	-	-	-	-	-5
Pharmacy Specialist - Renal	7	-	-	-	-	-	-7
Pharmacy Specialist – Anaesthesia/ICU	5	-	-	-	-	-	-5
Pharmacy Specialist – Emergency/Critical Care	6	-	-	-	-	-	-6
Total	128	26	25	31	33	30	-79

NB: (+) represents Surplus to requirement and (-) represents Deficit.

Table 3.3. 4: Gap Analysis for Allied Health Professionals

CADRE	NO. REQUIRED	NUMBER AVAILABLE					GAP IN 2023
		2019	2020	2021	2022	2023	
Physiotherapist	29	3	3	4	4	7	-22
Physiotherapy Assistant	12	8	8	7	7	9	-5

CADRE	NO. REQUIRED	NUMBER AVAILABLE					GAP IN 2023
		2019	2020	2021	2022	2023	
Radiographers/ X-ray Technician	17	7	6	6	11 (5 IGF)	14	-3
Radiotherapist	6	0	0	0	-	-	-6
Biomedical Scientist	96	12	34	48	48	-	-
Biostatistics Officer	11	1	0	2	3	3	-8
Technical Officer (Biostats. /HI)	18	11	9	9	9	-	-
IT Manager	9	-	-	-	-	3	-6
TOTAL	189	42	60	76	82	36	-40

NB: (+) represents Surplus to requirement and (-) represents Deficit.

Some of the strategies the hospital adopted in bridging the HR gap is recruitment and training. In 2023, the hospital recruited a total of 109 staff, among which 62 were Professional Nurses, 22 Medical Officers, 7 Midwives and 10 Orderlies as shown in table 3.3.5 below.

Table 3.3. 5: Categories of Newly Recruited Staff at CCTH in 2023

CATEGORY	NUMBER
Professional Nurses	62
Medical Officers	22
Orderlies	10
Midwives	7
Medical Counter Assistant	3
Enrolled Nurses	2
Porters	2
Community Health Nurse	1
Total	109

3.4. PROMOTIONS AND STAFF DEVELOPMENT

Staff development and promotion are significant strategies which enable organizations to attract and retain their employees. This is to promote a sense of belongingness and commitment among staff. Hence, CCTH conducts two promotional interviews annually geared towards upgrading qualified staff.

During the period, ten (10) staff were appointed to fill various managerial roles, fifty-four (54) were upgraded to different ranks, 12 converted to different professional grades

whiles 310 were promoted. Figure 3.4.1, table 3.4.1 and table 3.4.2 provides details of the analysis.

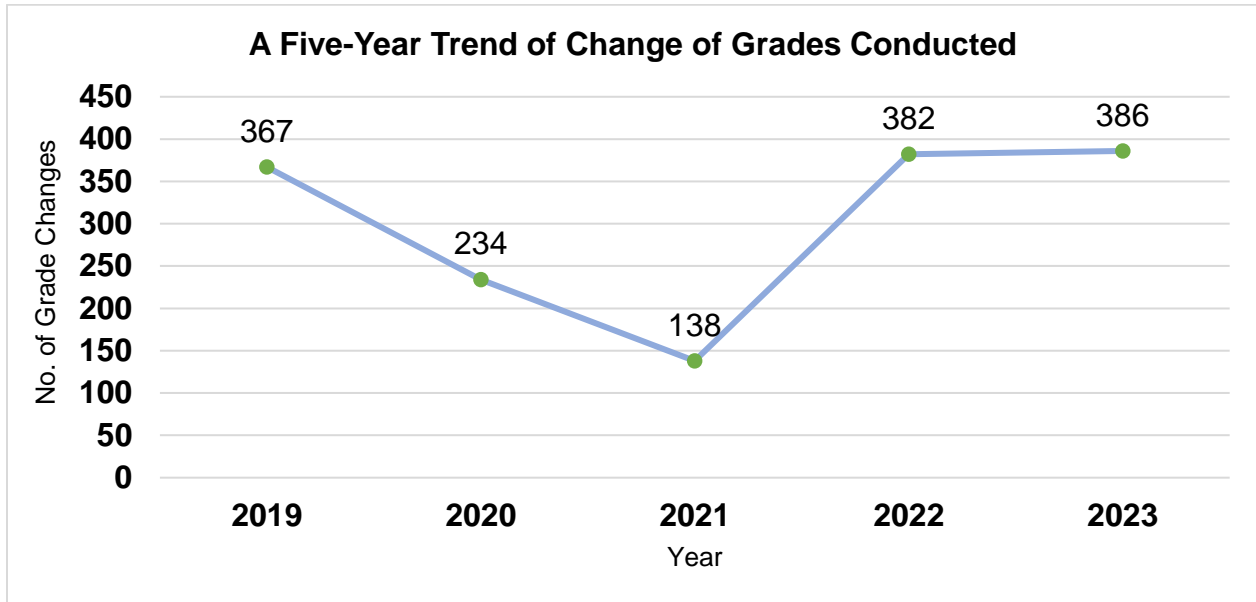


Figure 3.4. 1: A Five-Year Trend of Change of Grades Conducted (2019 - 2023)

Table 3.4. 1: Trend of Change of Grades by Categories (2019 - 2023)

Category	2019	2020	2021	2022	2023	REMARKS
Appointment	0	10	0	1	10	Incr
Conversion	5	16	7	9	12	33.3% incr
Promotion	342	194	81	322	310	3.73% decr
Upgrading	20	14	50	50	54	7.41% incr
Grand Total	367	234	138	382	386	1.05% incr

Table 3.4. 2: Change of Grades in 2023

TYPE OF CHANGE	FIRST HALF	SECOND HALF	TOTAL
Appointment	-	10	10
Upgrading	15	39	54
Conversion	3	9	12
Promotion	71	239	310
TOTAL	89	297	386

Over the years, Management has demonstrated strong interest in staff capacity development by investing in training and expanding capabilities through the process of granting study leaves. During the period, 58 were granted study leave with pay whereas 29 were given approval to study on sandwich basis.

Forty-eight (48) of the staff were Nursing and Midwifery staff (49.4%), Twenty-seven (27) (31.0%) doctors and seventeen (17) (19.5%) being other staff. The period further saw ninety-six (96) of various cadres resuming from their study leave comprising 41 Professional Nurses, 21 Doctors and 13 Midwives. Figure 3.4.2, table 3.4.3 and table 3.4.4 below highlights the analysis.

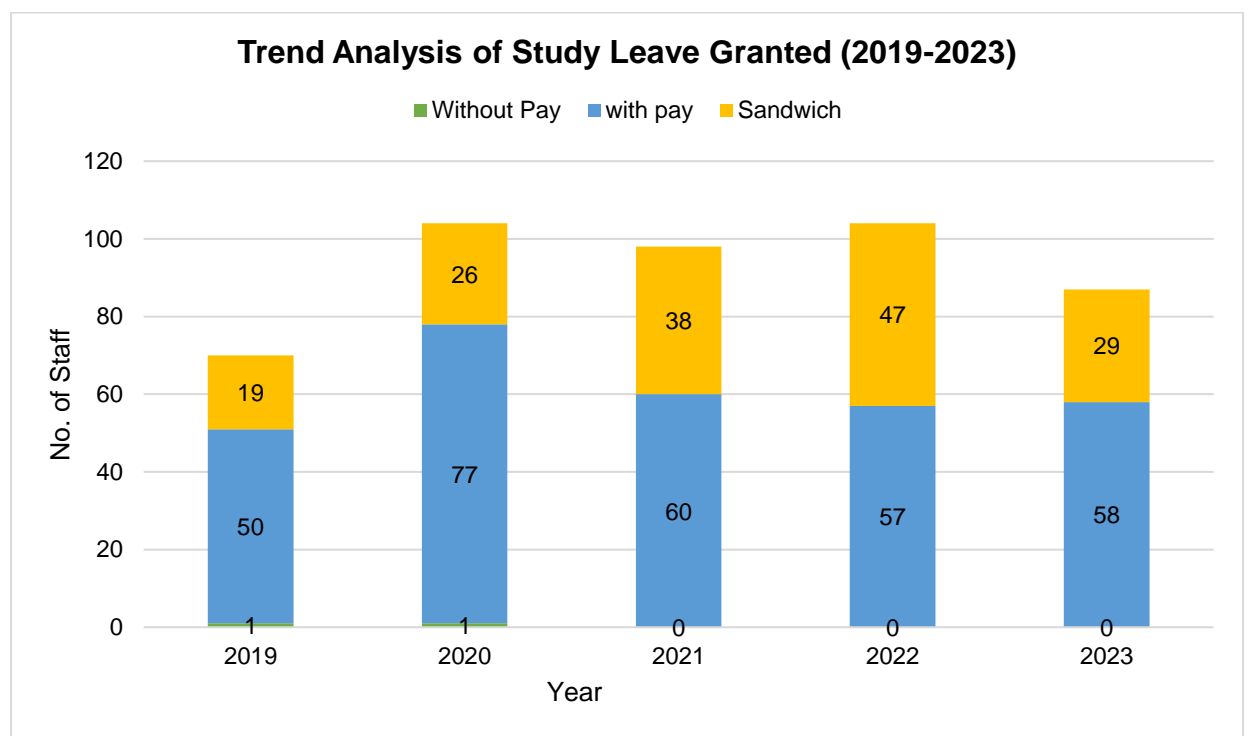


Figure 3.4. 2: Trend Analysis of Study Leave Granted (2019-2023)

Table 3.4. 3: Trend Analysis of Study Leaves Granted

Year	Cadre	Study Leave with Pay	Study without Pay	Sandwich	Total Granted
2019	Nurses	28	1	14	43
	Doctors	18	0	0	18
	Other Staff	4	0	5	9
	TOTAL	50	1	19	70
2020	Nurses	33	1	9	43
	Doctors	34	0	0	34
	Other Staff	4	0	11	15

Year	Cadre	Study Leave with Pay	Study without Pay	Sandwich	Total Granted
	TOTAL	77	1	26	104
2021	Nurses	32	0	27	59
	Doctors	23	0	0	23
	Other Staff	5	0	11	16
	TOTAL	60	0	38	98
2022	Nurses	31	0	27	58
	Doctors	25	0	0	25
	Other Staff	1	0	20	21
	TOTAL	57	0	47	104
2023	Nurses	18	0	25	43
	Doctors	27	0	0	27
	Other Staff	13	0	4	17
	TOTAL	58	0	29	87

Table 3.4. 4: Cadres of staff that resumed to post after training in 2023

CATEGORY	TOTAL
Professional Nurse	41
Medical Doctor	21
Midwife	13
Enrolled Nurse	8
Technical Officer	7
Estate Manager	1
Mechanical Engineer	1
Pharmacist	1
Supply Officer	1
Health Planner	1
Public Health Officer	1
Grand Total	96

The hospital expects sixty-four (64) staff on study leave to resume in 2024. Out of this number, 26 (39%) were granted study leave to pursue Membership training, 5 Fellowship training, whiles 27 (41%) and 6 (9%) pursued Bachelor and Master’s degree programs respectively. The category of staff expected to resume to post in 2024 include 15 Medical Doctors, 15 Professional Nurses, 12 Midwives, and 5 Pharmacists. Figure 3.4.3 and table 3.4.5 below provides details of the analysis.

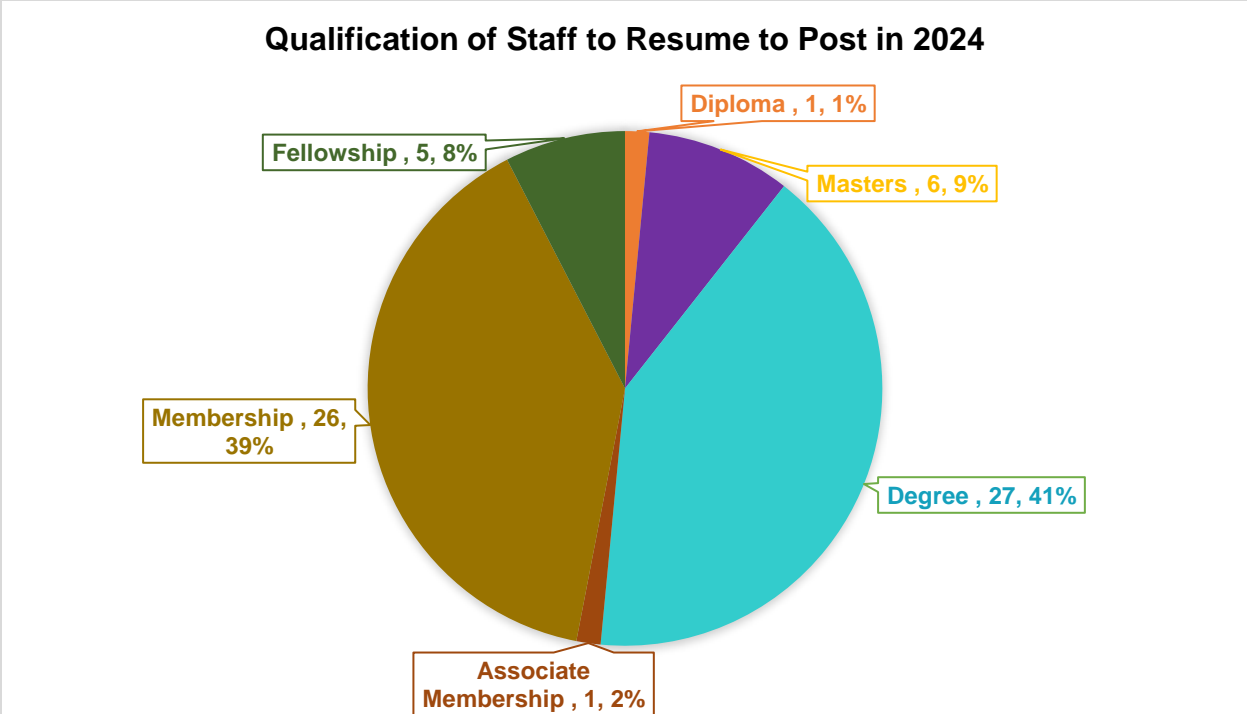


Figure 3.4. 3: Qualifications pursued by staff estimated to resume to post in 2024

Table 3.4. 5: Categories of staff expected to resume to post in 2024

CATEGORY	Number
Professional Nurse	15
Medical Doctor	15
Midwife	12
Pharmacist	5
Enrolled Nurse	4
Technical Assistant	4
Dental Technician	3
Procurement Manager	3
Administrative Manager/HAS	2
Medical Laboratory Technician	1
Grand Total	64

3.4.1 PERFORMANCE APPRAISAL

Performance appraisal is one of the essential tools adopted by the hospital to help monitor the performance of staff as well as to help identify their strengths, weaknesses and to improve on productivity and job satisfaction. The hospital in 2023 recorded the lowest proportion of staff appraised since 2019 as seen table 3.4.1.1 below. Periodic education of staff on performance appraisal needs to be intensified so as to help staff to know its benefit to them as well as the institution.

Table 3.4.1. 1: A Five-Year Trend of Staff Appraised (2019 – 2023)

APPRAISAL	2019	2020	2021	2022	2023
Number Expected	1231	1274	1594	1747	1827
Number Appraised	480	575	830	790	669
% Appraised	38.99%	45.13%	52.07%	45.21%	36.62%

3.5 TRANSFERS

In 2023, the number of transfers-out went up from 38 in 2022 to 50 in 2023. Majority of the staff transferred out were Professional Nurses (30) and Midwives (11). The number of transfers-in on the other hand has shown consistent rise since 2019. However, in 2023, there was a drop in the number from 12 in 2022 to 6 in 2023 as shown in figure 3.5.1 and table 3.5.1 below.

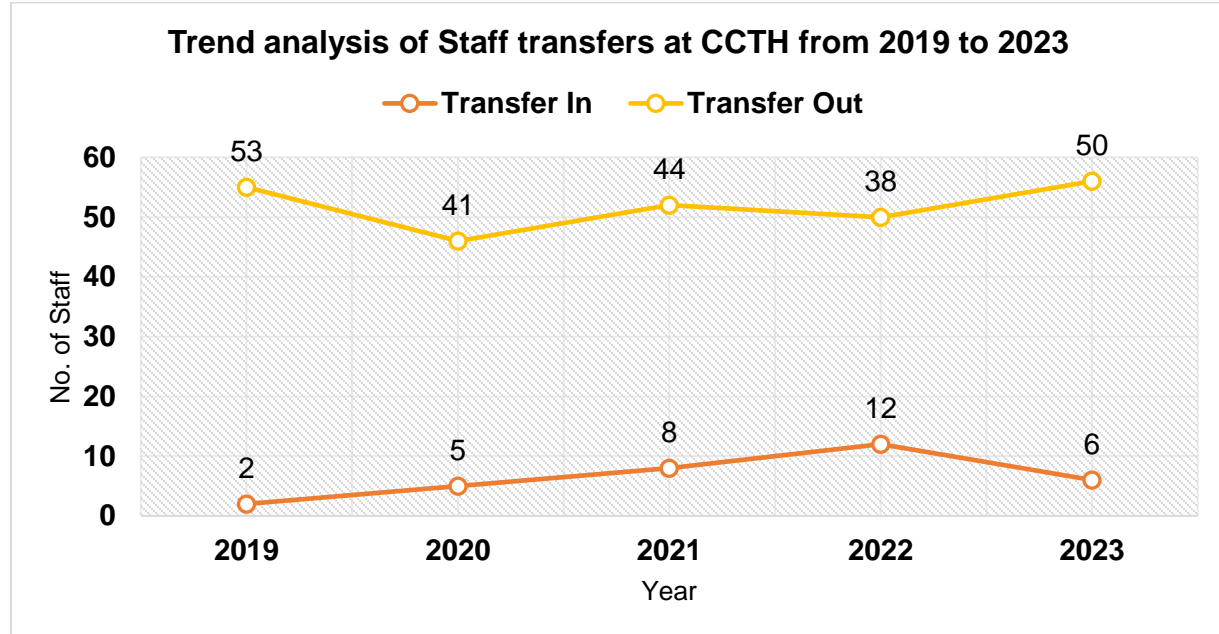


Figure 3.5. 1: Trend of Staff Transfers at CCTH (2019 – 2023)

Table 3.5. 1: Cadre of Staff who Transferred-in and out in 2023

TRANSFER - OUT		TRANSFER - IN	
Cadre	Number	Cadre	Number
Prof. Nurses	30	Medical Doctors	3
Midwives	11	Clinical Psychologist	1
Medical Doctors	2	Pharmacist	1
Tech. Officer (Lab)	3	Social Development Officer	1
Accountant	1		
Blood Donor Org.	1		
Mortuary Attendant	1		
Nutrition Officer	1		

The hospital in its quest to ensuring the wellbeing of staff and promote quality of work delivered to clients grants staff some days-off work when needed. Thus, in 2023, a total of fifty-two thousand, eight hundred and ninety-one (52,891) days were approved for staff to embark on various leaves such as Annual, Casual, Maternity, Paternity, Sick Leave/Excuse Duty among others. Details presented in table 3.5.2 below.

Table 3.5. 2: Breakdown of Leave of Absence of Staff in 2023

Type of Leave	Days	Sum of Days
Annual Leave	Days Taken	45,640
	Days Wasted	39,575
Casual Leave	Days Taken	80
	Days Wasted	0
Maternity Leave	Days Taken	6,750
	Days Wasted	0
Others	Days Taken	5
	Days Wasted	0
Paternity Leave	Days Taken	5
	Days Wasted	0
Sick Leave/Excuse Duty	Days Taken	411
	Sum of Days Taken	52,891

Type of Leave	Days	Sum of Days
	Sum of Days Wasted	39,575

3.6 HUMAN RESOURCE WASTAGE

Generally, the total number of staffs who went out of the hospital declined by 26.1% (from 88 in 2022 to 65 in 2023). Among the 65 staff that left, 48 vacated their post out of which 39 (81.2%) were Professional Nurses. Unfortunately, the hospital lost four (4) staff through death. Table 3.6.1 and table 3.6.2 provides details of the analysis

Table 3.6. 1: Trend of Human Resource Wastage (2020 – 2023)

TYPE OF WASTAGE	2020	2021	2022	2023	REMARKS
Voluntary Retirement	0	1	12	0	
Compulsory Retirement	7	7	0	5	incr
Death	3	1	3	4	33.3% incr
Resignation	4	7	12	8	40%% decr
Vacation of Post	5	18	35	48	37.1% incr
Leave without pay	0	10	26	-	
Grand Total	19	44	88	65	26.1% decr

Table 3.6. 2: Breakdown of Staff Wastage by Profession for 2022 and 2023

TYPE	2022		2023	
	NO.	BREAKDOWN	NO.	BREAKDOWN
Retirement (CAGD)	9	<ul style="list-style-type: none"> ● Administration - 3 ● Medical - 4 ● Technical Service -1 ● Nursing -1 	5	<ul style="list-style-type: none"> ● Professional Nurse - 2 ● Orderly - 2 ● Technologist - 1
Retirement (IGF)	3	<ul style="list-style-type: none"> ● Administration - 3 	-	-
Death	3	<ul style="list-style-type: none"> ● Nursing - 2 ● Technical service 1 	4	<ul style="list-style-type: none"> ● Porter - 1 ● Specialist - 1 ● Health Educator - 1 ● Artisan - 1
Resignation	12	<ul style="list-style-type: none"> ● Administration - 1 ● Medical - 4 ● Pharmacy - 2 ● Nursing - 5 	8	<ul style="list-style-type: none"> ● Professional Nurses - 3 ● Medical Officers - 2 ● I.T Manager - 1 ● Health Service Administrator - 1

TYPE	2022		2023	
	NO.	BREAKDOWN	NO.	BREAKDOWN
				<ul style="list-style-type: none"> ● Adm. Manager (IGF) - 1
Vacation of Post	35	<ul style="list-style-type: none"> ● Administration - 1 ● Medical - 3 ● Pharmacy - 1 ● Nursing - 30 	8	<ul style="list-style-type: none"> ● Physiotherapist - 1 ● Clinical Engineering Manager - 1 ● Technical Assistant - 2 ● Health Assistant - 1 ● Biostatistics Officer - 1 ● Accountant - 1 ● Occupational Therapist - 1 ● IGF - 1 ● Professional Nurses - 39
Leave Without Pay	26	<ul style="list-style-type: none"> ● Administration - 2 ● Medical - 7 ● Pharmacy - 1 ● Nursing - 18 		-
Grand Total	88		65	

3.7 IMPROVING TEACHING AND LEARNING

The mandate of Teaching Hospitals is to promote teaching and learning. As a result, CCTH created the enabling environment to provide opportunities for staff development and motivation to improve on service delivery. The training opportunities available at the hospital include undergraduate, postgraduate as well as basic and post-basic training.

3.7.1 GENERAL TRAINING REPORT

The following performance were achieved in 2023 under general training;

1. Sustained already acquired accreditations with colleges and institutions. They are
 - i. Accreditation in Urology from Ghana College of Physicians and Surgeons
 - ii. Accreditation in Orthopaedics from Ghana College of Physicians and Surgeons
 - iii. Accreditation in General Surgery from Ghana College of Physicians and Surgeons
 - iv. Accreditation in Internal Medicine from Ghana College of Physicians and Surgeons
 - v. Accreditation in Neurosurgery from Ghana College of Physicians and Surgeons

- vi. Accreditation in Obstetrics & Gynaecology from Ghana College of Physicians and Surgeons
- vii. Group accreditation for Family Medicine (Cluster of Hospitals)
- 2. Accreditations Received;
 - i. Advanced Midwifery from the Ghana College of Nursing and Midwifery
 - ii. A two- year provisional from Ghana College of Physicians and Surgeons (GCPS) for Dental Residency Training
 - iii. Rotational Accreditation in Otorhinolaryngology from West African College of Physicians and Surgeons (WACPS) for ENT Residency Training
- 3. Initiated processes to secure accreditation for the training of postgraduate pharmacists and Anaesthesia.
- 4. Various workshops and short course were attended (Local & International) by Senior Managers, Consultants and Specialists to upgrade their skills and capacity
- 5. Staff at the laboratory participated in EQA for TB, Malaria, HIV & SARS-COV-2
- 6. Organized in-service training for Nurses and Midwives on customer care/quality assurance/professional ethics.

3.7.2 POSTGRADUATE TRAINING

1. Seven (7) doctors pursued membership training in different specialties at the hospital while eleven (11) doctors did their membership training at different institutions. Details presented in table 3.7.2.1
2. One nurse pursued a Membership training in Infectious Disease at the Ghana College of Nursing
3. Two (2) specialist doctors (Neurosurgery and Orthopaedics) pursued Fellowship training at the hospital whereas seven (7) others had their Fellowship training in other institutions as shown in table 3.7.2.3
4. One Manager pursued a Certificate Fellowship course in Health Economics and Financing at Seoul National University-Republic of Korea

Table 3.7.2. 1: Membership Training of Doctors in 2023

Membership Training at CCTH			Membership Training of CCTH staff in Different Institutions		
Programme	Number	Institution of Student	Programme	Number	Institution of Study
Obstetrics & Gynaecology	3	CCTH	Laboratory Medicine	1	KBTH
Neurosurgery	2	CCTH	Emergency Medicine	1	KATH
General Surgery	1	CCTH	Radiology	2	KBTH

Membership Training at CCTH			Membership Training of CCTH staff in Different Institutions		
Programme	Number	Institution of Student	Programme	Number	Institution of Study
Internal Medicine	1	CCTH	Otorhinolaryngology	1	KATH
			Ophthalmology	1	
			Child Health	3	KATH
			Orthodontics	1	KATH
			Anaesthesia & Critical Care	1	KBTH
Total	7		Total	11	

Table 3.7.2. 2: Membership Training of Nurses in 2023

Programme	Number	Institution of Student
Infectious Diseases	1	Ghana College of Nursing

Table 3.7.2. 3: Fellowship Training Program in 2023

Fellowship Training at CCTH			Fellowship Training of CCTH staff in Different Institutions		
Programme	No.	Institution of Student	Programme	No.	Institution of Study
Neurosurgery	1	CCTH	Dermatology	1	WACOP-West Africa
Orthopaedics	1	CCTH	Maternal & Foetal Medicine	1	KATH
			Neonatology	1	KATH
			Gynaecological Oncology	2	KATH
			Ophthalmology	1	KBTH
			Family Medicine	1	KBTH
Total	2		Total	7	

Table 3.7.2. 4: Other Staff under Fellowship Training in 2023

Programme	Number	Institution of Student
Health Economics and Financing	1	Seoul National University- Republic of Korea

Table 3.7.2. 5: Performance under THs KPI - Provide Staff Development & Training

Residency Training Under the THs KPIs	2021	2022	2023	REMARKS	TARGETS	MEASUREMENT
Consultant to Resident Doctor Ratio	1:1.4	1:1.9	1:1.4	decr	THs = 1:3	Total number of consultants and snr specialist/ Resident Doctors
Resident Pass Rate	91%	87.5%	94.7%	incr	THs = 60%	Percentage of final year professional passes / Total number of students enrolled
Number enrolled in postgraduate colleges	38	47	22	decr	-	

3.7.3 INTERNSHIP AND IN-SERVICE TRAINING

In addition to granting study leave to staff to further their education, the hospital organizes in-service trainings to refresh their knowledge as well as equip them with the needed skills on current health-related issues pertaining to their work.

The hospital during the period organized ten (10) intensive workshops/in-service trainings through the various Sub-BMCs/Units from which a total of five hundred and ninety-six (596) staff benefited as shown in table 3.7.3.1 below.

Table 3.7.3. 1: In-Service Training Held in 2023

NO.	Sub-BMC/Unit	Topic	Number Trained
1.	Child Health	Birth Asphyxia	70
2.	A&E	CPR/Triage/Malaria Diagnosis/LHIMS	155
3.	Laboratory	Enzyme immunisation/laboratory quality	49
4.	HR	Virtual training workshop on selected topics in human resource management policy framework	9
5.	Technical Service	Workshop on equipment management software by African German Health Association	35
6.	ALL	ESPV Validation training	36
7.	NHIS	Cooperate training	68
8.	Nursing	Training on senior nurses' duties	56
9.	Pharmacy	Training on NHIA claims processing	33

NO.	Sub-BMC/Unit	Topic	Number Trained
10	Internal medicine	Cardiopulmonary resuscitation (CPR)	85
		Number of staffs trained	596

CHAPTER FOUR

CLINICAL CARE SERVICES

4.0 INTRODUCTION

This chapter discusses the interventions made in relation to COVID-19 as well as the performance of the hospital's routine clinical care services.

4.1 COVID-19 LABORATORY INVESTIGATION AT CCTH

During the period under review, the number of COVID-19 samples taken and tested reduced by 1.93% from 1,502 in 2022 to 1,473 in 2023. Similarly, the number of positive cases detected dropped by 27.4% (from 277 in 2022 to 201 in 2023). Also, the test positivity rate decreased from 18.83% in 2022 to 13.65% as shown in table 4.1.1 below.

Table 4.1. 1: COVID 19 Laboratory Investigation at CCTH from 2020 to 2023

INDICATOR	2020	2021	2022	2023	Remarks
Total suspected cases	2607	4085	1502	1532	
Overall total Covid-19 samples taken and tested	3,161	6,217	1,502	1,473	1.93% decr
Overall total number of Covid-19 Positives	447	1,109	277	201	27.4% decr
Overall total number of Covid-19 Negatives	2,714	5,108	1,225	1,272	3.8% incr
COVID-19 Sample Tested Externally (outside CCTH)					
COVID-19 Sample tested at externally facility	2,631	2,749	31	-	
COVID-19 Samples Tested In-house (in CCTH)					
Total number of Cases	530	3,468	1,471	1,473	1.93% decr
Total number of Positives	107	1,198	277	201	27.4% decr
Total number of Negatives	423	2,270	1,194	1,272	3.8% incr
Test Positivity Rate (%)	20.189%	34.544%	18.831%	13.65%	decr
COVID-19 related deaths	27	67	2	0	

4.2 OUT-PATIENT SERVICES

The OPD/Polyclinic/Family Medicine Sub-BMC hosts specialist services offered by other Sub-BMCs whiles providing general outpatient care. The hospital during the period recorded a marginal rise in the total OPD attendance by 1.41% (from 170,441 in 2022 to 172,839 in 2023). OPD cases seen per doctor declined in 2023 (from 1:1033 in 2022 to 1:843). The average daily OPD visits slightly went up by 1.5% (from 467 in 2022 to 474 in 2023) whiles the number of new registrants decreased by 0.48% (from 22,933 in 2022 to 22,823 in 2023).

The hospital continues to receive referral cases from lower-level health facilities in the quest to fulfil its mandate as a tertiary health facility and also meet its objective of Intensifying support to the lower level of care and service delivery points. The period saw an increase in the number of referred-in cases (from 6,309 in 2022 to 7,383 in 2023).

Furthermore, the monthly OPD attendance increased in January, February, March and July only as compared to the same months in 2022. Also, while the number of insured patients increased by 2.4% (from 148,031 in 2022 to 151,584 in 2023), the number of non-insured clients dropped by 5.2% (from 22,410 in 2022 to 21,255 in 2023). The Details of the analysis is illustrated in Figure 4.2.1, Figure 4.2.2 and Table 4.2.1 to Table 4.2.2 below.

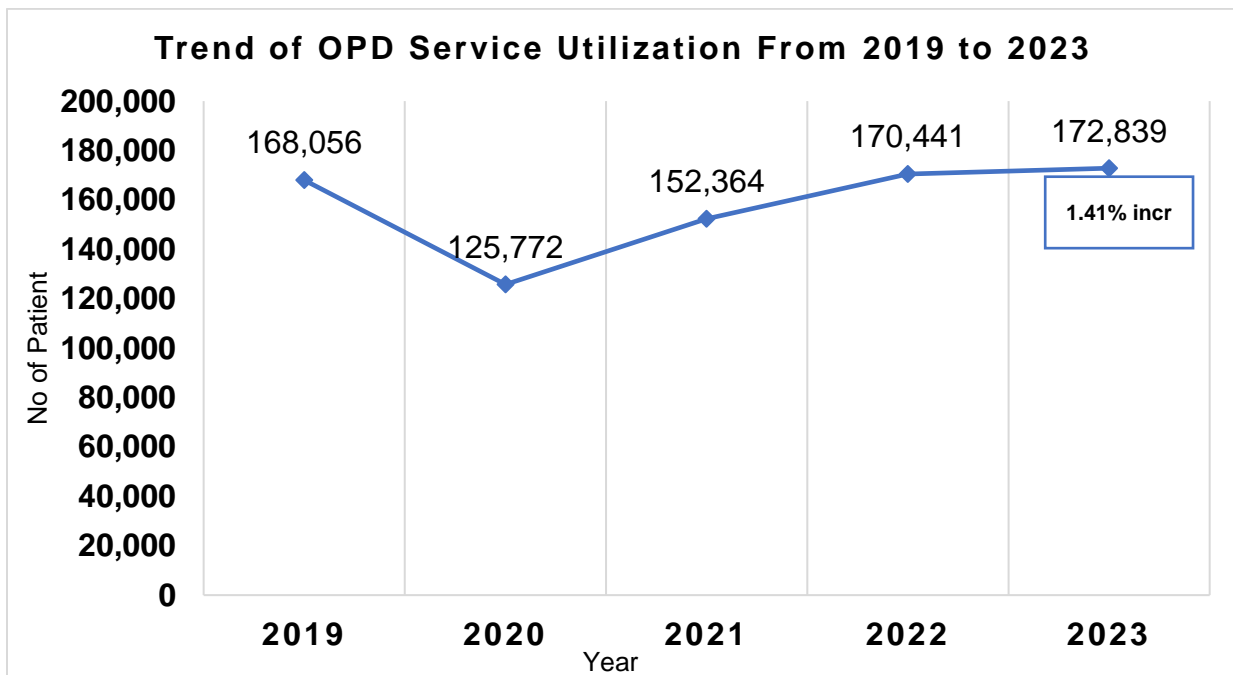


Figure 4.2. 1: Trend Analysis of Total OPD Attendance

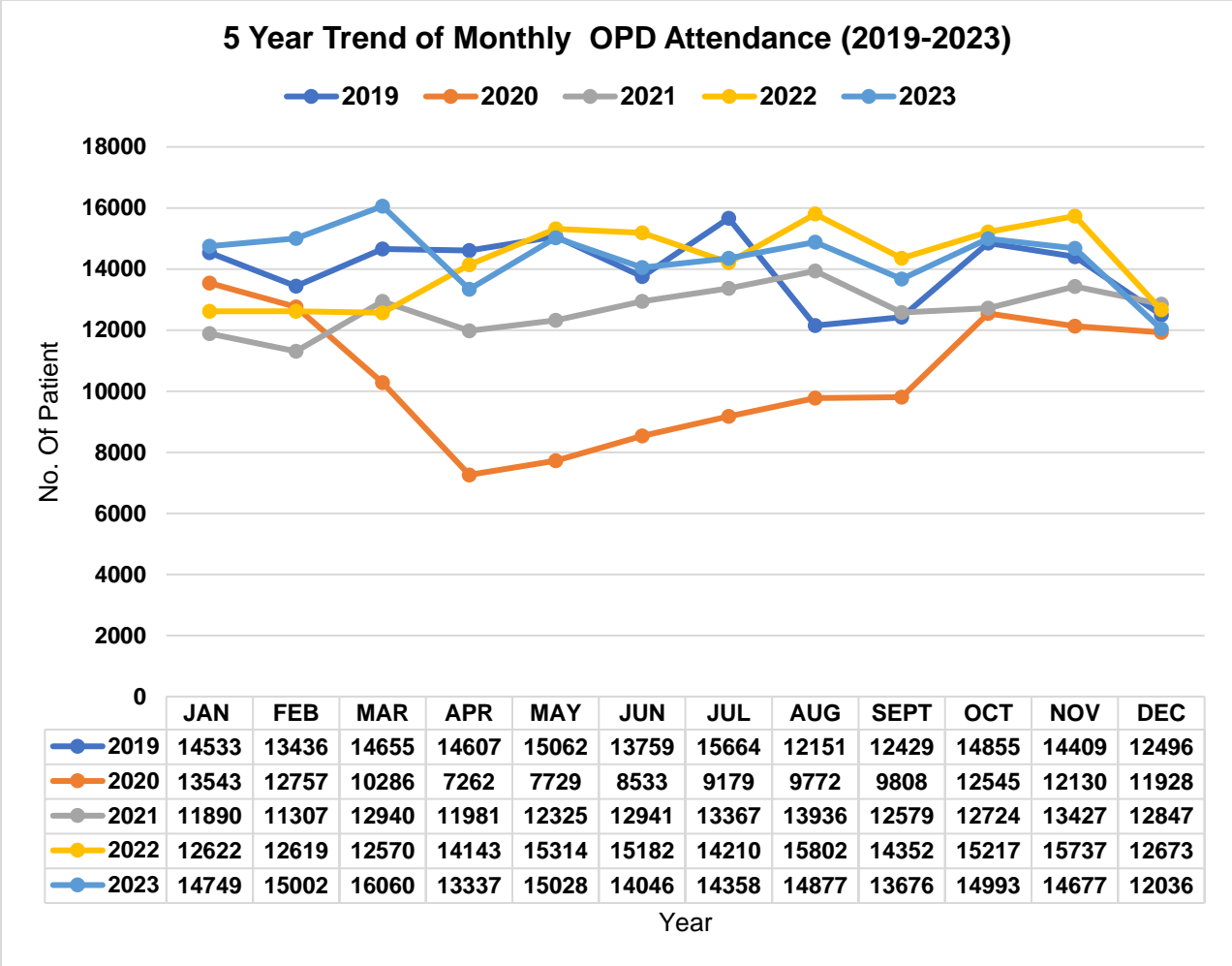


Figure 4.2. 2: Monthly Trend of OPD Services Utilization

Table 4.2. 1: General OPD Clinic Attendance

INDICATORS	2019	2020	2021	2022	2023	REMARKS
OPD Attendance	168,056	125,772	152,364	170,441	172,839	1.41% incr
New OPD Registrants	23,334	22,636	24,266	22,933	22,823	0.48% decr
Average Daily OPD Visit	461	345	417	467	474	1.5% incr
Insured Patients	146,227	107,169	129,530	148,031	151,584	2.4% incr
Non-Insured Patients	21,779	18,603	22,834	22,410	21,255	5.2% decr
Referrals In	4,447	4113	3,566	3,777	7,383	18.9% Incr
Referrals Out	146	64	-	-	186	

Table 4.2. 2: OPD Performance under THs KPIs

Indicator	2019	2020	2021	2022	2023	Remarks	Target	Measurement
OPD cases seen per doctor	1:1098	1:749	1:952	1:1033	1:843	Decr	THs = 1:1080	Total no. of client attending OPDs / Total no. of doctors
Total OPD Attendance	168,056	125,772	152,364	170,441	172,839	1.41% incr	CCTH = 10% Incr	
Total number of doctors (i.e. consultants, senior specialists, specialists, residents and Medical Officers only)	153	168	160	165	205	24.2% incr	-	
OPD Cases seen per specialist	1:1259	1:1024	1:1286	1:1086	1:816	Decr	THs = 1:1200	Total no. of client attending specialist OPDs / Total no. of specialist/ Snr. Specialists/ Consultants
Total Specialists OPD Attendant	90,336	69,603	80,114	82,557	84,886	2.8% incr		
Total number of specialist /Snr. Specialists/C onsultants	72	68	62	76	104	36.8% incr		

As a tertiary level health facility, CCTH strives to improve access to specialised services. For that matter, Management instituted strategies to ensure the continuous provision of specialist services such as the appointment of 6 Consultants, the operationalisation of the polyclinic to create more space for specialist clinics and proper referral mechanism. The period therefore saw an increase of 2.81% in the total specialist OPD attendance (from 82,557 in 2022 to 84,886 in 2023). On the other hand, the OPD cases seen per specialists declined (from 1:1086 in 2022 to 1:816 in 2023).

The Internal Medicine & Family Medicine services continue to be the mostly patronised service in the hospital although there was a drop in the proportion of utilization (from 33% in 2022 to 32% in 2023) while Anaesthesia & Critical Care services recorded 1.0%. Figure 4.2.3 to Figure 4.2. 3 and Table 4.2.5 below provides details of the analysis.

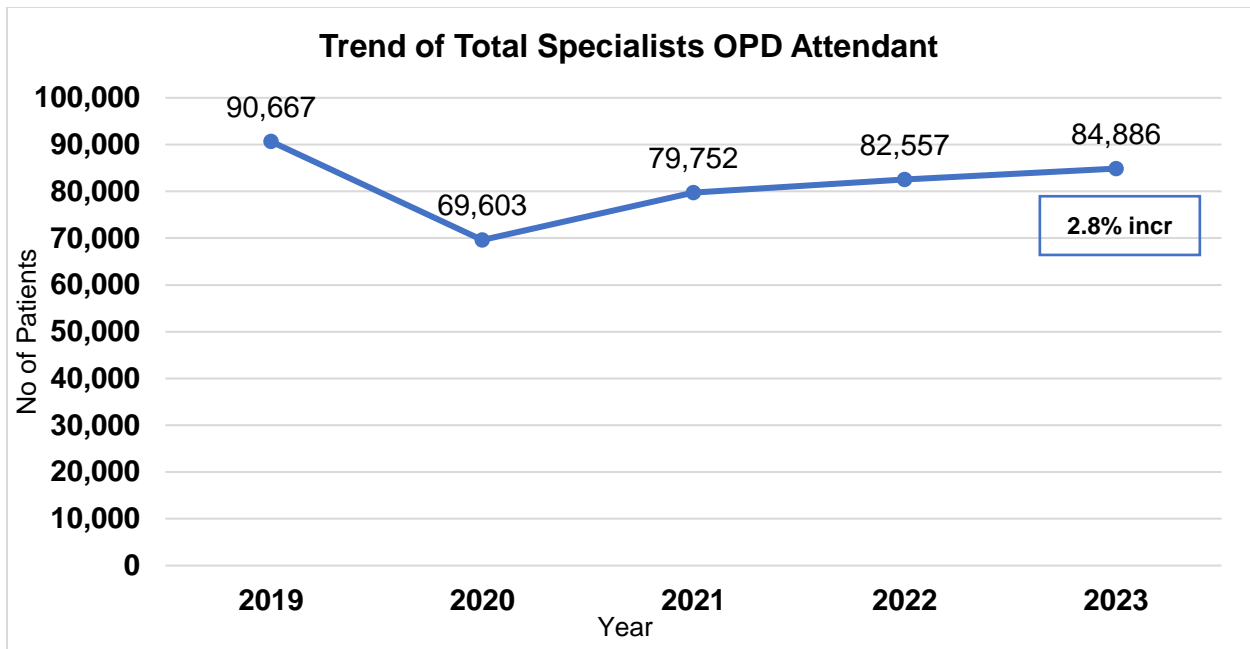


Figure 4.2. 3: Trend in utilisation of OPD Specialised Services

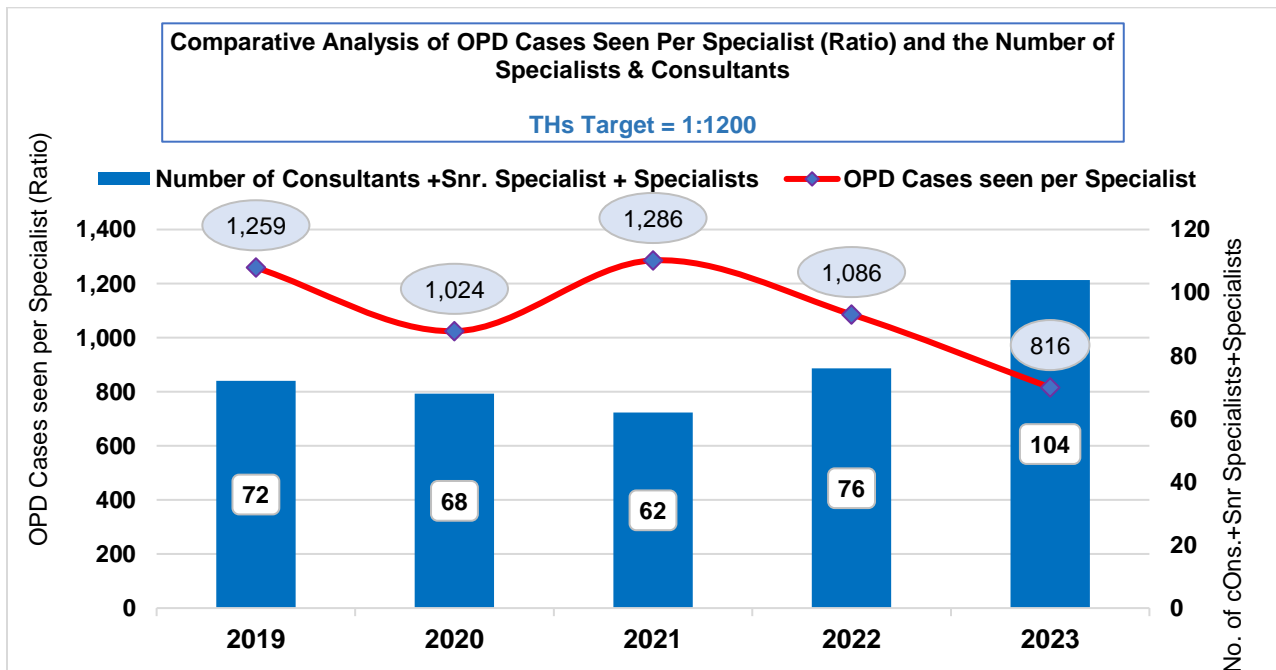


Figure 4.2. 4: Trend in OPD Cases Seen Per Specialist

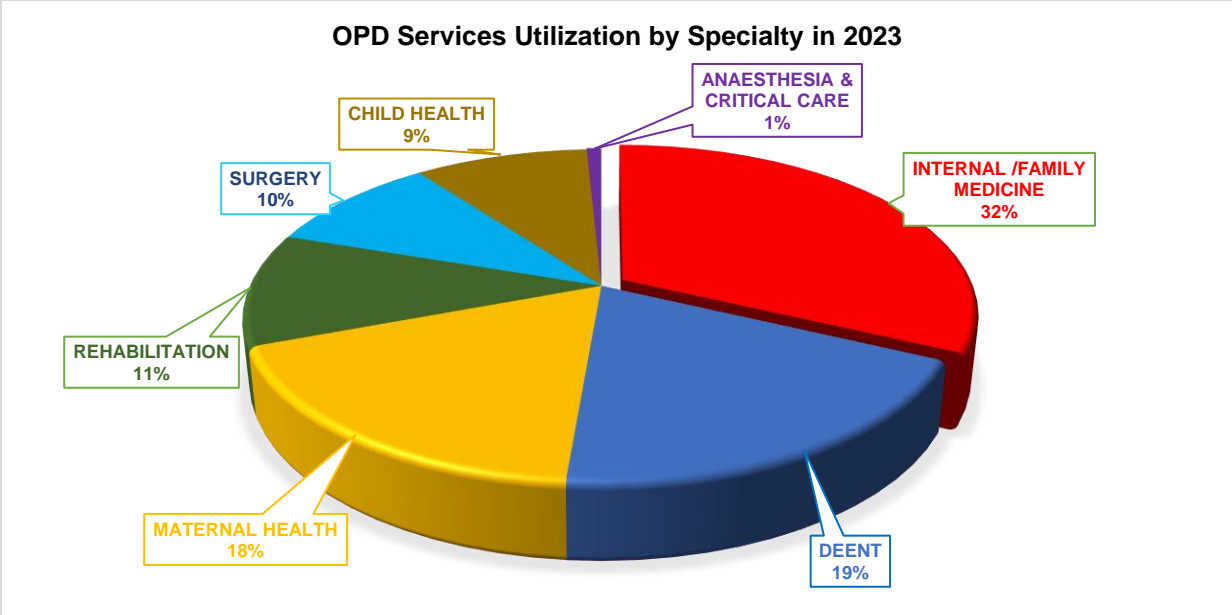


Figure 4.2. 5: OPD Utilization by Specialties in 2023

Table 4.2. 3: Trend of OPD Utilization by specialty from 2019 to 2023

Clinical Specialty	2019	2020	2021	2022	2023	Remarks
Internal Medicine & Family Medicine	35.0%	41.60%	35.0%	33.0%	32.0%	Decr
DEENT	21.0%	20.40%	21.0%	18.0%	19%	Incr
Maternal Health	14.0%	12.80%	15.0%	16.0%	18%	Incr
Rehabilitation	10.0%	8.00%	8.0%	13.0%	11%	decr
Surgery	11.0%	9.10%	9.0%	10.0%	10.0%	
Child Health	8.0%	7.60%	11.0%	9.0%	9.0%	
Anaesthesia & Critical Care	1.0%	0.51%	1.0%	1.0%	1.0%	

Generally, there was an increase in the specialist OPD attendance although there was a mixed performance among the individual clinics as shown in table 3.2.4 below. The hospital run a total of 49 specialised services under the clinical Sub-BMCs. Gynae. Oncology service recorded the highest rise of 551.9% in OPD attendance (from 77 in 2022 to 502 in 2023) and was followed by Osteogenesis Imperfecta and Oncology Clinic with an increase of 312.5% (from 8 in 2022 to 33 in 2023) and 262% (from 200 in 2022 to 320 in 2023) respectively. On the other hand, Adolescent clinic and TB clinic had the least attendance by 32.1% (from 162 in 2022 to 110 in 2023) and 34.2% (from 187 in 2022 to 123 in 2023) respectively.

Details of the analysis is provided in table 4.2.4 below.

Table 4.2. 4: Trend in Specialist Clinic OPD Utilization

CLINICS	2019	2020	2021	2022	2023	REMARKS
Gynae. Oncology	-	-	11	77	502	551.9% Incr
Osteogenesis Imperfecta	-	-	-	8	33	312.5% Incr
Oncology Clinic	-	62	183	200	320	262% incr
Paediatric Endocrine	-	-	-	17	44	158.8% incr
Paedics Cardio	21	60	58	38	77	102.6% incr
Uro-gynae	-	-	-	134	255	90.3% incr
Orthodontist Services	-	-	25	191	351	83.8% incr
Clinical Psychology	592	557	798	428	725	69.39% incr
General Surgery	3,433	1,356	2,442	2,085	3,200	53.48% incr
PNC	3,384	1,866	2,520	3,027	4,471	47.7% incr
Reproductive Endocrinology and Fertility Services	-	-	271	357	526	47.3% incr
Endocrinology	106	97	184	136	190	39.7% incr
Feto-Maternal services	-	-	-	912	1,256	37.72% incr
Paediatrics - Sickle Cell clinic	331	328	351	463	619	33.69% incr
Paedics Renal	97	216	115	79	98	24.1% incr
Haematology	437	396	427	366	435	18.9% incr
Gastroenterology	749	662	866	663	766	15.54% incr
Anaesthesia Clinic	894	480	1,042	784	889	13.4% incr
Paediatrics Oncology	-	48	22	23	25	8.70% incr
ENT	8,211	6,004	5,588	5,126	5,569	8.62% incr
Paedics Asthma	78	57	102	111	118	6.31% incr
Asthma	1,005	819	626	691	734	6.2% incr
Uro-Surgery	6,119	4,880	3,044	4,811	5,071	5.40% incr
Eye	12,078	8,451	10,837	10,755	11,310	5.16% incr
HIV Clinic	4,913	5,337	4,057	4,457	4,646	4.24% incr
Cardiology	2,583	2,558	2,718	2,438	2,586	3.32% incr
Colorectal	82	196	300	270	277	2.59% incr
Sickle Cell	423	595	269	301	301	No change
General Paediatrics Clinic	8,666	6,003	9,244	8,461	8,408	0.63% decr
Diabetes	11,304	8,965	9,356	8,590	8,266	0.94% decr
Renal Clinic	1,334	919	1005	1167	1,154	1.11% decr
Hepatitis B	1,212	850	775	748	737	1.47% decr
Dental & Maxillofacial	5,204	4,667	4,922	4,627	4,540	1.9% decr
Gynae	4,265	2,553	3,368	3,904	3,826	2.0% decr
Dermatology	45	353	462	185	178	3.78% decr
General Medical	18,142	17,385	19,046	17,068	16,404	3.89% decr

CLINICS	2019	2020	2021	2022	2023	REMARKS
Community Psychiatry	-	56	66	225	212	5.78% decr
Paedics Neuro	137	213	245	294	276	6.12% decr
NICU Follow-Up	206	247	890	958	888	7.31% decr
Diet Clinic	1,224	1,070	1,313	1,568	1,420	9.44% decr
ANC	9,419	7,717	9,298	10,449	9,400	10.04% decr
Neuro-Surgery	620	485	487	1,004	874	12.95% decr
Speech Therapy	68	208	415	642	556	13.40% decr
Orthopaedic	2,311	1,337	2,530	2,647	2,191	17.23% decr
Physiotherapy	10,090	5,670	5,055	11,498	9,493	17.44% decr
Plastic Surgery	461	408	739	654	846	29.36% decr
Adolescent Clinic	178	126	102	162	110	32.1% decr
TB Clinic	361 (31 CCTH Clients)	292	271	187	123	34.2% decr

4.3 TOP TWENTY OPD MORBIDITIES

Upper respiratory infection ranked first among the top 20 causes of OPD morbidity recorded at the hospital in 2023 accounting for 19.63% of the morbidities followed by uncomplicated malaria (6.4%) and Rheumatism/other joint pain/arthritis (5.56%). Surprisingly, Hypertension which ranked 1st in 2021 and 2022 was 9th among the top twenty causes of OPD morbidities in 2023. On the other hand, Diabetes mellitus was the least (0.84%) recorded in 2023. Table 4.3.1 below highlights the trend in the top twenty (20) OPD morbidities recorded at the hospital from 2021 to 2023.

Table 4.3. 1: Top Twenty OPD Morbidities from 2021 to 2023

2021		2022		2023	
CONDITION	%	CONDITION	%	CONDITION	%
Hypertension	11%	Hypertension	5489 (22.02%)	Upper respiratory infection	19.63%
Diabetes Mellitus	8%	Acute Urinary Tract Infection	1865 (7.48%)	Uncomplicated malaria	6.40%
Acute Urinary Tract Infection	6%	Rheumatism/Other Joint Pain/Arthritis	1445 (5.80%)	Rheumatism/other joint pain/arthritis	5.56%
Upper Respiratory Tract Infection	3%	Gynaecological Conditions	943 (3.78%)	Acute eye infection	5.03%
Urethral Discharges	3%	Diarrhoea Diseases	898 (3.60%)	pneumonia	4.62%
Anaemia	3%	Upper Respiratory Tract Infections	821 (3.29%)	Diarrhoea disease	4.55%
Typhoid fever	3%	Cataract	696 (2.79%)	anaemia	4.33%

2021		2022		2023	
CONDITION	%	CONDITION	%	CONDITION	%
Kidney related Disease	2%	Stroke	686 (2.75%)	Cardiac disease	4.32%
Pneumonia	2%	Urethral Discharge	680 (2.73%)	hypertension	3.79%
Rheumatism and Joint Pains	2%	Diabetes Mellitus	537 (2.15%)	Otitis media	2.59%
Cataract	2%	Pneumonia	453 (1.82%)	Acute u tract infection	2.28%
Otitis Media	2%	Anomia	445 (1.79%)	Typhoid fever	2.23%
Skin Disease	2%	Prostate Cancer	437 (1.75%)	cataract	2.08%
Dialarhoea Disease	1%	Periodontal Diseases	361 (1.45%)	Periodontal disease	1.68%
Ulcer	1%	Kidney Related Diseases	358 (1.44%)	Viral hepatitis	1.3%
Viral Hepatitis	1%	Cerebral Palsy	356 (1.43%)	stroke	1.11%
Stroke	1%	Acute Eye Infection	338 (1.36%)	Skin diseases	1.04%
Gynaecological Conditions	1%	HIV/AIDS Related Conditions	327 (1.31%)	Other eye acute infection	0.87%
HIV/AIDS Related Conditions	1%	Viral Hepatitis	297 (1.19%)	Gynaecological condition	0.85%
Periodontal diseases	1%	Typhoid Fever	275 (1.10%)	Diabetes mellitus	0.84%

4.4 ACCIDENT AND EMERGENCY SERVICES UTILISATION

The hospital since 2019 had seen fluctuations in the number of Accident and Emergency cases recorded. However, there was a significant drop of 18.6% (from 13,485 in 2022 to 10,979 in 2023), which could be attributed to the operationalisation of the Polyclinic.

Further, the number of cases detained went up by 47.4% (from 4,861 in 2022 to 7,164 in 2023) whereas the number of accident and emergency related deaths in 2023 decreased by 7.6% (from 330 in 2022 to 305 in 2023). Table 4.4.1 provides details of the analysis.

Table 4.4. 1: Performance of A&E Services (2019 – 2023)

PARAMETER	2019	2020	2021	2022	2023	REMARKS
Total Cases Seen	17,931	13,146	16,503	13,485	10,979	18.6% decr
Detention	4,513	4,877	5183	4,861	7,164	47.4% incr

PARAMETER	2019	2020	2021	2022	2023	REMARKS
Discharges	852	974	908	1,146	1,131	1.3% decr
Procedures	1,083	351	1247	2,000	3,457	72.9% incr
Deaths	435	365	436	330	305	7.6% decr

4.5 IN-PATIENT SERVICE UTILIZATION

The hospital has over the years recorded fluctuations in the total number of admissions. During the period, the total admissions marginally decreased by 0.51% (from 12,622 in 2022 to 12,557 in 2023). Also, the Nurse and Midwife to admission ratio went up from 1:13 in 2022 to 1:14 in 2023. 42% (5,305) of the patients were admitted to the Maternal Health department, 24% (2,970) to the Child Health department whiles 16% (1,999) and 17% (2,207) were admitted to the Surgical and Internal Medicine departments respectively.

The percentage of patients admitted due to external referrals increased from 19.27% in 2022 to 40.63% in 2023. Similarly, the percentage of maternal admissions due to external referrals increased from 26.71% in 2022 to 72.74% in 2023 whiles the percentage of neonatal admissions due to external referrals declined to 11.24% from 13.8% in 2022.

Bed occupancy rate increased from 54% in 2022 to 57.5% in 2023 with average length of stay also increasing from 5.5 days in 2022 to 6.0 days in 2023. The trend analysis is provided in figure 4.5.1 to figure 4.5.3 and table 4.5.1 to table 4.5.3 below.

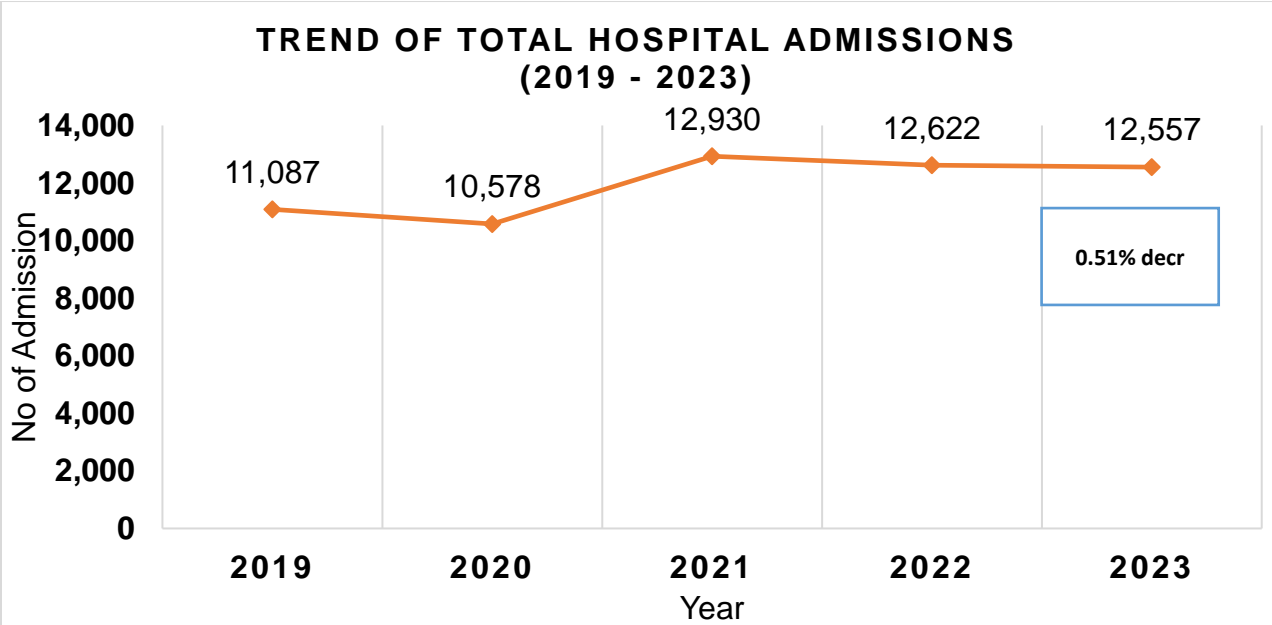


Figure 4.5. 1: Trend on Total Hospital Admissions

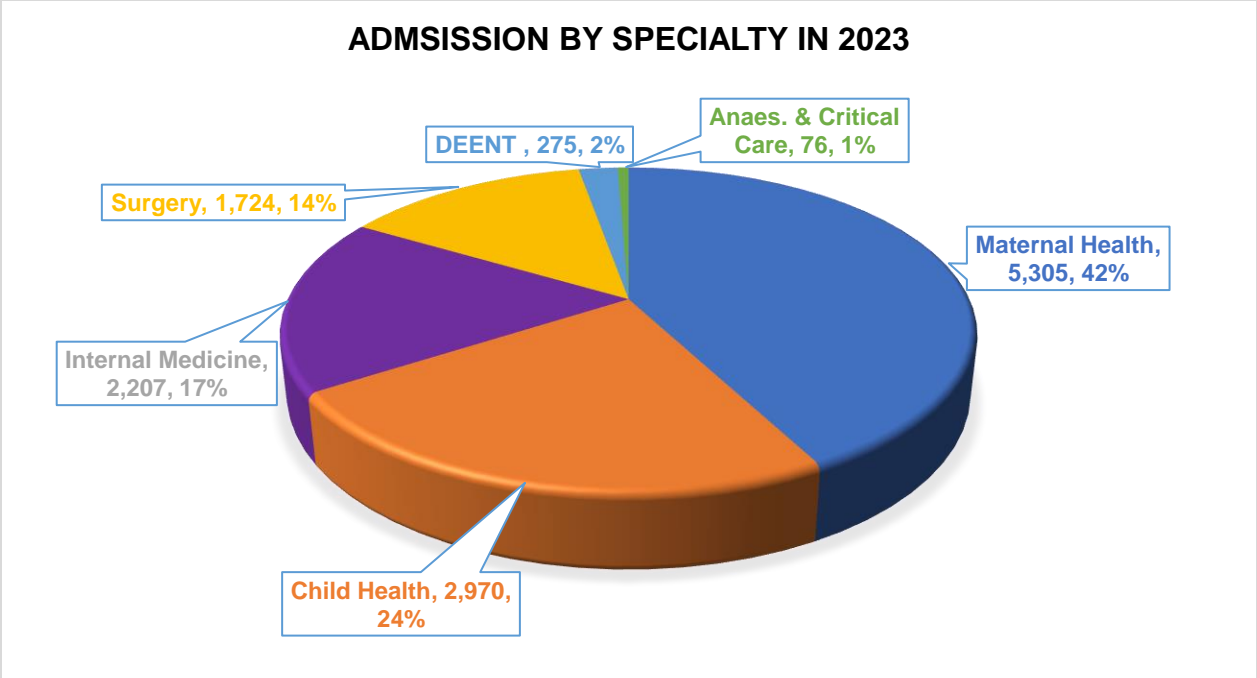


Figure 4.5. 2: Proportion of Specialty Admissions in 2023

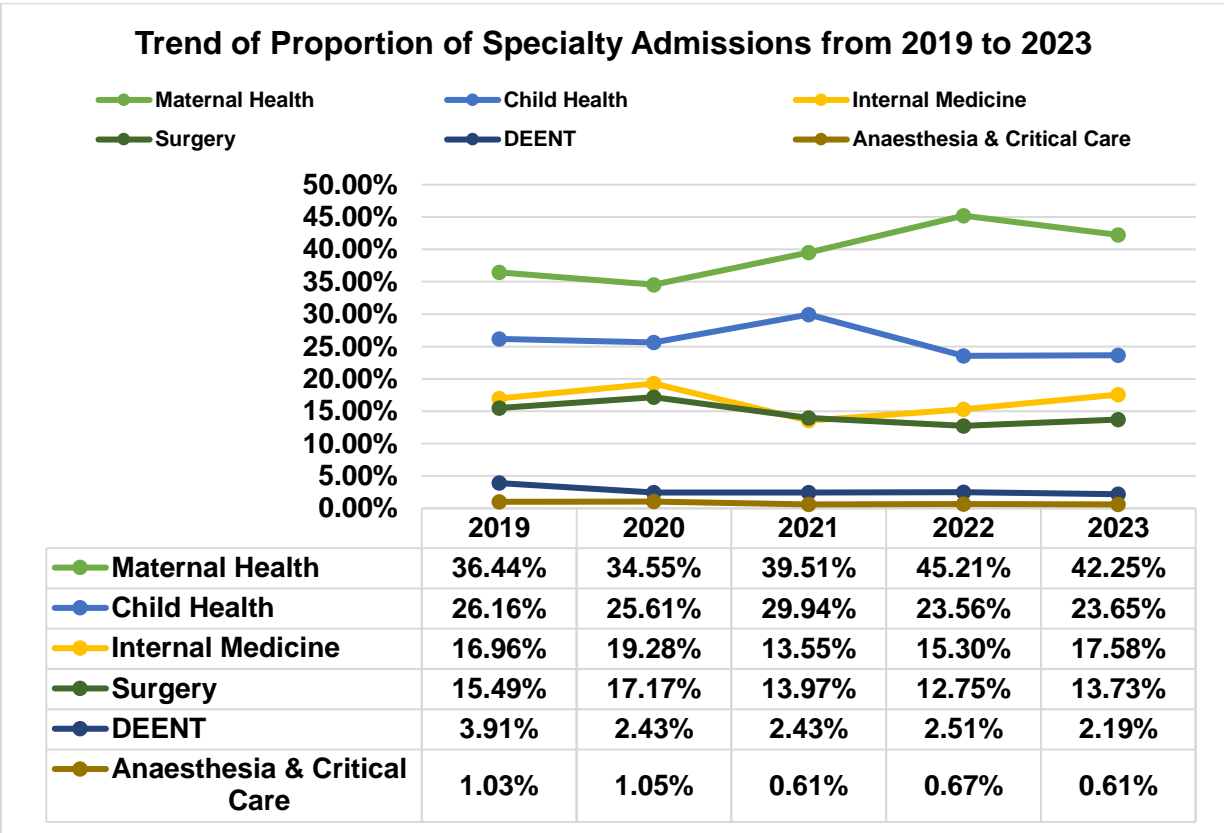


Figure 4.5. 3: Trend of Proportion of Specialty Admissions from 2019 to 2023

Table 4.5. 1: Admission Trend of Clinical Sub-BMCs

Specialty	2019	2020	2021	2022	2023	Remarks
Maternal Health	4,041	3,655	5,108	5,706	5,305	31.6% incr
Child Health	2,901	2,709	3,871	2,974	2,970	2.2% decr
Internal Medicine	1,881	2,039	1,752	1,931	2,207	14.3% incr
Surgery	1,717	1,816	1,806	1,609	1,724	7.1% incr
DEENT	433	257	314	317	275	13.2% decr
Anaesthesia & Critical Care	114	111	79	85	76	10.6% decr

Table 4.5. 2: Percentage Trend of Referrals and Bed Utilisation

INDICATOR	2019	2020	2021	2022	2023	REMARKS	TARGET	MEASUREMENT
Percentage of patients admitted due to external Referrals	40.4%	21.6%	18.81%	19.27%	40.63%	Incr	-	No. of admissions due to referrals / Total admissions*100
Percentage of maternal Admissions due to external Referrals	27.2%	21.2%	23%	26.71%	72.74%	Incr	60%	No. of Maternal admissions due to referrals / Total Maternal admissions*100
Percentage of neonatal Admissions due to external Referrals	27.2%	25.5%	15%	13.85%	11.24%	Decr	30%	No. of Neonatal admissions due to referrals / Total neonatal admissions*100
Bed occupancy rate	55.2%	55.5%	52.2%	54.00%	57.5%	Incr	75%	No. of client days / No. of beds * No of days in the period

Table 4.5. 3: In-Patient Service Utilization by Wards from 2021 to 2023

CLINICAL SUB-BMCS	WARD	ADMISSIONS			DISCHARGES			AV. LENGTH OF STAY			AV. DAILY BED OCCUPANCY			% BED OCCUPANCY			DEATHS			DEATH RATE (%)		
		2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Maternal Health	Gynaecology	2058	2022	1870	2730	2820	2583	4.2	4.3	4.5	32	33.7	33.6	70.3	71.8	73.8	16	21	10	0.5%	0.7%	0.53%
	Delivery Suite	1769	2010	1803	1412	1573	1409	1.0	1.7	4.7	8	7.5	11.7	27.7	30.3	61.8	0	1	2	0.0%	0.1%	0.11%
	ETAT	1,280	1674	1632	153	317	270	0.8	4.2	4.5	2	3.8	3.5	62.5	82.6	86.6	6	-	8	-	-	0.49%
Child Health	Paedics	1968	1898	1920	1940	1969	1947	5.9	5.4	3.0	33	30.4	32.9	69.3	63.1	68.6	117	101	-	5.6%	4.9%	-
	NICU	903	1076	796	649	751	796	7.8	7.3	6.8	19	18.8	20.6	80.6	63.0	85.7	201	185	-	22.2%	19.8%	-
Surgery	Male Surgical	1316	1203	1258	1331	1206	1231	7.4	8.2	5.9	30	28.1	25.4	70.1	67.6	59.1	65		53	4.4%	4.1%	4.1%
	Female Surgical	804	723	741	781	720	713	7.4	8.7	8.0	18	18.2	17.4	48.8	51.9	46.9	63		58	7.0%	5.8%	7.5%
Internal Medicine	Male Medical	797	911	999	626	771	861	6.6	7.1	7.2	15	17.8	18.8	34.1	50.2	43.8	165	136	147	20.3%	15.0%	14.6%
	Female Medical	865	960	1094	709	845	966	6.4	6.4	8.2	15	16.8	20.8	35.6	40.0	48.4	152	112	127	17.4%	11.7%	11.6%
	Executive Suite	90	60	114	90	70	120	0.9	4.7	6.3	2	0.9	2.1	70.8	55.6	71.6	4	1	4	4%	1.4%	3.2%
Anaesthesia & Critical Care	ICU	79	85	76	12	15	12	6.3	10.2	16.3	2	2.2	3.1	38	58.4	51.1	63	65	59	47.4%	81.3%	-
	TOTAL =	11,930	12,622	12,557	10,433	11,057	10,908	5.6	5.5	6.0	172	178.1	189.6	52.2	55.5	57.5	852	1,072	994	11%	8.5%	8.4%

4.5.1 TOP TEN CAUSES OF ADMISSIONS

Pregnancy related complications continue to be the leading cause of admission at the hospital with 26.68% (1,155) in 2023. This was followed by sepsis and pneumonia which formed 11.64% (504) and 11.31% (490) respectively. On the other hand, kidney diseases (5.77%), Asphyxia (5.54%) and Diabetes (5.45%) ranked 8th, 9th and 10th position among the top causes of admission in 2023. Table 4.5.1.1 below provides a trend of the causes of admissions at CCTH from 2021 to 2023.

Table 4.5.1. 1: Top Ten Causes of Admission

2021		2022		2023	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Pregnancy complications	419 (4.1%)	Pregnancy Related Complications	796 (9.3%)	Pregnancy Related Complication	1155 (26.68%)
Sepsis	414 (3.5%)	Jaundice(neonatal)	568 (6.7%)	Sepsis	504 (11.64%)
Jaundice	340 (3.0%)	Sepsis	439 (5.1%)	Pneumonia	490 (11.31%)
Asphyxia birth (Neonatal)	273 (2.3%)	Pneumonia	344 (4.0%)	Jaundice	484 (11.18%)
Pre-Maturity	254 (2.1%)	Malaria	297 (3.5%)	Malaria	412 (9.51%)
Hernia	240 (2.0%)	Anaemia	288 (3.4%)	Hypertension	305 (7.04%)
Malignant Neoplasm	220 (1.8%)	Asphyxia	287 (3.4%)	Pre-Maturity	253 (5.84%)
Fractures	216(1.8%)	Preterm (Prematurity)	245 (2.9%)	Kidney Diseases	250 (5.77%)
Pneumonia	170(1.4%)	Hypertension	240 (2.8%)	Asphyxia	240 (5.54%)
Cerebrovascular Accident (CVA)	164 (1.4%)	Diabetes	239 (2.8%)	Diabetes	236 (5.45%)

4.6 THEATRE SERVICES UTILIZATION

The hospital recorded a general increase of 8.7% in the total surgeries performed (from 5,357 in 2022 to 5,824 in 2023) with major surgeries constituting 94.3% (5,490). The surgery - surgeon ratio decreased from 179:1 in 2022 to 108:1 in 2023. Detailed trend analysis is illustrated in figure 4.6.1 and table 4.6.1 to table 4.6.2 below.

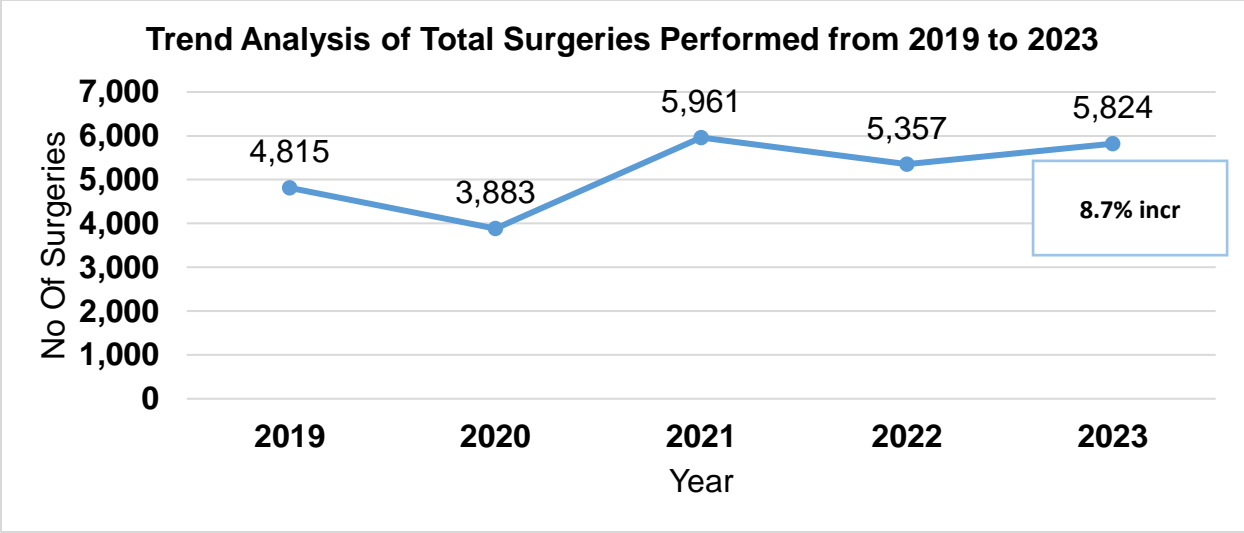


Figure 4.6. 1: Trend Analysis of Total Surgeries Performed at the Hospital

Table 4.6. 1: Trend of Theatre Service Utilization at the Hospital

Surgical Procedure	2019	2020	2021	2022	2023	Remarks
Major Gen. Surgery	2,940	1,875	3,908	3,152	3,722	0.35% incr
Major – O&G	1,508	1,632	1,676	1,918	1,768	7.82% decr
Total Major Surgeries	4,448	3,507	5,584	5,070	5,490	8.3% incr
Minor Gen. Surgery	313	289	350	268	272	1.49% incr
Minor – O&G	54	87	27	19	62	226.32% incr
Total Minor Surgeries	367	376	377	287	334	17.19% incr
Total Surgeries Performed	4,815	3,883	5,961	5,357	5,824	8.7% incr

Table 4.6. 2: Surgical Service Performance under THs KPI (Hospital Level Performance)

KEY INDICATORS	2019	2020	2021	2022	2023	REMARKS	MEASURE MENT	TARGET
Surgical site infection rates	0.27%	12.61% (Falcon)	-	-	-		Total infected wounds / Total Surgeries * 100	THs = 5%
Surgery Surgeon Ratio	127:1	108:1	199:1	179:1	108:1	decr	Total no. of surgeries performed/ total no. of Surgeons	THs = 250:1

KEY INDICATORS	2019	2020	2021	2022	2023	REMARKS	MEASURE MENT	TARGET
Total surgeries	4,815	3,883	5,961	5,357	5,824	8.7% Incr	-	CCTH = 10% Incr
Total surgeons	38	36	30	30	54	80% incr	-	-
Theatre Deaths Rate	0.6%	0.1%	0.4%	0.1%	0.1		-	-

The number of General Surgeries and Orthopaedic Surgeries decreased by 12.1% (from 863 in 2022 to 759 in 2023) and 6% (from 167 in 2022 to 177 in 2023) respectively whiles Plastics Surgeries and Paediatric Surgeries went up by 33.3% (from 93 in 2022 to 124 in 2023) and 14.1% (from 85 in 2022 to 97 in 2023) respectively as shown in table 4.6.3 below.

Table 4.6. 3: Surgeries Performed by Specialty from 2019 to 2023

SURGICAL SPECIALTY	2019	2020	2021	2022	2023	REMARKS
General Surgery	973	690	949	863	759	12.1% decr
Uro-Surgery	191	219	256	271	265	2.2% decr
Orthopaedics Surgery	186	130	173	167	177	6.0% Incr.
Plastic Surgery	82	82	102	93	124	33.3% Incr.
Neurosurgery	85	91	88	89	89	
Paediatrics Surgery	98	68	100	85	97	14.1% Incr.
OBGY	1,562	1,719	1,703	1,937	1,830	5.5% decr
ENT	222	201	166	206	194	5.8% decr
Ophthalmology	1,305	534	2,295	2,666	2,093	21.5% decr
Dental & Maxillofacial Surgery	69	98	1,257	1,887	2,180	15.5% incr

4.6.1 TOP TEN SURGICAL OPERATIONS

Caesarean Section was identified as the leading cause of surgical operations in 2023 with 37% (1,518). This was followed by Eye Surgeries with 13.61% (559) and Plastics surgeries 6.2% (255). On the other hand, Appendicectomy 2.19% (90) and Myomectomy 1.8% (72%) ranked 9th and 10th among the top ten surgeries performed in 2023 as presented in Table 4.6.1. 1 below.

Table 4.6.1. 1: Top Ten Surgical Operations Performed

2021		2022		2023	
Type of Case	No.	Type of Case	No.	Type of Case	No.
Caesarean Section	1462 (30.94%)	Eye Surgeries	1723 (32.2%)	Caesarean section	1518 (37.0%)
Eye Surgeries	1120 (23.70%)	Caesarean Section	1691 (31.5%)	Eye surgeries	559 (13.61%)
Hernia (Reducible)	240 (5.08%)	Hernia Reducible	198 (3.7%)	Plastics surgeries	255 (6.2%)
Laparotomy for Exploratory	198 (4.19%)	Laparotomy for Exploratory	147 (2.7%)	Hernia surgeries	252 (6.14%)
Appendicectomy	107 (2.26%)	ENT Operations	134 (2.5%)	laparotomy	246 (6.0%)
ENT Operations	107 (2.26%)	Operation on Fractures	109 (2.0%)	ENT surgeries	147 (3.6%)
Plastics Surgeries	102 (2.16%)	Appendectomy	90 (1.7%)	Fracture operations	96 (2.3%)
Operation on Fractures	99 (2.09%)	Neurosurgeries	86 (1.6%)	neurosurgeries	92 (2.2%)
Neurosurgeries	88 (1.86%)	Plastics Surgeries	77 (1.4%)	appendicectomy	90 (2.19%)
Intestinal Obstruction	75 (1.59%)	Removal of Tonsils Adenoids	75 (1.4%)	myomectomy	72 (1.8%)
Others	1027 (19.2%)	others	1,286 (24.0%)	others	2,452 (42.1%)
Total	5,961	Total	5,357	Total	5,824

4.7 DIAGNOSTIC SERVICES UTILIZATION

The total number of Laboratory investigations conducted decreased by 6.97% (from 558,298 in 2022 to 519,363 in 2023). In contrast, the number of laboratory clients went up by 16.3% (from 64,967 in 2022 to 73,667 in 2023). Moreover, the number of Radiology investigations increased by 10.2% (from 20,787 in 2022 to 22,903 in 2023) while the number of Radiology clients went up by 18.29% (from 16,857 in 2022 to 19,940 in 2023). Furthermore, the utilization of Laboratory and Radiology services decreased in 2023 to 505.1% and 114.41% respectively.

The number of Autopsies performed reduced by 7% (from 250 in 2022 to 232 in 2023). Detailed trend analysis is provided in table 4.7.1 below.

Table 4.7. 1: Diagnostics Services Utilisation (2019 – 2023)

KEY INDICATORS	2019	2020	2021	2022	2023	REMARKS	TARGET	MEASUREMENT
LABORATORY SERVICES								
Number of clients	70,021	55,652	55,871	64,967	73,667	13.39% incr	-	-
Total Lab request	61,900	92,907	73,953	103,638	102,820	0.79% decr	-	-
Number of laboratory tests conducted	291,677	241,858	180,422	558,298	519,363	6.97% decr	CCTH = 10% ↑	
Utilization of Laboratory services	62.5%	260.3%	221.3%	524%	505.1%	decr	THs = 60%	Total laboratory Investigations / Total Lab request * 100
RADIOLOGY SERVICES								
Number of radiology clients	17,624	21,792	17,983	16,857	19,940	18.29% incr		
Total Radio. request	17,624	4,465	17,962	16,857	19,940	18.29% incr	-	
Number of tests conducted	20,285	23,697	20,587	20,787	22,903	10.2% incr	CCTH = 10% ↑	
Utilization Radiological services	86.9%	530.7%	87%	123.3%	114.41%	decr	THs = 60%	Total Radiological Investigations / Total Radio. request * 100
PATHOLOGY SERVICES (AUTOPSY)								
Number of Autopsy	218	166	227	250	232	7% decr	-	

4.8 TRANSFUSION MEDICINE SERVICES

Blood and blood product transfusions continue to be a vital life-saving procedure. The total whole blood crossmatched during the year increased by 9.5% (from 4,296 in 2022 to 4,703 in 2023). Similarly, the number of Fresh Frozen Plasma (FFP) transfused went up by 4.2% (from 1,067 in 2022 to 1,112 in 2023) whereas the number of Whole Bloods transfused increased by 9.5% (from 4,296 in 2022 to 4,703 in 2023).

The voluntary blood donors increased by 29.2% (from 1,752 in 2022 to 2,264 in 2023). In the same vein, blood donations from mobile sessions went up by 34.7% (1,607 in 2022 to 2,165 in 2023). On the other hand, there was a reduction of 69.4% in the blood deposit at the ANC clinic (from 242 in 2022 to 74 in 2023). Detailed analysis is provided in figure 4.8.1 to figure 4.8.3 below

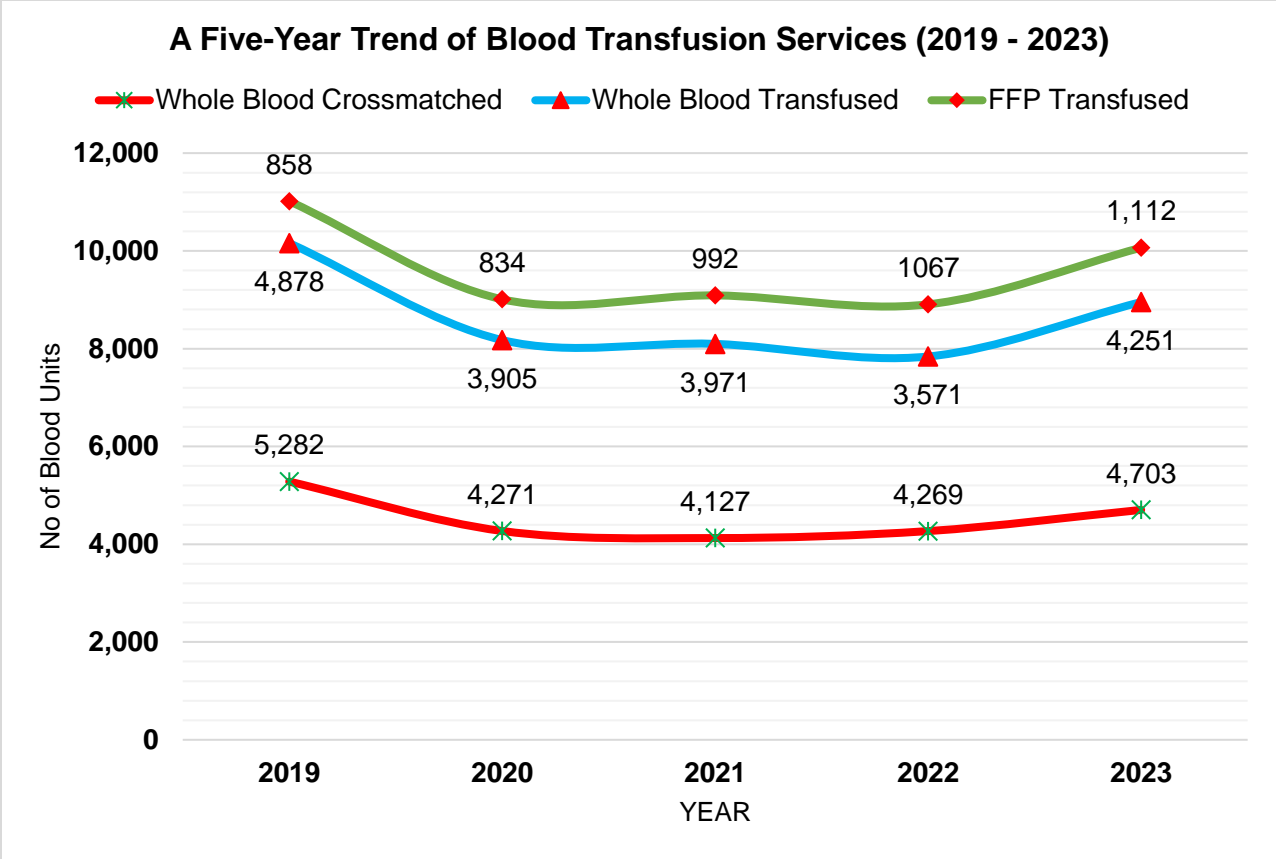


Figure 4.8. 1: A Five-Year Trend of Blood Transfusion Services (2019 - 2023)

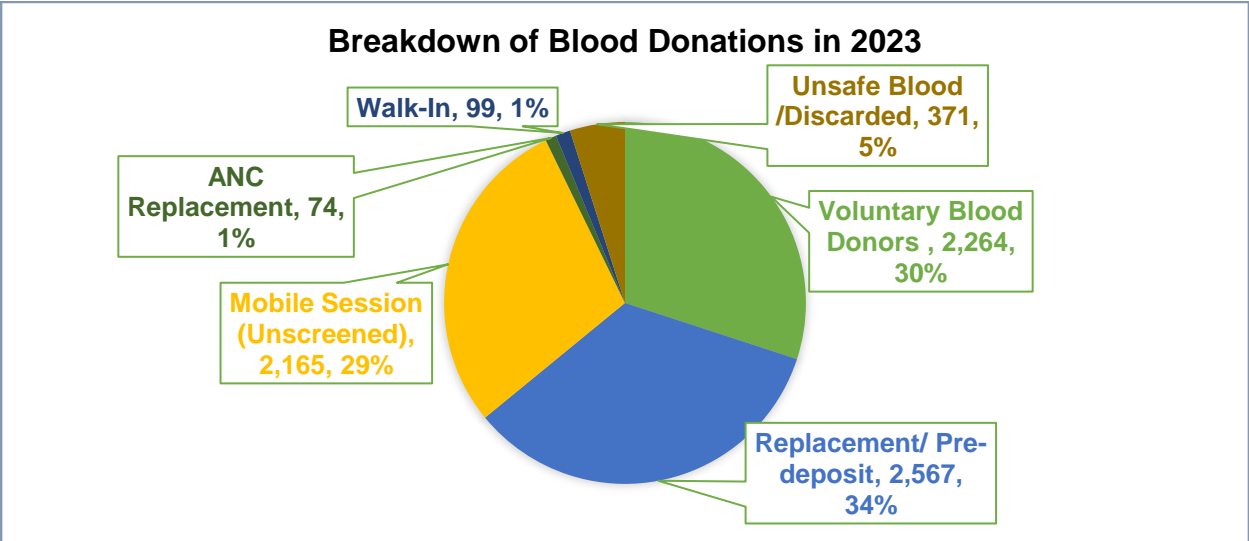


Figure 4.8. 2: Breakdown of Blood Donations in 2023

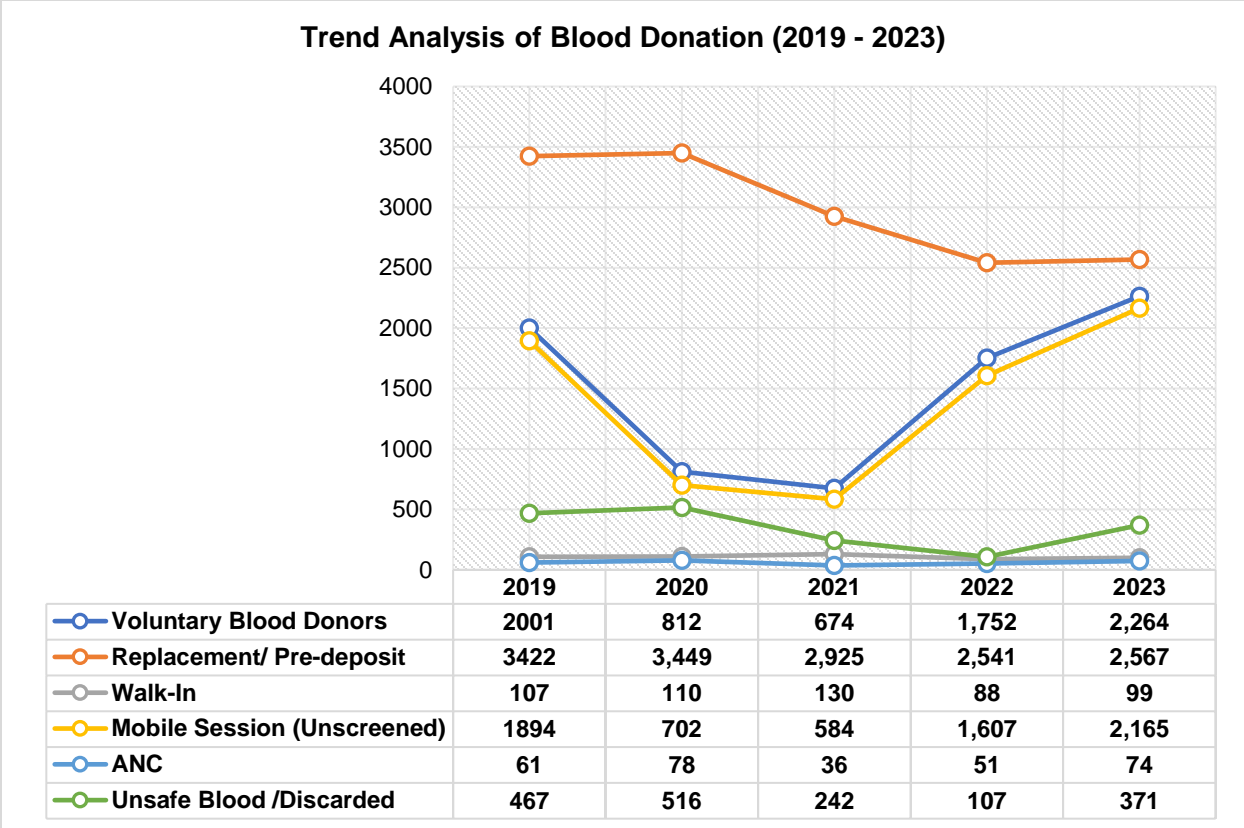


Figure 4.8. 3: Trend Analysis of Blood Donation

4.9 DIALYSIS SERVICE UTILIZATION

The hospital's Dialysis Center, which is regarded as Ghana's second-largest renal center, offers dialysis to people with acute and chronic kidney illness throughout Central and Western Regions. In August 2013, the Ghanaian and Japanese Tokushukai Medical Group renovated the Center, and it has been in use ever since.

The hospital recorded a marginal decrease of 1.11% in the adult OPD Renal Attendance (from 1 1,167 in 2022 to 1,154 in 2023). However, Paedics-Renal clinic attendance increased by 24.1% (from 79 in 2022 to 98 in 2023).

Further, the number of patients that accessed dialysis at the hospital reduced by 20.6% (from 107 in 2022 to 85 in 2023). Similarly, the number of dialysis sessions declined by 12.5% (from 3,229 in 2022 to 2,824 in 2023). Detailed trend analysis is provided in figure 4.9.1 below.

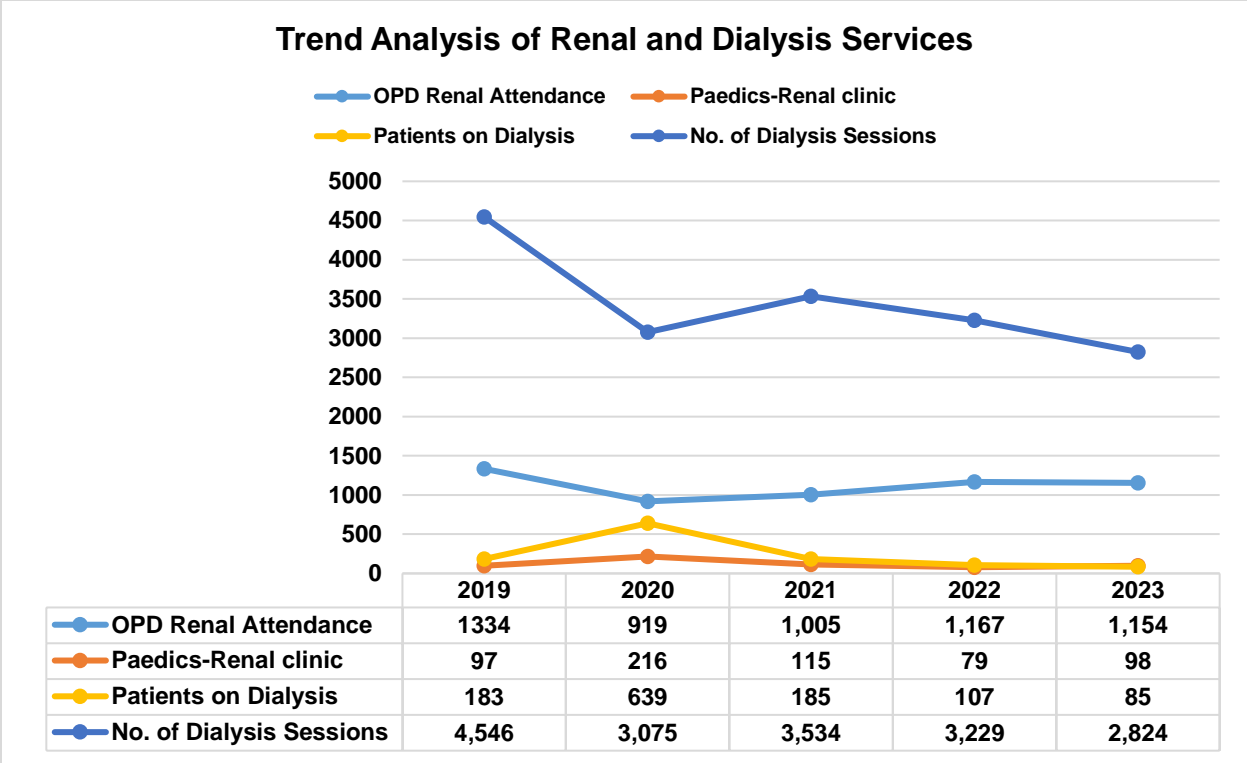


Figure 4.9. 1: Trend Analysis of Dialysis Service Utilization

4.10 INSTITUTIONAL MORTALITY

Institutional mortality remains a challenge despite the numerous strategies implemented to curtail it. Although still high, there has been an improvement in the institutional mortality rate since 2021. During the period, there was a marginal reduction in the institutional mortality rate from 8.5% in 2022 to 8.4% in 2023.

The total number of deaths recorded at the hospital in general decreased by 7.3% (from 1,072 in 2022 to 994 in 2023). On the other hand, the number of cases brought-in-dead increased by 10.5% (from 57 in 2022 to 63 in 2023). Detailed analysis is shown in figure 4.10.1 and table 4.10.1 below.

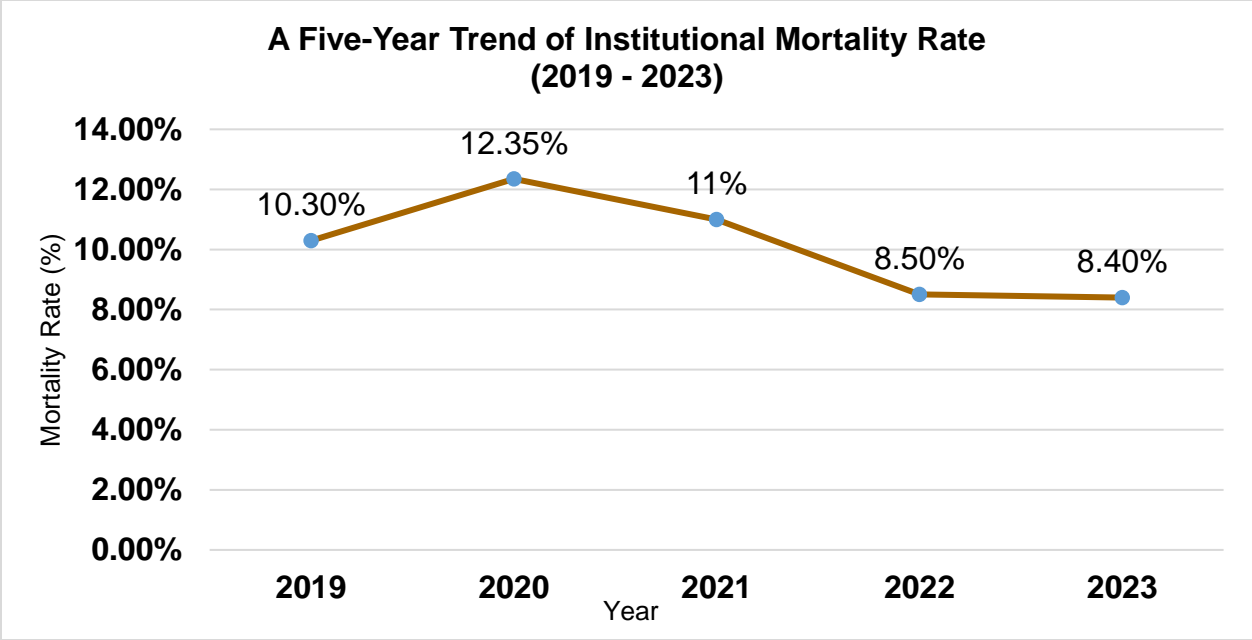


Figure 4.10. 1: A Five-Year Trend of Institutional Mortality Rate (2019 - 2023)

Table 4.10. 1: Institutional Mortality Categorization

INDICATORS	2019	2020	2021	2022	2023	REMARKS	TARGET
Deaths (Ward)	843	1,001	852	736	688	6.5% decr	-
Death (A&E)	437	365	436	330	301	8.8% decr	-
Death (Theatre)	7	2	2	4	1	75% decr	-
Death (Recovery ward)	20	12	16	2	4	Incr	-
Total Hospital Death	1,307	1,379	1,306	1,072	994	7.3% decr	CCTH = 5% Decr
Mortality Rate (%)	10.3%	12.35%	11%	8.5%	8.4%	Decr	THs = 5%
Theatre death rate	0.6%	0.1%	0.4%	0.1%	0.1%		
Brought in Dead	97	74	44	57	63	10.5% incr	-

4.10.1 TOP TEN CAUSES OF INSTITUTIONAL MORTALITY

Sepsis and Respiratory Distress Syndrome remained the leading cause of death in 2023 accounting for 13.1% (66) and 10.1% (51) respectively although a reduction was seen in their number of deaths. These were followed by Pneumonia 9.7% (49), kidney disease 8.1% (41) and Birth Asphyxia 6.5% (33) and Septic shock accounting for the 10th leading cause of mortality in 2023. Table 4.10.1.1 below provides a four-year trend analysis of the causes of institutional mortality at CCTH from 2020 to 2023.

Table 4.10.1. 1: Top Ten Causes of Institutional Mortality

2021		2022		2023	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Respiratory Failure	121 (14.2%)	Sepsis	84 (15.7%)	Sepsis	66 (13.1%)
Birth Asphyxia (Neonatal)	60 (7%)	Respiratory Distress Syndrome	64 (12.0%)	Respiratory distress syndrome	51(10.1%)
Sepsis	41 (4.8%)	Asphyxia	44 (8.2%)	Pneumonia	49 (9.7%)
Septic Shock	35 (4.1%)	Kidney Disease	29 (5.4%)	Kidney disease	41(8.1%)
Cerebrovascular Accident	33 (3.8%)	Pneumonia	29 (5.4%)	Birth asphyxia	33(6.5%)
Kidney Disease	27 (3.2%)	Cerebrovascular Accident	22 (4.1%)	Heart failure	25(5.0)
Bilirubin-Induced Neurologic Dysfunction (BIND)	22 (2.58%)	Heart Failure	14 (2.6%)	Prematurity	19(3.8%)
Haemorrhage	18 (2.1%)	NEC	12 (2.2%)	Stroke	18(3.6%)
Congestive Cardiac Failure	15 (1.76%)	Tuberculosis	12 (2.2%)	Liver failure	16(3.2%)
Pneumonia	15 (1.76%)	Hepatic Encephalopathy	10 (1.9%)	Septic shock	14(2.8%)

4.10.2 MATERNAL MORTALITY

The hospital still battles with high maternal mortality although strategies are implemented annually to improve on the survival chances of pregnant women who access care at CCTH. Thus, the hospital recorded a reduction in the maternal mortality rate from 1,186/100,000 LB in 2022 to 681/100,000 LB in 2023. Actual maternal deaths dropped by 48.7% (from 39 in 2022 to 20 in 2023). 17 (85%) of the total deaths were referred to the hospital. Figure 4.10.2.1 below provide trend of the analysis.

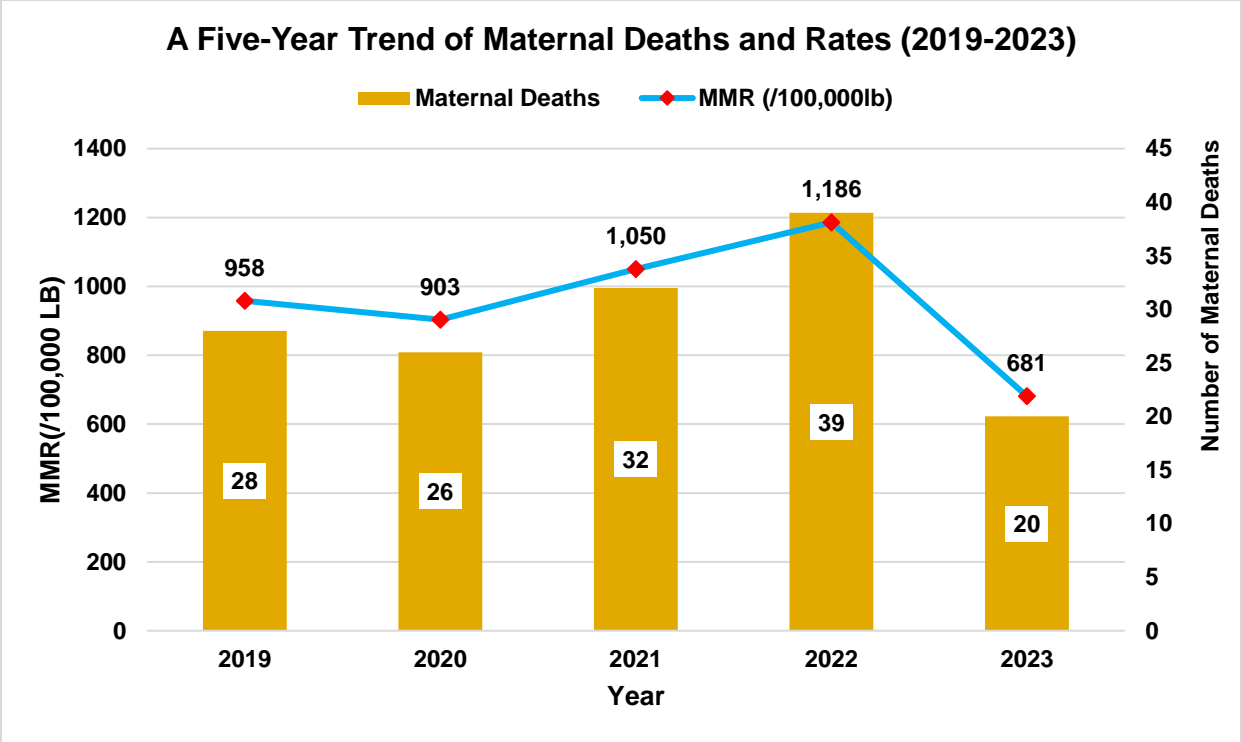


Figure 4.10.2. 1: A Five-Year Trend of Maternal Deaths and Rates (2019-2023)

4.10.3 CHILD MORTALITY

The hospital is keen on improving the survival chances of its client especially children. Thus, interventions such as raising campaigns and education of mothers on major conditions such as Neonatal Jaundice, Prematurity, Breastfeeding, Birth Asphyxia and Childhood Cancer that could lead to child mortality were done.

This resulted in a tremendous improvement in all the child mortality indicators in 2023. The institutional infant mortality rate decreased from 77/1000LB in 2022 to 67/1000LB in 2023. In the same light, the neonatal mortality rate declined from 67/1000LB in 2022 to 58/1000LB in 2023 while under 5 mortality rate reduced from 80/1000LB in 2022 to 72/1000LB in 2023. Details of the analysis is provided in table 4.10.3.1 and figure 4.10.3.1 below.

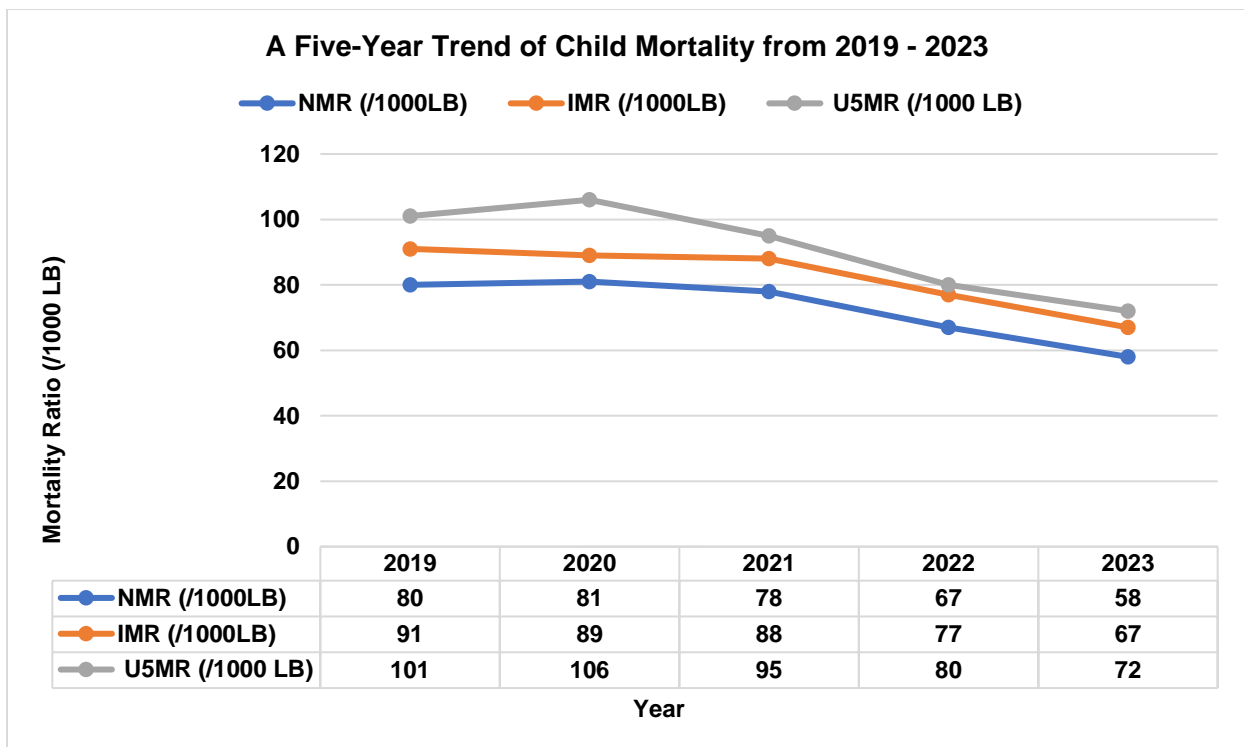


Figure 4.10.3. 1: A Five-Year Trend of Child Mortality from 2019 - 2023

Table 4.10.3. 1: Child Mortality

INDICATORS	2019	2020	2021	2022	2023	REMARKS	TARGET
Infant Deaths	272	284	267	252	197	21.8% decr	-
Institutional Infant mortality rate (/1000LB)	91	89	88	77	67	decr	THs = 15/1000LB
Number Of < 5 Deaths	301	307	290	264	213	19.3% decr	-
Under 5 Mortality Rate (/1000 LB)	101	106	95	80	72	decr	-
Neonatal Deaths	239	233	239	219	170	22.4% decr	-
Neonatal Mortality Rate (/1000LB)	80	81	78	67	58	decr	THs = 25/1000LB

CHAPTER FIVE

SUPPORT AND GENERAL SERVICES

5.1 INTRODUCTION

The support and general services to augment clinical care are provided by Technical Service Sub-BMC, Domestic Service Sub-BMC, and some General Administrative Units such as Supply Chain Management Unit, Health Information Management Unit, Transport Unit, Security Unit among others.

The period under review saw some estate, ICT and medical equipment improvement such as;

- i. Completion of renovation works and handing over of Polyclinic for use
- ii. Tiling of ENT Nurses' station to the rare exit point
- iii. Rehabilitation of eleven (11) consulting/patient care rooms (Ear, Nose and Throat (ENT), Eye Care, Family Planning, General Patient Consulting Rooms services)
- iv. Renovation of some residential flats (Block C Flat 4, Block E Flat 2 & 3, Block I Flat 13)
- v. Painting of hospital frontage (fence wall)
- vi. Construction of additional washroom at Administration Block
- vii. Construction of gable roof shed for the newly installed power plant (Medical Stores area)
- viii. Extension of electric power to CT-Scan at the Diagnostic Centre
- ix. Implementation of the Logistics/Medical Stores Management component of the LHIMS application
- x. Completion of pilot phase and rolled out of Social Welfare Model on the LHIMS application.
- xi. Installation of twenty (20) CCTV cameras at selected areas within the hospital.
- xii. Installation and configuration of DICOM server to make CT-Scan images available on LHIMS application
- xiii. Roll out of inventory and requisition component of the LHIMS application software.
- xiv. Installation of various medical equipment and medical furniture
- xv. Extension of medical oxygen pipelines to ten (10) wards
- xvi. Installation of 45 oxygen terminal points, thirty-eight (38) 2-in-one wall flowmeters, and eight (8) area oxygen valve monitors.

5.2 EQUIPMENT UTILIZATION AND DOWN TIME ANALYSIS

During the period, the hospital experienced a breakdown of the old CT-Scan machine leading to a 100% equipment downtime. However, the hospital after receiving a 32-slide CT-Scan from the Ministry of Health within the later part of the year brought utilisation to

14.17%. In addition, the hospital recorded an increase in PPM output from 50% in 2022 to 55% in 2023. Detailed analysis is provided in tables 5.2.1 to table 5.2.2 below.

Table 5.2. 1: Trend of Selected Equipment Downtime of Imaging Equipment

Equipment Type	2019	2020	2021	2022	2023	Remarks
CT-Scan (New)	Not Applicable				0	There was no downtime
CT-Scan (old)	0%	0%	82.52%	100%	100%	
Ultrasound Machine (Old – Philips)	0%	*30.89%	0%	N/A	N/A	
X-Ray Machine 2 (Fuji)	53.00 %	*47.00 %	0%	N/A	N/A	
Fluoroscopy Machine	N/A	N/A	0%	N/A	N/A	
Magnetic Resonance Imaging (MRI)	100%	100%	100%	100%	100%	

Table 5.2. 4: Equipment Utilization – IMAGING

Equipment Type	Avg. Equipment Operating Hours	2019	2020	2021	2022	2023
CT-SCAN (Old)	12hrs per day (all days)	14.17%	Use of this new equipment started in February 2023	-	-	-
CT-SCAN (Old)	8 hrs per working day 2 hours per weekend / public holiday	83.07%	*98.72%	21.39%	0%	100%

Equipment Type	Avg. Equipment Operating Hours	2019	2020	2021	2022	2023
Ultrasound Machine (Siemens)	9 hrs per working day 2 hours per weekend / public holiday	*69.52% (Mar. – Dec. 2019)	*69.11%	74.27%	N/A	30.29%
Fluoroscopy Machine	8 hrs per working day 2 hours per weekend / public holiday	N/A	N/A	N/A	-	9.25%
X-Ray Machine 1 (Fuji)	8 hrs per working day 2 hours per weekend / public holiday	*47.20%	*53.44%	65.03%	N/A	54.26%
Magnetic Resonance IMAGING (MRI)	N/A	N/A	N/A	0%	0%	0%

Table 5.2. 2: THs KPI - Technical and Logistical Support Services

KPI	2019	2020	2021	2022	2023	REMARKS	TARGETS	MEASUREMENT
Equipment downtime Proxy: CT SCAN	0%	0%	82.5%	100%	0%	decr	THs = 5%	Average downtime / Total productive hours Total productive hours (12 per day) *100
PPM Output Achieved	80%	75%	61.7%	50%	55%	incr	THs = 80%	PPM executed/PPM*100
Equipment Utilisation (CT-SCAN)	83.1%	98.72%	21.4%	0%	14.17%	incr	THs = 90%	No. of hours equipment was used / total no. of hours

KPI	2019	2020	2021	2022	2023	REMARKS	TARGETS	MEASUREMENT
								available for usage *100

5.3 KEY INFRASTRUCTURAL PRIORITY PROJECTS IN 2023

The following infrastructural projects were undertaken in 2023;

- i. Construction of an Infectious Disease Centre (99% completion – funded by World Bank through Ministry of Health)
- ii. Expansion of the current Accident and Emergency wing of the hospital (40% completion – Funded by the Government of Ghana)
- iii. Commencement of the construction of a Patient Relatives’ Hostel (60% completion - Funded by Ghana National Gas company)
- iv. Commencement of the Construction of a New Eye Surgical Centre (20% completion - Funded by USAID and Himalayan Cataract Project (a USA NGO & its Partners)

5.3.1 INFECTIOUS DISEASE CENTRE (ANNEX B)



5.3.2 ACCIDENT AND EMERGENCY CENTRE EXPANSION|



5.3.3 CONSTRUCTION OF PATIENT RELATIVE HOSTEL



5.3.4 CONSTRUCTION OF EYE CARE SURGICAL TRAINING CENTRE



5.4 TRANSPORT SERVICES

During the period, the hospital run with fourteen (14) vehicles out of which five were in the "green zone" (age - 1 to 5 years), four (4) in the "yellow zone" (age - 6 to 9 years), and five (5) in the "red zone" (age - 10 years and above). Table 5.4.1 below provides a detailed study of vehicle inventory broken down by age and colour code.

Table 5.4. 1: Vehicle Inventory by Age Block

AGE BLOCK/ZONE	2019	2020	2021	2022	2023
1-5 years	5	4	3	5	5 (1 mini bus)
6-9 years	5	3	4	4	4
10 and above	4	5 (3)	5(2)	5(1)	5(1)

5.5 DOMESTIC SERVICES

The domestic services in the hospital are provided by the Laundry, CSSD, Tailoring, Catering and Environmental Units.

Generally, there was a decline in the total number of outputs provided by the Units. The Tailoring Unit recorded the least decline of 0.67% in the number of cloths and linen sown (from 15,590 in 2022 to 15,485 in 2023). Also, the quantity of food served to inpatients declined by 2.1% (from 61,971 in 2022 to 60,691 in 2023). Similarly, the number of items sterilized by the CSSD unit declined by 24.4% (from 365,421 in 2022 to 276,314 in 2023), as well as the number of items washed by the Laundry Unit dropped by 28.6% (from 236,116 in 2022 to 168,617 in 2023). The figure 5.5.1 and table 5.5.1 below provides details of the analysis.

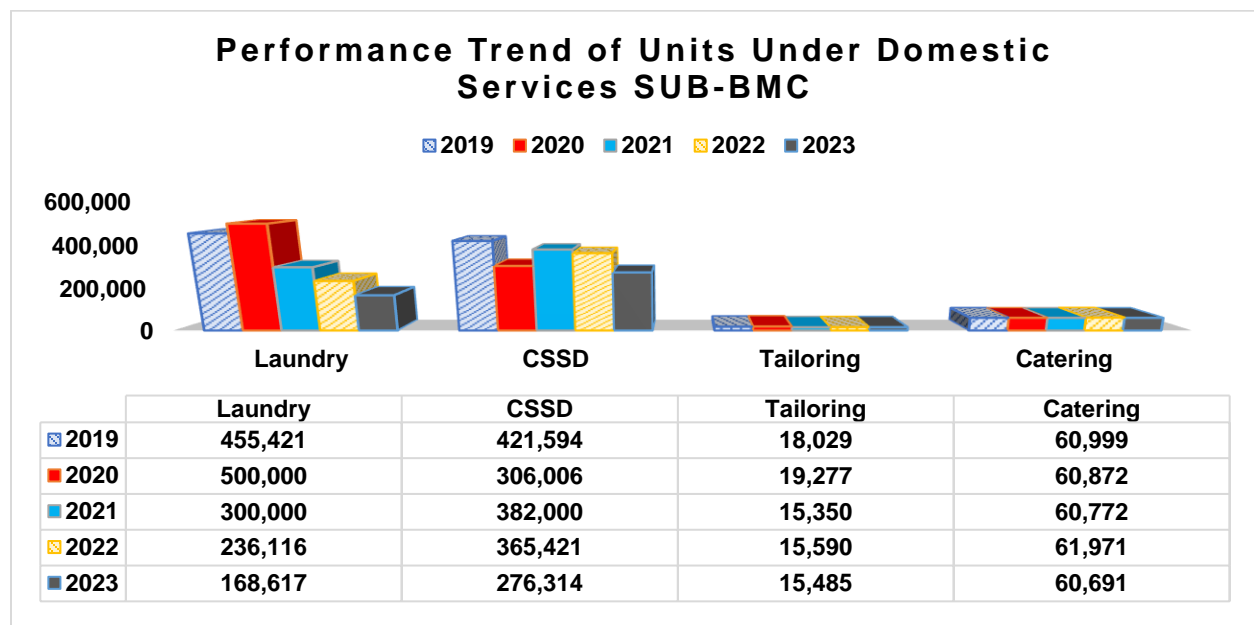


Figure 5.5. 1: Performance Trend of Units under Domestic Services Sub-BMC

Table 5.5. 1: Performance Trend of Units under Domestic Services Sub-BMC

UNIT	2019	2020	2021	2022	2023	REMARKS
Laundry	455,421	500,000	300,000	236,116	168,617	28.6% decr
CSSD	421,594	306,006	382,000	365,421	276,314	24.4% decr
Tailoring	18,029	19,277	15,350	15,590	15,485	0.67% decr
Catering	60,999	60,872	60,772	61,971	60,691	2.1% decr

CHAPTER SIX

FINANCIAL PERFORMANCE

6.1 INTRODUCTION

The financial performance of the hospital is dependent on various internal and external factors. The institution therefore has an obligation to ensure the efficient and effective use of these funds with realistic budgeting. This chapter provides the summary of financial performance of the hospital over the past year.

6.2 SOURCES OF FUNDING

The Hospital is financed through multiple sources. These include;

1. Government of Ghana- GOG funds are provided for the salaries of full-time employees and selected capital investments.
2. Internally Generated Funds (IGF)
 - a. Health Insurance -The NHIS has become a major buyer of the hospital's services for both OPD/Inpatient clients through the provision of medical services and medicines. Currently, the national health insurance scheme (NHIS) has a coverage of over 95% of disease conditions reimbursement, constituting about 20% of the total cost of services delivery at any given time.
 - b. User Fees - "Out of Pocket" – This is a direct payment from non-insured clients for services and it is the most reliable source of revenue to the hospital. It constitutes about 10-20% of the total IGF of the hospital.
These internally generated funds are used to finance both recurrent and capital expenditures including the procurement of medicines and non-medical consumables, logistics, basic equipment, remunerations of staff as well as the payment of utility bills.
3. Donor Fund- These are funds received from donor partners, philanthropists and cooperate organisations to support the execution of specific programs such as; Malaria, HIV/AIDS, TB, Cataract surgeries, etc and the procurement of medicines, non-medical consumables, equipment etc. to enhance its service delivery.

6.3 REVENUE AND EXPENDITURE HIGHLIGHTS

Total resource envelope budgeted for the year was GH¢152,214,788. However, the hospital executed GH¢ 170,598,748.10 representing 112.1% execution rate. Total revenue generated went up by 25.7% as compared to the previous year (from GH¢ 131,305,508.02 in 2022 to GH¢165,083,959 in 2023), this could be attributed to the increase in tariff by NHIS at the beginning of the year.

IGF revenue appreciated by 51.0% (from GH¢32,100,188.39 in 2022 to GH¢ 48,472,268 in 2023) while GOG compensation also increased by 17.8% (from GH¢99,005,319.63 in 2022 to 116,611,691 in 2023). The period also saw the hospital also receiving some support to fund some services to the tune of GH¢ 5,314,788.07. Out of the total revenue of GH¢170,598,748.10, GOG compensation was 68.4%, IGF 28.5% and donor revenue 3.1% respectively.

Goods and services revenue went up by 53.5% (from GH¢22,786,950.76 in 2022 to GH¢ 34,980,185 in 2023), whilst revenue from pharmaceutical also increased by 44.9% (from GH¢9,313,237.63 in 2022 to GH¢ 13,492,583 in 2023).

In view of the above, the hospital projected GH¢44,400,000 as the total IGF for the year under review, and executed 109% (GH¢48,472,268). Furthermore, out of the GH¢102,500,000 GOG compensation budget projected, the execution rate was 113.17% (GH¢116,611,691).

The hospital's total expenditure for the year under review was GH¢47,883,472. The expenditure towards medicines increased by 25.8% (from GH¢8,451,653.77 in 2022 to GH¢ 10,634,844.23 in 2023) whilst that of goods and services also went up by 66.7% (GH¢22,344,909.49 in 2022 to GH¢37,248,627.77 in 2023). Tables 6.3.1 to 6.3.3 below shows detailed analysis.

Table 6.3. 1: Revenue Distribution by Source

Source of Funds	2020			2021			2022			2023		
	Amount GH¢	Proportion (%)	% Diff	Amount GH¢	Proportion (%)	% diff	Amount GH¢	Proportion (%)	% diff	Amount GH¢	Proportion (%)	% diff
IGF Revenue	22,268,693.6	24.1%	+3.2%	24,217,381.36	23.4%	+8.75	32,100,188.39	24.5%	+32%	48,472,268	28.5%	+51.0%
GOG Compensation	70,106,668	75.89%	+46.3%	79,407,405.56	76.6%	+13.27%	99,005,319.63	75.5%	+24.7%	116,611,691	68.4%	+17.8%
Donors	-	-	-	-	-	-	-	-	-	5,314,788.07	3.1%	
TOTAL	92,375,361.60			103,624,786.92			131,105,508.02			170,398,747.07		

Table 6.3. 2: IGF Budget Financial Highlights

Financial Highlights	Target	Perf +/-	2023	2022	2021	2020	2019
REVENUE GH¢							
SERVICE S	34,000,000	72.17 %	34,980,185	22,786,950.76	15,816,701.56	15,089,523.72	15,832,185
MEDICINE S	10,400,000	27.83 %	13,492,583	9,313,237.63	8,400,679.80	7,179,169.88	5,747,495
TOTAL	44,400,000	100%	48,472,268	32,100,188.39	24,217,381.36	22,268,693.6	21,579,680
EXPENDITURE GH¢							
SERVICE S	39,589,117.94	77.79 %	37,248,627.77	22,344,909.49	18,472,801.38	17,574,513.18	15,832,184.9
MEDICINE S	12,700,000	22.21 %	10,634,844.23	8,451,653.77	6,192,675.02	7,258,127.93	5,747,495.43
TOTAL	52,289,117.94	100	47,883,472.00	30,706,563.26	24,665,476.40	24,832,641.11	20,761,126.11

Table 6.3. 3: Summary of IGF Budget Execution Rate

Category	2019	2020	2021	2022	2023	REMARKS
Revenue	88.5%	91.2%	86.53%	101.95%	109%	incr
expenditure	92.4%	86.8%	88.1%	98%	91.6%	decr

6.4 IGF PERFORMANCE STRUCTURE

The hospital during the period recorded a significant increase in its IGF revenue generation. Out of the total IGF generated, 51.53% (GH¢ 24,978,340.3) was from Out-of-Pocket payment while 49.5% (GH¢ 16,368,337.65) was from NHIA Claims submissions while income from corporate/private insurance stood at GH¢ 381,377 representing a percentage of 0.78%.

Revenue from Out-of-Pocket payment increased significantly by 52.6% (from GH¢ 16,368,337.65 in 2022 to GH¢ 24,978,340.3 in 2023) and, NHIS revenue increased by 49.5% (from GH¢15,457,167 in 2022 to GH¢23,112,550.68 in 2023).

Additionally, revenue from out of pockets payments from goods and services increased by 57.7% (from GH¢12,008,874.95 in 2022 to GH¢18,940,191.98 in 2023), while that of NHIS equally went up by 49.0% (from GH¢ 10,537,872.74 in 2022 to GH¢15,697,392.05 in 2023). Total pharmaceutical revenue for out of pocket was GH¢ 6,038,148.32 while that of NHIS was GH¢7,415,158.63 as shown in Table 6.4.1 to table 6.4.2 below.

Table 6.4. 1: Composition of IGF (GH¢)

Source of IGF	2019	2020	2021	2022	2023	Remarks
Out of Pocket Collections	9,748,480	10,765,740.42	11,745,526.38	16,368,337.65	24,978,340.3	52.6% incr
NHIA Revenue	11,734,192	11,368,136.98	12,304,287.46	15,457,167.44	23,112,550.68	49.5% incr
Corporate/Private Insurance	97,008.00	134,816.20	167,567.52	274,683.21.	381,377.00	38.8% incr
Total Revenue Earned	21,579,680	22,268,693.60	24,217,381.36	32,100,188.39	48,472,268	51% incr

Table 6.4. 2: IGF Performance Structure GH¢

Performance	Total Revenue	% Diff	REVENUE STATUS (CASH AND CARRY & NHIS)										% Diff
			NHIS (GH¢)					Out of Pocket (GH¢)					
			2023	2022	2021	2020	2019	2019	2020	2021	2022	2023	
Goods & Service	34,637,584.03	49%	15,697,392.05	10,537,872.74	8,366,343.13	8,077,704.07	8,955,294.47	6,876,894.43	6,894,250.32	7,307,543.45	12,008,874.95	18,940,191.98	57.7%
Medicine/Pharmaceuticals	13,453,306.95	50.7%	7,415,158.63	4,919,295.70	3,937,944.33	3,290,432.91	2,875,905.84	2,871,589.59	3,871,490.1	4,437,982.93	4,359,461.79	6,038,148.32	38.5%
TOTAL	48,090,890.98	49.5%	23,112,550.68	15,457,168.44	12,304,287.46	11,368,136.98	11,831,200.31	9,748,337.65	10,765,740.42	11,745,526.38	16,368,337.65	24,978,340.3	52.6%

6.5 REVENUE BY DEPARTMENTS (GH¢)

The total IGF revenue from the various departments / units in the hospital went up significantly by 51%. Out of the total revenue generated, Out-patients departments was the highest revenue generating Sub-BMC with 10.4% (GH¢5,081,625) followed by Surgical Sub-BMC 9.72% (GH¢4,710,224.80) and the Maternal Health Sub-BMC 9.68% (GH¢4,692,257). On the other hand, ENT, Mortuary and Physiotherapy contributed 1.06%, 0.66% and 1.27% respectively of the total revenue. Table 6.5.1 below provides a five-year trend analysis of the revenue contribution from the various departments/Units within the hospital.

Table 6.5. 1: Proportion of Revenue Contribution by Department

SERVICE S	Proportion of Revenue		Total Revenue (GH¢)					
	2023	2022	% DIFF	2023	2022	2021	2020	2019
Surgical	9.72 %	9.21 %	+59.3 %	4,710,224.80	2,955,722.25	3,544,206.00	3,176,479.31	3,174,276.85
Medical	8.65 %	9.75 %	+34%	4,194,788	3,131,203.05	1,857,318.67	2,041,275.38	2,446,169.67
Imaging	6.62 %	5.54 %	+83.79%	3,211,078	1,747,176.77	1,274,716.70	1,978,410.00	1,715,744.00
Laboratory and Diagnostics	6.21 %	6.23 %	+50.5 %	3,008,334	1,998,352.56	1,172,912.00	943,553.27	586,245.60
OPD	10.4 %	7.45 %	+112.6%	5,081,625	2,390,064.53	1,711,465.80	1,647,485.01	1,909,435.43
Obstetrics and Gynaecology	9.68 %	11.47 %	+27.4 %	4,692,257	3,682,093.17	2,436,670.14	2,236,267.12	2,295,245.70
Dental	0.97 %	1.22 %	+20.3 %	470,022	390,677.33	247,023.03	206,726.44	172,010.04
Paediatric	4.81 %	5.4%	+34.6 %	2,329,444	1,730,924.84	1,191,082.97	1,028,066.03	1,126,813.27
Ear, Nose & Throat	1.06 %	1.08 %	49.7%	515,528	344,377.11	214,559.44	183,974.37	195,587.03
Eye Care	2.63 %	2.86 %	+39.0 %	1,276,429	917,873.30	702,666.70	350,939.81	440,261.44
Mortuary	0.66 %	0.99 %	+1.4%	320,486	316,047.89	329,904.20	313,730.00	262,247.93
Physiotherapy	1.27 %	0.90 %	+115.7%	617,282	286,140.08	268,317.44	182,476.84	207,488.34
Dialysis	2.0 %	2.47 %	+58.7 %	967,452	798,417.00	839,061.50	647,214.07	818,989.00
Others	7.40 %	6.56 %	+70.4 %	3,584,729	2,103,880.87	321,687.46	285,987.33	481,670.60
Total	100 %	-	+51.0 %	48,472,268	32,100,188.39	24,217,381.36	22,268,693.60	21,579,680.33

Capital Investment (CAPEX) during the period also appreciating significantly by 534.3% (from GH¢323,907 in 2022 to GH¢2,054,599.56) in 2023). The contributions of Compensation, Goods and services and Investment (CAPEX) to the total annual expenditure of the hospital were 8.65%, 87.06% and 4.29% respectively. Detailed information is in table 6.5.2 below.

Table 6.5. 2: Financial Performance, Expenditure (GH¢)

	PERF. +/-	2023	2022	2021	2020	2019
Compensation	8.65%	4,143,680.99	2,866,897	2,233,434.25	2,408,362.87	1,836,109.80
Goods and services	87.06%	41,685,191.45	26,626,192	20,646,545.71	21,885,359.16	20,686,346.21
Investment (CAPEX)	534.3%	2,054,599.56	323,907	518,861	639,919.10	-
Total	100%	47,883,472	30,816,996	23,398,840.96	24,933,641.13	22,522,456.01

6.6 STATUS OF NHIS CLAIMS

The hospital submitted a total of GH¢ 23,112,550.68 claims for reimbursement, which was 49.5% rise over the previous year (from GH¢15,457,168.44 in 2022 to GH¢23,112,550.68). Total claims paid by NHIA went up significantly by 146% (from GH¢10,197,212.92 in 2022 to GH¢25,097,766.46 in 2023), whilst the outstanding claims recorded as at the close of 2023 declined by 16.5% (from GH¢12,054,979.92 in 2022 to GH¢10,069,763.40 in 2023). The outstanding number of months for NHIA reimbursement was 5 months as at the close of 2023 as compared to 9 months in 2022. Detailed analysis is shown in table 6.6.1 below.

Table 6.6. 1: Status of NHIS Claims

ITEM	% DIFF	2023	2022	2021	2020	2019
Claims Submitted	49.5% incr	23,112,550.68	15,457,168.44	12,304,287.46	11,368,136	11,734,191.92
Claims Paid	146% incr	25,097,766.46	10,197,212.92	10,748,624.26	12,715,888	7,367,571.40
Outstanding as at Close	16.5% decr	10,069,763.40	12,054,979.92	6,795,023.88	11,416,143	12,643,564.86
Adjustment for Unrecoverable Claims	-	-	-	6,177,203.32	-	-
No. of Month Outstanding	decr	5	9	6	6	8

6.7 ASSETS, LIABILITIES AND CASH FLOWS

The hospital's total net asset in 2023 went up by 69.1% (from GH¢9,341,137.84 in 2022 to GH¢15,794,906.39), while total current liabilities recorded a decrease of 9.8% (from GH¢17,196,078.37 in 2022 to GH¢15,512,010.07 in 2023). Total cash inflow increased sharply by 817% (from GH¢30,634,991.1 in 2022 to GH¢55,655,156.13 in 2023), with net cash outflow going up by 18.5% (from GH¢2,085,220.65 in 2022 to GH¢2,471,121.71 in 2023). Table 6.7.1 and 6.7.2 provides details of the analysis.

Table 6.7. 1: Trend of Assets and Liabilities

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Non-Current Assets:						
Cash & Cash Equivalent	694,206.58	763,698.88	1,073,813.65	2,097,224.17	2,488,171.72	18.6% incr
Accounts Receivables	12,748,013.24	11,416,143.98	8,873,138.10	12,412,453.51	10,611,703.78	14.5% decr
Staff Receivables	-	-	47,200	29,750.00	17,920.00	39.8% decr
Inventories	6,002,442.47	6,445,365.39	7,357,920.65	7,357,920.65	11,494,653.28	56.2%
Total Current	19,444,662.29	18,682,212.25	17,352,072.4	21,897,348.33	24,612,448.78	12.4% incr
Non-Current						
Property, Plant & Equipment	3,116,319.68	3,755,238.78	4,315,960.38	4,639,868.12	6,694,467.68	44.3% incr
Total Assets	22,560,981.97	22,437,451.03	21,668,032.78	26,537,216.45	31,306,916.46	18.0% incr
LIABILITIES						
Current Liabilities						
Account Payables	822,876.75	9,337,117.28	11,774,418.76	15,898,019.24	14,544,922.43	8.5% decr
Trust Monies	89,687.93	105,353.32	234,448.08	1,298,059.37	967,087.64	25.5% decr
Total Current Liabilities	8,313,564.68	9,442,470.60	12,008,866.84	17,196,078.61	15,512,010.07	9.8% decr
Net Assets						
Total Net Assets	14,247,417.29	12,996,026.25	9,659,165.94	9,341,137.84	15,794,906.39	69.1% incr
Financed By						
Accumulated Fund B/F	15,190,192.97	14,247,417.29	12,996,026.25	9,659,165.94	9,341,137.84	3.3% decr

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Non-Current Assets:						
Surplus /Deficit Recorded	942,775.68	- 1,251,391.05	1,025,181.82	1,407,844.68	-	
Accumulated Fund Carried Over	14,247,417.29	12,996,026.25	9,659,165.94	9,341,137.84	15,794,906.39	

Table 6.7. 2: Cash Flow

INDICATOR	2023	2022	2021	2020	2019	REMARKS
Cash Inflow						
Out of Pocket	24,978,870.30	16,368,336.74	11,745,526.38	10,764,780.42	10,125,338.52	52.6% incr
NHIA Re-Imbursement	25,097,766.46	10,197,212.92	10,748,624.26	12,715,888.45	7,367,571.40	146.1% incr
Other Receipts	5,511,699.37	4,069,441.44	1,578,033.91	1,025,610.80	577,954.81	35.4% incr
Total Inflows:	55,655,156.13	30,634,991.11	24,072,184.55	24,506,279.67	18,070,864.73	81.7% incr
Cash Outflows:						
IGF Compensation	4,093,629.04	2,773,865.54	2,173,839.80	2,357,163.82	1,751,383.36	47.6% incr
Goods/Services	43,875,045.86	24,235,782.43	20,176,117.65	22,048,723.65	16,773,372.91	81.0% incr
Salary Advance	-	-	45,200	30,900.00	60,300.00	-
Trust Payments	5,606,432.58	2,925,141.64	-	-	-	91.7% incr
GRA-Tax Payment	1,709,669.95	151,426.55	543,820.51	-	-	1029.0% incr
Total Outflow	55,284,644.56	30,086,216.16	23,779,567.58	24,436,787.47	18,585,056.27	83.8% incr
Net Cash Outflow	2,471,121.71	2,085,220.65	292,616.97	69,492.20	514,191.54	18.5% incr

CHAPTER SEVEN

COLLABORATION AND SUPPORT

7.1 INTRODUCTION

The hospital periodically partners with and equally receives donations from corporate organisations and individuals that are geared towards improving the quality of health care.

7.2 COLLABORATORS

Table 7.2.1 provides details of the major collaborators and type of support provided to the institution in 2023.

Table 7.2. 1: Collaborator(s) and Supports Received

NO.	COLLABORATOR(S)	SUPPORT / CONTRIBUTION
1.	Ministry of Health	Donated the following medical items to improve service delivery <ul style="list-style-type: none"> ● Laundry Equipment (<i>Washing Machine, Roller Ironing Machine, Industrial Dryer</i>) ● Patient Monitors with Accessories - 15 ● Ventilators with Accessories - 7
2.	Himalayan Cataract Project/ National Cataract Outreach Programme	Funding for free Cataract Surgeries with screened 16,793 people with 1,711 Surgeries
3.	Operation-Smile Ghana	<ul style="list-style-type: none"> ● Funded free Cleft lip & palate surgeries with 29 beneficiaries ● Donated the following; <ul style="list-style-type: none"> ○ Stadiometer, ○ Plaster Infantometer ○ Removable Pan Scale.
4.	The Czech Republic Governmental Medical Program (MEDEVAC)	Funded free Orthopaedics & Plastic Surgeries. <ul style="list-style-type: none"> ● Screened 502 people and performed 45 surgeries
5.	Specialist Doctors and Nurses from University of UTAH, USA	Collaborated to perform surgeries in the area of Ear, Nose and Throat. <ul style="list-style-type: none"> ● Performed a total of 23 surgeries
6.	Ghana Gas	Funded the construction of Patient Relative Hostel to provide decent and affordable accommodation
7.	USAID, HCP (A USA NGO & its Partners)	Funded the construction of a New Eye Centre
8.	Korea Federation of International Health (KOFIH)	Sponsorship of fellowship programs for staff
9.	Latter Day Saint	Donated seven (7) medical equipment to Surgical Department

NO.	COLLABORATOR(S)	SUPPORT / CONTRIBUTION
		<ul style="list-style-type: none"> ● Dermatome ● Mesher ● Thoracotomy set ● Gigli saw ● Pulse oximeters, ● Defibrillators ● Motor/Power Drill
10.	Heritage Outreach Group	Donated 20 bedsheets with pillowcases, 2 boxes of hand sanitizers and 6 packs of bottle water to Surgical Department
11.	Unknown philanthropist	Donated 4 large buckets of paint, 20 chairs, 4 ceiling fans to the Internal Medicine department
12.	Clinton Health Access Initiative (CHAI)	Donated the following; <ul style="list-style-type: none"> ● Twenty (20) Pulse Oximeter with charging base ● Sixty-Five (65) pieces of 7.5m³ Oxygen Cylinders ● Twenty-One (21) Flowmeters with Humidifier bottles.
13.	Hills Pharmacy Ltd	Donated Handwashing Machines and Twenty (20) Drip Stands.
14.	KHRC and NMIMR	Collaborated to undertake the MVPE programme and Influenza Surveillance respectively.
15.	Ghana Prisons Service	Engagement of prisoners to undertake labourer works around the hospital
16.	Ghana Police Service	Support to keep protecting clients, staff and property.

SECTION 4 SUB-BMCs & UNITS DETAIL REPORTS

CHAPTER EIGHT

OUTPATIENT/FAMILY MEDICINE & POLYCLINIC SUB-BMC

8.1 BACKGROUND

This is one of the clinical Sub-BMCs in the hospital. It serves as the first point of contact for patients who come to the hospital. The Sub-BMC in addition to providing general OPD services, host specialised OPD clinics that are run by other clinical Sub-BMC's.

The mandate of this Sub-BMC is to promote excellence in outpatient care by advancing the scope of practice in ensuring effective and efficient delivery of quality healthcare through decentralization. The Sub-BMC is managed by a five (5) member management team.

8.2 SERVICES PROVIDED

The Sub-BMC provides the following services;

- i. General Medical
- ii. Polyclinic
- iii. Minor Procedures (Treatment Room)

8.3 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The table below provides a summary of the key outputs and outcomes of the Sub-BMC in line with the six medium-term strategic objectives of the hospital.

Table 8.3. 1: Summary of the 2023 Annual Performance of Family Medicine/Polyclinic Sub-BMC under the Strategic Objectives

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2019	2020	2021	2022	2023	Target	Remarks
xxvii. Total OPD Attendance	27,422	25,760	29,455	25,692	22,936	-	10.7% ↓
xxviii. OPD cases seen per doctor	1:2,493	-	1:2,946	1:3,670	1:2,294	-	Decr
xxix. Doctors	11	-	10	7	10		
The Sub-BMC expanded service provision hours since October, 2023;							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
<ul style="list-style-type: none"> ● General Medical OPD operated from 8am to 7pm ● Operationalisation of Polyclinic in October with service hours from 7am to 7pm
Collaborated with the Internal Medicine Sub-BMC to celebrate World Hypertension and Diabetes Days to commemorate the 25 th Anniversary of CCTH at Kissi with a total of 862 cases seen
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.
Enforcement of Infection prevention and control (IPC) and occupational health and safety (OHS) measures
One (1) customer care training was organized for all Polyclinic staff
Counselling services was offered to some selected staff on personal and professional development issues
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Renovation of the Polyclinic for operationalisation
New sets of equipment were procured for the Polyclinic including ACs, Fridges, etc
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Conducted one (1) staff durbar
Organised seven (7) management meetings and 1 extended management meeting
4.2: Human Resource Related Performance
The following cadre of staff were posted to the Sub-BMC; <ul style="list-style-type: none"> ● Six (6) Medical Officers, ● One (1) Family Physician, ● One (1) Executive Officer and ● Ten (10) nurses
Two (2) Medical Officers and 1 Specialist were granted study leave with pay to pursue different postgraduate programmes
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
Six (6) operational researches were conducted
Staff and client satisfaction surveys were conducted
5.2 Improve on Teaching and Learning:

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Training was conducted on medical documentation
Clinical meetings were organized on Tuesday and Thursdays
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Weekly mentorship of House Officers and Medical Officers at the University of Cape Coast Hospital on the management of Hypertension and Diabetes Mellitus
Two (2) medical outreaches were conducted as part of the activities earmarked for the CCTH@25 with a total of 862 cases seen; <ul style="list-style-type: none"> ● World Hypertension Day ● World Diabetes Day

8.4 CLINICAL ATTENDANCE

The total number of attendance reported at the Sub-BMC has been fluctuating over the years. However, there has been a decline since 2021. In 2023, there was a marginal reduction of 0.05% in the total OPD attendance (from 25,692 in 2022 to 25,678). The Polyclinic was re-opened in October 2023 and saw a total of 2,742 patients. Figure 8.4.1 and table 8.4.1 below provides details of the analysis.

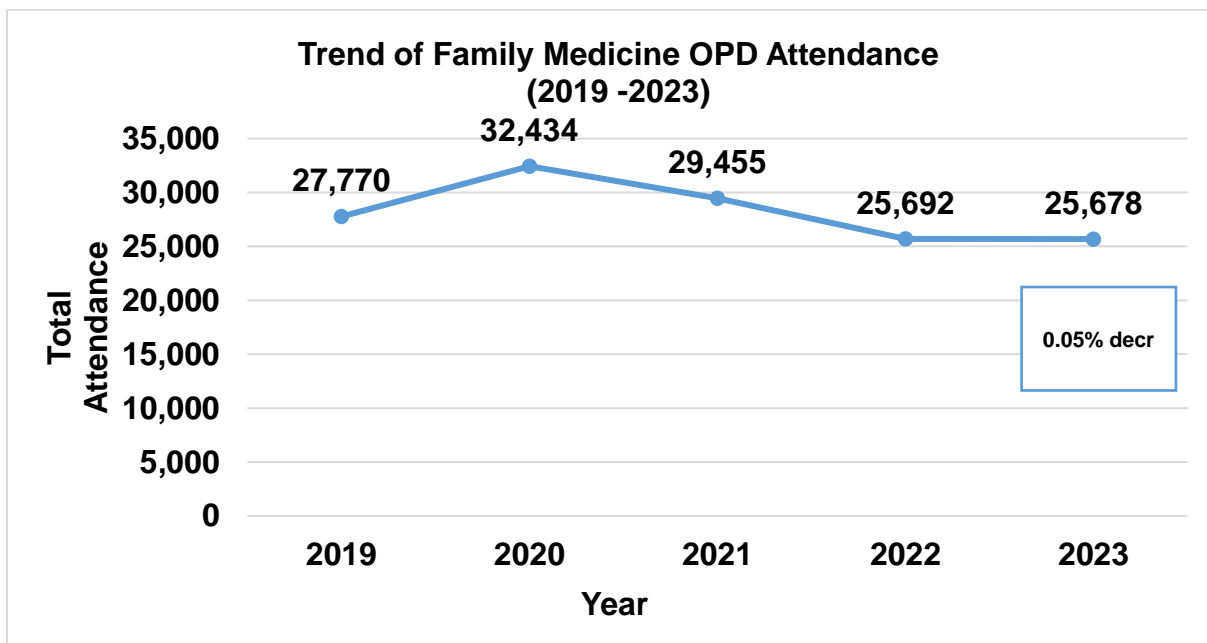


Figure 8.4. 1: A Five-Year Trend of OPD Attendance (2019 – 2023)

Table 8.4. 1: Trend of Attendance by Clinic (2019-2023)

CLINIC	2019	2020	2021	2022	2023	REMARKS
General Medical	18,142	17,385	19,046	17,068	16,404	3.89% decr
Treatment Room (Minor Procedure)	9,280	8,375	10,409	8,624	6,532	24.26% decr
Polyclinic	348	6,674	-	-	2,742	
Total	27,770	32,434	29,455	25,692	25,678	0.05% decr

8.5 TOP TEN (10) OPD MORBIDITY

Upper respiratory infection ranked first among the top ten (10) causes of OPD morbidities accounting for 34% (2,638) of the morbidities followed by uncomplicated malaria and Rheumatism/other joint pain/arthritis forming 11.1% (859) and 9.6% (747) respectively whereas Typhoid Fever was ranked 10th at the sub-BMC with 3.9% (299) cases as shown in table 8.5.1 below.

Table 8.5. 1: Top Twenty OPD Morbidities reported at Family Medicine from 2021 to 2023

2021		2022		2023	
CONDITION	% (no.)	CONDITION	% (no.)	CONDITION	% (no.)
Hypertension	15.51% (6,474)	Hypertension	37.6% (5,489)	Upper Respiratory Tract Infection	34% (2,638)
Diabetes Mellitus	10.49% (4,378)	Acute Urinary Tract Infection	12.8% (1,865)	Uncomplicated Malaria	11.1% (859)
Acute Urinary Tract Infection	7.97% (3,328)	Rheumatism/other joint pains/Arthritis	9.9% (1,445)	Rheumatism/other joint pains/Arthritis	9.6% (747)
Upper Respiratory Tract Infection	5.86% (2,445)	Uncomplicated Malaria	8.5% (1,239)	Pneumonia	8.0% (621)
Uncomplicated Malaria	4.13% (1,725)	Gynaecological conditions	6.5% (943)	Diarrhoea Diseases	7.9% (611)
Urethral Discharges	4.13% (1,725)	Diarrhoea Diseases	6.1% (898)	Anaemia	7.5% (581)
Anaemia	4.06% (1,694)	Upper Respiratory Tract Infection	5.6% (821)	Cardiac Diseases	7.5% (580)
Typhoid Fever	3.78% (1,578)	Stroke	4.7% (686)	Hypertension	6.6% (509)
Kidney Related Diseases	3.30% (1,378)	Urethral Discharges	4.7% (680)	Acute Urinary Tract Infection	3.9% (306)
Pneumonia	3.22% (1,344)	Diabetes Mellitus	3.7% (537)	Typhoid Fever	3.9% (299)

CHAPTER NINE

REHABILITATION SERVICES

9.1 BACKGROUND

The Rehabilitation Units of the hospital provides specialized services to clients who are recovering from debilitating injuries, illnesses, surgeries, chronic medical conditions and others. The rehabilitation services provided at the hospital are Diet & Nutrition, Clinical Psychology, Physiotherapy, Community Psychiatry and Speech & Language Therapy.

9.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The table below provides a summary of the key outputs and outcomes of the Rehabilitation Services Units in line with the six medium-term strategic objectives of the hospital.

Table 9.2. 1: Summary of the 2023 Annual Performance of Rehabilitation Services Units under the Strategic Objectives

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2019	2020	2021	2022	2023	Target	Remarks
Total OPD Attendance	12,655	7,561	7,647	14,361	12,404	-	13.6% decr
<i>Physiotherapy Unit</i>							
A total of 9,493 attendance was recorded							
<i>Clinical Psychology Unit</i>							
Provided a total of 723 patients with psychological services							
<i>Diet & Nutrition Unit</i>							
Assigned a dietitian to the diabetic clinic							
Assigned a dietitian to the wards							
<ul style="list-style-type: none"> ● A total of 438 patients seen and counselled 							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
<i>Diet & Nutrition Unit</i>							
Sensitisation on the role of nutrition in the management of cases on the ward done at the Surgical, O&G and Paediatric wards							
Educated 2,349 clients on breastfeeding and complementary feeding							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Developed protocol on nutrition support practices and feeding in the ICU
<i>Speech & Language Therapy Unit</i>
Conducted 14 educational talks to clients
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
<i>Diet & Nutrition Unit</i>
Acquired one (1) body composition analyser
<i>Speech & Language Therapy Unit</i>
Assorted toys and other resources received from philanthropist and NGOs for use by the Unit
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
<i>4.1: Governance Related Performance</i>
<i>Diet & Nutrition Unit</i>
Appraised all staff
<i>Speech & Language Therapy Unit</i>
Sixteen (16) trainings on Feeding Baby Words Campaign organized which benefitted; <ul style="list-style-type: none"> ● 643 staff and ● 1,670 members of the public
<i>4.2: Human Resource Related Performance</i>
<i>Speech & Language Therapy Unit</i>
One (1) Dental Specialist and two (2) Nursing Officer were posted to the unit
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
<i>5.1 Improve on Research:</i>
<i>Diet & Nutrition Unit</i>
Engaged with tertiary institutions to conduct collaborative researches (internal and external)
<i>Speech & Language Therapy Unit</i>
Conducted a study on the Knowledge of Autism among Health workers in CCTH

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
5.2 Improve on Teaching and Learning:
<i>Clinical Psychology Unit</i>
Supported the training of twenty-one (21) undergraduate practicum students and six (6) MPhil psychology practicum students from UCC
<i>Diet & Nutrition Unit</i>
Supported the training of the following students; <ul style="list-style-type: none"> ● 70 undergraduates and postgraduates ● 64 Nurses and Midwives on rotation ● 50 technical students
<i>Speech & Language Therapy Unit</i>
Trained and supervised eleven (11) ENT students
The Head of Unit (HOD) attended a professional certificate program in Hearing Rehabilitation
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
<i>Clinical Psychology Unit</i>
Conducted follow-up visits to patients after being discharged. <ul style="list-style-type: none"> ● 45 follow-ups done.
<i>Speech & Language Therapy Unit</i>
Conducted outreaches to 16 organisations and a total number of 1,670 people benefitted

9.3 TREND OF PERFORMANCE

Generally, there was a decline of 13.6% in the utilization of rehabilitation services at the hospital (from 14,361 in 2022 to 12,404 in 2023). The Clinical Psychology services however observed an increase in utilization. Figure 9.3.1 and table 9.3.2 below provides details of the analysis.

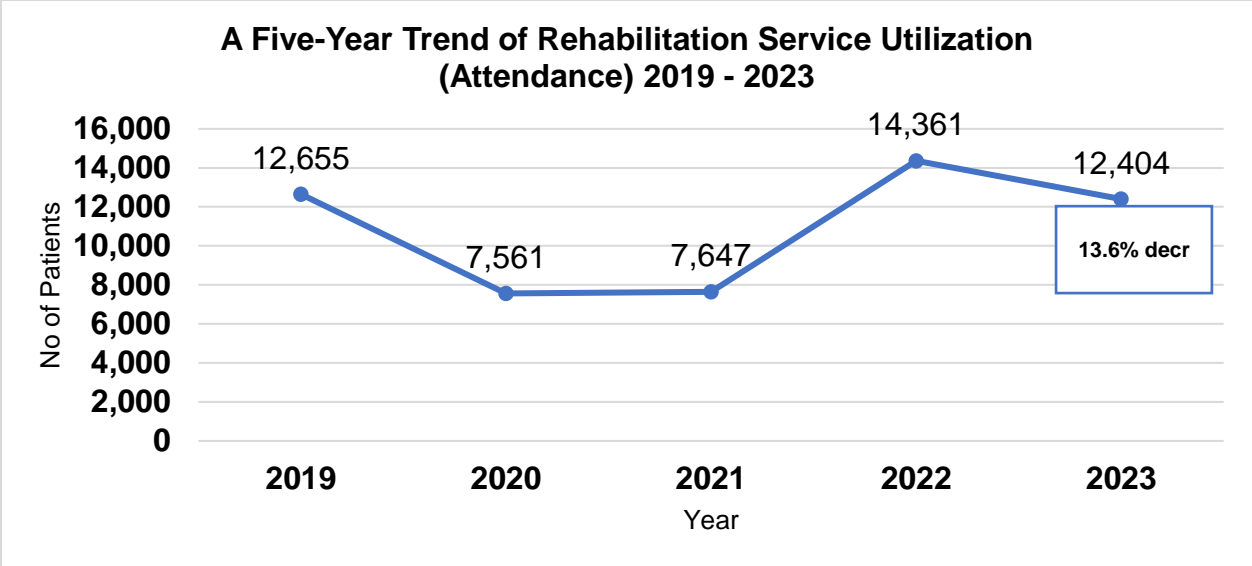


Figure 9.3. 1: A Five-Year Trend of Rehabilitation Service Utilization (2019 – 2023)

Table 9.3. 1: Breakdown of Rehabilitation Service Utilization (Attendance) (2019 - 2023)

Rehabilitation Services	2019	2020	2021	2022	2023	Remarks
Diet & Nutrition	1,224	1,070	1313	1,568	1,418	9.6% decr
Clinical Psychology	592	557	798	428	725	69.4% incr
Physiotherapy	10,771	5,670	5,055	11,498	9,493	17.4% decr
Speech & Language Therapy	68	208	415	642	556	13.4% decr
Community Psychiatry	-	56	66	225	212	5.8% decr
Total attendance	12,655	7,561	7,647	14,361	12,404	13.6% decr

9.4 PHYSIOTHERAPY SERVICES UTILIZATION

The Physiotherapy services over the years has seen fluctuations in its utilization with the highest recorded in 2022. However, the period recorded a decline of 17.44% in utilization (from 11,498 in 2022 to 9,493 in 2023).

CVA (Hemiplegia) is identified as the condition mostly seen at the physiotherapy clinic although a decline of 14.2% was recorded during the period (from 2,165 in 2022 to 1,858 in 2023). This was followed by low back pain with a total of 1,827 cases, representing an increase of 8.8% from 1,680 in 2022. Spondylosis and Club Foot were recorded as the 3rd and 4th leading condition seen while Contracture and Amputation were the conditions with the least number of cases recording 76 and 41 cases respectively. Details of the analysis is highlighted in Figure 9.4.1 and table 9.4.1 below.

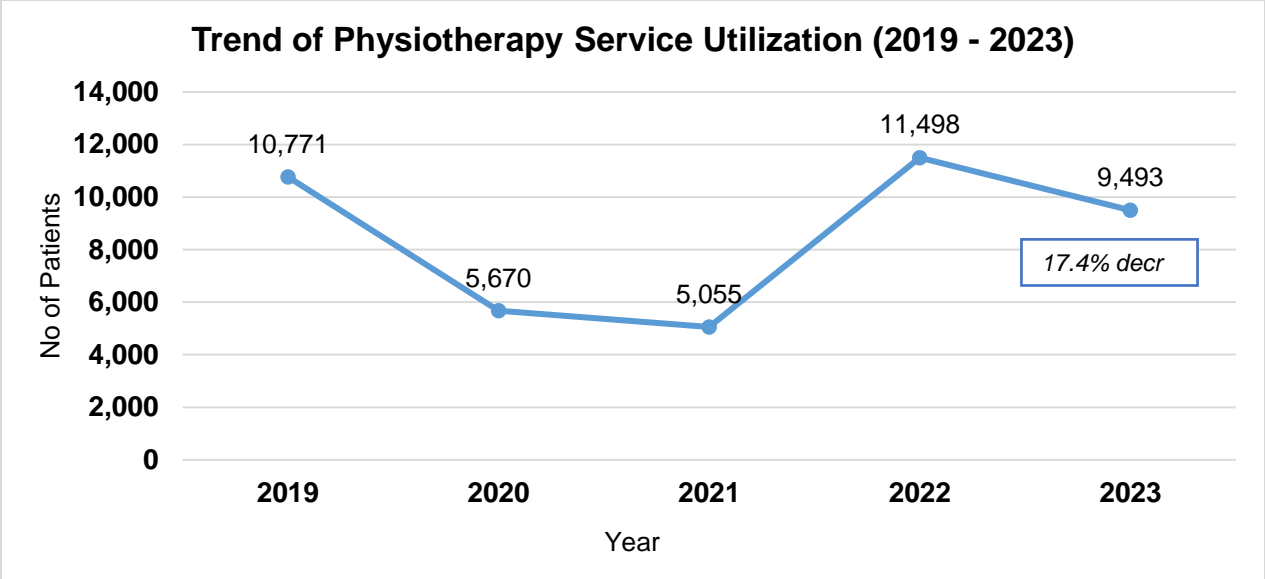


Figure 9.4. 1: Trend of Physiotherapy Service Utilization (2019 - 2023)

Table 9.4. 1: Comparative Analysis of Top Ten Physiotherapy Conditions from 2021 to 2023

2021		2022		2023	
Type of Case	No.	Type of Case	No.	Type of Case	No.
CVA (Hemiplegia)	2,096	CVA (Hemiplegia)	2,165	CVA (Hemiplegia)	1,858
Spondylosis	1,684	Spondylosis	1,744	Low Back	1,827
Low Back	1,475	Low Back	1,680	Spondylosis	1,453
Club Foot	992	Knee Arthritis	931	Club Foot	866
Cerebral Palsy	940	Cerebral Palsy	753	Knee Arthritis	630
Erb's Palsy	450	Club Foot	922	Cerebral Palsy	601
Amputation	230	Erb's Palsy	243	Erb's Palsy	192
Contracture	70	Fracture	84	Fracture	100
Fracture	60	Contracture	79	Contracture	76
Knee Arthritis	-	Amputation	52	Amputation	41

9.5 CLINICAL PSYCHOLOGY SERVICES UTILIZATION

The Clinical Psychology Unit provides psychological services as well as psycho-education to out-patients, in-patient and staff. The period under review saw a significant rise of 69.39% in utilization (from 428 in 2022 to 725 in 2023). Stress, Anxiety and Depression were the leading cases seen ranking 1st, 2nd and 3rd respectively with Alcohol dependency being the condition with the least number of cases recorded among the top

ten conditions. Regarding gender distribution, majority of the clients seen were females except Alcohol Dependency which saw male majority. Figures 9.5.1, 9.5.2 and table 9.5.1 shows details of the analysis.

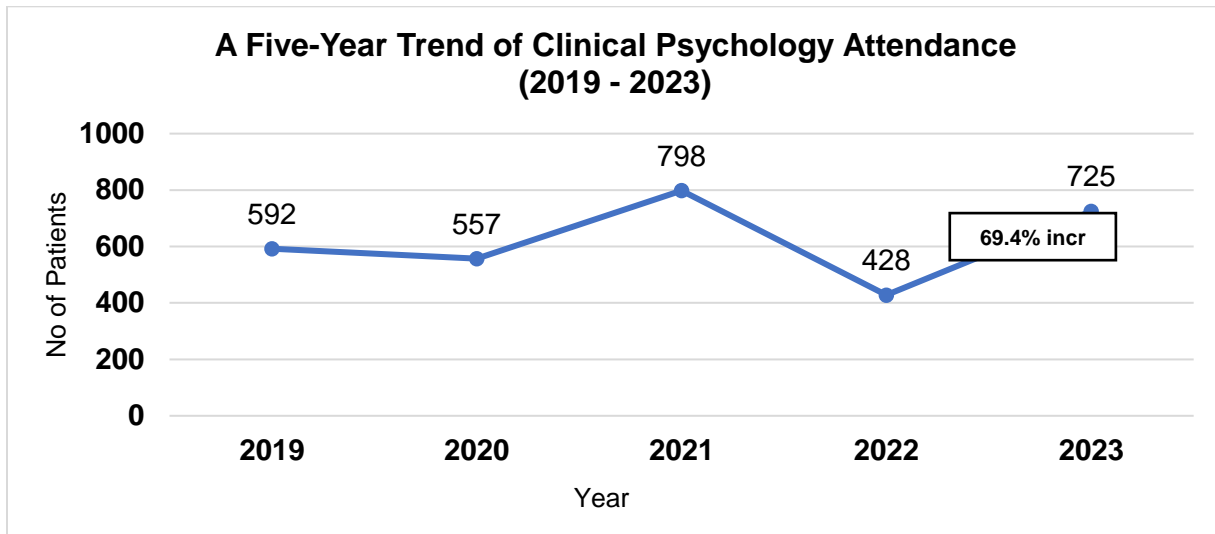


Figure 9.5. 1: A Five-Year Trend of Clinical Psychology Attendance (2019 - 2023)

Table 9.5. 1: Top Clinical Psychology Cases seen (2021-2023)

2021		2022		2023	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Major Depression	374	Stress	99	Stress	134
Anxiety	151	Depression	93	Anxiety	117
Stress	141	Anxiety	92	Depression	83
Pain management	64	Post-traumatic stress disorder	46	Pain management	52
Panic attack	36	Addiction	22	Grief	52
Alcohol	18	Intellectual disability	21	Somatoform disorder	45
Distress	10	Pain management	12	Cognitive impairment	28
Grief	3	Low self esteem	9	Suicidal Ideation	18
Memory lapses	1	Retroviral infections	9	Suicidal attempt	15
		psychosis	7	Alcohol dependency	8

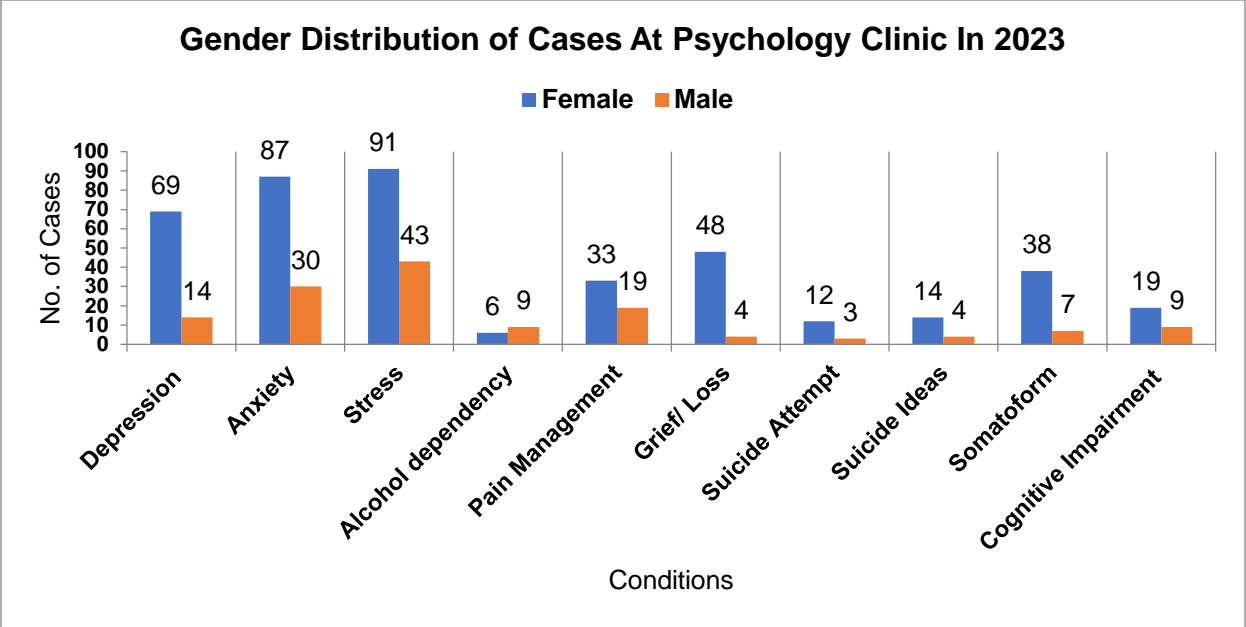


Figure 9.5. 2: Gender Distribution of Cases at Psychology Clinic In 2023

9.6 COMMUNITY PSYCHIATRY SERVICES UTILISATION

As part of the its strategies to improve access to mental health services, the hospital introduced Community Psychiatry services in 2020. Since its inception, the service has seen a steady rise in its utilization. However, during the period, there was a drop of 5.78% (from 225 in 2022 to 212 in 2023) as shown in figure 9.6.1 below.

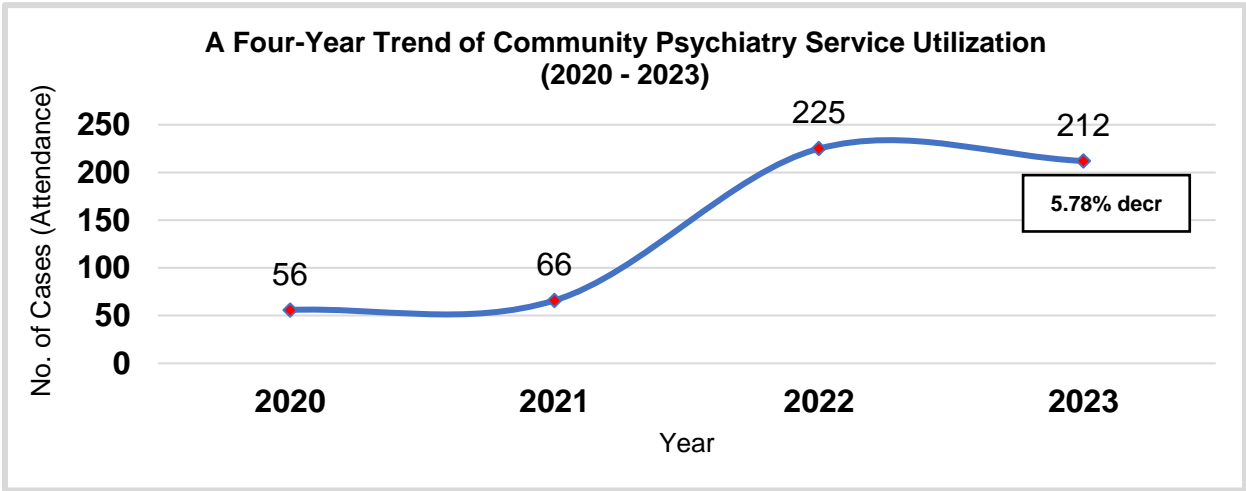


Figure 9.6. 1: A Four-Year Trend of Community Psychiatry Service Utilization (2020 - 2023)

9.7 DIET & NUTRITION SERVICES UTILIZATION

The period saw a drop of 9.6% in the utilization (from 1,568 in 2022 to 1,418 in 2023). Out of the total, 69.1% (980) were inpatient while 30.9% (438) were outpatients. Diabetes Mellitus, Hypertension and Obesity continued to be the leading conditions managed by the Diet & Nutrition clinic.

Over the years, the Diet & Nutrition Unit embark on outreach services to improve access to the services to the community. During the period, the unit conducted 5 outreaches from which 691 people benefitted. Details shown in Figure 9.7.1 to Figure 9.7.4 and Table 9.7.1 below.

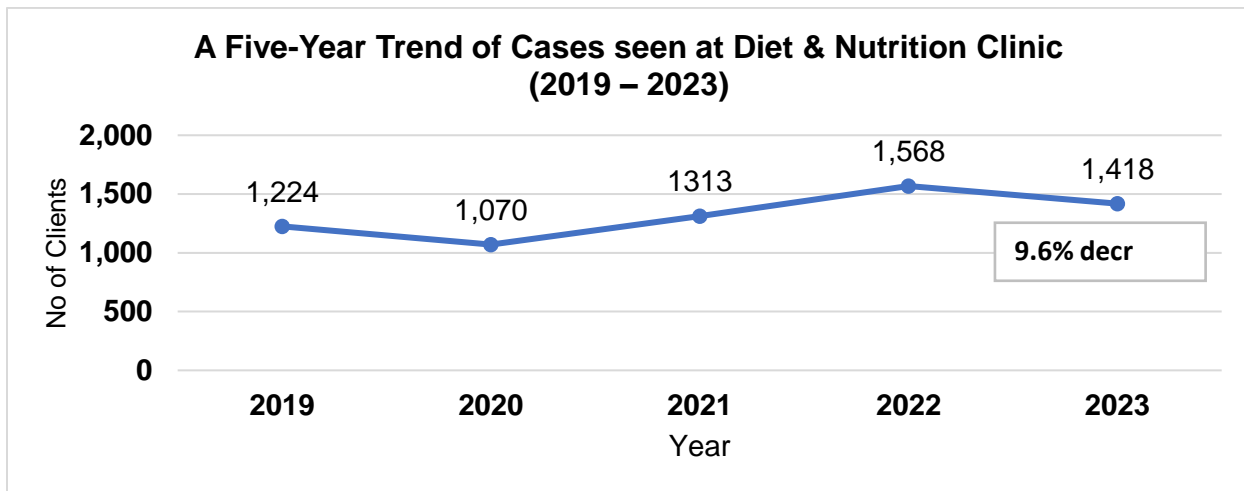


Figure 9.7. 1: A Five-Year Trend of Cases seen at Diet & Nutrition Clinic (2019 – 2023)

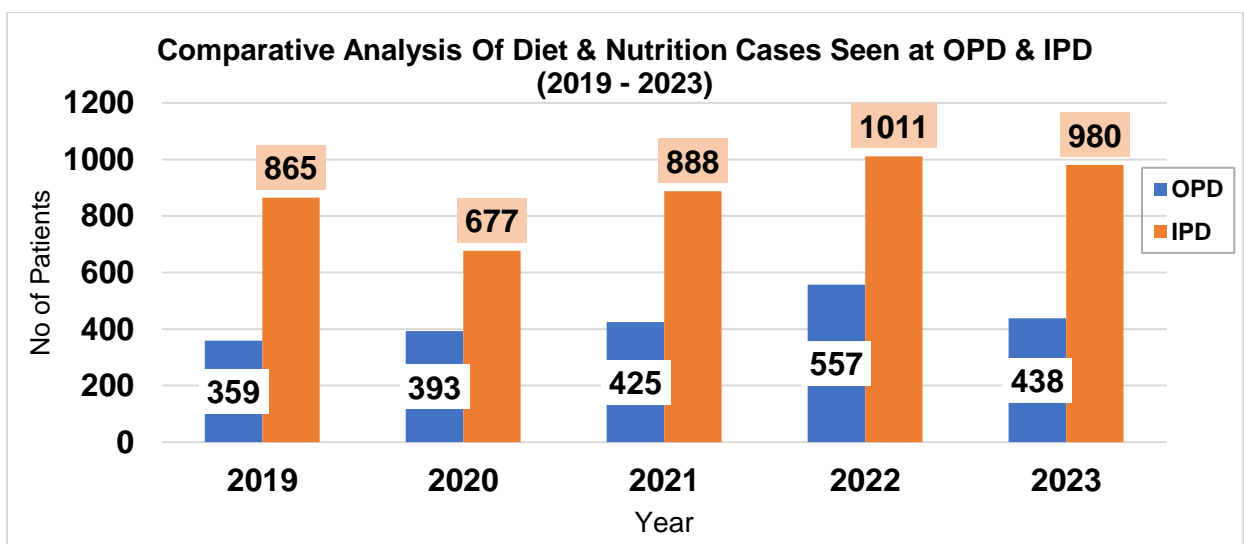


Figure 9.7. 2: Comparative Analysis of Diet & Nutrition Cases Seen at OPD & IPD (2019 – 2023)

Table 9.7. 1: Top Ten Diet & Nutrition Cases (2020 – 2023)

2021		2022		2023	
CONDITION	%	CONDITION	%	CONDITION	%
Diabetes Mellitus	36.70%	Diabetes Mellitus	34.98%	Diabetes Mellitus	36.84%
Hypertension	17.00%	Hypertension	18.36%	Hypertension	24.84%
Obesity	14.80%	Obesity	15.18%	Dyslipidemia	9.45%
Dyslipidemia	7.10%	Dyslipidemia	6.08%	Renal	7.80%
Underweight	5.00%	Underweight	4.69%	Underweight	4.25%
S.A.M	3.60%	Renal	3.50%	S.A.M	3.45%
Renal	3.60%	Anemia	2.34%	CVA	3.13%
Anemia	1.70%	S.A.M	2.34%	Anemia	2.60%
CVA	1.20%	CVA	1.31%	Liver Diseases	1.80%
Liver	1.0%	Surgical	1.23%	HIV	1.38%

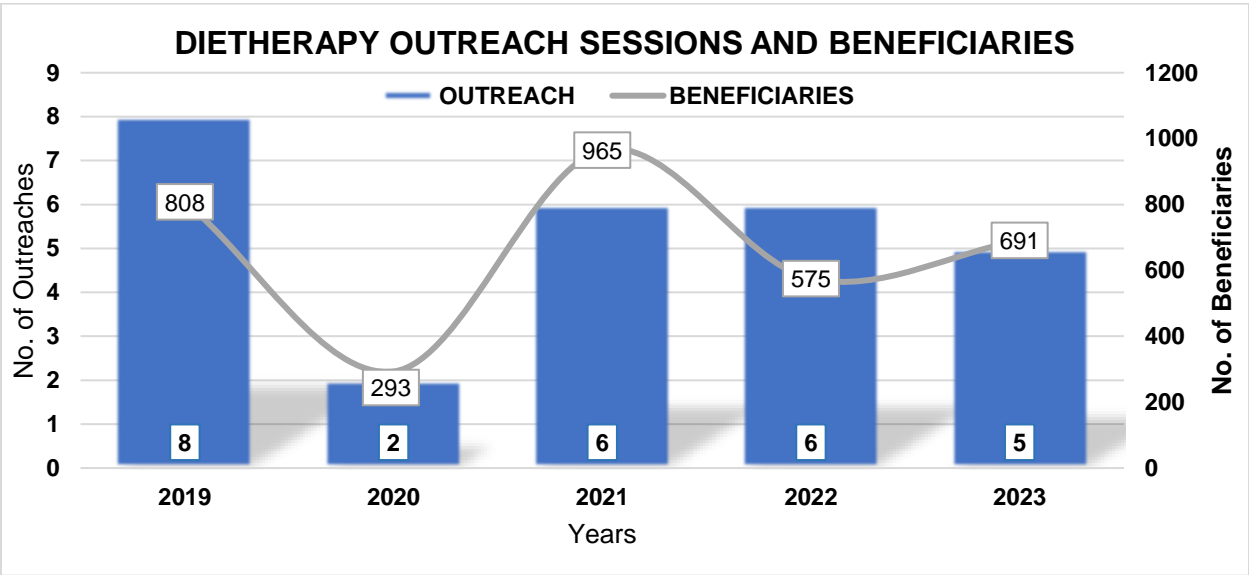


Figure 9.7. 3: Comparative Analysis of Outreaches conducted and Beneficiaries (2019 – 2023)

As a strategy to scale up nutrition services to mothers and new-borns, Diet and Nutrition officers are assigned to the Obstetrics and Gynaecology ward, NICU as well as the Antenatal clinic to educate the mothers and prospective mothers on lactation. Consequently, the number of mothers educated on lactation went up by 11.2% (from 2,113 in 2022 to 2,349 in 2023) as shown in figure 9.7.4 below.

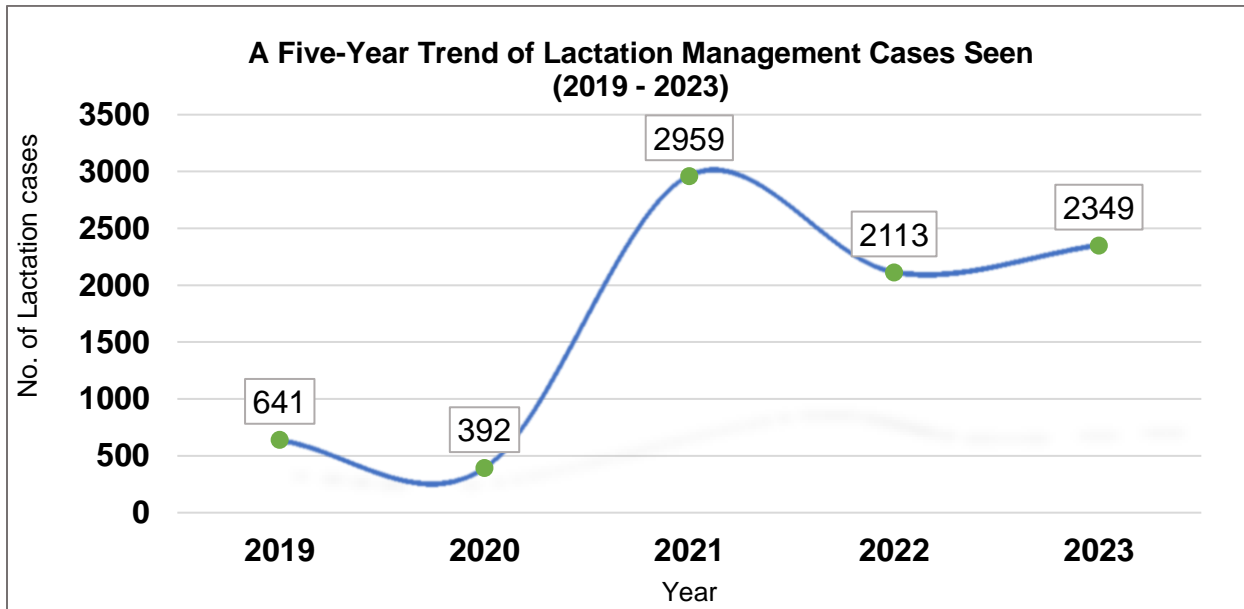


Figure 9.7. 4: A Five-Year Trend of Lactation Management Cases Seen (2019 - 2023)

9.8 SPEECH AND LANGUAGE THERAPY SERVICES UTILISATION

The Speech and Language Therapy (SLT) Unit provides treatment, support and care for children and adults who have difficulties with communication, eating, drinking or swallowing. The hospital since the introduction of SLT service in 2018 instituted strategies such as awareness of the availability of the service at the hospital on various mass media and social media platforms.

This strategy led to the increase in the utilisation of SLT services over the years. However, in 2023, there was a drop of 13.4% in the utilisation of the service (from 642 in 2022 to 556 in 2023). Further, there was a decline of 82.1% (from 106 in 2022 to 19 in 2023) and 33.3% (from 21 in 2022 to 14 in 2023) in the number of SLT cases referred to the hospital and referred out of the hospital respectively.

Language Delay (407), Speech Delay (78) and Autism Spectrum Disorder (26) were the leading conditions seen during the period. Figure 9.8.1, Figure 9.8.2 as well as table 9.8.1 below shows details of the analysis.

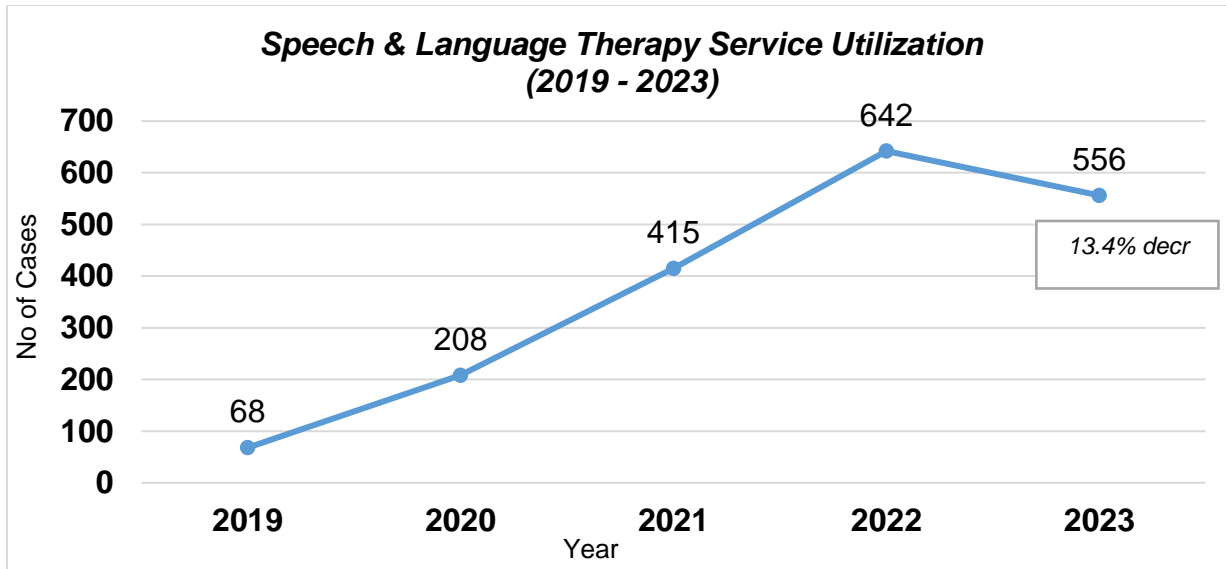


Figure 9.8. 1: A Five-Year Trend of Speech & Language Therapy Service Utilization (2019 - 2023)

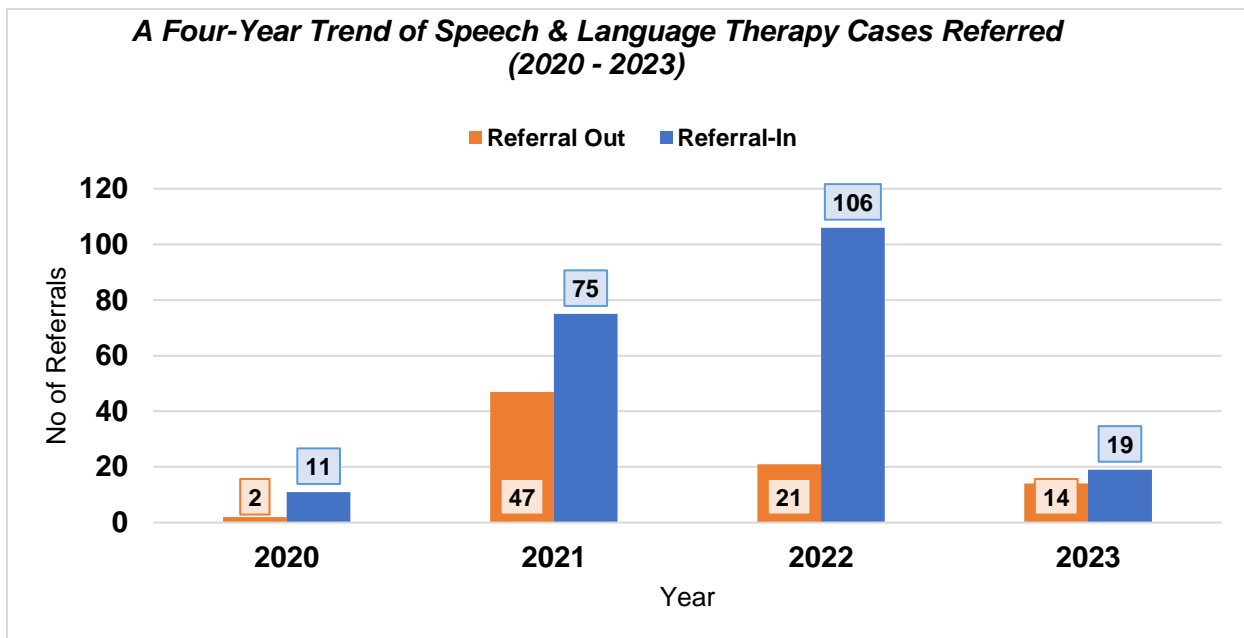


Figure 9.8. 2: A Four-Year Trend of Speech & Language Therapy Cases Referred (2020 - 2023)

Table 9.8. 1: Top Speech & Language Therapy Conditions Seen

2021		2022		2023	
Condition	No. Of Cases	Condition	No. Of Cases	Condition	No. Of Cases
Language Delay / Disorder	234	Language Delay / Disorder	373	Language Delay	407
Autism Spectrum Disorder (ASD)	82	Speech Disorder	111	Speech delay	78
Aphasia	42	Autism Spectrum Disorder (ASD)	68	Autism Spectrum Disorder (ASD)	26
Speech Disorders	37	Aphasia	46	Aphasia	28
Dysphonia	10	Dysarthria	21	Stammering	3
Stammering	4	Stammering	6	Dysarthria	11
Laryngectomy	1	Dysphonia	4	Dysphonia	1
Others	4	Dysphagia	2	Others	1

CHAPTER TEN

ACCIDENT AND EMERGENCY SUB-BMC

10.1 INTRODUCTION

The Sub-BMC provides a 24-hour tertiary emergency health services, training and research. As an emergency entry point of the hospital, the A&E department provides initial treatment for a broad range of illnesses and conditions some of which may require emergency attention.

10.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The table below provides a summary of the key outputs and outcomes of the A&E Sub-BMC in line with the six medium-term strategic objectives of the hospital.

Table 10.2. 1: Summary of the 2023 Annual Performance of A&E Sub-BMC under the Strategic Objectives.

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Triaged and provided specialist emergency services to a total of 10,979 patients							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Impact	2019	2020	2021	2022	2023	Target	Remarks
Average length of stay at the Emergency ward	3.0	2.0	2.9	1.0	1.1	THs = 2.0	Incr but target was met
Organized one (1) Infection Prevention and Control training for staff with 20 staff trained.							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
Acquired additional medical equipment; 2 oxygen concentrators, 1 syringe pump, 4-wheel chairs, 8 screens, 5 Cardiac Monitors, 2 swivel chairs and 1 Defibrillator.							
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM							
4.1: Governance Related Performance							
Held a two- day CPR workshop with 66 A&E staff trained							
Organised two (2) triaging and START training with 111 A&E staff trained.							
conducted five (5) Sub-BMC management meetings.							
Organized two (2) staff durbars							
4.2: Human Resource Related Performance							
Two (2) Doctors approved for specialized training in emergency medicine							
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING							
5.1 Improve on Research:							
Conducted one (1) research on point of care ultrasound training in low resource settings (Ghana), focusing on sustainability.							
5.2 Improve on Teaching and Learning:							
Eighty-three (83) Medical students, Physician Assistants, Pharm D and Resident rotated through the department							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Conducted four (4) radio talks and one (1) TV show
Mentored Ewim polyclinic on common conditions referred to the A&E department

10.3 A&E SERVICE UTILISATION

The hospital in 2023 recorded a significant decline of 18.6% in the total number of cases seen at the A&E department (from 13,485 in 2022 to 10,979 in 2023) as shown in Figure 10.3.1 and table 10.3.1 below. Out of the cases seen during the period, 65.3% (7,164) were detained for continuous care. The highest number of cases seen was recorded in the month of July (1,075) followed by March (994).

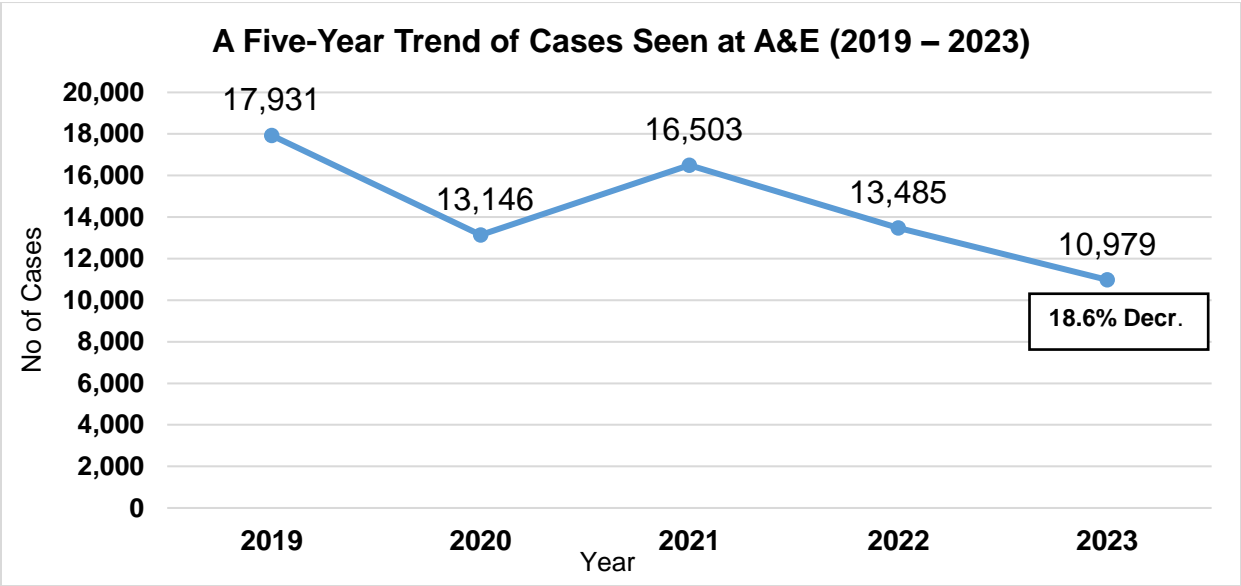


Figure 10.3. 1: A Five-Year Trend of Cases Seen at A&E (2019 – 2023)

Table 10.3. 1: Comparative Performance Trend at A&E (2019 – 2023)

PARAMETER	2019	2020	2021	2022	2023	REMARKS
Total A&E Cases	17,931	13,146	16,503	13,485	10,979	18.6% decr
Detention	4,513	4,877	5183	4,861	7,164	47.4% incr
Discharges	852	974	908	1,146	1,131	1.3% decr
Procedures	1,083	351	1247	2,000	3,457	72.9% incr
Trans-out	3,223	3,504	3,567	3,269	3,348	2.4% incr
Deaths	435	365	436	330	305	7.6% decr

10.4 EMERGENCY CASES SEEN ACCORDING TO THE ACUITY

The hospital in 2023 re-operationalized the polyclinic which absorbed most of the non-critical cases seen at the A&E over the years. Consequently, this led to significant reduction of 34% and 13.6% of the green and yellow cases seen in 2023 respectively. The number of red coded cases seen went up by 1.14% (from 779 in 2022 to 788 in 2023) while the orange coded cases increased marginally by 0.3% (from 2,679 in 2022 to 2,687 in 2023). Figure 10.4.1 to Figure 10.4.2 and Table 10.4.1 provides details of the analysis.

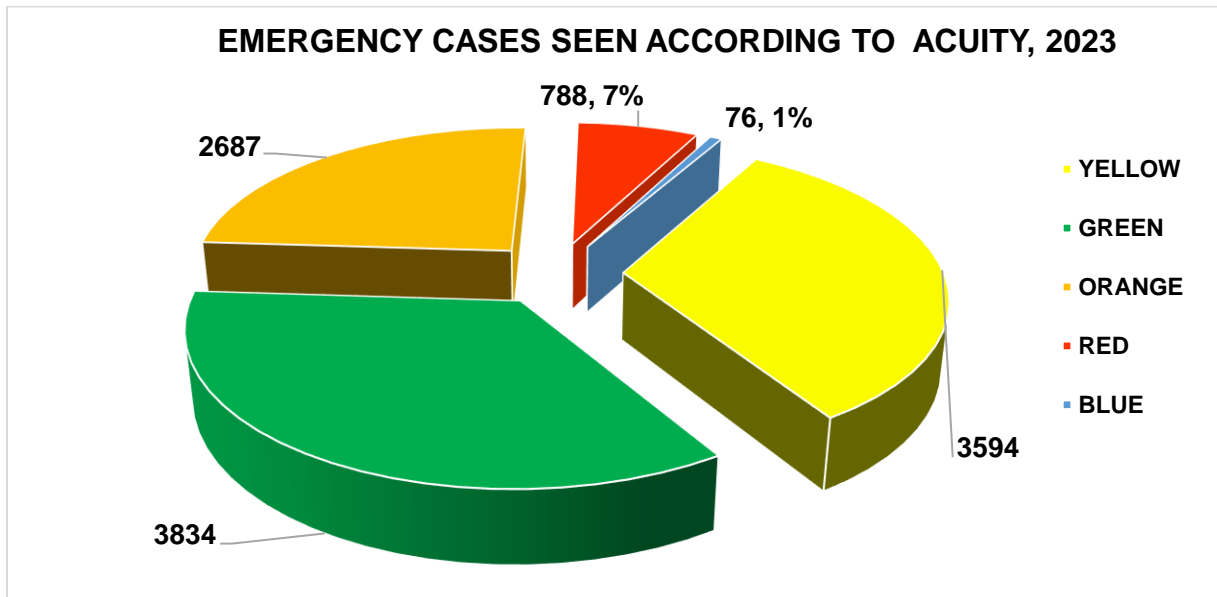


Figure 10.4. 1: Emergency Cases Triage According to Acuity in 2023

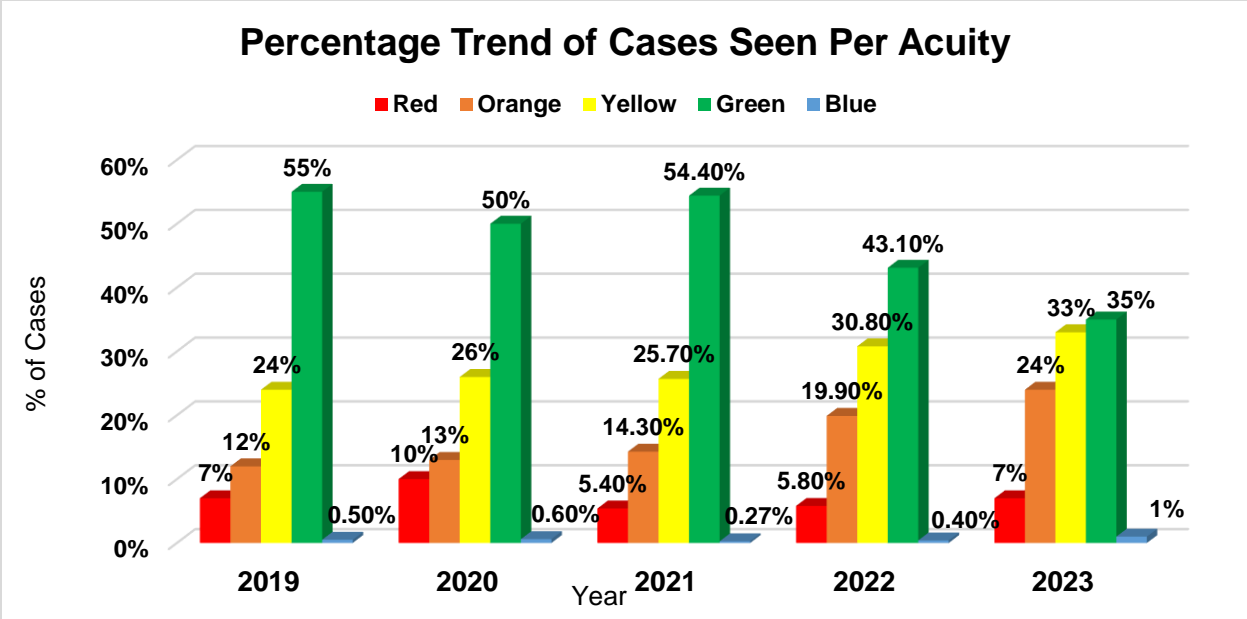


Figure 10.4. 2: Percentage Breakdown of Emergency Cases Triaged by Acuity (2019-2023)

Table 10.4. 1: Yearly Breakdown of Emergency Cases Triaged Per Acuity

COLOR CODES	2019	2020	2021	2022	2023	REMARKS
Red	1,310	1,360	885	779	788	1.14% incr
Orange	2,244	1,736	2359	2,679	2,687	0.3% incr
Yellow	4,357	3,381	4234	4,158	3,594	13.6% decr
Green	9,923	6,595	8981	5,812	3,834	34% decr
Blue	97	74	44	57	76	33.3% incr
Total	17,931	13,146	16,503	13,485	10,979	18.6% decr

10.5 A&E DETENTION

The number of detentions went up by 47.4% (from 4,861 in 2022 in 7,164 in 2023). 3,348 patients constituting 46.7% of the cases were transferred-out to the various wards for further specialist care. The average length of stay increased slightly (from 1.0 day in 2022 to 1.1 days in 2023). Details shown in Figure 10.5.1 and Table 10.5. 1 below.

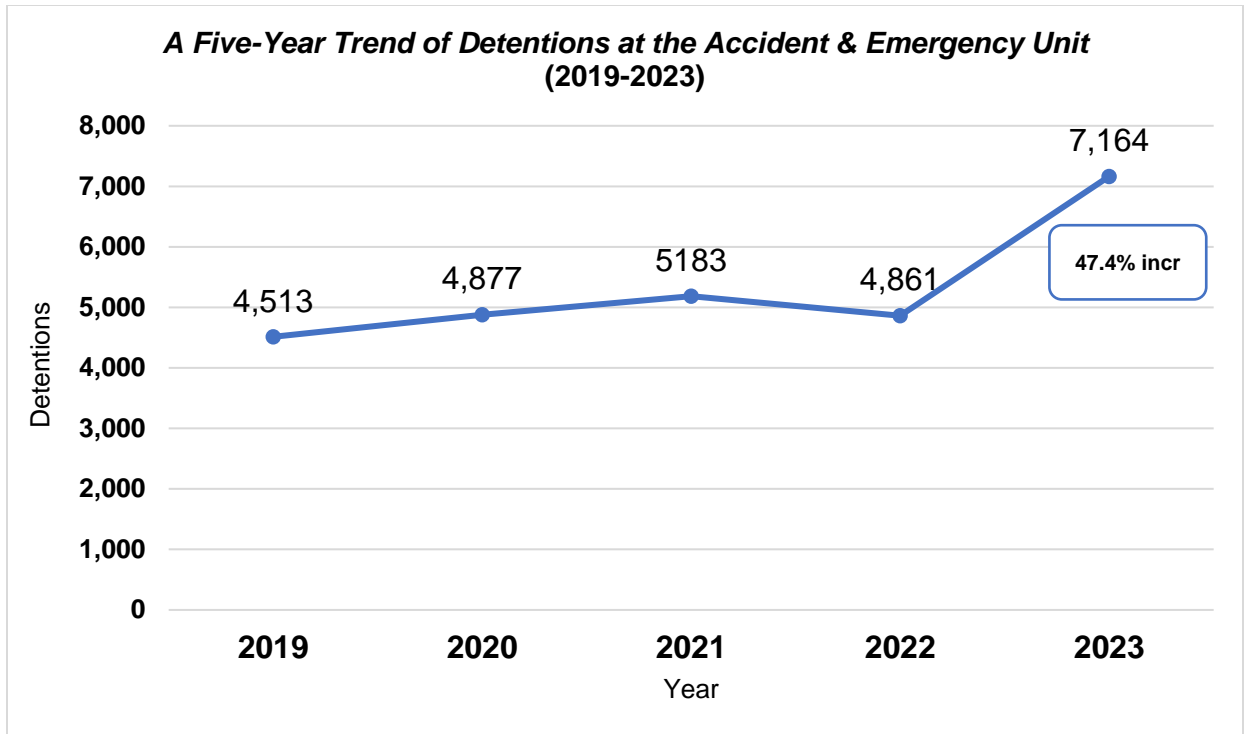


Figure 10.5. 1: A Five-Year Trend of Detentions at the Accident & Emergency Unit from 2019 to 2023

Table 10.5. 1: Comparative Performance Trend at A&E

PARAMETER	2019	2020	2021	2022	2023	REMARKS
Detention (Admissions)	4,513	4,877	5183	4,861	7,164	47.4% incr
Trans-Out	3,223	3,504	3567	3,269	3,348	2.4% incr
Average Length of Stay	3.9	2.0	2.9	1.0	1.1	incr

10.5.1 TOP TEN CAUSES OF A&E DETENTION

Gastroenteritis, Pneumonia and Trauma remained the three leading causes of detention constituting 19.56% (533), 18.28% (498) and 14.97% (408) respectively while Acute Abdomen ranked 10th among the top ten causes of A&E detention accounting for 2.46% (67) of the cases. Table 10.5.1.1 provides details of the analysis.

Table 10.5.1. 1: Top Ten Causes of A&E Detention

2021		2022		2023	
Diagnosis	No. Of Cases (%)	Diagnosis	No. Of Cases (%)	Diagnosis	No. Of Cases (%)
Fracture	86 (5.57%)	Gastroenteritis	569 (11.7%)	Gastroenteritis	533 (19.56%)
Pneumonia / RTI	77 (4.99%)	Pneumonia	520 (10.7%)	Pneumonia	498 (18.28%)
Trauma	50 (3.24%)	Trauma	354 7.3%	Trauma	408 (14.97%)
Malaria	48 (3.11%)	Heart Failure	345 (7.1%)	Chronic Kidney Disease & Hypertension Emergencies	380 (13.95%)
Sepsis	36 (2.33%)	CVA	322 (6.6%)	Chronic Lung Disease & Complications	225 (8.26%)
Diabetic related emergencies	34 (2.2%)	Sepsis	261 (5.4%)	Diabetic Emergencies	219 (8.04%)
Hypertensive Emergency	25 (1.62%)	Chronic Kidney Disease & Hypertensive Emergencies	236 (4.9%)	Malaria	188 (6.90%)
Gastroenteritis	25 (1.62%)	Chronic Lung Disease	233 (4.8%)	Asthma	108 (3.96%)
UTI	24 (1.55%)	Diabetic Emergencies	168 (3.5%)	CVA	99 (3.63%)
Hernia	24 (1.55%)	Malignancies	99 (2%)	Acute Abdomen	67 (2.46%)
Other condition	1114 (11.65%)	Other Conditions	3,107 (64%)	Other Conditions	4,439 (62%)
Total	1543 (0.19%)	Total	4,861	Total	7,164

10.6 ACCIDENT & EMERGENCY DEATHS

In 2023, there was a decrease of 7.6% in the number of Accident & Emergency deaths (from 330 in 2022 to 305 in 2023). However, the mortality rate went up from 2.4% in 2022 to 2.8% in 2023. The death rate recorded among severely ill patients (red coded cases) was at the highest in December (23.68%) with the lowest reported in June (6.85%). Comparatively, the highest mortality rate (0.37%) among the moderately ill patients

(yellow coded cases) were recorded in the month of October and November. Figure 10.6.1, Figure 10.6.2, Table 10.6.1 and Table 10.6.2 provides details of the analysis.

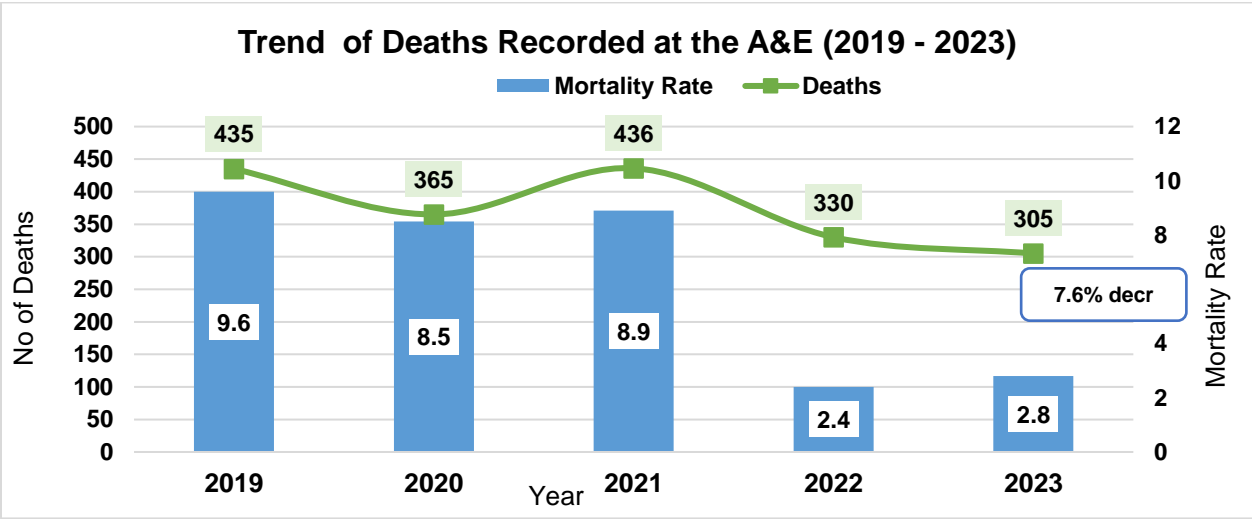


Figure 10.6. 1: Trend of Deaths Recorded at the A&E (2019 – 2023)

Table 10.6. 1: Trend Analysis of Deaths Recorded at the A&E (2019 – 2023)

PARAMETER	2019	2020	2021	2022	2023	REMARKS
Deaths	435	365	436	330	305	7.6% decr
Mortality Rate	9.6	8.5	8.9	2.4	2.8	incr
Brought in Dead (BID)	97	74	44	57	76	33.3% incr

Table 10.6. 2: Analysis of Monthly Mortality (True Mortality) Rate intra-triage in 2023

Month	Mortality Rate per Color Code		
	Red/All Red	Orange/total orange	Yellow/total yellow
January	13.46%	0.44%	0
February	8.11%	3.26%	0
March	10.71%	0.82%	0.29%
April	11.94%	1.72%	0
May	12.00%	1.47%	0
June	6.85%	1.61%	0.29%
July	17.39%	4.51%	0

Month	Mortality Rate per Color Code		
	Red/All Red	Orange/total orange	Yellow/total yellow
August	6.15 %	1.30%	0.61%
September	12.50%	0	0
October	10.10%	2.99%	0.37%
November	15.63%	2.02%	0.37%
December	23.68%	4.12%	0

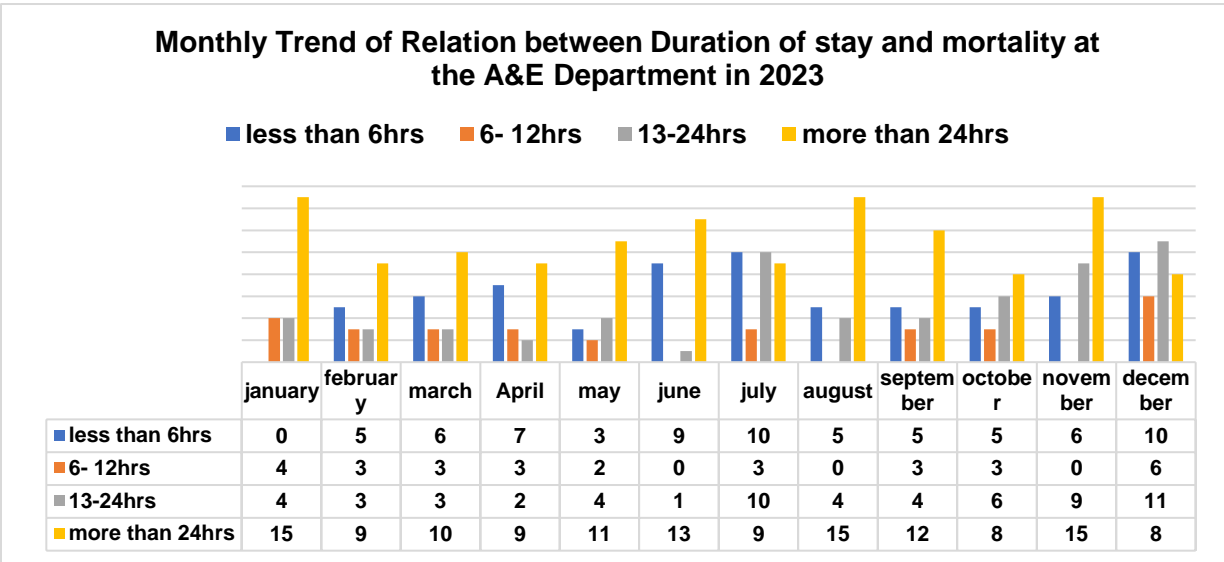


Figure 10.6. 2: Monthly Trend of Relation between Duration of stay and mortality at the A&E Department in 2023

10.6.1 TOP CAUSES OF DEATH AT A&E

CVA was the leading cause of mortality at the A&E department accounting for 63 of the deaths, followed by heart failure, Malignancies, Sepsis and Chronic liver disease with 36, 30, 30 and 27 respectively. Also, 18 of the deaths were due to Severe Head Injury whereas 12 deaths were as a result as End Stage Kidney Disease. Table 10.6.1.1 provides a trend of the leading causes of death at the hospital emergency unit from 2021 to 2023.

Table 10.6.1. 1: Top Causes of Death at A&E from 2020 to 2023

2021		2022		2023	
DIAGNOSIS	NO	DIAGNOSIS	NO	DIAGNOSIS	NO
Pneumonia	46	Acute respiratory distress syndrome	25	CVA	63
Chronic Kidney Disease	26	Cerebrovascular accident	18	Heart Failure	36
CVA	22	Pneumonia	15	Malignancies	30
Shock	17	Chronic liver disease	13	Sepsis	30
Sepsis	17	End stage kidney disease	12	Chronic liver disease	27
Cardiac arrest	15	Malignancies	12	Pneumonia	27
Head Injury	10	Congestive heart failure	13	Severe Head Injure	18
CCF	9	Septic shock	8	End stage kidney disease	12
Hypertension	7	Acute abdomen	5	Acute abdomen	9

10.7 TOP 10 REFERRING FACILITIES TO A&E

The number of cases referred to the A&E department significantly went up by 57.5% (from 550 in 2022 to 866 in 2023). Respiratory distress and abdominal pain were the leading conditions referred from peripheral facilities constituting 11.9% (32) and 9.0% (24) of the total conditions respectively.

Ewim Polyclinic (68), Mercy Women Center (58) and Twifo Atti-Morkwa Hospital (55) were the facilities that referred more cases to the department. On the other hand, UCC hospital, Tarkwa Municipal and Twifo Praso ranked 7th, 8th and 9th among the top ten facilities that referred cases to the A&E department. Figure 10.7. 1, Figure 10.7. 2 and Table 10.7.1 to Table 10.7.2 provides details of the analysis.

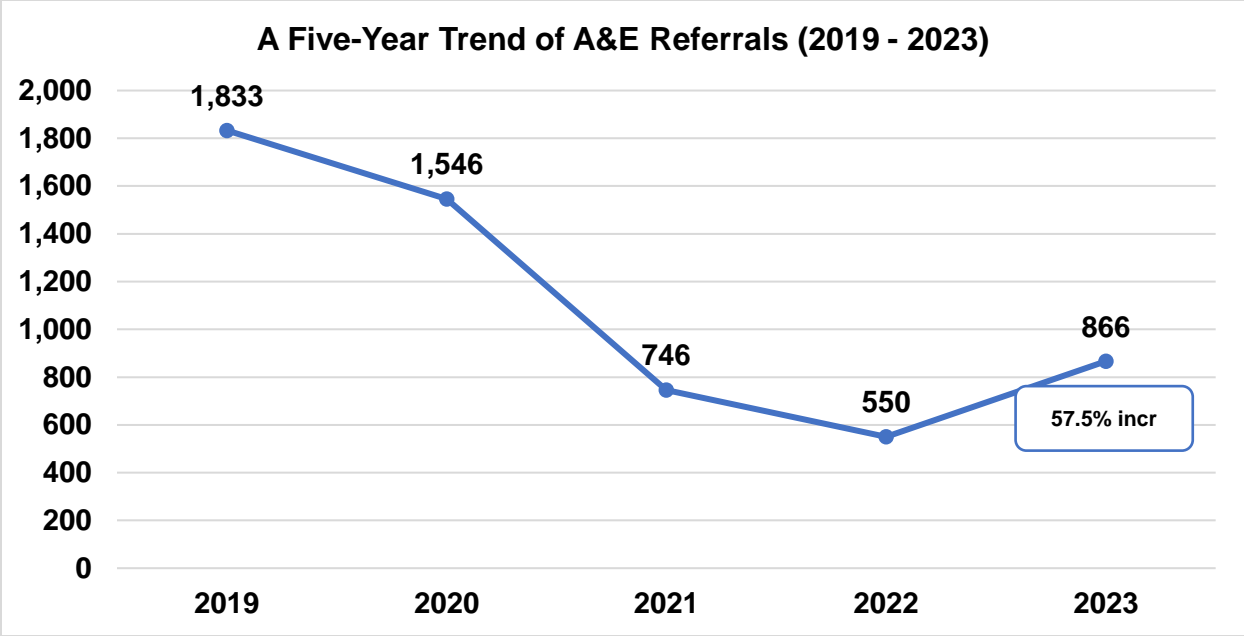


Figure 10.7. 1: Trend of Total A&E Referrals (2019 - 2023)

Table 10.7. 1: Top Ten Conditions Referred to the A&E Department in 2023

No.	Condition	Frequency	Proportion
1	Respiratory Distress	32	11.9%
2	Abdominal Pain	24	9.0%
3	Other Pain	20	7.5%
4	Laceration	15	5.6%
5	Cough	13	4.9%
6	Fever	12	4.5%
7	Swelling	12	4.5%
8	Headache	11	4.1%
9	Trauma	11	4.1%
10	Retention of Urine	10	3.7%
	Others	706	40.3%
	Total	866	

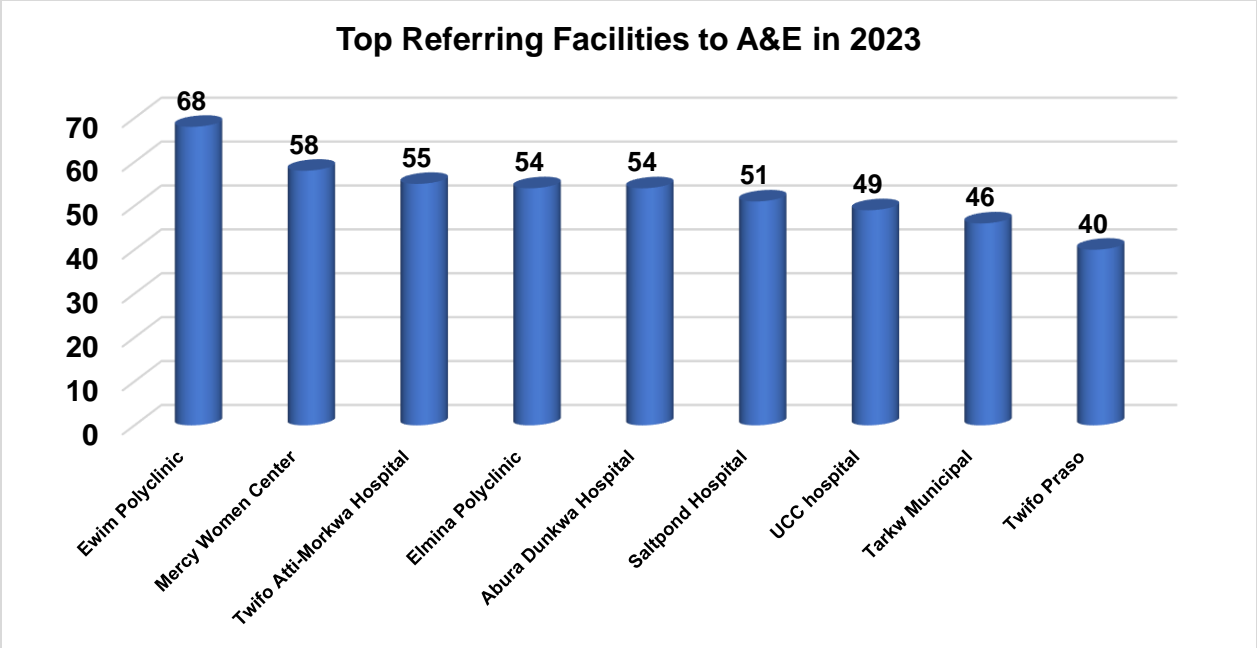


Figure 10.7. 2: Top Referring Facilities to A&E in 2023

Table 10.7. 2: Top Referring Facilities to A&E in 2023

2021		2022		2023	
Facility	No.	Facility	No.	Facility	No.
St. Francis Xavier hospital	114	St. Francis Xavier hospital	49	Ewim Polyclinic	68
Ewim Polyclinic	100	Ewim Polyclinic	32	Mercy Women Center	58
UCC hospital	82	Abura Dunkwa Hospital	31	Twifo Atti-Morkwa Hospital	55
Abura Dunkwa Hospital	76	UCC hospital	31	Elmina Polyclinic	54
Elmina Polyclinic	76	Moree	30	Abura Dunkwa Hospital	54
Moree	74	Elmina Polyclinic	28	Saltpond Hospital	51
Cape Coast Metro Hospital	68	Winneba Trauma Center	27	UCC hospital	49
Mercy Women Center	60	Mercy Women Center	24	Tarkwa Municipal	46
Adisadel Urban Health	54	Baiden Ghartey Clinic	18	Twifo Praso	40
Effia Nkwanta	42	Cape Coast Metro Hospital	18		

CHAPTER ELEVEN

DIAGNOSTIC SERVICES

11.1 INTRODUCTION

Diagnostic Service in the hospital is rendered by the Medical Laboratory, Imaging Sub-BMC, Pathology, Haematology, Microbiology and the Transfusion Medicine Management Units. The services provided by the Medical Laboratory Unit includes Biochemistry, Bacteriology, Parasitology & Serology. The Imaging Sub-BMC also provides X-radiation (X-ray), Computed tomography (CT scan) Ultrasound, Mammography, Echocardiogram and Fluoroscopy services.

11.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The table below provides a summary of the key outputs and outcomes of Diagnostics Services in line with the six medium-term strategic objectives of the hospital.

Table 11.2. 1: Summary of the 2023 Annual Performance of Diagnostics Services Units under the Strategic Objectives.

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2019	2020	2021	2022	2023	Target	Remarks
Utilisation of laboratory services	62.5%	260.3%	221.3%	524%	505.1%	TH = 60%	Decr Target met
Total laboratory Investigation	291,677	241,858	180,415	558,298	519,363	CCTH = 10% ↑	Decr Target not met
Utilisation of radiological services	86.9%	530.7%	87%	123.3%	114.41%	TH = 60%	Decr Target met
Radiology investigation	20,285	23,697	20,587	20,787	22,758	CCTH = 10% ↑	9.48% ↑ Target not met
Autopsies	218	166	227	250	232	-	7.2% decr
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Laboratory Unit							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
The department participated in External Quality Assessment (EQA) Training for tuberculosis (TB), COVID-19, Malaria, Human Immunodeficiency Virus (HIV), Cerebrospinal fluid (CSF), Blood Grouping & Coombs Tests
Revised, printed and distributed the Unit's User's Hand Book
Conducted orientation on Handbook for end users
Conducted Quality Internal Audit, Client & Customer Satisfaction Survey for the unit.
Conducted training on RDT POCT for OPD and ward staff
Conducted client satisfaction survey (Overall satisfaction:95.2%)
Imaging Sub-BMC
Organised in-service on customer care
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Laboratory Unit
Acquired the following equipment; <ul style="list-style-type: none"> ● High-capacity water distiller ● High-capacity autoclave (150L) ● Biochemistry auto-analyser - 2 ● 7-parts Haematology auto-analyser ● Urinalysis deposit Auto analyser installed ● 2 Centrifuges ● 3 ACs
Minor repair works at the front desk
Pathology Unit
Refurbished one (1) trolley
Maintenance works carried-out on cold room 2
Painted the general offices and mortuary area
Imaging Sub-BMC
Renovated the CT scan and ultrasound suite
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Laboratory Unit

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Conducted four (4) quarterly supervisors staff meetings
Held quarterly general staff meetings
Conducted twelve (12) monthly scientific clinical meetings/in-service trainings
<i>Transfusion Medicine Unit</i>
One (1) staff durbar was organized.
One (1) departmental meeting was organized
<i>Pathology Unit</i>
Held two meetings
<i>Imaging Sub-BMC</i>
All Radiologists, Radiographers and Sonographers attended their respective associations' annual general meeting
Tutorial sessions held with all cadre of clinical staff intermittently
Three (3) Sub-BMC management meetings and two (2) staff durbars were organized.
4.2: Human Resource Related Performance
<i>Laboratory Unit</i>
Appraised 85% staff
<i>Transfusion Medicine Unit</i>
Three (3) nurses were posted to the Unit.
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
<i>Laboratory Unit</i>
Four (4) researches were conducted out of which 2 were submitted for peer review.
Partnered with KHRC and NMIMR in undertaking the MVPE program and Influenza surveillance respectively.
<i>Pathology Unit</i>
Published four (4) research papers; <ul style="list-style-type: none"> 1. Exertional Dyspnea incidentally diagnosed in sarcoidosis: A teaching Hospital Experience. DOI: 10.1155/2023/8689352 2. Bilateral Tubal Ectopic pregnancy: A case Report. DIO: 1060014/PMJG.V12I1.312

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
<p>3. A rare case of conjunctive rhinosporidiosis mimicking a neoplasm in Ghana: DOI: 10.600014/pmjpg.VIli2.290.</p> <p>4. Clinical autopsy as an outcome measure and tool for quality improvement at the Cape Coast Teaching Hospital. DOI: 10.60014/pmjpg.VIli2.293.</p>
5.2 Improve on Teaching and Learning:
Laboratory Unit
Facilitated the training of 205 undergraduates and post-graduates
Facilitated the training of fourteen (14) newly qualified scientists with their mandatory one-year post qualification internship
Pathology Unit
Facilitated the training of 417 Medical students, postgraduate doctors, forensic science and biomedical science students
Imaging Sub-BMC
<p>The following students had their rotation in the Sub-BMC;</p> <ul style="list-style-type: none"> ● Sonography and radiography students ● 6 Medical Students ● 1 Family medicine resident ● 3 OBGYN residents
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Laboratory Unit
Provided diagnostic support for lower facilities (TB, COVID-19, EID)
Staff facilitated key training programs and also served as Regional OTSS and EQA supervisors in the Region

11.3 LABORATORY SERVICES UTILISATION

In 2023, there was a general decline of 6.97% in the total number of laboratory investigations in 2023 (from 558,298 in 2022 to 519,363 in 2023). The number of Lipid Profile (Lipogram), Kidney Function Test (KFT) and Liver Function Test (LFT) declined by 26.3%, 25.1% and 12.1%, and respectively whereas biochemistry investigations went up by 57%.

The number of parasitology investigations dropped by 11.5% (from 14,071 in 2022 to 12,449 in 2023), whilst bacteriology recorded a significant decline of 48.4% (from 14,344 in 2022 to 7,344 in 2023). Also, there was a general decrease in the number of ELISA

test. The number of COVID-19 cases detected slightly increased by 0.14% (from 1,471 in 2022 to 1,473 in 2023).

However, the number of positive cases dropped by 27.4% (from 277 in 2022 to 201 in 2023) with a positivity rate of 13.65%. Further, out of the 73,667 clients seen, 41% (30,166) were in-patients, whereas 59% (43,501) were out-patient clients. Figure 11.3.1 to figure 11.3.7 and table 11.3.1 to table 11.3.5 provide a detailed trend analysis of the performance.

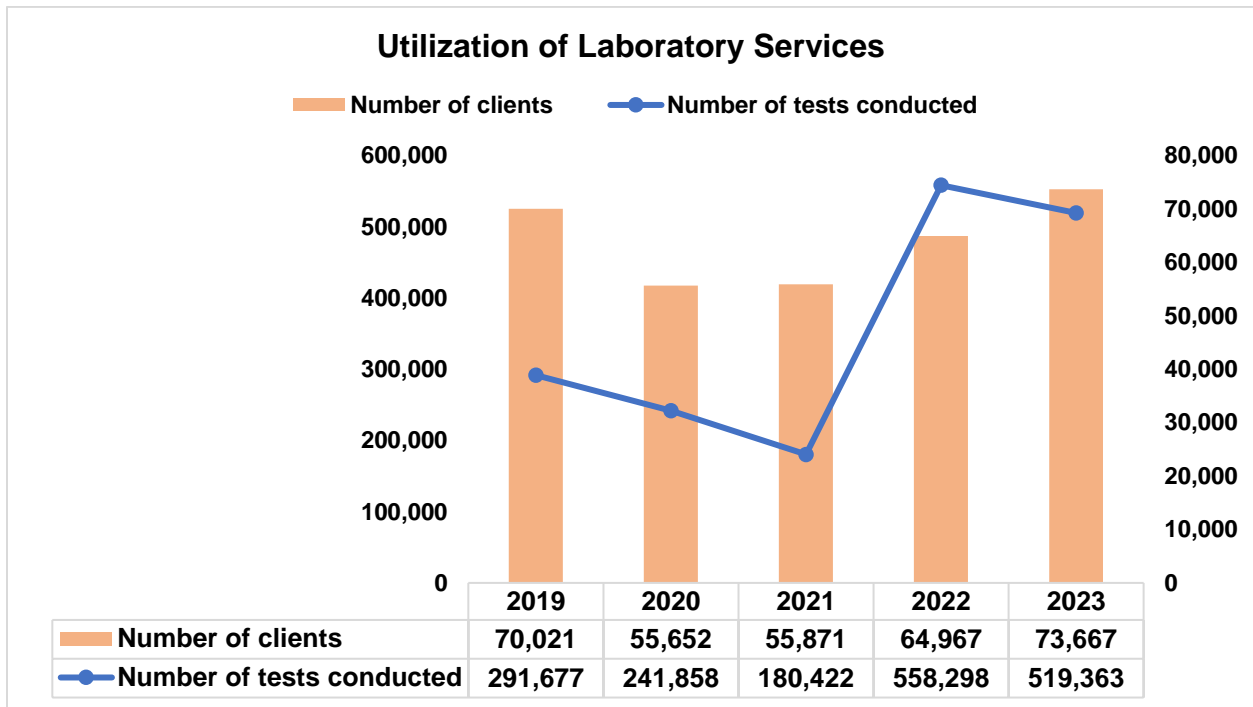


Figure 11.3. 1: Utilization of Laboratory (2019-2023)

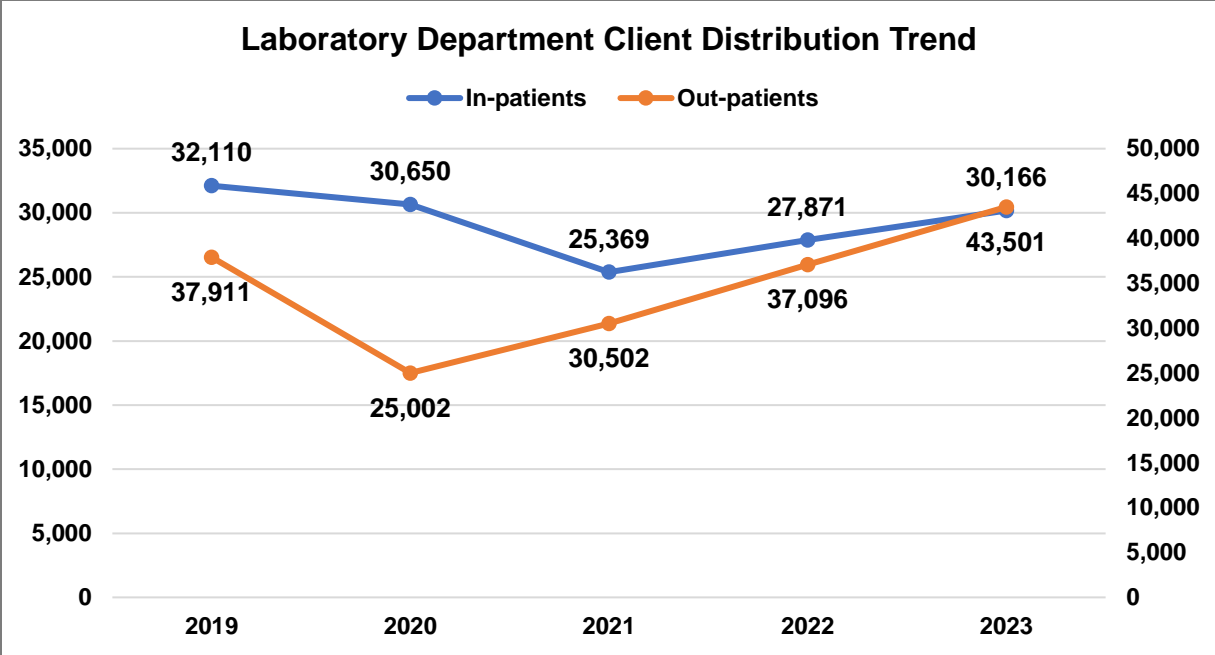


Figure 11.3. 2: Laboratory Department Client Distribution Trend

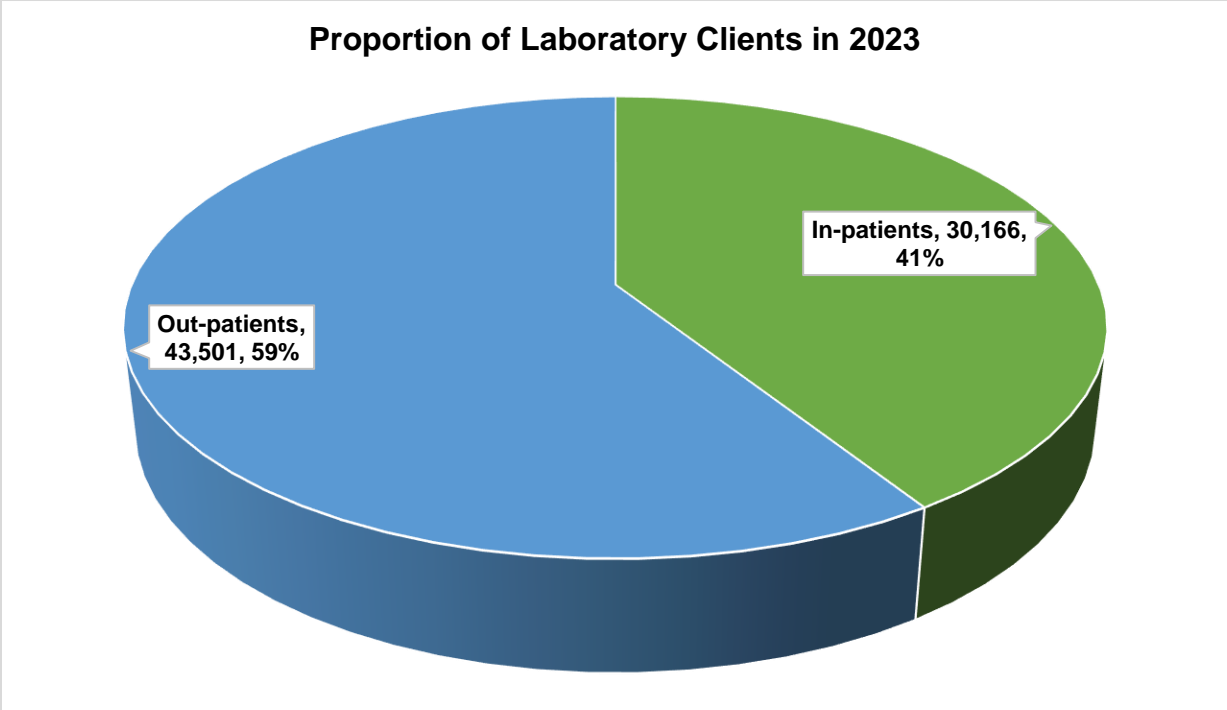


Figure 11.3. 3: Proportion of Laboratory Clients in 2023

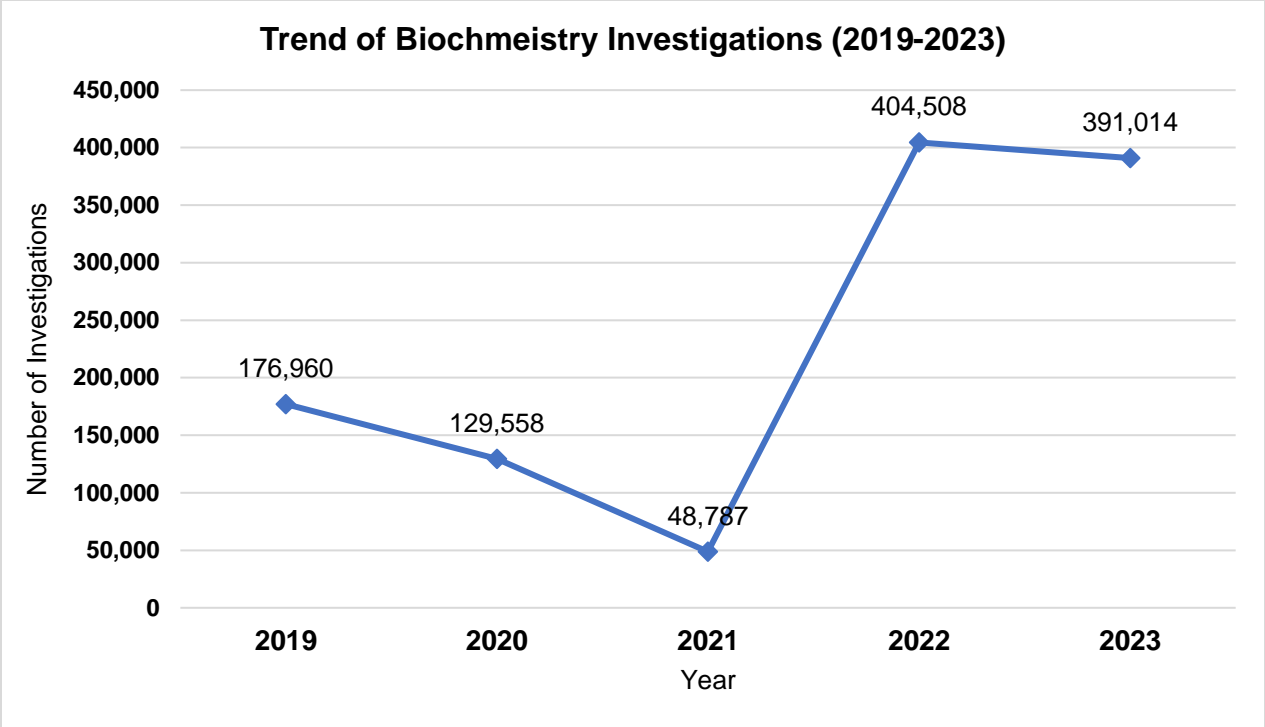


Figure 11.3. 4: Trend of Biochemistry Investigations (2019-2023)

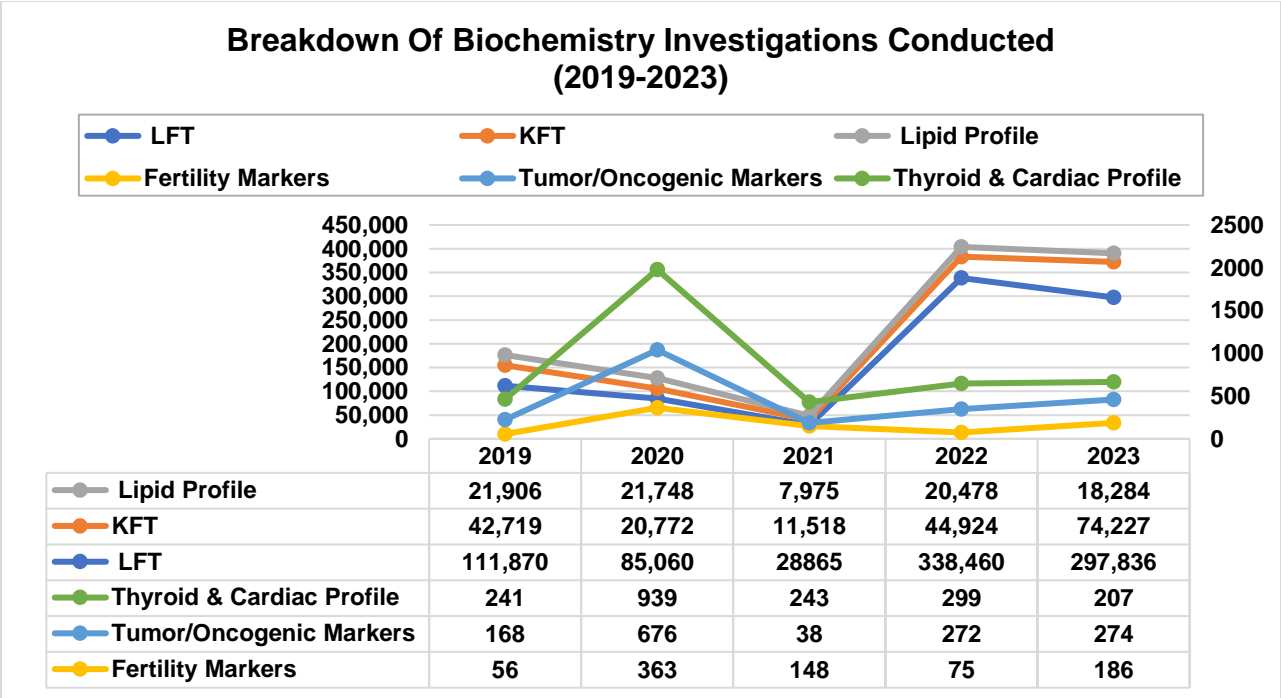


Figure 11.3. 5: Biochemistry Investigations (2019-2023)

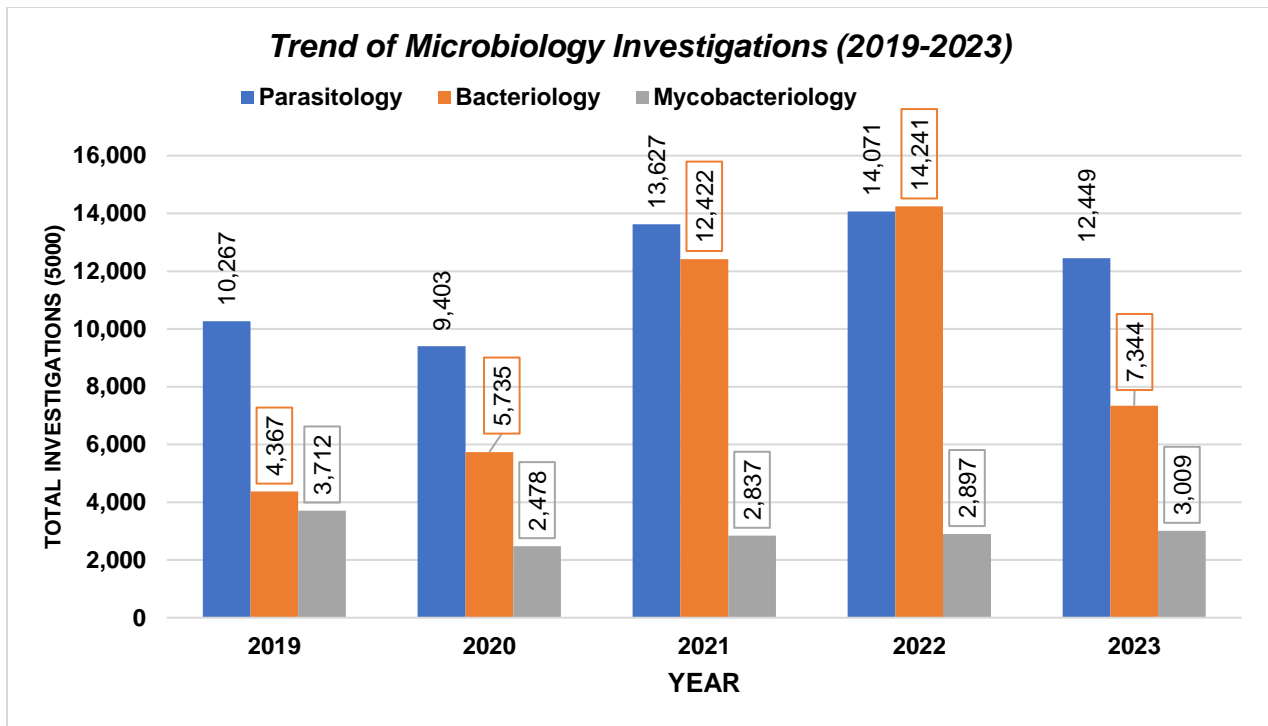


Figure 11.3. 6: Trend of Microbiology Investigations (2019-2023)

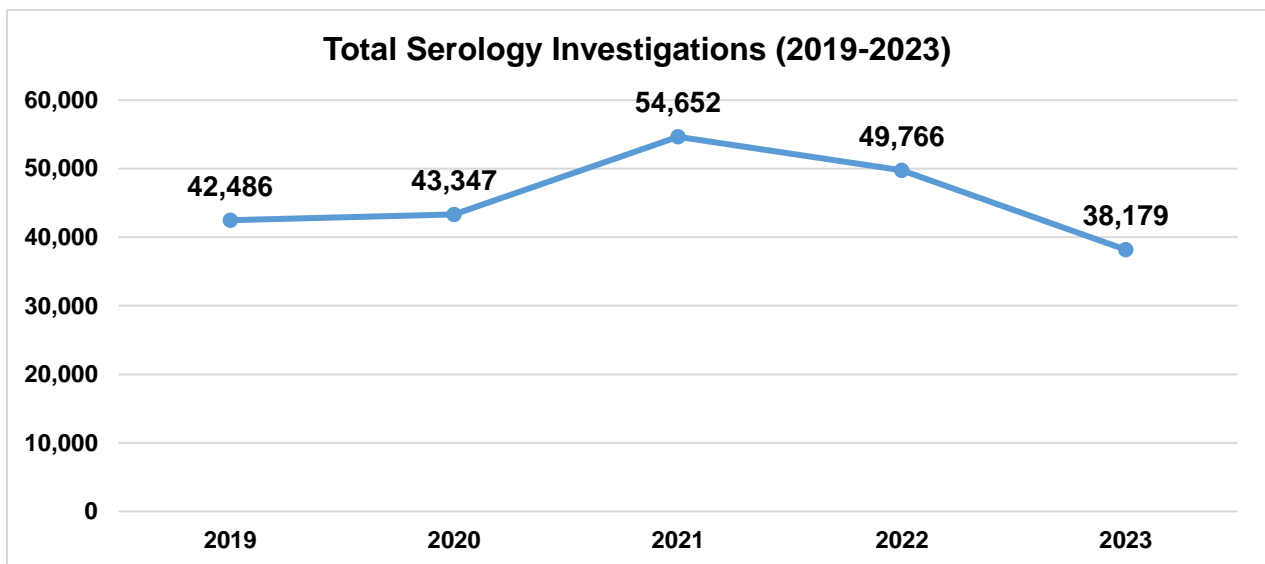


Figure 11.3. 7: Total Trend of Serology Investigations (2019-2023)

Table 11.3. 1: Serology Investigations (2019-2023)

Investigation	2019	2020	2021	2022	2023	Remarks
Widal/Typhidot	1,059	1540	3,518	2,414	1243	48.5% decr

Investigation	2019	2020	2021	2022	2023	Remarks
VDRL	6,901	6234	6,079	6,425	4670	27.3% decr
Hepatitis-B	9,211	8528	8,716	7,702	5159	33.0% decr
Hepatitis-C	8,553	7229	7,337	7,497	4943	34.1% decr
HIV	8,460	8,005	8,762	7,803	7844	0.5% incr
Rheumatoid Factor	36	36	51	60	38	36.7% decr
Pregnancy Test	136	-	-	-	-	-
Antistreptolysin O (ASO)	0	-	0	0	0	-
C-Reactive Protein	12	79	63	150	88	41.3% decr
CD4 COUNT	0	-	-	-	-	-
DBS/ EID	677	-	633	623	384	38.45 decr
HIV Viral Load	5420	-	2807	4,045	1542	61.9% decr
Hepatitis 'B' Profile (Combo)	269	117	93	167	127	24.0% decr
Helicobacter Pylori (AG & AB)	1445	826	2,031	1,096	1261	15.1% incr
Hepatitis A	14	-	0	0	0	-
Hepatitis E	8	-	0	0	0	-
Infectious Markers						
HBsAg (Confirmatory)	0	0	14	0	0	-
HBsAg (Quantification)	0	1	0	0	0	-
HCV (Confirmatory)	0	0	8	0	0	-
HIV (Confirmatory)	1	0	17	4	0	-
Syphilis (Confirmatory)	0	-	24	0	0	-
ELISA Test (Donor Testing)						
HBsAg	70	2,688	3,453	3089	2828	8.4% decr
HCV Antibody	70	2,688	3,453	3049	2808	7.9% decr
HIV Antigen/Antibody	71	2,688	3,453	2554	2763	8.2% incr
Syphilis Antibody	73	2,688	3,453	3088	2481	19.7% decr
Total	42,486	43,347	54,652	49,766	38,179	23.3% decr

Table 11.3. 2: Haematology Investigation Trend (2019-2023)

TEST	2019	2020	2021	2022	2023	Remarks
FBC	27,212	20,616	23,106	34,510	26,597	22.9% decr
Rectics Count	-	-	-	15	0	100% decr
Sickling	2,760	1,386	1,697	1645	1448	12.0% decr
ESR	1,467	856	1,250	1,951	2776	42.3% incr
BF-MPs	4,929	4,550	4,966	6,863	6301	8.2% decr
G6PD	1,313	996	1,030	1,826	1826	

TEST	2019	2020	2021	2022	2023	Remarks
Blood Group	16,231	14,642	16,122	21,248	23,059	8.2% incr
Bleeding & Clotting Time	-	-	-	-	-	-
Clotting Profile (PT, INR, APTT)	394	331	346	443	447	0.9% incr
D-Dimer	-	-	-	15	110	633.3% incr
Coomb's Test	133	26	42	113	65	42.5% decr
Film Comment	0	-	187	104	225	116.3% incr
Hb Electrophoresis	990	663	264	0	0	-
Total	Total	55,429	44,066	49,010	68,743	62,854

Table 11.3. 3: COVID-19 (SARS-CoV-2) Investigations (2019-2023)

Indicator	2020	2021	2022	2023	Remarks
Total number of Cases	530	3,468	1,471	1,473	0.14% incr
Total number of Positives	107	1,198	277	201	27.4% decr
Total number of Negatives	423	2,270	1,194	1,272	6.5% incr
Test Positivity Rate (%)	20.189%	34.544%	18.831%	13.646%	Decr

Table 11.3. 4: Viral Load (HIV) Investigations (2021-2023)

HIV LOAD	2021	2022	2023	REMARKS
Total Patients Tested	2,807	4,045	1,542	61.9% decr
Viral Suppression	1,880 (75.02%)	2,701 (74.5%)	799 (74.9%)	Decr
Virologic Failure	626 (24.98%)	924 (25.5%)	267 (25.1%)	Decr
Invalid	301	420	467	Incr

Table 11.3. 5: Trend of Early Infant Diagnosis of HIV (2021-2023)

EID	2021	2022	2023	REMARKS
Total Infants Tested	633	623	384	Decr
Positives	36 (5.75%)	30 (4.82%)	14 (3.65%)	Decr
Negatives	590 (94.25%)	593 (95.18%)	370 (96.35%)	Decr
Invalid	7	0	0	

11.3.1 LABORATORY SAMPLES REFERRED OUT

The hospital collaborates with other institutions to conduct test on some of the suspected surveillance diseases that are of public health concern. Some of these cases include; H1N1, Rubella, HIVL, Buruli Ulcer, TB, etc., with the recent one being Covid-19. During the period, only 392 H1N1 (Influenza) and 1,473 COVID-19 samples were referred out as shown in table 11.3.1.1 below.

Table 11.3.1. 1: Laboratory Samples Referred to Outside Facilities

TESTS	2019	2020	2021	2022	2023	REMARKS
TB Culture (DR, DST)	-	-	-	-	-	-
TB Culture (LPA)	-	-	-	-	-	-
H1N1 (Influenza)	215	18	69	395	392	0.8% decr
Rubella	0	-	0	0	0	-
Buruli Ulcer	0	-	0	0	0	-
HIVL	559	3,184	0	0	0	-
EID	73	489	0	0	0	-
Covid-19 Samples	-	2,631	2,749	-	1,473	

11.4 TRANSFUSION MEDICINE MANAGEMENT SERVICES

Transfusion of blood and blood product remains essential in saving the lives of patients. Over the years, there has been general demand of blood to improve the survival rate of patients in critical state. In 2023, the total number of Whole Blood Cross-Matched, Whole Blood Transfused and fresh frozen plasma (FFP) Transfused increased by 10.2% (from 4,127 in 2022 to 4,703 in 2023), 19.0% (from 3,071 in 2022 to 4,251 in 2023) and 4.2% (from 1,067 in 2022 to 1,112 in 2023) respectively. The number of whole blood received by Sub-BMCs increased. However, A&E, Child Health, Internal Medicine as well as the Surgical Sub-BMCs saw a drop in the consumption of FFP.

There was a general increase of 18.7% in the total number of blood mobilised (from 6,039 in 2022 to 7,169 in 2023). In all, 371 pints of blood were discarded, due to reasons such

as, TTIs, clotting, expiration, transfusion reaction, Presence of visible protein & lipid particles (cloudy plasma), etc. Figures 11.4.1 to 11.4.3 and table 11.4.1 to table 11.4.5 provides detailed trend analysis below.

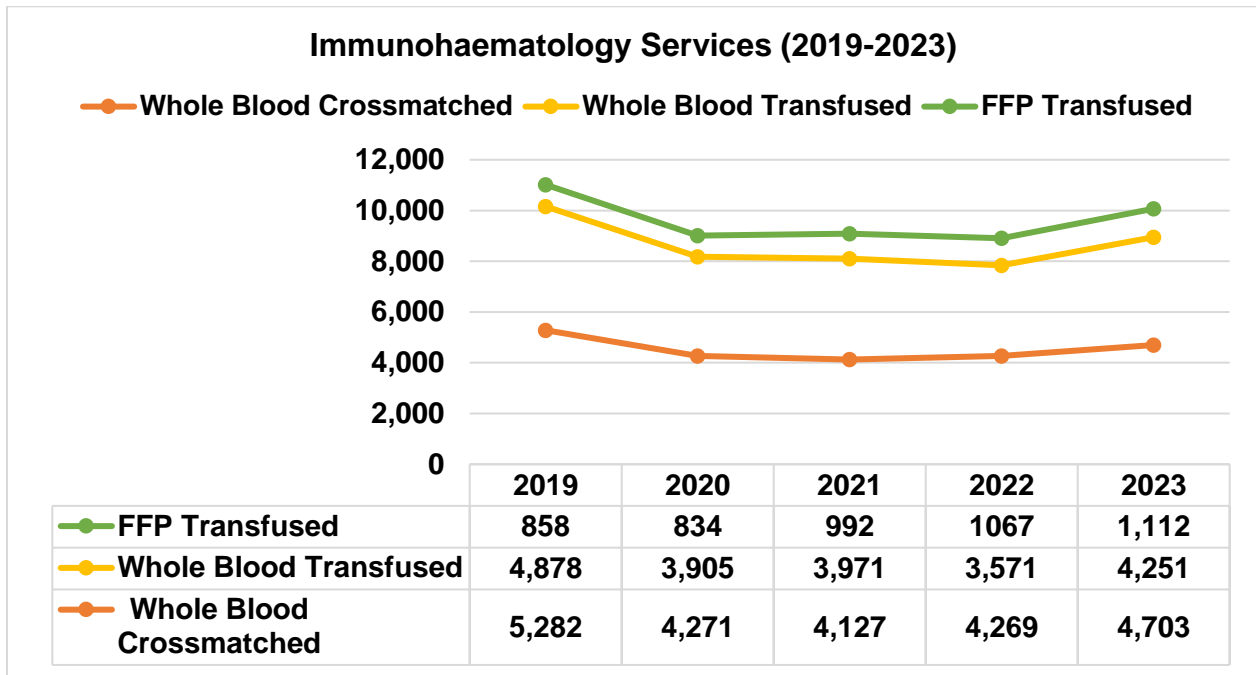


Figure 11.4. 1: Immunohaematology Services (2019-2023)

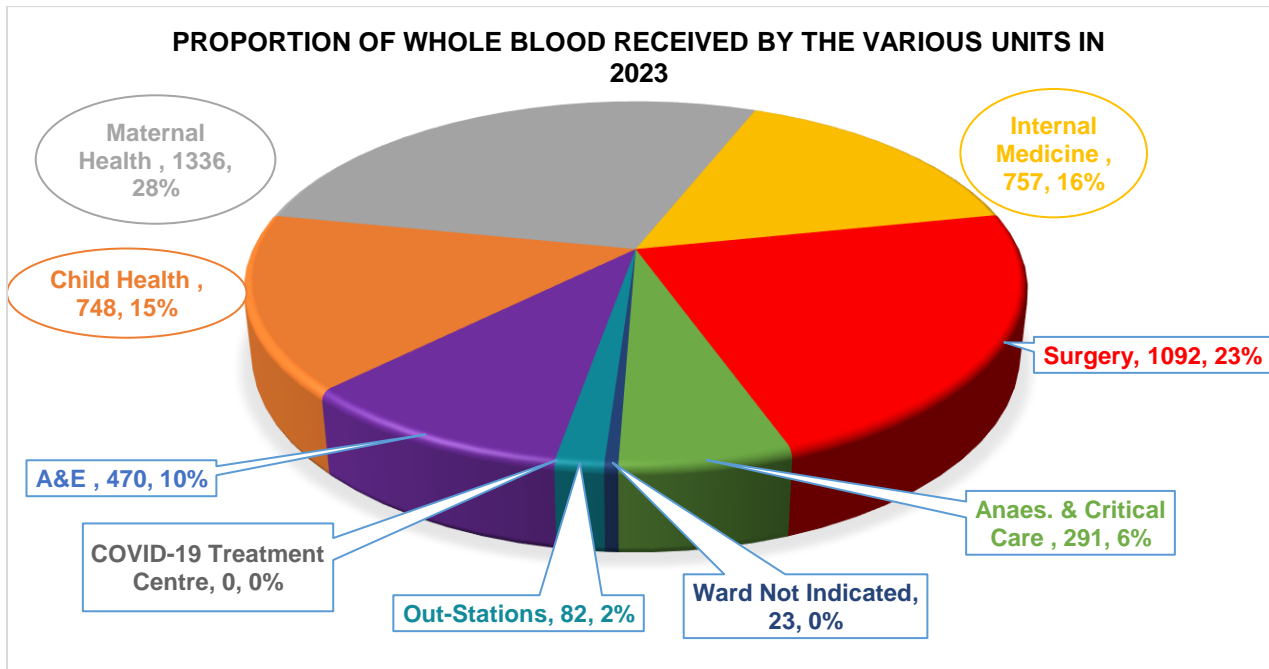


Figure 11.4. 2: Proportion of Whole Blood received by the various Units in 2023

Table 11.4. 1: Whole Blood received by the various Units from 2019 to 2023

Department	2019	2020	2021	2022	2023	Remarks
A&E	635	282	379	355	470	32.4% incr
Child Health	466	419	465	504	748	48.4% incr
Maternal Health	1270	1002	987	1176	1336	13.6% incr
Internal Medicine	889	842	721	736	757	2.9% incr
Surgery	988	914	1132	1070	1092	2.1% incr
Anaesthesia and Critical Care	139	143	97	126	291	131% incr
Ward Not Indicated	283	185	61	21	23	9.5% incr
Out-Stations	168	92	67	197	82	58.4% decr
COVID-19 Treatment Centre	-	26	17	-	-	
Total	4838	3905	3926	4201	4798	14. 2% incr

PROPORTION OF FFP RECEIVED BY VARIOUS WARDS/SUB-BMCS IN 2023

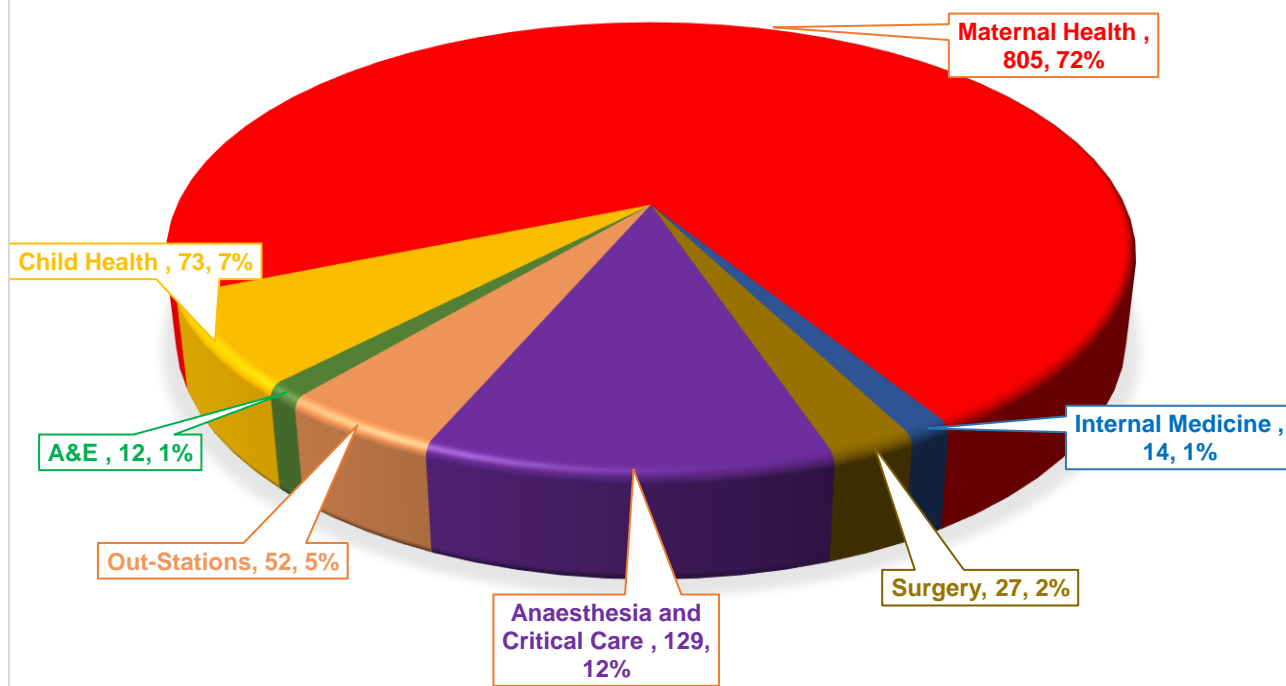


Figure 11.4. 3: Proportion of FFP received by the various Units in 2023

Table 11.4. 2: Trend of FFP Received by Various Wards/Sub-BMCs 2019 to 2023

Department	2019	2020	2021	2022	2023	Remarks
A&E	36	15	47	41	12	70.7% decr
Child Health	28	29	378	435	73	83.2% decr
Maternal Health	628	508	581	614	805	31.1% incr
Internal Medicine	33	29	77	347	14	96% decr
Surgery	30	76	108	115	27	76.5% decr
Anaesthesia and Critical Care	69	61	62	70	129	84.3% incr
Ward Not Indicated	14	77	17	12	0	Decr
Out-Stations	20	39	29	31	52	67.7% incr
COVID-19 Treatment Centre	34	116	0	0	0	-
Total	858	834	992	1665	1112	4.2% incr

Table 11.4. 3: Source of Blood Donation (2019-2023)

GROUPS	2019	2020	2021	2022	2023	REMARKS
Voluntary Blood Donors	2001	812	674	1,752	2,264	29.2% incr
Replacement/ Pre-deposit	3422	3,449	2,925	2,541	2,567	1.0% incr
Walk-In	107	110	130	88	99	12.5% incr
Mobile Session (Unscreened)	1894	702	584	1,607	2,165	34.7% incr
ANC Replacement	61	78	36	51	74	45.1% incr
Total	7,485	5,151	4,349	6,039	7,169	18.7% incr

Table 11.4. 4: Number of Blood Discarded (2019-2023)

GROUPS	2019	2020	2021	2022	2023	REMARKS
Unsafe Blood /Discarded	467	516	242	107	371	246.7% incr

Table 11.4. 5: Reasons for Discarding Blood (2022-2023)

REASON	NUMBER		REMARKS
	2022	2023	
Transfusion-Transmitted Infections (TTIs)	62	293	Incr
Clotted	0	1	Incr
Expired	5	1	Decr
Haemolysis	0	3	Incr
Unsuccessful	25	38	Incr
Unaccounted	0	35	Incr
Total Blood Discarded	92	371	incr

11.5. HAEMATOLOGY SERVICES UTILISATION

The Haematology service utilization increased by 18.9% (from 366 in 2022 to 415 in 2023). The number of bone marrow aspirates performed in 2023 increased to 24 from 17 in 2022 representing an increase of 41.2% whereas the number of sickle cell cases increased by 6.4% (from 298 in 2022 to 317 in 2023).

The number of admissions due to haematology related conditions dropped by 13% (from 46 in 2022 to 40 in 2023). The number of haematology related mortalities also decreased by 16.7% (from 6 in 2022 to 5 in 2023).

Chronic Myeloid Leukaemia was the leading haematology condition seen with 14 conditions followed by Chronic Lymphocytic Leukaemia (13), Non-Hodgkin Lymphoma

(11), Multiple Myeloma (10). Figures 11.5.1, tables 11.5.1 to table 11.5.2 below provides details of the analysis.

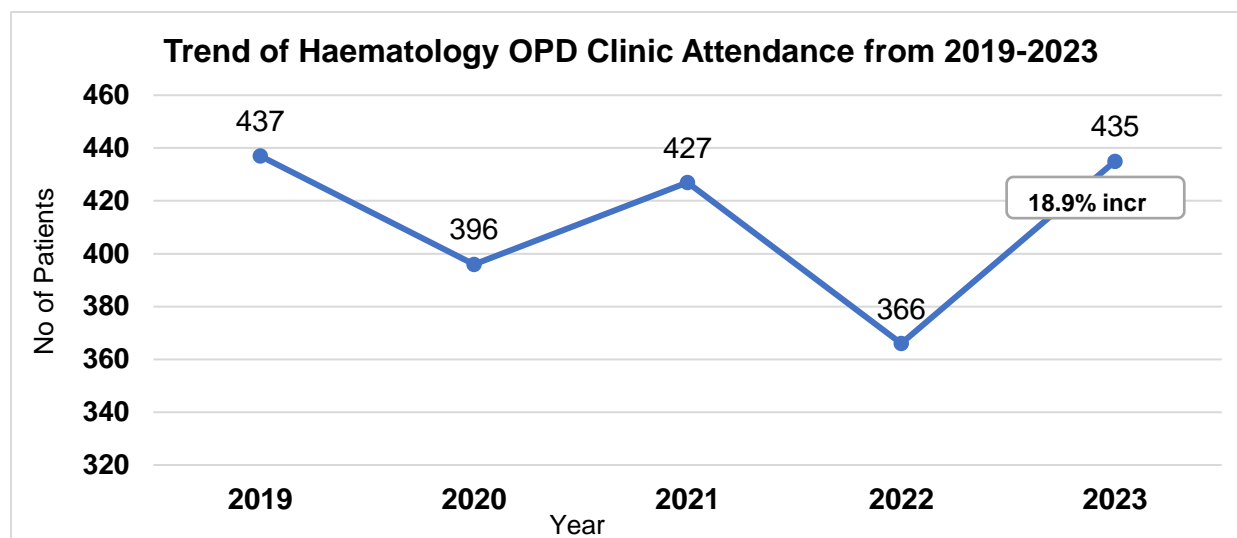


Figure 11.5. 1: Trend of Haematology Clinic OPD Attendance (2019-2023)

Table 11.5. 1: Trend of Haematology Service Utilization (2019-2023)

INDICATOR	2019	2020	2021	2022	2023	REMARKS
No. of Bone marrow Aspirates	13	31	5	17	24	41.2% incr
No. of remissions	11	6	2	1	12	Incr
Sickle cell	65	46	87	298	317	6.4% incr
No. of relapse Patients	2	3	1	1	3	incr
No. of Admissions	23	17	10	46	40	13.0% decr
No. of mortalities	5	10	5	6	5	16.7% decr

Table 11.5. 2: Top 6 Common Haematology Cases Managed

2021		2022		2023	
CONDITION	NO	CONDITION	NO	CONDITION	NO.
Chronic Lymphocytic Leukaemia (CLL)	11	Chronic Lymphocytic Leukaemia (CLL)	16	Chronic Myeloid Leukaemia	14
Hodgkin lymphoma	10	Hodgkin lymphoma	6	Chronic Lymphocytic Leukaemia	13

2021		2022		2023	
CONDITION	NO	CONDITION	NO	CONDITION	NO.
Chronic Myeloid Leukaemia	7	Chronic Myeloid Leukaemia	8	Non-Hodgkin Lymphoma (NHL)	11
Multiple Myeloma	7	Multiple Myeloma	6	Multiple Myeloma	10
Non-Hodgkin Lymphoma (NHL)	6	Non-Hodgkin Lymphoma (NHL)	3	Hodgkin lymphoma	9
Polycythaemia Vera	4	Polycythaemia Vera	7	Polycythaemia Vera	5

11.6 RADIOLOGICAL SERVICES UTILISATION

Radiological services in the hospital are provided by the Imaging Sub-BMC. These services include ultrasound, x-ray, CT-Scan, echocardiogram among others. The number of investigations went up by 10.2% (from 20,787 in 2022 to 22,758 in 2023). In the same light, the number of clients increased considerably by 18.3% (from 16,857 in 2022 to 19,940 in 2023).

The hospital could not perform CT-Scan investigations in 2022 because the machine was faulty. However, the Ministry of Health donated a 32 slide CT-Scan which was installed and operationalised in 2023 leading to a total of 3,142 investigations performed. While the number of ultrasound scan investigations went up by 18% (from 7,470 in 2022 to 8,818 in 2023), the number of x-ray investigations declined considerably by 10.9% (from 12,001 in 2022 to 10,687 in 2023).

There were 256 special radiological investigations (HSG, MCUG Rug, Mammo, Dental, Ba. studies) conducted in 2023 compared to the 1,315 investigations in 2022. Figure 11.6.1 and table 11.6.1 below shows details of the analysis.

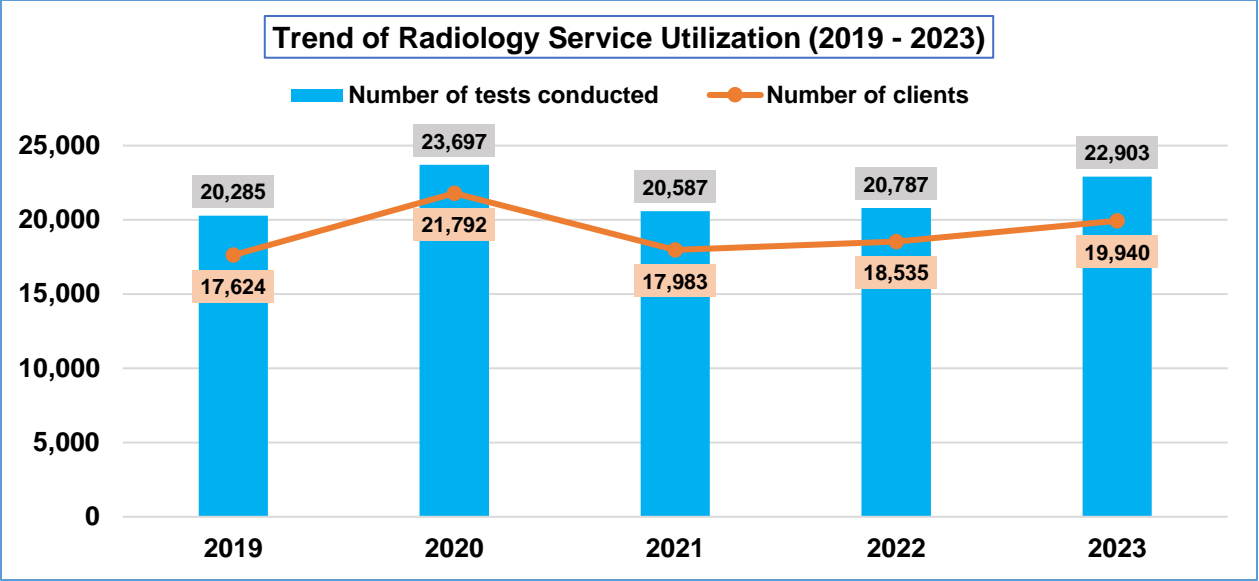


Figure 11.6. 1: Trend of Radiology Service Utilization (2019 - 2023)

Table 11.6. 1: Trend of Radiology Investigations

Investigation	2019	2020	2021	2022	2023	Remarks
CT scan	2,046	3,220	461	-	3142	-
Ultrasound Scan	7,907	8,485	7,033	7,470	8,818	18.0% incr
X-Ray	9,765	11,492	12,363	12,001	10,687	10.9% decr
Echocardiogram	495	496	-	-	-	-
Interventional Radiology	-	4	9	1	-	-
Specials (Hsg, Mcug Rug, Mammo, Dental, Ba. studies)	-	-	721	1,315	256	80.5% decr

11.7 PATHOLOGY SERVICE UTILISATION

The total number of bodies received at the Pathology unit increased by 2.7% (from 1,237 in 2022 to 1,271 in 2023). Out of the 1,103 bodies received from the Wards, 410 were from the Accident and Emergency department, 278 were from the Internal Medicine Sub-BMC whiles 230 were received from the Child Health Sub-BMC.

The hospital during the year recorded a decline of 7% in the number of autopsies conducted (from 250 in 2022 to 232 in 2023). However, there was an increase of 27.6% and 9.0% in the number of embalmmnt and general handling respectively. Also, the number of bodies stored by the department went up by 34.6% (from 757 in 2022 to 1,019 in 2023), whereas the number of brought-in-dead dropped by 38.1% (from 263 in 2022 to

149 in 2023). Figure 11.7.2 to figure 11.7.2 and tables 11.7.1 to table 11.7.2 below provides detailed trend analysis.

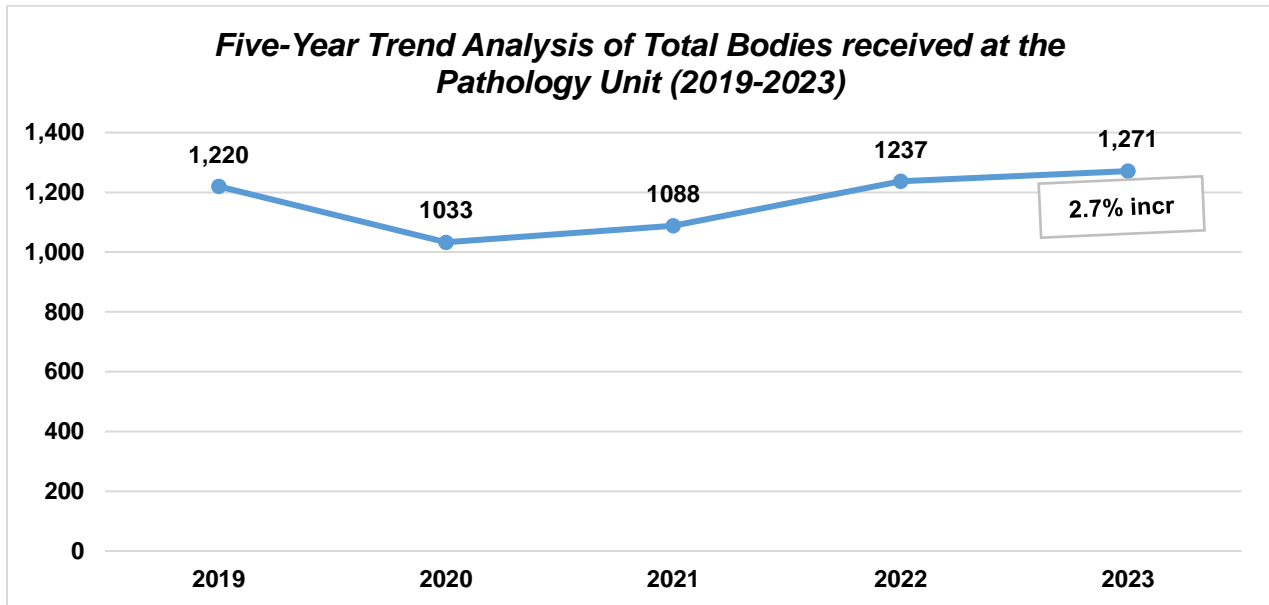


Figure 11.7. 1: Five-Year Trend Analysis of Total Bodies received at the Pathology Unit (2019-2023)

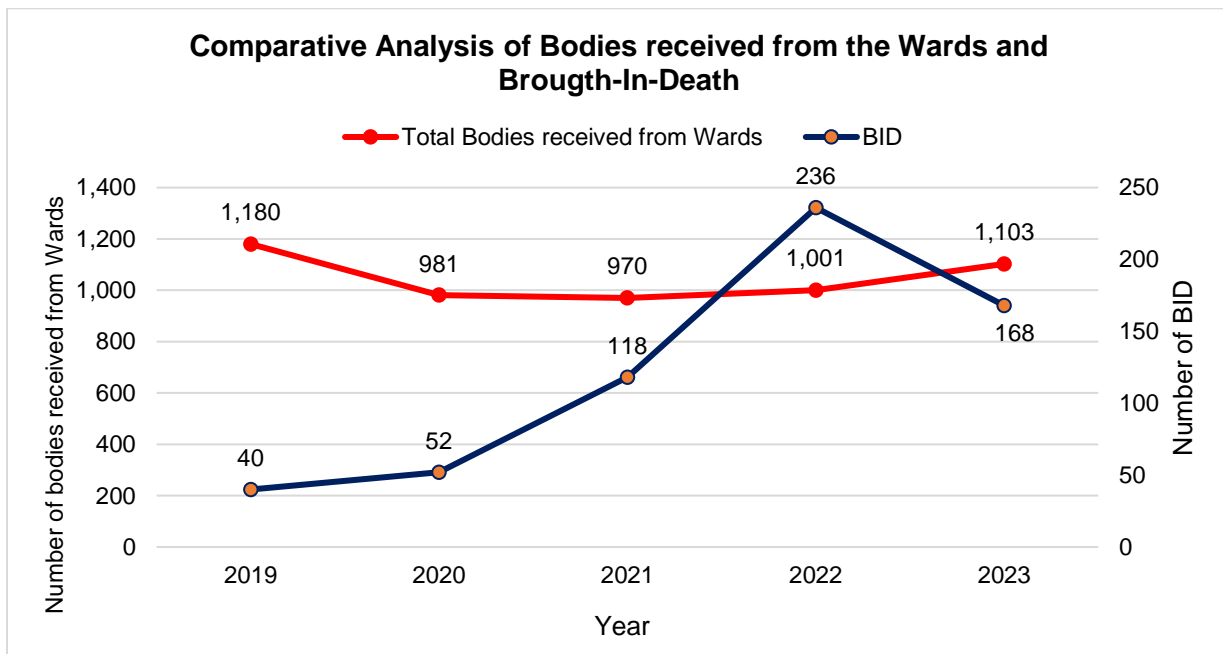


Figure 11.7. 2: Comparative Analysis of Bodies received from the wards and Brought-In-Death (2019-2023)

Table 11.7. 1: Sources of Bodies Received at the Pathology Unit (2019-2023)

Source	2019	2020	2021	2022	2023	REMARKS
Bodies Received from the Wards						
A&E Sub-BMC	704	406	468	330	410	24.2% incr
Child Health Sub-BMC	29	28	41	286	230	19.6 decr
Maternal Health Sub-BMC	20	25	37	39	20	48.7% decr
Internal Medicine Sub-BMC	285	388	296	250	278	11.2% incr
Surgery Sub-BMC	142	134	128	96	126	31.3% incr
ICU	-	-	-	-	39	
Total Bodies received from Wards	1180	981	970	1,001	1,103	10.2% incr
BID	40	52	118	236	168	19 were received from the Ghana Police service, sister health facilities without morgue and other morgues)
Total bodies received at the Pathology Unit	1,220	1,033	1,088	1,237	1,271	2.7% incr

Table 11.7. 2: Procedures performed at Pathology Unit (2019-2023)

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Number of Autopsy	218	166	227	250	232	7% decr
Number of General Handling	642	773	929	724	789	9.0% incr
Number of Embalment	395	561	540	380	485	27.6% incr
Number of bodies Bath	395	561	550	397	619	55.9% incr
Body Storage (Number)	789	954	993	757	1019	34.6% incr

CHAPTER TWELVE

MATERNAL HEALTH SUB-BMC

12.1 INTRODUCTION

The Maternal Health Sub-BMC is responsible for the management of Obstetric and Gynaecological conditions as well as its related emergencies. The Sub-BMC is made up of O & G Ward, Delivery Suite, Delivery Suite Theatre and Recovery Ward, Antenatal & Postnatal Clinics (ANC & PNC), Gynaecological Clinic and Emergency Triage Assessment & Treatment (ETAT) centre. The Sub-BMC is managed by a six-member team.

The hospital, provides a plethora of maternal health services such as Reproductive Endocrinology and Fertility Services, Gynae-Oncology, Feto-Maternal, Antenatal, Childbirth and Emergency Obstetric care and Postnatal services.

12.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The table below provides a summary of the key outputs and outcomes of Maternal Health Sub-BMC in line with the six medium-term strategic objectives of the hospital.

Table 12.2. 1: Summary of the 2023 Annual Performance of Maternal Health Sub-BMC under the Strategic Objectives.

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2019	2020	2021	2022	2023	Target	Remarks
Total OPD Attendance	17,068	12,136	15,468	18,860	21,237	-	12.6% ↑
Total Patients admission	2,033	2,000	2,058	5,706	5,305	-	Admission increased in 2022 and 2023 because ETAT admissions were included
Percentage of maternal admissions due to external referrals decreased	27.2%	21.2%	23%	26.71%	72.74%	THs = 60%	Incr Target exceeded

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
Percentage bed occupancy	55%	55.5%	52.20%	54.0%	57.5%	THs = 75%	Incr Target not met
Total surgical operations	1,501	1,717	1,728	1,917	1,786	-	5.5% ↓
Total deliveries	3,027	2,883	3055	3,269	2,877	CCTH = 5% ↑	11.99% ↓ Target not met
Delivery to midwife ratio (all midwives at the institution)	20:1	18:1	15:1	14:1	15:1	THs = 20:1	Incr
Couple year protection	1,562.5	1,891.2	2,233	2,626	2,075	TH = 2,500	Target not met
Caesarean section rate	41.2%	53.3%	51.4%	50.4%	52.69%	TH = 40%	Incr Target not met
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Impact	2019	2020	2021	2022	2023	Target	Remarks
Live births	2994	2,793	3,048	3,288	2937	-	10.7% decr
Low birth rate	16.1%	16.8%	19.4%	20.5%	23.2%	THs = 12%	Incr Target not met
Stillbirth rate (/1000LB)	42	31	42	35	37	THs = 15	Incr Target not met
Total Fresh Still birth	39	38	43	54	42	-	22.2% ↓
Total Macerated Still Birth	87	52	85	86	63	-	26.7% ↓
Institutional Maternal	925	903	1,050	1,186	681	THs = 300	Decr but was not

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
mortality ratio (/100,000LB)							Target met
Number of institutional maternal deaths	28	26	32	39	20	CCTH = 50% ↓	48.7% ↓
% of maternal mortalities audited	100%	100%	100%	100%	100%	THs = 100%	Sustained
Partograph use rate	46.12%	48.7%	48.5%	47.6%	62.01%	THs = 60%	Incr Target met
Organised a total of twenty (20) trainings on; <ul style="list-style-type: none"> ● Infection Prevention and Control (IPC) ● Life-support system ● Emergency readiness ● Quality Improvement ● Helping Babies Breathe 							
Audited 70% of perinatal mortalities							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
Acquired the following set of equipment; <ul style="list-style-type: none"> ● 2 adjustable beds, ● 1 nebulizer ● 3 BP apparatus ● 3 desktop computers 							
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM							
4.1: Governance Related Performance							
Organised five (5) Leadership trainings on the art of leadership and Emotional Intelligence							
Conducted orientation for all new staff posted to the Sub-BMC							
Conducted two (2) unannounced Peer reviews							
Held six (6) Sub-BMC meetings							
4.2: Human Resource Related Performance							
90% of eligible staff were promoted and upgraded							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
Conducted a research on congenital anomaly (Birth Defects)
5.2 Improve on Teaching and Learning:
Three (3) Midwives were recommended for specialist training in advance Midwifery
Seventy (70) medical students were trained
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Collaborated with Regional Health Directorate to conduct mentorship support for thirty-eight (38) peripheral facilities in Central Region
Organised one (1) Joint Zonal OBGYN Specialists Emergency Obstetric and New-born Care (EmONC) Training where a total of one thousand, five hundred and forty-eight (1,548) professionals were trained <ul style="list-style-type: none"> ● One thousand, one hundred and seventy-two (1,172) Midwives ● Sixty-four (64) Doctors ● Eighty-four (84) Physician Assistants ● Sixty-nine (69) Community Health Nurses ● Twenty (20) Public Health Nurses ● Fifty-one (51) Enrolled Nurses ● Sixty-five (65) General Nurses ● Four (4) Anaesthetics ● Nineteen (19) other staffs

12.3 MATERNAL HEALTH SERVICES OPD UTILIZATION

The total OPD attendance of the Sub-BMC appreciated by 12.6% (from 18,860 in 2022 to 21,237 in 2023) as shown in Figures 12.3.1 below. Attendance to most of the clinics went up significantly. Table 12.3.1 indicates that, Gynae. Oncology clinics attendance went up by 551.9% (from 77 in 2022 to 502 in 2023), Uro-gynae clinic attendance by 90.3% (from 134 in 2023 to 255 in 2023), Reproductive Endocrinology and Fertility clinic by 47.3% (from 357 in 2022 to 526 in 2,023). Additionally, PNC and Feto- Maternal clinics attendance increased by 47.7% (from 3027 in 2022 to 4471 in 2023) and 37.7% (from 912 in 2022 to 1,256 in 2023) respectively. However, ANC and Gynaecology Clinics attendance dropped by 10.0% and 2.0% respectively.

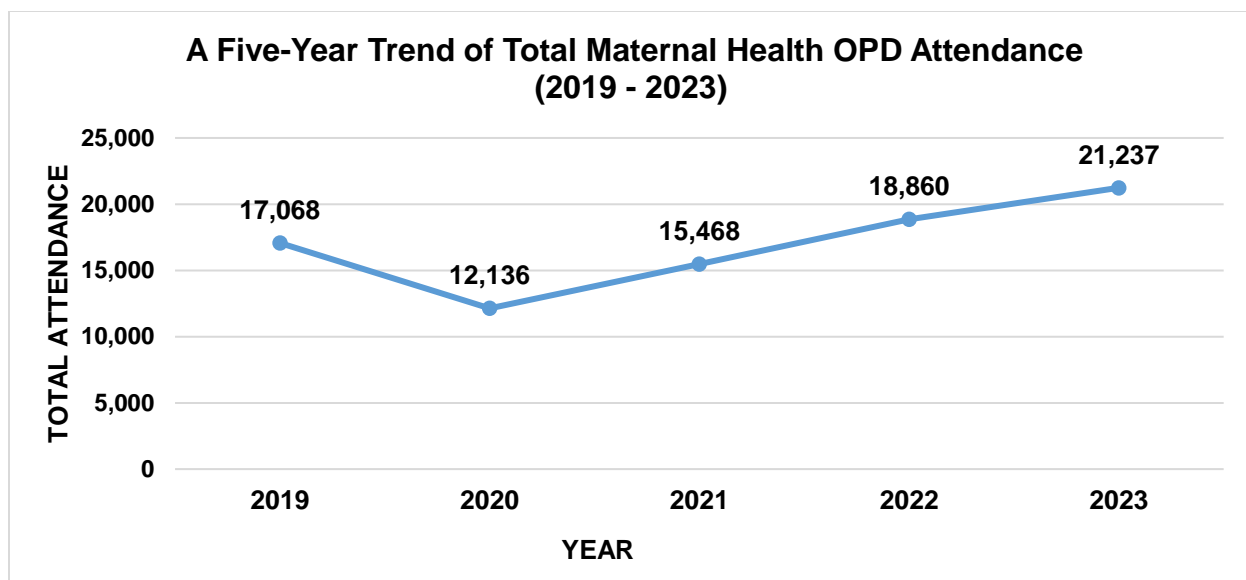


Figure 12.3. 1: Trend of Total Maternal Health OPD Attendance (2019-2023)

Table 12.3. 1: OPD Attendant for Maternal Health

CLINIC	2019	2020	2021	2022	2023	REMARKS
ANC	9,419	7,717	9,298	10,449	9,400	10.0% decr
PNC	3,384	1,866	2,520	3,027	4471	47.7% incr
Gynae	4,265	2,553	3,368	3,904	3826	2.0% decr
Reproductive Endocrinology and Fertility clinic	-	-	271	357	526	47.3% incr
Gynae. Oncology	-	-	11	77	502	551.9% incr
Uro-gynae	-	-	-	134	255	90.3% incr
Feto-Maternal	-	-	-	912	1,256	37.7% incr
Total Attendance	17,068	12,136	15,468	18,860	21,237	12.6% incr

12.4 MATERNAL HEALTH SERVICES IN-PATIENT UTILIZATION

Since the operationalisation of ETAT in 2021, the Sub-BMC has seen a steady rise in the number of admissions compared to previous years. However, total admissions dropped slightly by 7% (from 5,706 in 2022 to 5305 in 2023).

The percentage of maternal admissions due to external referrals increased from 26.71% in 2022 to 79.6% in 2023. Bed occupancy rate went up from 66.0% in 2022 to 77.1% in 2023 whereas the average length of stay increased from 3.5 days in 2022 to 4.5 days in

2023. Table 12.4. 1 provides an overview of the in-patient statistics at the sub-BMC whiles Table 12.4.2 highlights the in-patient statistics at the individual wards.

Table 12.4. 1: Maternal In-Patient Statistics

Indicator	2019	2020	2021	2022	2023	Remarks	Target	Measurement
Total Admission	2,033	2,000	2,058	5,706	5,305 (7.0% decr)	ETAT admissions were included in 2021 and 2023	-	-
Number of maternal admissions due to external referrals	976	776	556	1,077	4,224	292.2% incr		
Percentage of maternal admissions due to external referrals	27.2%	21.2%	23%	26.71%	79.6%	incr	60%	No. of Maternal admissions due to referrals / Total Maternal admissions
Total Discharges	2541	2559	2,730	4,710	4239	10% decr	-	
Trans-In	1009	983	1,157	1,455	1130	23.3% decr	-	
Trans-Out	617	389	460	2,404	2064	14.1% decr	-	
Average Daily Occupancy	31.0	32.4	32	45	52.4	16.4% incr	-	
% Bed Occupancy	68.8%	71.8%	71%	66.0%	77.1%	incr	-	
Average Length of Stay	4.5 days	4.0 days	4.2 days	3.5 days	4.5 days	incr	-	
Total Death	28	26	32	39	20	48.7% decr	-	

Table 12.4. 2: at Maternal Sub-BMCs in-patient statistics per Ward (2019 – 2023)

INDICATOR	O&G Ward					Delivery Suite					ETAT				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Admissions	2180	2000	2058	2022	1870	1861	1655	1769	2010	1803	-	-	1,280	1,674	1632
Discharges	2539	2554	2730	2820	2583	1626	1293	1412	1573	1409	-	-	153	317	270
Average Length of Stay (days)	4.4	4	4.2	4.3	4.5	1.5	1.1	1	1.7	4.7	-	-	1	4.2	4.5
Average Daily Bed Occupancy	30	32.4	32	33.7	33.6	7	5.8	8	7.5	11.7	-	-	8	7.5	11.7
% Bed Occupancy	67.8	71.8	70.3	71.8	73.8	34.8	30.3	27.7	30.3	61.8	-	-	63	82.6	86.6
Number of Deaths	9	13	16	21	10	3	1	0	1	2	-	-	6	-	8
Death Rate (%)	0.30	0.40	0.50	0.70	0.53	0.10	0.10	0.0	0.10	0.11	-	-	-	-	0.49

12.5 TOP 10 OBSTETRIC CONDITIONS

Eclampsia 402(24.77%) and other Hypertensive Disorders in Pregnancy 262 (16.14%) were the leading obstetric conditions recorded. On the other hand, Ectopic 5.18% (84) was the least among the top 10 obstetric conditions. Table 12.5.1 below provides a three-year trend of the top ten obstetric conditions from 2021 to 2023.

Table 12.5. 1: Top 10 Obstetric Conditions

2021		2022		2023	
CONDITION	No (%)	CONDITION	No (%)	CONDITION	No (%)
Eclampsia	161 (30.09%)	Hypertensive disease in pregnancy (Eclampsia-332)	471 (39.71%)	Eclampsia	402 (24.77%)
Hypertensive Disorders of Pregnancy	73 (13.64%)	Abortion	156 (13.15%)	Other hypertensive disorders of Pregnancy	262 (16.14%)
Gestational diabetes	65 (12.14%)	Urinary tract infection	145 (12.23%)	UTI in Pregnancy	214 (13.19%)
UTI in Cyesis	64 (11.96%)	Anaemia in pregnancy	110 (9.27%)	Abortion	180 (11.09%)
Abortion	51 (9.53%)	Diabetes mellitus in pregnancy	80 (6.75%)	Malaria in Pregnancy	116 (7.15%)
Malaria in Pregnancy	32 (5.98%)	Malaria in pregnancy	79 (6.66%)	GDM/DM in pregnancy	103 (6.36%)
Abnormal Uterine Bleeding	26 (4.86%)	Ectopic	66 (5.56%)	Hyperemesis gravidarum	88 (5.42%)
Anaemia in Pregnancy	22 (4.11%)	Premature rupture of membrane	44 (3.71%)	Haemorrhage/bleeding	87 (5.18%)
Preterm Labour	21 (3.92%)	Preterm Labor	2.95% (35)	Anaemia in Pregnancy	87 (5.18%)
Hyperemesis Gravidarum	20 (3.74%)			Ectopic	84 (5.18%)

12.6 MATERNAL HEALTH - KEY PERFORMANCE INDICATORS

The total deliveries recorded in 2023 declined significantly by 12% (from 3,269 in 2022 to 2,877 in 2023) which is above the hospital's target of 5% increase. Equally, the number of babies delivered dropped by 10.7% (from 3,408 in 2022 to 3,042 in 2023). The hospital since 2018 has been recording fluctuations in the partograph use rate. The partograph

use rate increased from 47.6% in 2022 to 62.0% in 2023. Further, the low-birth-weight rate decreased (from 20.5% in 2022 to 20.0% in 2023) but exceeded the teaching hospital's target of 12%. Although the hospital recorded a decline in the total number of still birth by 25% (from 140 in 2022 to 105 in 2023), the still birth rate increased (from 35/1000LB in 2022 to 36/1000LB).

The number of ANC new registrants decreased by 13.7% (from 808 in 2022 to 697 in 2023). Similarly, the ANC Attendance declined by 10.0% (from 10,449 in 2022 to 9,400 in 2023). During the period, the hospital recorded a decrease in the Couple year protection (from 2,626 in 2022 to 2,075 in 2023). Detailed analysis is highlighted in Figure 11.6. 1 to Figure 12.6. 3 and table 12.6. 1 below.

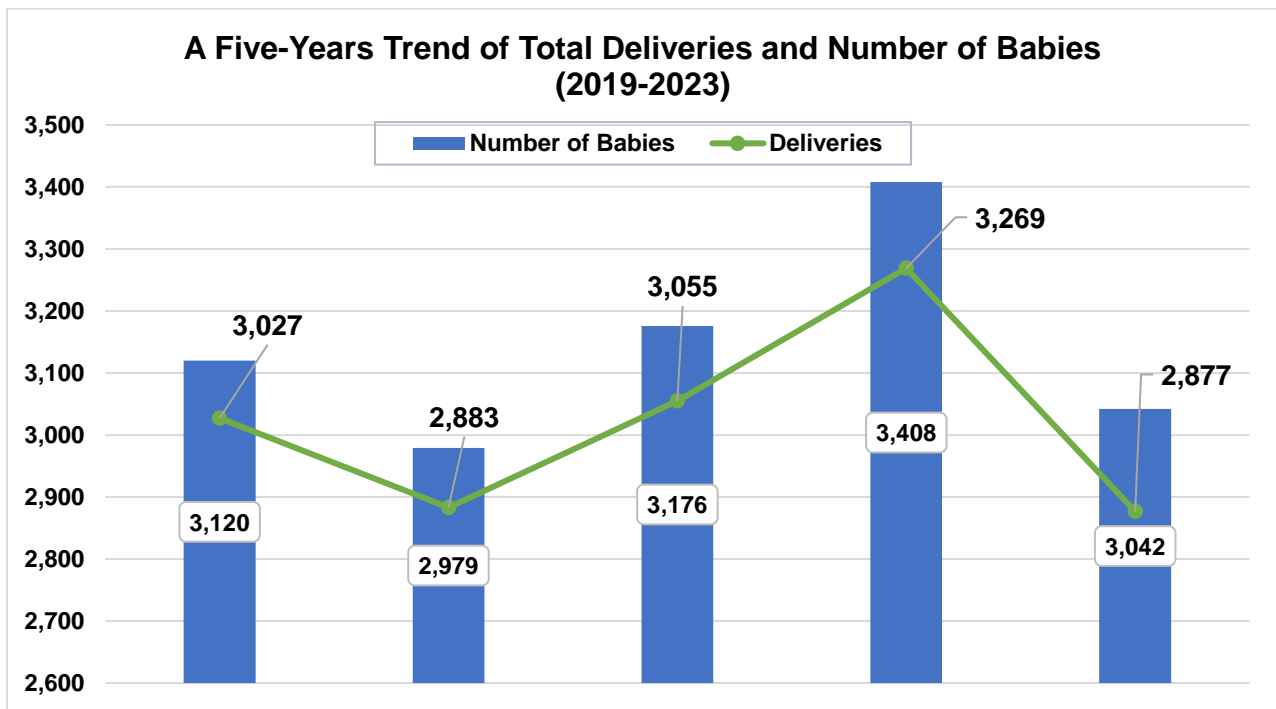


Figure 12.6. 1: Trend of Total Deliveries and Number of Babies (2019-2023)

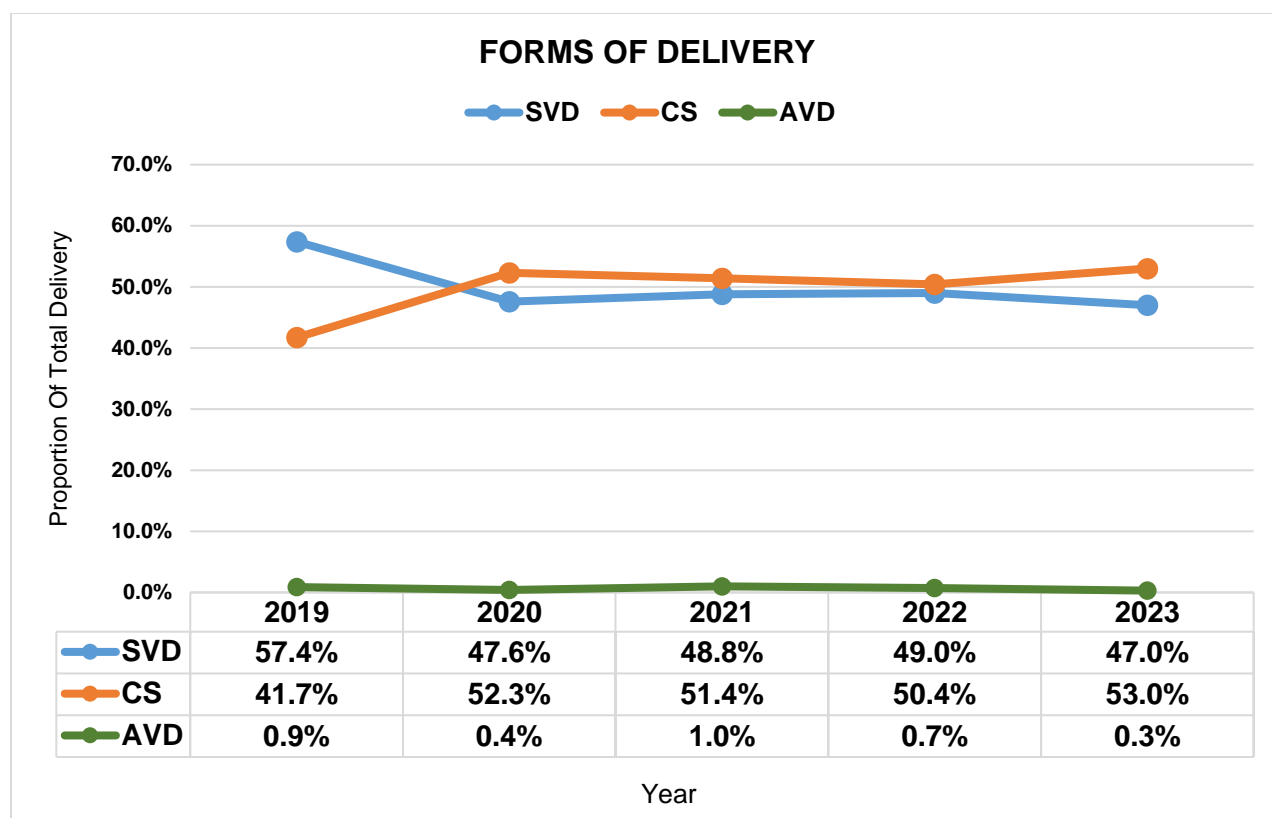


Figure 12.6. 2: Trend Analysis of Forms of Deliveries (2019-2023)

Table 12.6. 1: Maternal Health Key Performance Indicators

Indicator s	2019	2020	2021	2022	2023	Remarks	Target	Measurement
ANC Registrants	802	761	768	808	697	13.7% decr	CCTH = 10% Incr	-
ANC Attendance	9,419	7,717	9,298	10,449	9,400	10.0% decr	-	-
Deliveries	3,027	2,883	3,055	3,269	2877	12.0% decr	CCTH = 5% Incr	Total No. of Deliveries undertaken
Number of Babies	3,120	2,979	3,176	3,408	3,042	10.7% decr	-	-
Live births	2994	2,793	3,048	3,288	2937	10.7% decr	CCTH = 5% Incr	-
Low birth Weight Rate (%)	16.10	16.80	19.40	20.50	20.00	decr	THs = 12%	Total no. of babies < 2.5kg/ Total live births *100

Indicators	2019	2020	2021	2022	2023	Remarks	Target	Measurement
Total Still Birth	126	90	128	140	105	25% decr	-	-
Total Fresh Still Birth	39	38	43	54	42	22.2% decr	-	-
Total Macerated Still Birth	87	52	85	86	63	26.7% decr	-	-
Still Birth Rate Per 1,000LB	40	31	42	35	36	incr	THs = 15/1000LB	No. of babies born with no signs of life / Total no. of deliveries.
% Supervised Deliveries	100	100	100	100	100		-	-
Number of Caesarean Section	1,248	1,520	1,573	1,646	1,516	7.9% decr	-	
% Caesarean Section	41.20%	53.30%	51.40%	50.35%	52.69%	incr	THs = 40%	-
Partograph use rate	46.12%	48.70%	48.50%	47.60%	62.01%	incr	THs = 60%	Deliveries done with use or support of Partograph / Total deliveries * 100
Couple year protection	1,562.50	1,891	2,233	2,626	2,075	decr	THs = 2,500	Total No. of Commodities dispensed / CYP factor

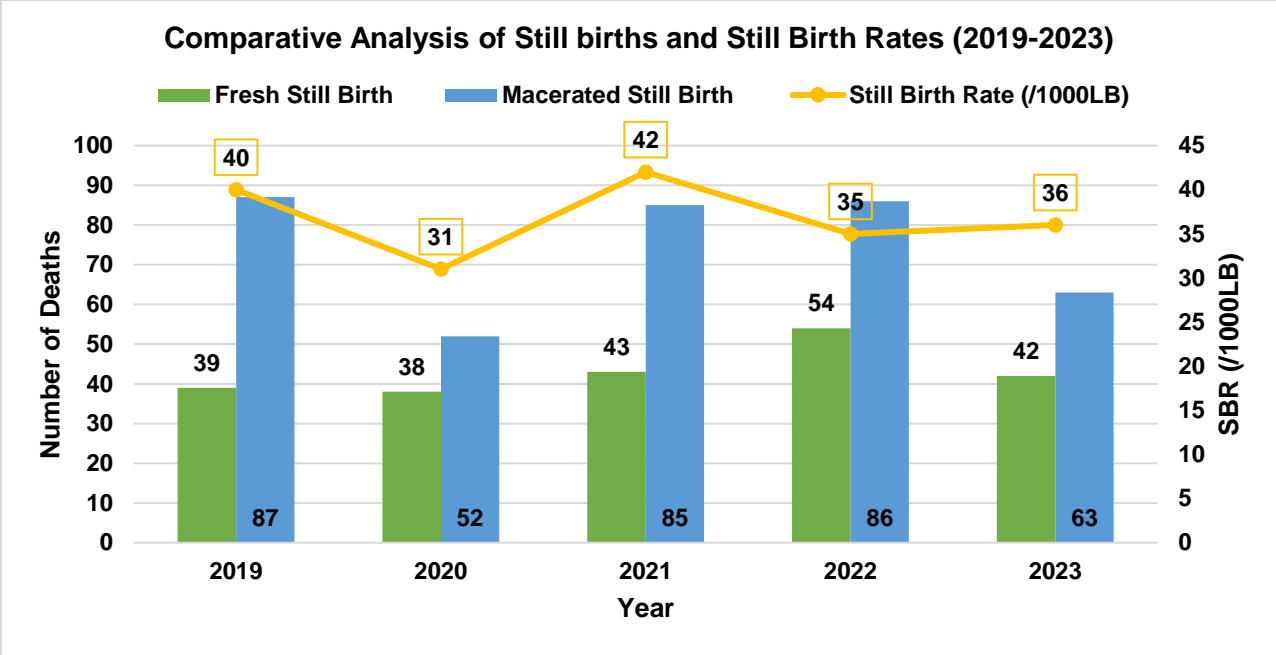


Figure 12.6. 3: Comparative Analysis of Still births and Still Birth Rates (2019-2023)

12.7 TOP 10 GYNAECOLOGY CONDITIONS

In 2023, Leiomyoma remained the leading cause of gynaecological conditions seen forming 33.3% (135) of the total cases seen. On the other hand, Acute Vaginitis was ranked as the least cases amongst the top 10 gynaecology cases seen constituting 0.99% (4). Details presented in table 12.7.1 below.

Table 12.7. 1: Top 10 Gynaecology Conditions from 2021 to 2023

2021		2022		2023	
CONDITIONS	NO. OF CASES	CONDITIONS	NO. OF CASES	CONDITIONS	NO. OF CASES
Leiomyoma of uterus (Uterine Fibroids)	51 (30.54%)	Leiomyoma (Abnormal uterine bleeding -33)	50.61% (124)	Leiomyoma	33.33% (135)
Ectopic Pregnancy	49 (29.34%)	Endometritis (Pelvic inflammatory dx – 29)	24.08% (59)	Abnormal uterine bleeding	20.49% (83)
Endometritis	21 (12.57%)	Malignant neoplasm/ cancers of the female	8.57% (21)	Pelvic Inflammatory dx	15.06% (61)

2021		2022		2023	
CONDITIONS	NO. OF CASES	CONDITIONS	NO. OF CASES	CONDITIONS	NO. OF CASES
		reproductive system			
Pelvic Inflammatory disease	15 (8.98%)	Ovarian cyst	5.71% (14)	Endometritis	11.11% (45)
Ovarian cyst	13 (7.7.8%)	Uterine prolapse	4.49% (11)	Malignant neoplasm/ cancers of the female reproductive system	7.41% (30)
Molar pregnancy	7 (4.19%)	Cervical polyps	4.08% (10)	Ovarian cyst	3.7% (15)
Endometrial hyperplasia	4 (2.40%)	Vaginal prolapse	2.04% (5)	Cervical Polyps	3.21% (13)
Cervical cancer	4 (2.40%)	Female infertility	0.41% (1)	Endometriosis	3.21% (13)
Uterovaginal Prolapse	2 (1.20%)			Dysmenorrhea	1.48% (6)
Ovarian Torsion	1 (0.60%)			Acute Vaginitis	0.99% (4)

12.8 OBS & GYNAE SURGERIES PERFORMED

During the period, the total obs. & gynae surgeries conducted declined by 5.5% (from 1,937 in 2022 to 1,830 in 2023). Similarly, the total number of major obs. & gynae surgeries dropped by 7.8% (from 1,918 in 2022 to 1,768 in 2023). However, the number of minor obs. & gynae surgeries went up significantly by 226.3% (from 19 in 2022 to 62 in 2023).

Further, the total gynaecological major surgeries performed decreased by 4.4% (from 137 in 2022 to 131 in 2023). Caesarean section continues to be the leading major obs. & gynae. surgical procedure in the hospital whiles Cervical Cerclage recorded the lowest. Figure 12.8.1 to figure 12.8.2 and Table 12.8.1 below provides detailed analysis.

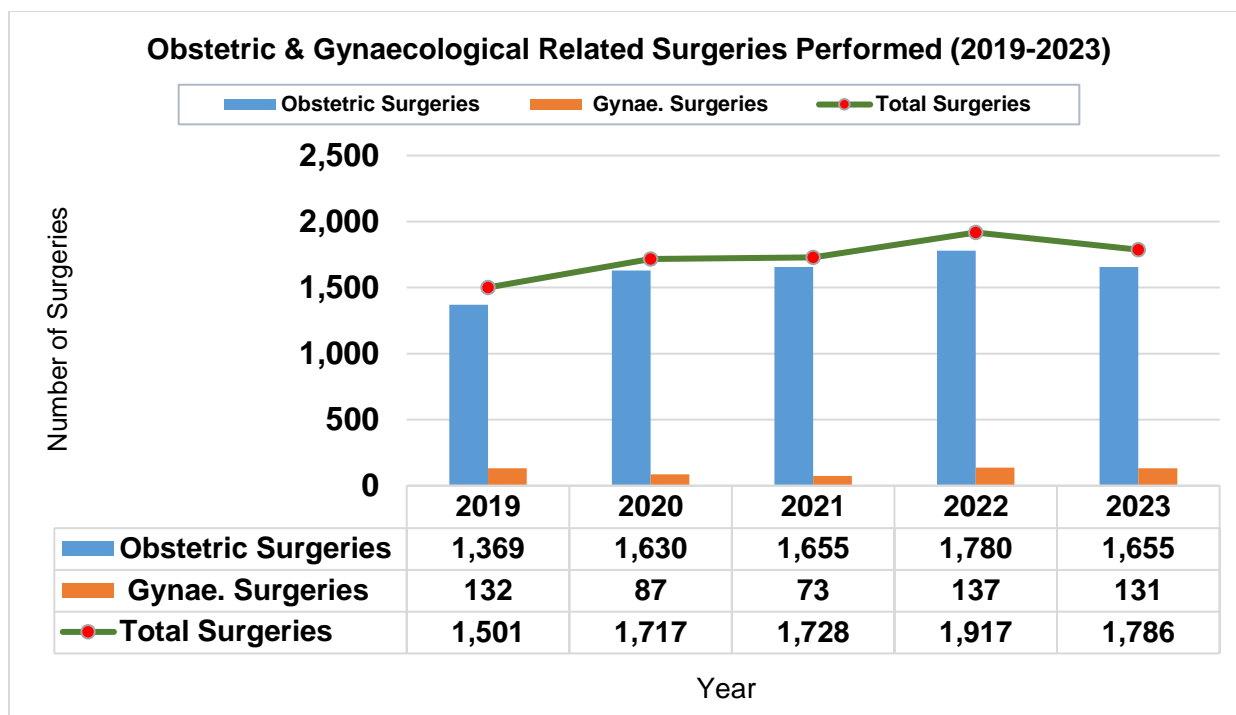


Figure 12.8. 1: Obstetric & Gynaecological Related Surgeries Performed (2019-2023)

Table 12.8. 1: Obs. & Gynae Surgeries Performed

Procedure	2019	2020	2021	2022	2023	Remarks
OBSTETRIC RELATED SURGERIES						
Major Obstetric Surgeries						
Caesarean Section	1,264	1,520	1,462	1,646	1,506	8.62% decr
Hysterectomy	3	3	7	-	-	-
Sterilization	-	-	0	-	-	-
Laparotomy for,						
• Ectopic	72	76	58	89	64	28.09% decr
• Ovarian Cyst	-	10	17	17	3	82.4% decr
• Exploratory	30	21	27	28	15	46.4% decr
Minor Obstetric Operations	-	-	-	-	62	
Others	-	-	84	-	5	
Total	1,369	1,630	1,655	1,780	1,655	7.0% decr

Procedure	2019	2020	2021	2022	2023	Remarks
GYNAECOLOGY RELATED SURGERIES						
Myomectomy	66	44	48	69	79	14.5% incr
C/S	-	-	-	-	10	
Total Abdominal Hysterectomy (TAH)	53	29	20	50	32	36% decr
Vaginal Hysterectomy	5	6	0	8	5	37.5% decr
Cervical cerclage	7	5	5	6	2	66.7% decr
Fistula repair	1	3	-	4	3	25% decr
Total	132	87	73	137	131	2.24%

12.9 MATERNAL MORTALITY

In 2023, the hospital recorded a significant decrease of 48.7% in the number of maternal deaths (from 39 in 2022 to 20 in 2023). Similarly, the institutional maternal mortality rate declined significantly from 1,186 in 2022 to 681/100,000 LB in 2023. Majority (85%) of the reported maternal deaths were cases referred to the hospital. 55% (11) of the deaths occurred within 48 hours of admission while 45% (9) occurred after 48 hours upon admission at the hospital. Details of the analysis is presented in figures 12.9.1, figure 12.9.2 and table 12.9.1 to 12.9.2 below.

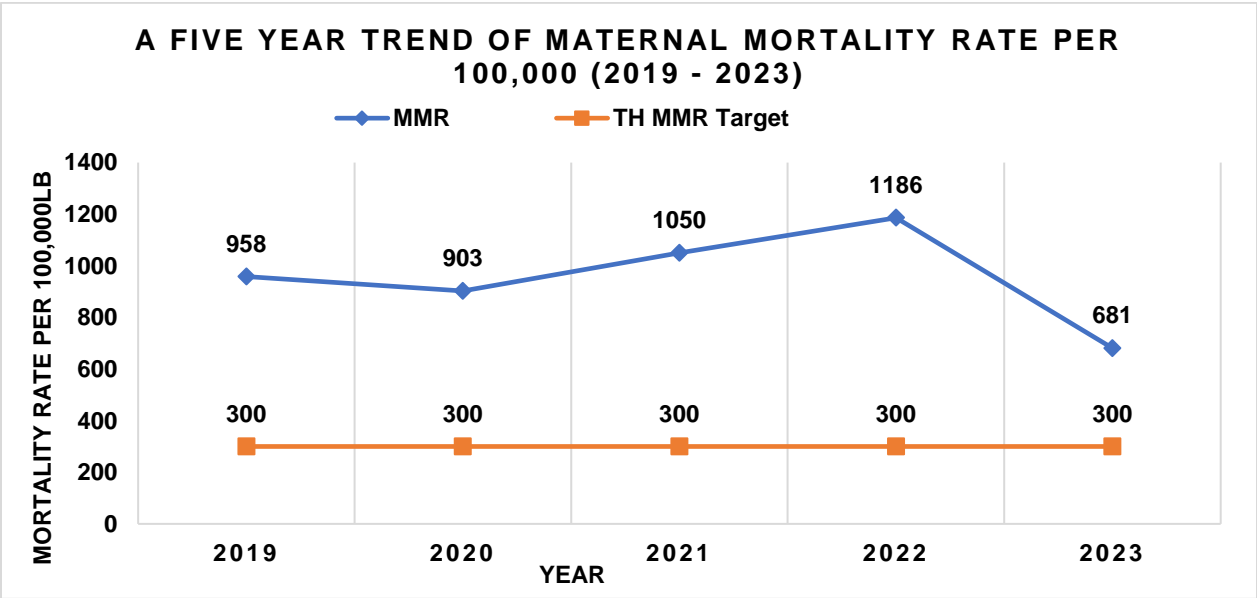


Figure 12.9. 1: A Five-Year Trend of Maternal Mortality Rate (2019 – 2023)

Table 12.9. 1: Breakdown of Maternal Mortality

INDICATORS	2019	2020	2021	2022	2023	REMARKS	TARGET	MEASUREMENT
Maternal Death	28	26	32	39	20	48.7% <i>decr</i>	-	-
<i>Referred cases</i>	89.7% (24)	92.3% (24)	75.0% (24)	82.1% (32)	85% (17)	<i>decr</i>		
<i>CCTH cases</i>	10.3% (4)	3.8% (2)	25.0% (8)	17.9% (7)	15% (3)	<i>Decr</i>		
Maternal Mortality Ratio Per 100,000 Live Births	958	903	1,050	1,186	681	<i>decr</i>	THs = 300	No of maternal deaths / total live births * 100 000
% of maternal mortalities audited	100	100	100	100	100		100	

Table 12.9. 2: Duration of Maternal Deaths

INDICATOR	2019	2020	2021	2022	2023	REMARKS
<i>Time of death</i>						
Deaths in less than 48 hrs. upon Admission (<48 Hours)	58.6%	57.7%	52%	56.4%	55%	Decreased
Deaths in 48hrs/more upon (≥ 48 Hours)	41.4%	42.3%	48.4%	43.6%	45%	Increased

12.9.1 TOP CAUSES OF MATERNAL MORTALITY

In 2023, Hypertensive Disorders of Pregnancy (Eclampsia) was the leading cause of maternal mortality constituting 35% (7) of the total causes of maternal mortality. Table 12.9.1.1 below presents a trend of the causes of maternal deaths in the hospital.

Table 12.9.1. 1: Top Causes of Maternal Mortality

2021		2022		2023	
Condition	%	Condition	%	Condition	%
Hypertensive diseases in pregnancy	13 (40.6%)	Sepsis	12 (30.8%)	Hypertensive Disorders in	7 (35%)

2021		2022		2023	
Condition	%	Condition	%	Condition	%
(Eclampsia)				Pregnancy (Eclampsia)	
Sickle Cell	5 (15.6%)	Obstetric Haemorrhage	11(28.2%)	Sepsis	5 (25%)
Acute Kidney Injury	5 (15.6%)	Hypertensive Disorders in Pregnancy	9 (23.1%)	Obstetric Haemorrhage (PPH=2) (APH=2)	4 (20%)
Anaemia in Pregnancy	2 (6.25%)	Embolism	2 (5.1%)	Acute Kidney Injury	1 (5%)
Pneumonia	2 (6.25%)	Metastatic Gall Bladder Cancer	1 (2.56%)	Empyema Thoracis	1 (5%)
				Pulmonary Embolism	1 (5%)

12.9.2 REFERRAL FACILITIES AND THE MATERNAL DEATHS RECORDED

The Hospital provides mentorship training on safe motherhood and lifesaving Service (LSS) in Emergency Obstetric and New-born Care (EmONC) to peripheral facilities as a strategy to improve on the survival chances of pregnant women. This is to enable them to improve on the management of cases before referring them to CCTH for specialised care. Nonetheless, it is crucial for stakeholders to be committed in their shared responsibilities geared towards improving the survival rates of these pregnant women, especially during emergencies.

In the year under review, the hospital recorded 20 maternal deaths out of which 85% (17) were cases from referral facilities. Table 12.9.2.1 below provides details of the number of maternal deaths recorded and the referring facility.

Table 12.9.2. 1: Referral Facilities of The Maternal Deaths from 2021-2023

2021		2022		2023	
Institution	No.	Institution	No.	Institution	No.
Saltpond Municipal Hospital	3	Abrem Agona Health Centre	3	Twifo-Attimorkwaa District Hospital (TAMDH)	3
Kissi Health Centre	2	Twifo Praso	2	Swedru Municipal Hospital	2

2021		2022		2023	
Institution	No.	Institution	No.	Institution	No.
Adisadel Hospital	2	Komenda Health Centre	2	self-Referred	2
Cape Coast Metro	3	St. Francis Xavier Hospital	2	Biriwa Polyclinic	2
St. Francis X'avier	2	Swedru Government Hospital	2	Mercy Women's Hospital	1
Ankaful Psychiatric Hospital	1	TAMDH	2	Nkwantanan CHPS	1
Gomoa Fetteh	1	Cape Coast Metro Hospital	1	Ankaful Psychiatry Hospital	1
Winneba Trauma	1	Mercy Women's Hospital	1	Ankaful Lep/Gen Hospital	1
Mother & Child Clinic	1	Moree District Hospital	1	Komenda Health Centre	1
Moree Hospital	1	UCC Hospital	1	Elmina Polyclinic	1
U.C.C Hospital	1	Akatakwiwa CHPS	1	Ajumako District Hospital	1
Ankaful General Hospital	1	Tarkwa Municipal Government	1	Premier District Hospital	1
Abrem Agona	1	Ankaful Leprosy and General Hospital	1	Moree Health Centre	1
Komenda	1	Bisease Polyclinic	1	St. Francis Xavier Hospital, Assin Fosu	1
ST. Luke, Apam	1	Amosima CHPS	1	Cape Coast Teaching Hospital	1
Twifo Praso	1	Breman Asikuma	1		
		Elmina polyclinic	1		
		Sanford Clinic	1		
Total (Referrals)	24	CCTH	7	Total (Referrals)	17
CCTH cases	8	Total	39	CCTH cases	3
Grand Total	32			Grand Total	20

CHAPTER THIRTEEN

CHILD HEALTH SUB-BMC

13.1 BACKGROUND

The Child Health Sub-BMC oversee the management of patients who are aged from zero (0) to sixteen (16) years with surgical and medical conditions. The sub-BMC also has a Special Care Baby Unit (NICU) for new-borns with critical conditions. The Sub-BMC is manned by a six-member Management team.

13.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

Table 13.2.1 below provides a summary of the key outputs and outcomes of Child Health Sub-BMC in line with the six medium-term strategic objectives of the hospital.

Table 13.2. 1: Summary of the 2023 Annual Performance of Child Health Sub-BMC under the Strategic Objectives.

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2019	2020	2021	2022	2023	Target	Remarks
Total OPD Attendance	9,536	7,172	11,027	10,444	10,591		1.41% incr
Percentage of neonatal admissions due to external referrals	27.2%	25.5%	15%	13.80%	11.24%	THs = 30%	Incr Target not met
Increased staff specialisation; <ul style="list-style-type: none"> • Doctors:1 infectious disease sub-specialist, 2 paediatricians • Nurses:1 neonatal nurse specialist, 1 associate paediatric nurse 							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Impact	2019	2020	2021	2022	2023	Target	Remarks
Low birth rate	16.1%	16.8%	19.4%	20.5%	23.2%	THs = 12%	Incr Target not met

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
Institutional infant mortality rate (/1000LB)	91	89	88	77	67	THs = 15	Decr but was not Target met
Number of Infant deaths	272	284	267	252	197	-	21.8% ↓
Institutional neonatal mortality rate (/1000)	80	81	78	67		TH = 25	
Number of institutional neonatal deaths	239	233	239	219	170	CCTH = 5% ↓	22.4% ↓ and target met
Under-five mortality rate (/1000LB)	101	106	95	80	72	-	Decr
Number of Institutional under-five mortality	301	307	290	264	213	CCTH = 5% ↓	19.3% ↓ and target met
<p>Improved advocacy</p> <ul style="list-style-type: none"> • Successful awareness campaigns of major conditions that contribute to childhood mortality were done on the following media stations; (Pax FM, Cape FM, Ahomka FM, Kastle FM, Eagle FM, Metro TV, Ocean TV) • The conditions of the awareness were; (Neonatal jaundice, Prematurity, Breastfeeding, Birth asphyxia, Childhood cancer) 							
Held educational Talks/Videos at the OPD							
Provided education at peripheral units and communities during Prematurity Awareness Day at Elmina Community in collaboration with Elmina Polyclinic							
Organised the following in-service trainings; (ETAT (Emergency, Triage and Treatment) and resuscitation training, 1 customer service training & 2 IPC trainings)							
Held regular weekly teaching sessions							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
<p>Acquired the following medical equipment;</p> <ul style="list-style-type: none"> • 1 suction machine • 1 bedside monitor with a sphygmomanometer 							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
<ul style="list-style-type: none"> ● 3 new cardiac monitors ● 15 pulse oximeters ● 10 drip-stands ● 4 screens ● 2 sphygmomanometers
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Organised sub-BMC meetings and staff durbar
4.3 Finance related performance
Increased revenue from all sources – NHIS/ cash & carry/corporate etc.
Increased expenditure – stores/petty cash
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
Submitted research proposal for ethical clearance on a project in collaboration with ST on rotavirus surveillance in children <ul style="list-style-type: none"> ● Sickle cell disease research ● Clinical service audits
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Provided telephone feedback on referred cases when possible
Provided support to peripheral health facilities; <ul style="list-style-type: none"> ● Telephonic case discussion and management ● Visits to periphery during childhood awareness campaigns such as prematurity month, childhood cancer awareness month etc.

13.3 CHILD HEALTH OPD SERVICES UTILIZATION

During the year, the general paediatric clinic attendance declined by 0.63% (from 8,461 in 2022 to 8,408 in 2023) whiles the total paediatric specialist clinic attendance increased by 9.6 % (from 1,991 in 2022 to 2,183 in 2023). The NICU Follow-Up clinic and Paediatric Neuro clinic saw a decline of 7.3% (from 958 in 2022 to 888 in 2023) and 6.1% (from 294 in 2022 to 276 in 2023) respectively in their attendance as compared to the other

Paediatric Sub-Specialty clinics that recorded an increase in their OPD attendance. Detailed trend analysis is provided in Figure 13.3.1 and Table 13.3. 1 below.

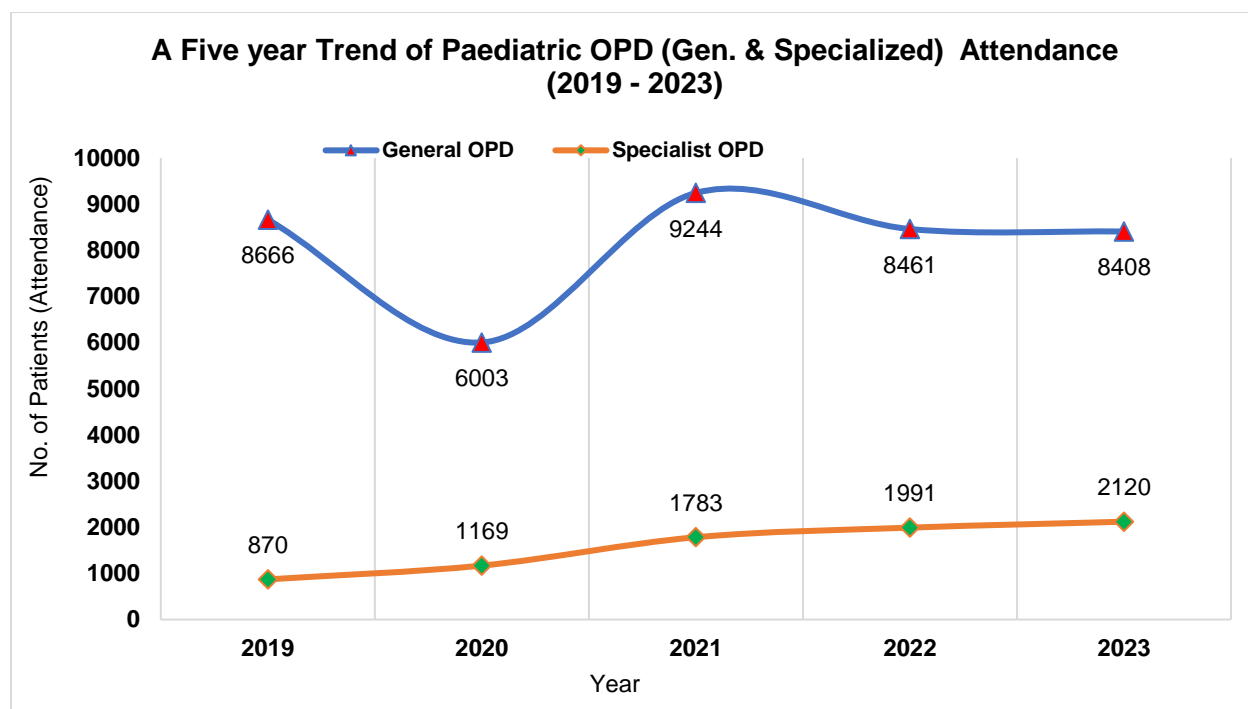


Figure 13.3. 1: A Five-Year Trend of Paediatric OPD (Gen. & Specialized) Attendance (2019 – 2023)

Table 13.3. 1: Yearly Breakdown of Child health OPD Clinic Attendance (2019 – 2023)

CLINICS	2019	2020	2021	2022	2023	REMARKS
General Paediatrics Clinic	8,666	6,003	9,244	8,461	8,408	0.63% decr
Paediatric Specialist Clinic						
NICU Follow-Up	206	247	890	958	888	7.3% decr
Paedics Asthma	78	57	102	111	118	5.9% incr
Paedics Neuro	137	213	245	294	276	6.1% decr
Paedics Renal	97	216	115	79	98	19.3% incr
Paedics Cardio	21	60	58	38	77	50.6% incr
Paediatrics - Sickle Cell clinic	331	328	351	463	619	25.2% incr

CLINICS	2019	2020	2021	2022	2023	REMARKS
Paediatrics Oncology	-	48	22	23	30	30% incr
Paediatric Endocrine	-	-	-	17	44	61.3% incr
Osteogenesis Imperfecta	-	-	-	8	33	incr
<i>Total Paediatric Specialist Clinic Attendance</i>	<i>870</i>	<i>1,169</i>	<i>1,783</i>	<i>1,991</i>	<i>2,183</i>	<i>9.6% incr</i>
Total OPD Attendance	9,536	7,172	11,027	10,444	10,591	1.41% incr

13.4 CHILD HEALTH ADMISSIONS

The number of admissions to the paediatric ward increased marginally by 1.1% during the year under review (from 1,898 in 2022 to 1,920 in 2023) comparatively to NICU admissions which recorded a decrease of 2.7% (from 1,076 in 2022 to 1049 in 2023). The bed occupancy rate at the Paediatric ward went up significantly from 63.1% in 2022 to 68% in 2023. Similarly, the bed occupancy rate at NICU increased from 63% in 2022 to 85.7% in 2023. The average length of stay at the paediatric ward went up (from 5.4 days in 2022 to 5.9 days in 2023) whereas the average length of stay at NICU increased from 7.3 days in 2022 to 8 days in 2023. Further, there was a decline in both the number of deaths at the Paediatric and NICU wards in 2023. Detailed trend analysis is provided in figure 13.4.1 and tables 13.4.1 to table 13.4.2 below.

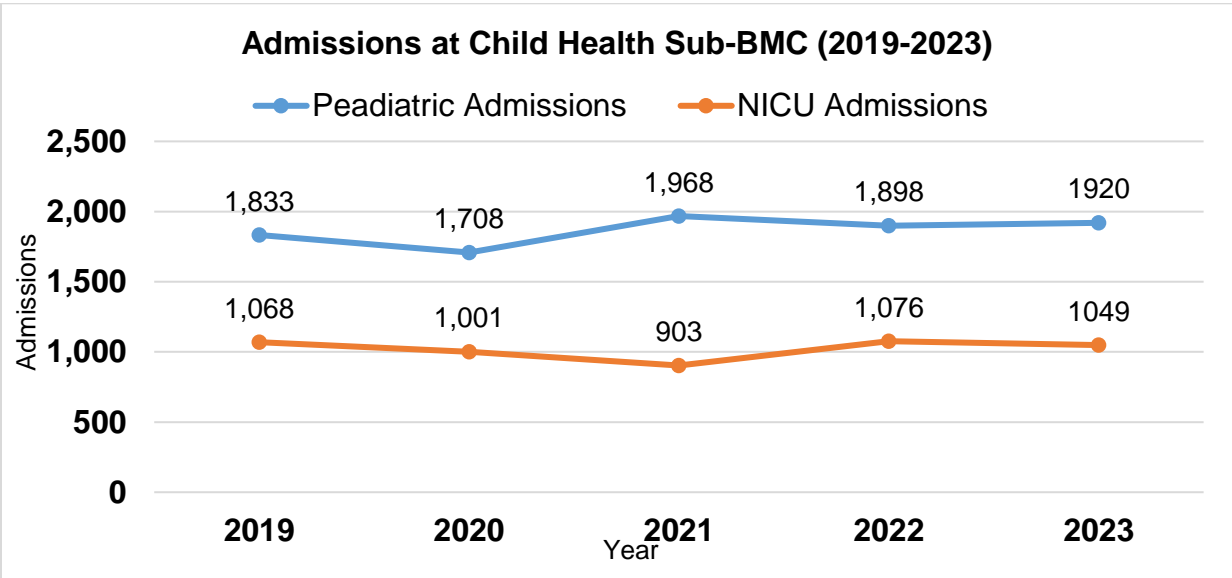


Figure 13.4. 1: Admissions at Child Health Sub-BMC (2019-2023)

Table 13.4. 1: Paediatric Ward Performance (2019-2023)

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Admissions	1,833	1,708	1,968	1,898	1920	1.1% incr
Discharges	1,791	1,512	1,940	1,969	1943	1.3% decr
Average Daily Occupancy	32	30.4	33	33.7	33	0.7% decr
% Bed Occupancy	67.2	63.1	69	63.1	68.6	5.5% incr
Average Length of Stay (Days)	6.2	6.1	5.9	5.4	5.9	0.5% incr
Number of Deaths	119	99	117	101	89	11.9% decr
Death Rate (%)	6.2	6.1	5.6	4.9	4.4	0.5% Decr

Table 13.4. 2: NICU Ward Performance (2019 – 2023)

Indicator	2019	2020	2021	2022	2023	Remarks	Target	Measurement
Total Admissions	1,068	1,001	903	1,076	1,049	2.7% decr	-	-
No. of Neonatal admissions due to referrals	291	262	131	149	118	20.8% decr	-	-
Percentage of neonatal admissions due to external referrals	27.2%	25.5%	15%	13.8%	11.24%	Decr	30%	No. of Neonatal admissions due to referrals / Total neonatal admissions
Discharges	802	702	649	751	796	5.9% incr	-	-
Average Daily	20	18.1	19	18.8	21	incr	-	-
% Bed Occupancy	83.3	75.3	80.6	63.0	85.7	incr	-	-
Average Length of Stay	7.2	7.2	7.8	7.3	8.0	incr	-	-
Number of Deaths	218	227	201	185	141	23.8% decr	-	-
Death Rate (%)	20.5	24.2	23.6	22.2	15.0	decr	-	-

13.5 TOP 10 CAUSES OF CHILD HEALTH ADMISSION

Jaundice and sepsis have been the two-leading cause of Paediatric admissions since 2018, accounting for 23.8% (480) and 17.3% (348) of all paediatric admissions in 2023 respectively. Further, 12.6% (253) of all child admissions were due to Prematurity and

Asphyxia 11.9 (240). Gastroenteritis & Colitis was the least among the top ten causes of child health admissions, representing 4.7% (95). Details highlighted in figure 13.5. 1 and table 13.5.1 below.

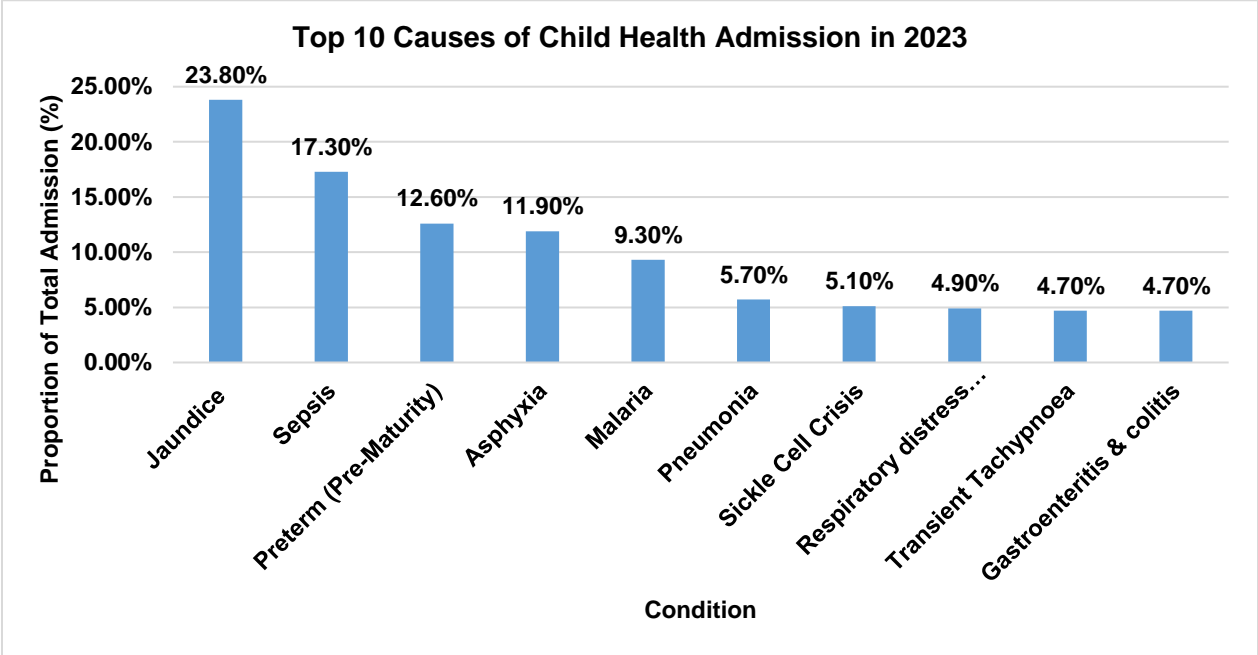


Figure 13.5. 1: Top 10 Causes of Child Health Admission in 2023

Table 13.5. 1: Top 10 Causes of Child Admission (2021-2023)

2021		2022		2023	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Sepsis	414	Jaundice	567 (14.4%)	Jaundice	480 (23.80%)
Jaundice	340	Sepsis	348 (8.9%)	Sepsis	348 (17.30%)
Asphyxia	273	Asphyxia	304 (7.7%)	Pre-Maturity	253 (12.60%)
Pre-Maturity	254	Prematurity	245 (6.2%)	Asphyxia	240 (11.90%)
Low Birth Weight	137	Malaria	142 (3.6%)	Malaria	188 (9.30%)
Malaria	137	Respiratory distress syndrome	142 (3.6%)	Pneumonia	115 (5.70%)
RDS	119	Malnutrition	131 (3.3%)	Sickle Cell Crisis	102 (5.10%)
Broncho pneumonia	67	Low birth weight	108 (2.7%)	Respiratory distress syndrome	99 (4.90%)
Sickle Cell	67	Gastroenteritis & colitis	90 (2.3%)	Transient Tachypnoea	95 (4.70%)
Anaemia	60	Sickle cell anaemia	88 (2.2%)	Gastroenteritis & colitis	94 (4.70%)

13.5.1 TOP TEN CAUSES OF NEONATAL ADMISSIONS

During the year, Jaundice, Sepsis, Asphyxia, and Prematurity were the leading cause of neonatal admissions, accounting for 28.5% (474), 18.8% (313), 15.2% (253), and 14.4% (240) respectively. Meconium Aspiration and Anaemia representing 2.0% (33) and 1.9% (32) respectively, constituted the least of the top ten causes for neonatal admissions. Table 13.5.1.1 present details of the analysis.

Table 13.5.1. 1: Top Causes of Neonatal Admissions (2021-2023)

2021		2022		2023	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Jaundice	336 (18.9%)	Jaundice	489 (25.2%)	Jaundice	474 (28.5%)

2021		2022		2023	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Sepsis	324 (18.2%)	Sepsis	285 (14.7%)	Sepsis	313 (18.8%)
Asphyxia	269 (15.1%)	Asphyxia	268 (13.8%)	Pre-Maturity	253 (15.2%)
Pre-Maturity	246 (13.8%)	Pre-Maturity	206 (10.6%)	Asphyxia	240 (14.4%)
Low Birth Weight	137 (7.7%)	Respiratory distress syndrome	122 (6.3%)	Respiratory distress syndrome	98 (5.9%)
Respiratory distress syndrome	117 (6.6%)	Low Birth Weight	85 (4.4%)	Transient Tachypnoea	95 (5.7%)
Meconium aspiration	25 (1.4%)	Transient tachypnoea	50 (2.6%)	Low Birth Weight	91 (5.5%)
Hypoglycaemia	21 (1.2%)	Meconium aspiration	29 (1.5%)	Pneumonia	35 (2.1%)
Heart disease unspecified	16 (0.9%)	Haemorrhage	17 (0.9%)	Meconium Aspiration	33 (2.0%)
Hydrocephalous	14 (0.8%)	Syphilis	17 (0.9%)	Anaemia	32 (1.9%)

13.5.2 TOP TEN CAUSES OF UNDER FIVE ADMISSIONS

The hospital reported Jaundice, Sepsis, Prematurity and Asphyxia as the four topmost causes for under-five admissions in 2023, accounting for 30.5% (440), 17.1% (247), 15.8% (228) and 14.6% (211) respectively. However, the number of Jaundice cases dropped from 567 in 2022 to 440 in 2023. Meconium Aspiration and Anaemia representing 2.0% (33) and 1.9% (32) respectively, constituted the least of the top ten causes of under-five admissions in 2023. Details of the analysis is presented in table 13.5.2.1 below.

Table 13.5.2. 1: Top Causes of Under Five Admissions from 2021 to 2023

2021		2022		2023	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Sepsis	395 (14%)	Jaundice	567 (18.0%)	Jaundice	440 (30.5%)
Jaundice	339 (12.0%)	Sepsis	341 (10.8%)	Sepsis	247 (17.1%)
Asphyxia	272 (9.6%)	Asphyxia	304 (9.7%)	Prematurity	228 (15.8%)

2021		2022		2023	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Pre-Maturity	254 (9.0%)	Prematurity	245 (7.8%)	Asphyxia	211 (14.6%)
Low Birth Weight	137 (4.8%)	Respiratory distress syndrome	141 (4.5%)	Respiratory distress syndrome	88 (6.1%)
Respiratory distress syndrome	119 (4.2%)	Low birth weight	108 (3.4%)	Transient Tachypnoea	87 (6.0%)
Malaria	81 (2.9%)	Malaria	80 (2.5%)	Low Birth Weight	81 (5.6%)
Broncho pneumonia	57 (2.0%)	Malnutrition	78 (2.3%)	Meconium Aspiration	28 (1.9%)
Gastroenteritis	45 (1.6%)	Gastroenteritis & colitis	74 (2.3%)	Syphilis	1.9 (1.3%)
Malnutrition	43 (1.5%)	Broncho pneumonia	59 (1.9%)	Anaemia	12 (0.8%)

13.6 CHILD MORTALITIES

There was a marginal improvement in the child health mortality indicators during the year under review although the hospital could not meet the Teaching Hospital's targets. The neonatal mortality rate declined from 67/1000LB to 58/1000LB. In the same vein, institutional infant mortality rate decreased from 77/1000LB in 2022 to 67/1000LB in 2023 whereas the under-five mortality rate dropped from 80/1000LB in 2022 to 72/1000LB in 2023 as shown in table 13.6.1 below.

Table 13.6. 1: Breakdown of Child Mortality (2019 – 2023)

INDICATORS	2019	2020	2021	2022	2023	REMARKS	TARGET
Neonatal Deaths	239	233	239	219	170	22.4% decr	-
Neonatal Mortality Rate (/1000LB)	80	81	78	67	58	decr	THs = 25/1000LB
Infant Deaths	272	284	267	252	197	21.8% decr	-
Institutional Infant mortality rate (/1000LB)	91	89	88	77	67	decr	THs = 15/1000LB
Infants Admissions-Institutional	1660	1,357	1,734	1,975	1933	2.1% decr	-

INDICATORS	2019	2020	2021	2022	2023	REMARKS	TARGET
Number Of < 5 Deaths	301	307	290	264	213	19.3% decr	-
Under 5 Mortality Rate (/1000 LB)	101	106	95	80	72	decr	-

13.6.1 TOP TEN CAUSES OF CHILD MORTALITY

Respiratory Distress Syndrome remained as the leading cause of child mortality since 2021 constituting 29.0% (49) of the total child mortality during the period in spite of 23.4% drop in the total number of deaths (from 64 in 2022 to 49 in 2023). Similarly, the number of Birth Asphyxia cases declined but it remained the second leading cause of child mortality accounting for 19.5% of the total deaths. However, Severe Acute Malnutrition 4.1% (7) and Meningitis 3.0% (5) were the least cause of child mortality in 2023. Details presented in figure 13.6.1.1 and table 13.6.1.1 below.

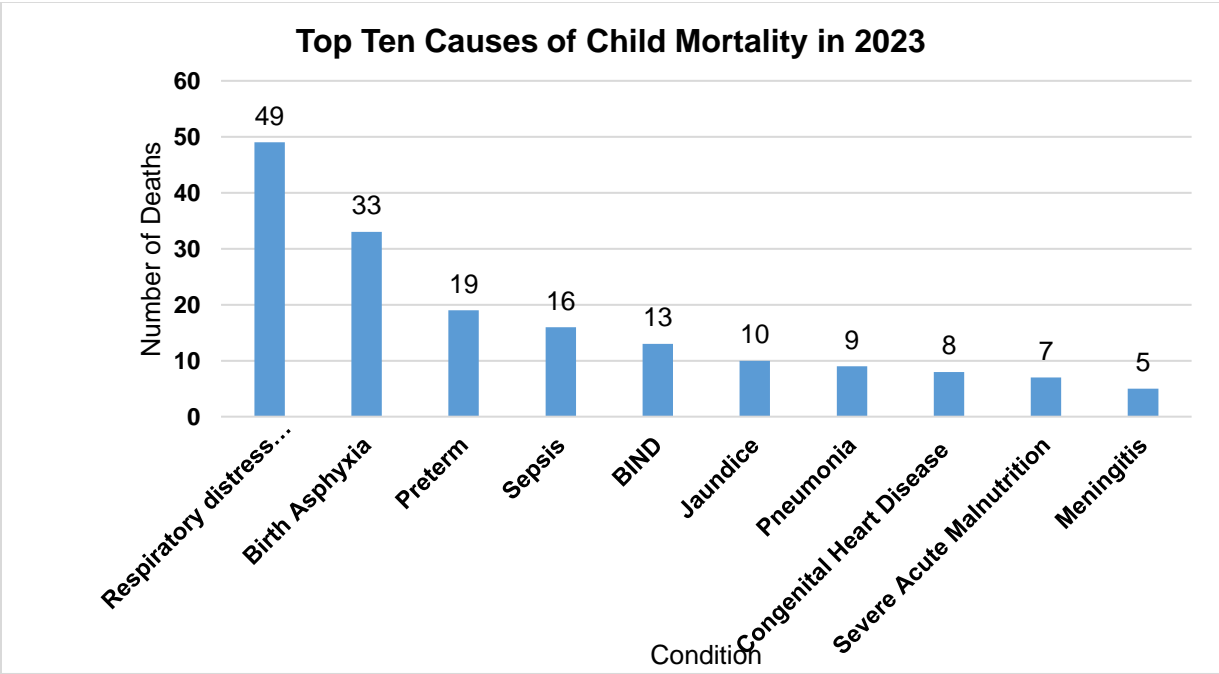


Figure 13.6.1. 1: Top Ten Causes of Child Mortality In 2023

Table 13.6.1. 1: Top Ten Causes of Child Mortality (2021 - 2023)

2021		2022		2023	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Respiratory distress syndrome	70 (22.0%)	Respiratory distress syndrome	64 (22.45%)	Respiratory distress syndrome	49 (29.0%)
Asphyxia	60 (18.9%)	Asphyxia	43 (15.0%)	Birth Asphyxia	33 (19.5%)
Sepsis	41 (12.9%)	Sepsis	33 (11.5%)	Preterm	19 (11.2%)
BIND	22 (6.9%)	NEC	12 (4.2%)	Sepsis	16 (9.5%)
Respiratory Failure	17 (5.3%)	Respiratory Failure	9 (3.1%)	BIND	13 (7.7%)
Septic shock	14 (4.4%)	BIND	8 (2.8%)	Jaundice	10 (5.9%)
Aspiration pneumonia	7 (2.2%)	Meconium aspiration	8 (2.8%)	Pneumonia	9 (5.3%)
Bronchopneumonia	5 (1.6%)	Prematurity	7 (2.4%)	Congenital Heart Disease	8 (4.7%)
Congenital heart disease	5 (1.6%)	Aspiration pneumonia	3 (1.0%)	Severe Acute Malnutrition	7 (4.1%)
Anaemia	4 (1.3%)	Pulmonary oedema	3 (1.0%)	Meningitis	5 (3.0%)

13.6.2 TOP TEN CAUSES OF NEONATAL MORTALITY

Respiratory Distress Syndrome and Birth Asphyxia accounted for 31.6% (48) and 21.7% (33) of all neonatal deaths in 2023, making them the two-leading cause of neonatal mortality since 2021. Preterm 12.5% (19), Sepsis 9.2% (14) and BIND 8.6% (14) were ranked 3rd, 4th and 5th respectively whiles NEC 2% (3) was the least among the top ten causes of neonatal mortality. Figure 13.6.2.1 and table 13.6.2.1 below provides details of the analysis.

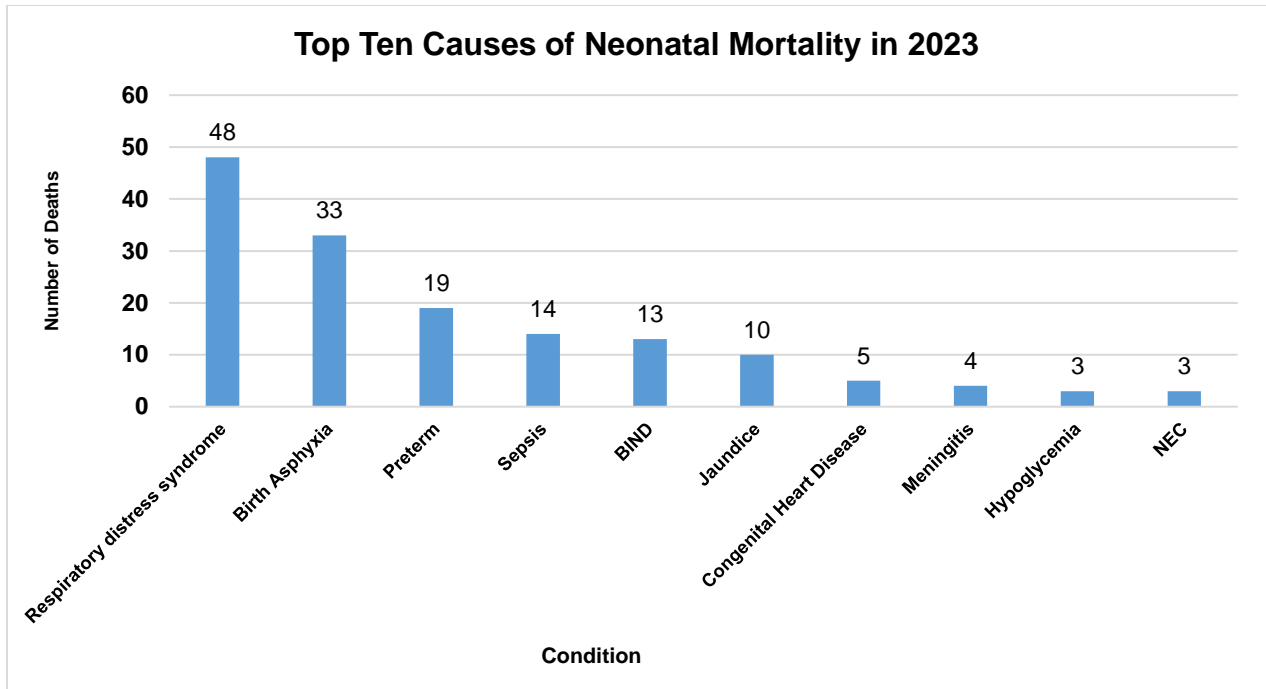


Figure 13.6.2. 1: Top Ten Causes of Neonatal Mortality in 2023

Table 13.6.2. 1: Top Ten Causes of Neonatal Mortality (2021 – 2023)

2021		2022		2023	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Respiratory distress syndrome	65 (27.2%)	Respiratory distress syndrome	63 (28.8%)	Respiratory distress syndrome	48 (31.6%)
Asphyxia	57 (23.8%)	Asphyxia	42 (19.2%)	Birth Asphyxia	33 (21.7%)
Sepsis	34 (14.2%)	Sepsis	25 (11.4%)	Preterm	19 (12.5%)
BIND	22 (9.2%)	NEC	12 (5.5%)	Sepsis	14 (9.2%)
Respiratory Failure	14 (5.9%)	Respiratory Failure	9 (4.1%)	BIND	13 (8.6%)
Aspiration pneumonia	6 (2.5%)	BIND	8 (3.7%)	Jaundice	10 (6.6%)
Septic shock	6 (2.5%)	Meconium aspiration	8 (3.7%)	Congenital Heart Disease	5 (3.3%)
Anaemia	3 (1.3%)	Prematurity	7 (3.2%)	Meningitis	4 (2.6%)
Necrotizing enterocolitis	3 (1.3%)	Cardiogenic shock	3 (1.4%)	Hypoglycemia	3 (2.0%)

2021		2022		2023	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Congenital heart disease	2 (0.8%)	Jaundice	3 (1.4%)	NEC	3 (2.0%)

13.6.2.1 NEONATAL DEATH’S AUDITED

The important step in determining the cause of deaths and formulating prevention strategies is death auditing. In light of this, the hospital implemented measures to guarantee that all deaths, particularly neonatal deaths, are audited. For that matter, all neonatal deaths reported in 2023 were duly audited and recommendations implemented successfully. The table below provides the percentage of deaths audited from 2019 to 2023.

Table 13.6.2.1. 1: Trend of neonatal deaths audited from 2019 to 2023

INDICATORS	2019	2020	2021	2022	2023	REMARKS
percentage to neonatal deaths audited	99.05%	88%	100%	100%	100%	Sustained

13.6.3 CHILDREN UNDER FIVE MORTALITIES

The under-five mortality rate reduced from 80/1000LB in 2022 to 72/1000LB in 2023. Also, the total number of under-five deaths decreased by 19.4% (from 264 in 2022 to 213 in 2023) as shown in Figure 13.6.3.1 below.

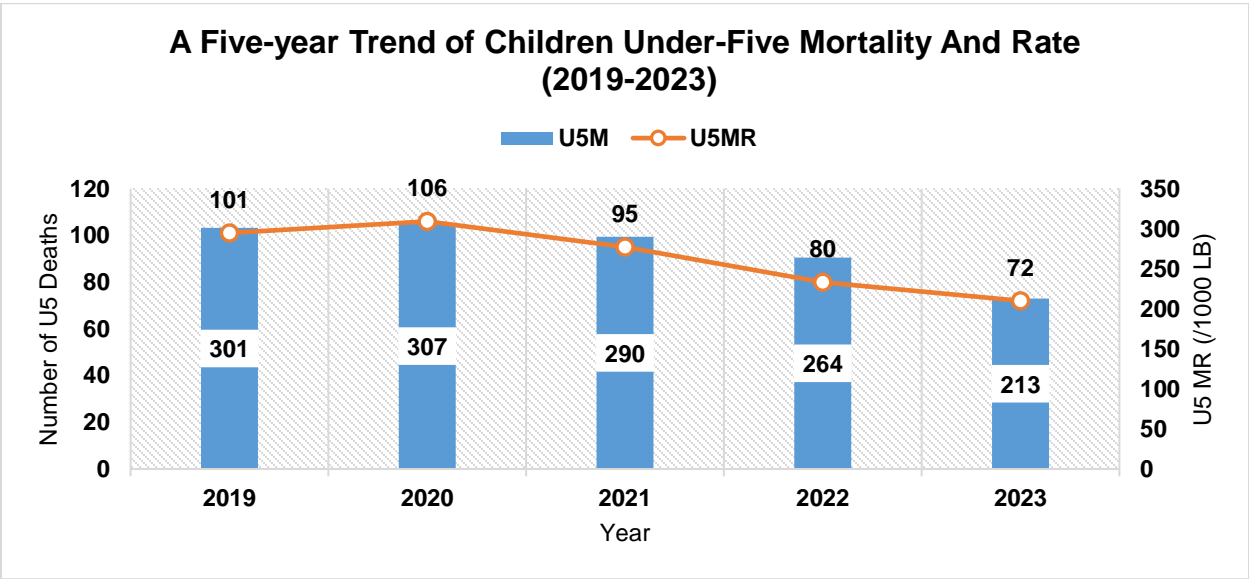


Figure 13.6.3. 1: A Five-year Trend of Children Under-Five Mortality and Rate (2019-2023)

13.6.3.1 TOP TEN CAUSES OF UNDER 5 MORTALITIES

Respiratory Distress Syndrome 29.0% (49), Birth Asphyxia 19.5% (33) and Preterm 11.2% (19) were recorded as the three leading causes of under-five mortality during the period. On the other hand, Severe Acute Malnutrition and Meningitis accounting for 4.1% (7) and 3.9% (5) respectively were identified as the least common cause of under-five mortality in 2023 as shown in Figures 13.6.3.1.1 and table 13.6.3.1.1 below.

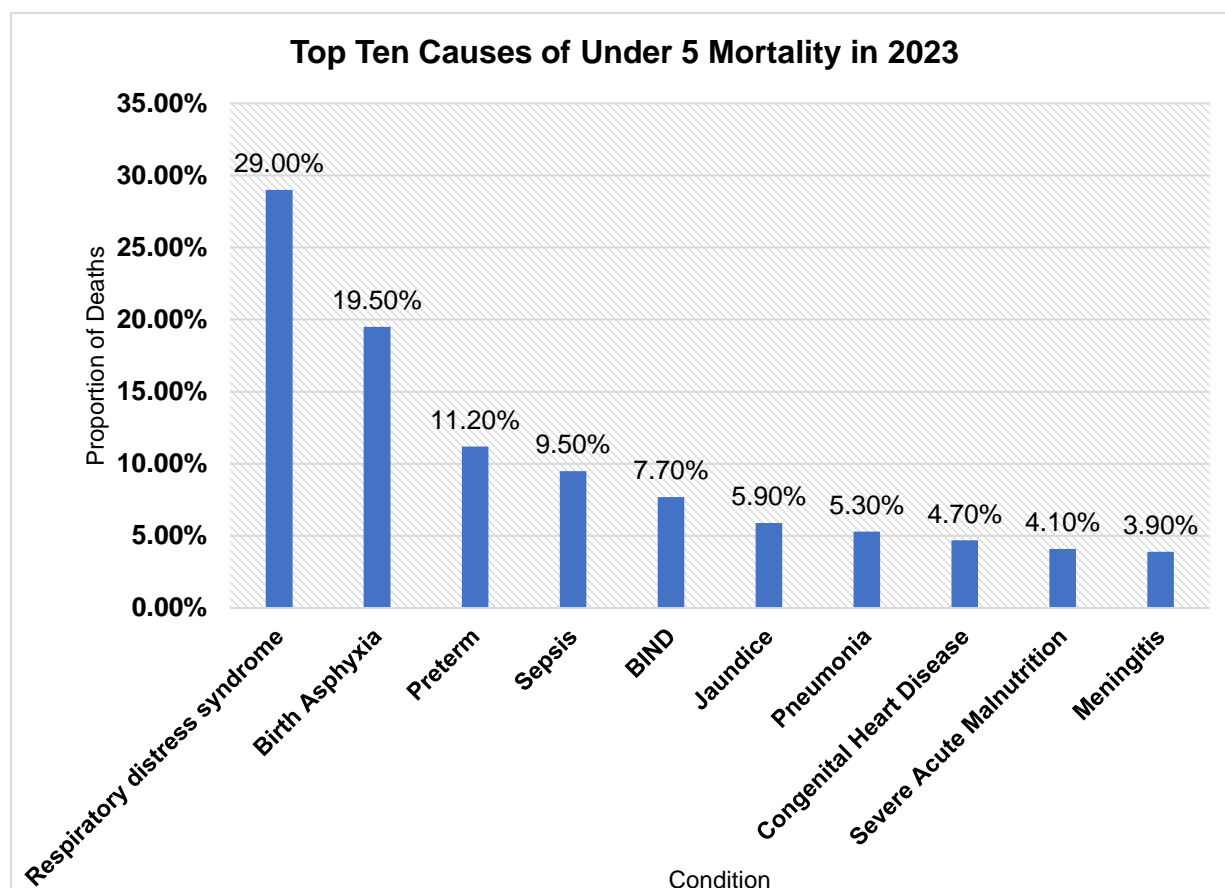


Figure 13.6.3.1. 1: Top Ten Causes of Under 5 Mortality in 2023

Table 13.6.3.1. 1: Comparative Analysis of Top Ten Causes of Under 5 Mortality

2021		2022		2023	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
RDS	70 (24.1%)	Respiratory distress syndrome	63 (23.9%)	Respiratory distress syndrome	49 (29.00%)
Asphyxia	60 (20.7%)	Asphyxia	43 (16.3%)	Birth Asphyxia	33 (19.50%)
Sepsis	38 (13.1%)	Sepsis	32 (12.1%)	Preterm	19 (11.20%)

2021		2022		2023	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
BIND	22 (7.6%)	NEC	12 (4.5%)	Sepsis	16 (9.50%)
Respiratory Failure	17 (5.9%)	Respiratory Failure	9 (3.4%)	BIND	13 (7.70%)
Septic Shock	13 (4.5%)	BIND	8 (3.0%)	Jaundice	10 (5.9%)
Aspiration Pneumonia	7 (2.4%)	Meconium aspiration	8 (3.0%)	Pneumonia	9 (5.3%)
Broncho Pneumonia	5 (1.7%)	Pre-maturity	7 (2.75)	Congenital Heart Disease	8 (4.70%)
Congenital Heart Disease	5 (1.7%)	Broncho Pneumonia	3 (1.1%)	Severe Acute Malnutrition	7 (4.10%)
		Aspiration Pneumonia	1 (0.4%)	Meningitis	5 (3.90%)

CHAPTER FOURTEEN

INTERNAL MEDICINE SUB-BMC

14.1 INTRODUCTION

The Internal Medicine Sub BMC is a medical specialty dealing with the prevention, diagnosis, and treatment of medical cases. The department has a total bed complement of 97 and it is made up of the Male ward, Female Ward, Intensive Care Unit, Dialysis, and the Executive suite.

14.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The table below provides a summary of the key outputs and outcomes of Internal Medicine Sub-BMC in line with the six medium-term strategic objectives of the hospital.

Table 14.2. 1: Summary of the 2023 Annual Performance of Internal Medicine Sub-BMC under the Strategic Objectives

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY
Introduced seizure clinic under Neurology services
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY
Ensured the availability of emergency trays throughout the year
Organised training for doctors and nurses on advance life support/basic support (ALS/BLS)
Improved HDU services to enhance life support services provided to clients/patients
Ensured the adequate supply of PPEs through the year
Celebrated the following World Health Days; <ul style="list-style-type: none"> a. World Kidney Day <ul style="list-style-type: none"> ● Conducted screening for 423 people for kidney disease and also created awareness on kidney disease among the public b. World Hepatitis Day <ul style="list-style-type: none"> ● Organized hepatitis B&C screening for 303 people for and also created awareness on hepatitis within hospital departments and among public
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Increased the number of oxygen pipe points and improved oxygen supply to the HDU
Refurbished the Male and Female Medical wards waiting areas
Renovated the balconies of the Male and Female Medical Ward
Installed two (2) new air conditioners at the Executive Suite Ward
Repainted the Dialysis and Executive suite consulting rooms and retiled the washroom
Renovated two (2) Executive Suite Wards and retiled their washrooms
Installed six (6) new C-bulbs at Executive suite wards waiting area
Received a Cardiac monitor and one Defibrillator
Received donations of 4 large buckets of paint, 20 chairs and s4 ceiling fans
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Organised seven (7) Sub-BMCs meetings
Held seven (7) Management meetings

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
90% of staff attended each clinical meeting <ul style="list-style-type: none"> • This resulted in the improvement of knowledge and competence of staff
Collaborated with social welfare to verify patients noted to be paupers
4.3: Finance related performance
Periodic financial report made available to HOD and Sub-BMC Staff
Posted notices on vantage points insisting on patients to demand receipt upon payment.
Organised refresher training on billing procedure for Sub-BMC Billing Clerks
Implemented new hospital fees/levies <ul style="list-style-type: none"> • Ward procedure and consultation fee, sanitation and documentation levy implemented
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
Commenced four (4) collaborative research projects which are at various stages of completion
5.2 Improve on Teaching and Learning:
Reaccreditation of Internal Medicine by Ghana College of Physicians and Surgeons
Facilitated the residency training of two new residents
Four (4) specialist physicians graduated
Seven (7) nurses were granted study leave to undergo specialist training; <ul style="list-style-type: none"> • 2 Critical care nurses • 2 Nephrology • 1 Infectious disease • 2 Neurosciences
Organised a CPR workshop for nurses and doctors

14.3 INTERNAL MEDICINE OPD SERVICES UTILISATION

The overall total Internal Medicine OPD attendance increased marginally by 1.25% (from 20,291 in 2022 to 20,546 in 2023). Despite the increase, some clinics recorded decline in attendance, among which included the Dermatology and Diabetes clinics with a drop of 3.8% (from 185 in 2022 to 178 in 2023) and 0.9% (from 8,590 in 2022 to 8,266 in 2023) respectively. However, some of the specialties recorded significant rise in their clinic attendance. For example, the attendance of both Oncology Clinic and Endocrinology Clinic went up by 60% (from 200 in 2022 to 320 in 2023) and 39.7% (from 136 in 2022 to 190 in 2023) respectively. Detailed trend analysis is provided in figure 14.3.1 and table 14.3.1 below.

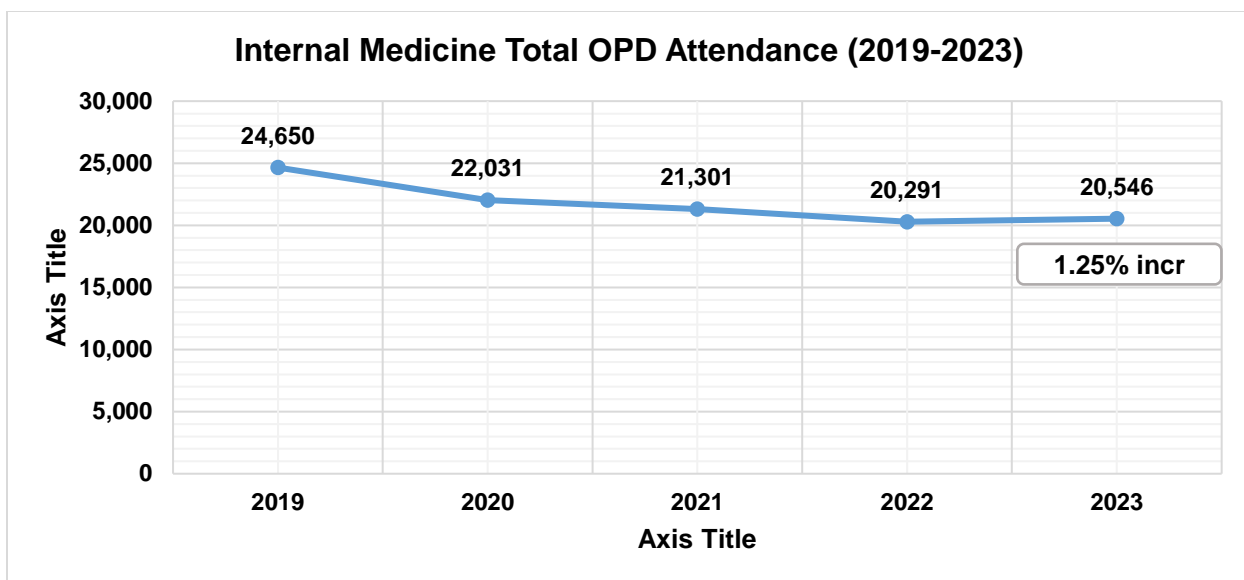


Figure 14.3. 1: Trend of Internal Medicine Total OPD Attendance (2019-2023)

Table 14.3. 1: Internal Medicine OPD Services from 2019 to 2023.

CLINICS	2019	2020	2021	2022	2023	REMARKS
Dermatology	45	353	462	185	178	3.8% decr
Asthma	1,005	819	626	691	734	6.2% incr
Sickle Cell	423	595	269	301	301	No change
Gastroenterology	749	662	866	663	766	15.5% incr
Cardiology	2,583	2,558	2718	2,438	2,586	3.2% incr
Diabetes	11,304	8,965	9,356	8,590	8,266	0.9% decr
Hepatitis B	1,212	850	775	748	737	1.5% decr
TB Clinic	361	292	271	187	123	34.2% decr
HIV Clinic	4,913	5,337	4,057	4,457	4,646	4.2% incr
Adolescent Clinic	178	126	102	162	110	32.1% decr
Endocrinology	106	97	184	136	190	39.7% incr
Haematology	437	396	427	366	435	18.9% incr
Renal Clinic	1,334	919	1,005	1167	1154	1.1% decr
Oncology Clinic	-	62	183	200	320	60% incr
Total Attendance	24,650	22,031	21,301	20,291	20,546	1.25% incr

14.4 INTERNAL MEDICINE IN-PATIENT PERFORMANCE

The total number of admissions at the Internal Medicine sub-BMC increased by 14% (from 1,931 in 2022 to 2,207 in 2023). Similarly, the total admissions at the Male, Female and Executive Suite wards went up by 9.7% (from 911 in 2022 to 999 in 2023), 14% (from 960 in 2022 to 1,094 in 2023) and 90% (from 60 in 2022 to 114 in 2023) respectively. The average length of stay recorded at the Female ward was 14.3 days compared to 6.9 days

recorded at both the Male and Executive Suite wards. Also, bed occupancy rates at the Male Medical, Female Medical and Executive Suite wards were 57.1, 48.8 and 43 respectively.

Detailed trend analysis is illustrated in figure 14.4.1 and table 14.4.1 to table 14.4.2 below.

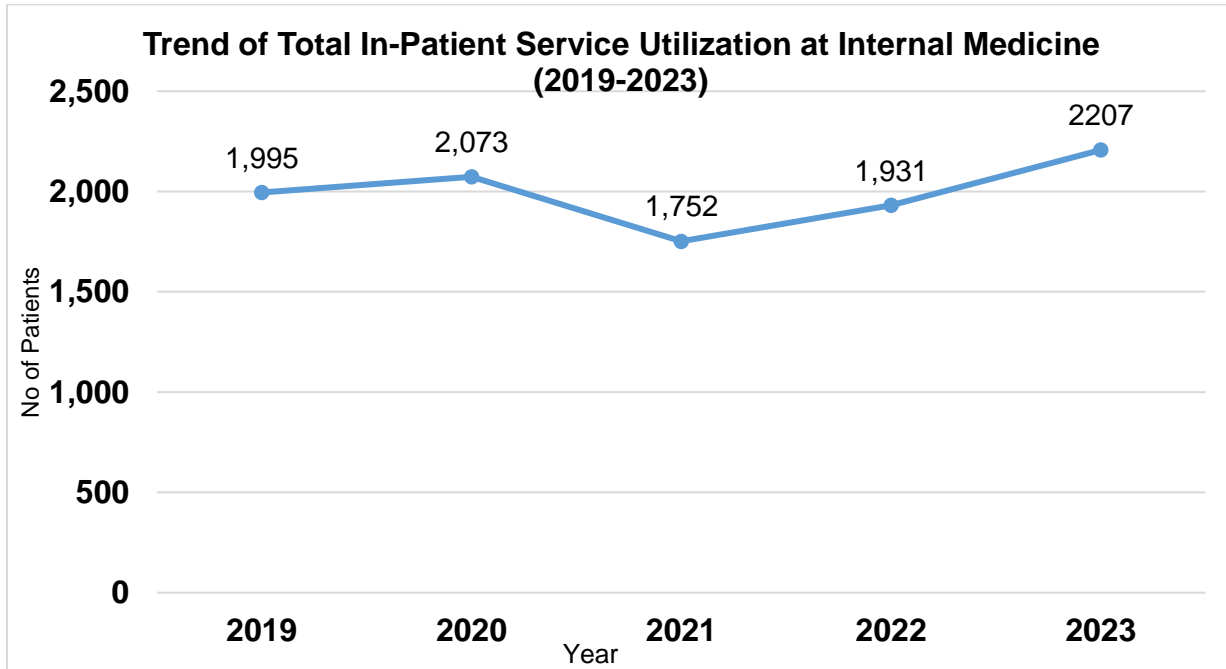


Figure 14.4. 1: Trend of Total In-Patient Service Utilization at Internal Medicine (2019-2023)

Table 14.4. 1: Trend of Total In-Patient Service Utilization at Internal Medicine Sub-BMC

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Admissions	1,995	2,073	1,752	1,931	2,207	14% incr
Discharge	1,594	1,005	1,425	1,686	1,947	15% incr
Deaths	379	488	321	249	278	12% incr

Table 14.4. 2: In-Patient Utilization at the Internal Medicine's per Ward (2019 – 2023)

INDICATOR	Male Medical					Female Medical					Executive Suite				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Admissions	885	983	797	911	999	912	924	865	960	1094	84	55	90	60	114
Discharges	733	211	626	771	861	772	722	709	845	966	83	62	90	70	120
Average Length of Stay (days)	6.5	6.2	6.6	7.1	6.9	6.5	6.6	6.4	6.4	14.3	10.3	8.7	0.9	4.7	6.9
Average Daily Bed Occupancy	16	17.1	15	17.8	18.8	16	17.2	15	16.8	20.8	2	1.7	2	0.9	2.1
% Bed Occupancy	36.3	50.2	34.1	50.2	57.1	37.9	40	35.6	40	48.8	79.8	55.6	70.8	55.6	43

14.4.1 TOP TEN CAUSES OF ADMISSION AT INTERNAL MEDICINE.

Pneumonia continued to be the leading cause of admission at the internal medicine Sub-BMC since 2021. In the year under review, Pneumonia went up by 43.1% (from 304 in 2022 to 435 in 2023), followed by kidney disease (324) and Hypertension (305). However, Anaemia (132) and Urinary Tract Infection (UTI) (116) were the least among the top ten causes of admissions. Detailed analysis is provided in table 14.4.1.1 and figure 14.4.1.1 below.

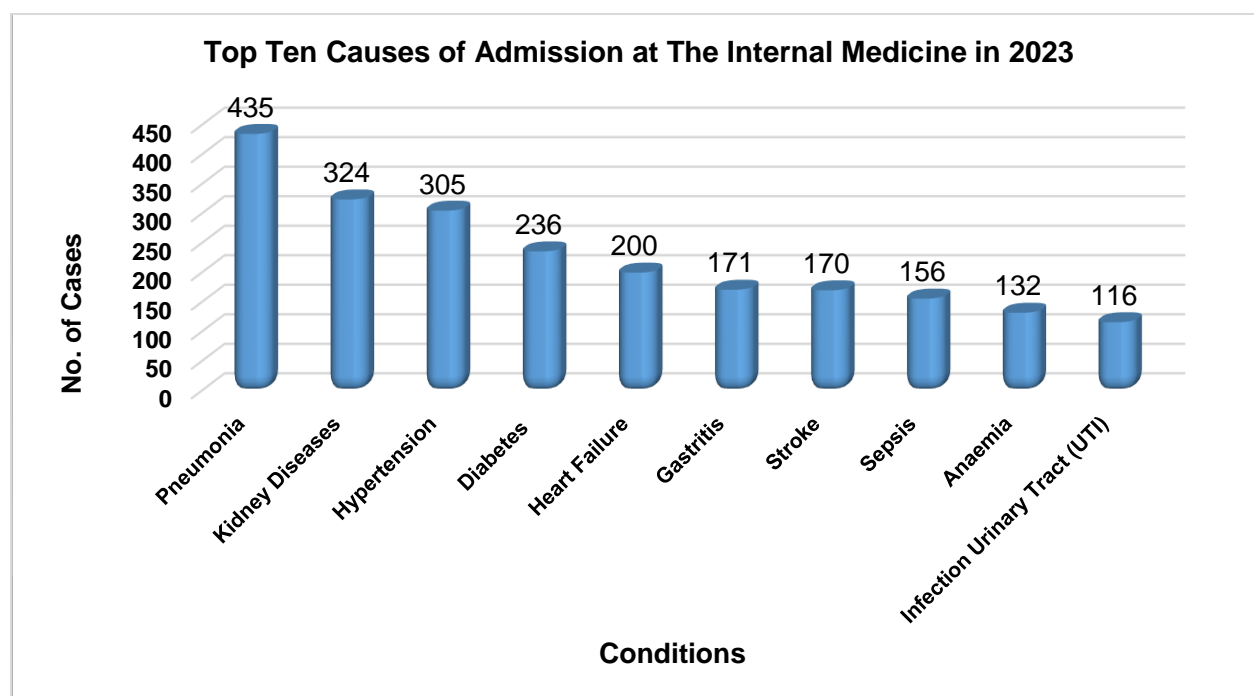


Figure 14.4.1. 1: Top Ten Causes of Admission at The Internal Medicine in 2023

Table 14.4.1. 1: Top Ten Causes of Admission at Internal Medicine

2021		2022		2023	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Pneumonia	170	Pneumonia	304	Pneumonia	435
Stroke	164	Hypertension	240	Kidney Diseases	324
Diabetes Mellitus	106	Diabetes Mellitus	234	Hypertension	305
Hypertension	95	Kidney Diseases	215	Diabetes	236
Kidney Diseases	82	Stroke	175	Heart Failure	200
End stage renal disease	81	Heart Failure	110	Gastritis	171
Tuberculosis	63	Pulmonary Embolism	108	Stroke	170
Heart Failure	62	Anaemia	104	Sepsis	156

2021		2022		2023	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Sepsis	56	Sepsis	91	Anaemia	132
Sickle Cell Crisis	56	Gastritis	86	Urinary Tract Infection (UTI)	116

14.4.2 MORTALITY TREND AT INTERNAL MEDICINE SUB-BMC

During the period, the Sub-BMC recorded an 11.6% increase in deaths, rising from 249 in 2022 to 278. Notable increases were observed across the wards: the Male Medical experienced an 8.1% rise (136 to 147), the Female Medical saw a 13.4% increase (112 to 127), and the Executive Suite reported a 300% increase (1 to 4).

Figure 14.4.2.1 and table 14.4.2.1 to table 14.4.2 below shows details of the analysis.

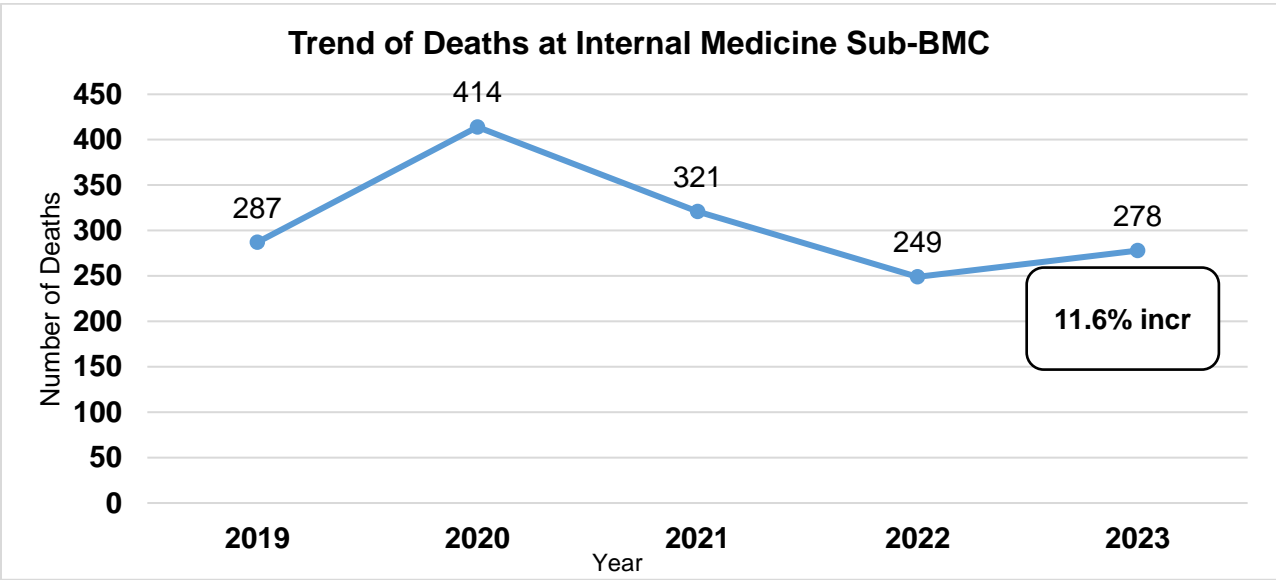


Figure 14.4.2. 1: Trend of Deaths at Internal Medicine Sub-BMC (2019-2023)

Table 14.4.2. 1: Mortality Trend Per Ward at Internal Medicine Sub-BMC

WARD	2019	2020	2021	2022	2023	Remarks
Male Medical	140	211	165	136	147	8.1% incr
Female Medical	144	202	152	112	127	13.4% incr
Executive Suite	3	1	4	1	4	300% incr
Total	287	414	321	249	278	11.6% incr

Table 14.4.2. 2: Mortality Rate Trend Per Ward at Internal Medicine Sub-BMC

WARD	2019	2020	2021	2022	2023	Remarks
Male Medical	15.5%	21.0%	20.3%	15.0%	14.6%	Decr
Female Medical	15.4%	21.2%	17.4%	11.7%	11.6%	Decr
Executive Suite	3.1%	1.4%	4.0%	1.4%	3.2%	incr

14.4.3 TOP TEN CAUSES OF DEATH AT INTERNAL MEDICINE

In the year under review, Sepsis (51), Pneumonia (48) and kidney disease (43) were identified as the leading cause of death, followed by heart failures (26) and Stroke (24) whiles HIV (10) and Tuberculosis (8) were the least among the common ten causes of death at the Sub-BMC. Figure 14.4.3.1 and table 14.4.3.1 provides details of the analysis.

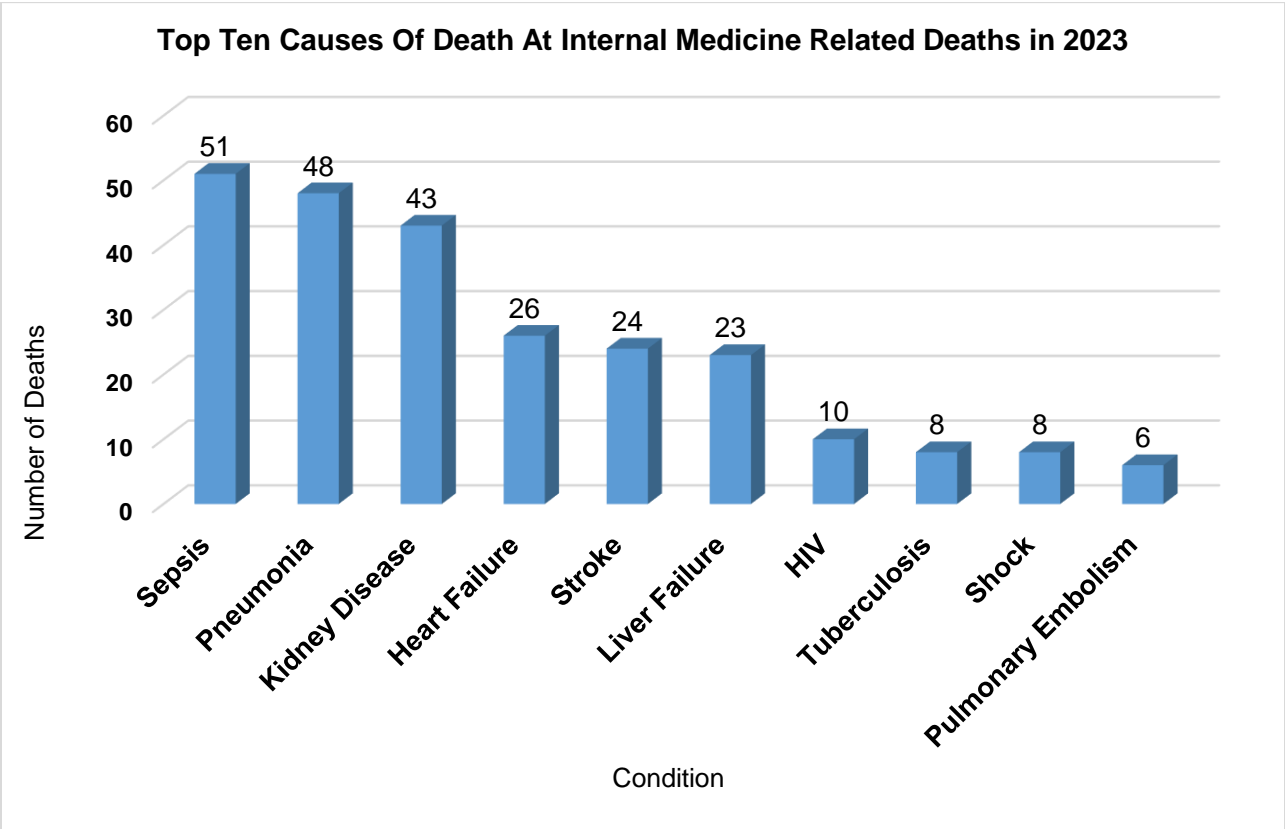


Figure 14.4.3. 1: Top Ten Causes of Death at The Internal Medicine

Table 14.4.3. 1: Top Ten Causes of Death at The Internal Medicine (2021-2023)

2021		2022		2023	
CONDITION	No.	CONDITIONS	No.	CONDITIONS	NO.
Respiratory Distress	51	Sepsis	51	Sepsis	51
CVA	33	Kidney Disease	34	Pneumonia	48
Kidney Diseases	27	CVA	30	Kidney Disease	43
Shock	21	Pneumonia	26	Heart Failure	26
Haemorrhage	18	Heart Failure	19	Stroke	24
Congestive Cardiac Failure	15	Tuberculosis	12	Liver Failure	23
Pneumonia	15	Hepatic Encephalopathy	10	HIV	10
Sickle Cell Crises	15	Hepato-cellular Carcinoma	5	Tuberculosis	8
Encephalopathy	12	HIV	5	Shock	8
Injury	12	Pulmonary Embolism	4	Pulmonary Embolism	6

CHAPTER FIFTEEN

CRITICAL CARE AND ANAESTHESIA SUB-BMC

15.1 INTRODUCTION

Established in September 2020, the Critical Care and Anaesthesia Sub-BMC is mandated to provide specialist service in critical care and anaesthesia, train undergraduate medical students and postgraduate residents in anaesthesia and critical care and to conduct research.

The services provided by the Sub-BMC are:

- Critical care services
- Anaesthesia
- Theatre recoveries
- NICU/PICU- assistance
- Specialist clinics

15.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The table below provides a summary of the key outputs and outcomes of Critical Care and Anaesthesia Sub-BMC in line with the six medium-term strategic objectives of the hospital.

Table 15.2. 1: Summary of the 2023 Annual Performance of Critical Care and Anaesthesia Sub-BMC under the Strategic Objectives.

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY
Two Anaesthesiologists run the Anaesthesia Clinic
Clinic days were increased from one to three days in a week
Some advanced techniques started e.g. Epidural Anaesthesia/analgesia
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.
Conducted Specialist-led perioperative consults and reviews
Enhanced quality of care by introducing modern standards e.g. infusomats, syringe pumps, and revised monitoring charts
Introduced ultrasound services in the Sub-BMC
Organised in- service training for staff on BLS/ACLS/ATLS
Held mortality and morbidity audit committee meetings

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Acquired the following set of equipment <ul style="list-style-type: none"> ● ventilators (3), monitors (5), ABG machine, deliberators, 4 new beds
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
<i>4.1: Governance Related Performance</i>
Four (4) management meetings were held
<i>4.2: Human Resource Related Performance</i>
Facilitated training of: <ul style="list-style-type: none"> ● House Officers, ● Medical Officers ● Resident Anaesthesiologists ● Critical Care nurses under rotation
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
<i>5.1 Improve on Research:</i>
A research team was formed
Received ethical clearance and collected data on; <ul style="list-style-type: none"> ● An Investigation on Women’s Labour Pain Experiences and Perception of Epidural Analgesia ● Nutrition in Critically ill Patients
<i>5.2 Improve on Teaching and Learning:</i>
Clinical seminars regularly held
BLS/PALS training was organized for selected staff

15.3 ANAESTHESIA OPD SERVICES UTILISATION

The utilization of anaesthesia services is primarily driven by surgical cases across various specialties. In 2023, service utilization increased by 13.4%, rising from 784 in 2022 to 889, reflecting the corresponding rise in the number of surgeries performed.

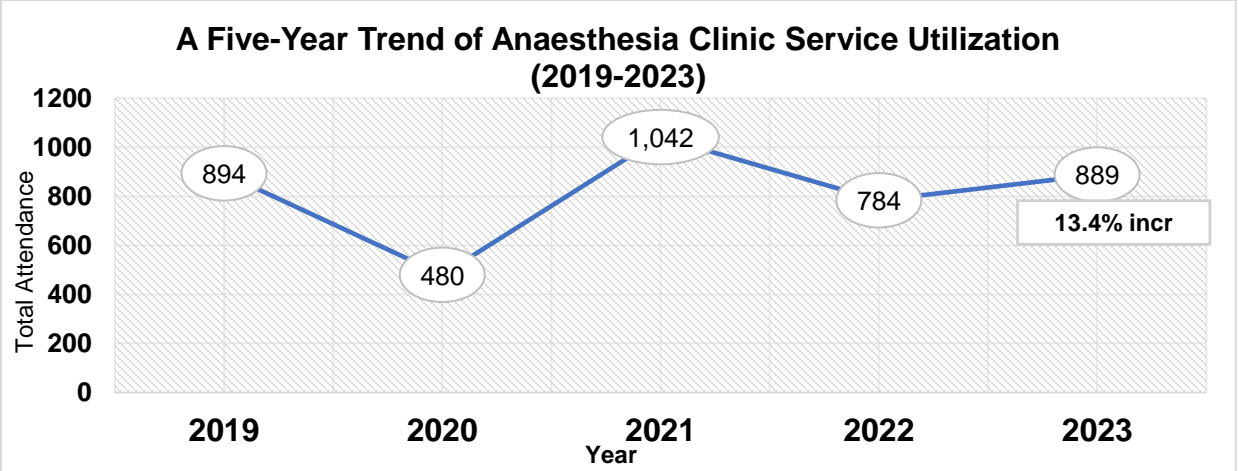


Figure 15.3. 1: A Five-Year Trend of Anaesthesia Clinic Service Utilization (2019-2023)

Among the anaesthesia services provided, spinal anaesthesia constituted the majority with 56.34% (2,235) cases while epidural service was the least with 0.05% (2) cases. Detailed trend analysis is provided in figure 15.3.1 and table 15.3.1 below.

Table 15.3. 1: Anaesthesia Services provided in 2023

General Anaesthesia	Spinal Anaesthesia	Local Anaesthesia	Sedation	Epidural	Total
1,219 (30.73%)	2,235 (56.34%)	391 (9.86%)	120 (3.02%)	2 (0.05%)	3,967

15.4 IN-PATIENT SERVICE UTILISATION

The number of patients admitted to the intensive care unit (ICU) in the year under review decreased by 10.6% (from 85 in 2022 to 76 in 2023). The average length of stay at the ICU increased from 10.2 days in 2022 to 16.4 days whereas the average daily occupancy rate went up (from 2.2 in 2022 to in 3.1 2023). Furthermore, the total death declined by 13.8% (from 65 in 2022 to 56 in 2023). Detailed trend analysis provided in figure 15.4.1 to figure 15.4.2 and table 15.4.1 below.

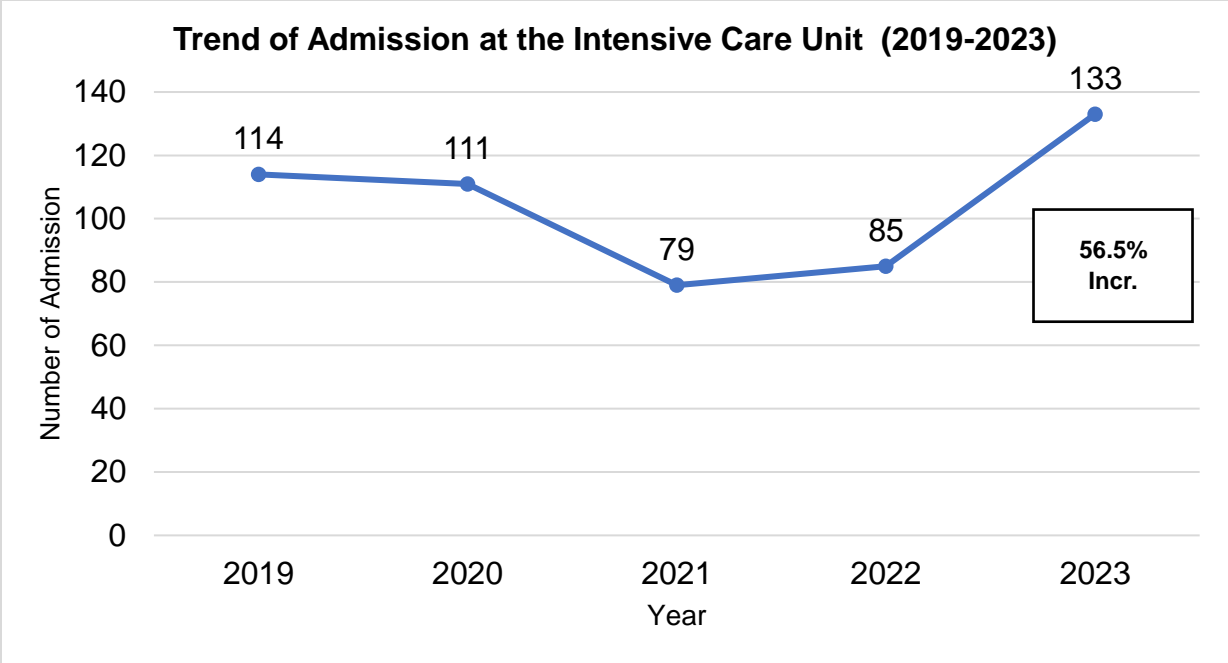


Figure 15.4. 1: Trend of Admission at the Intensive Care Unit (ICU)

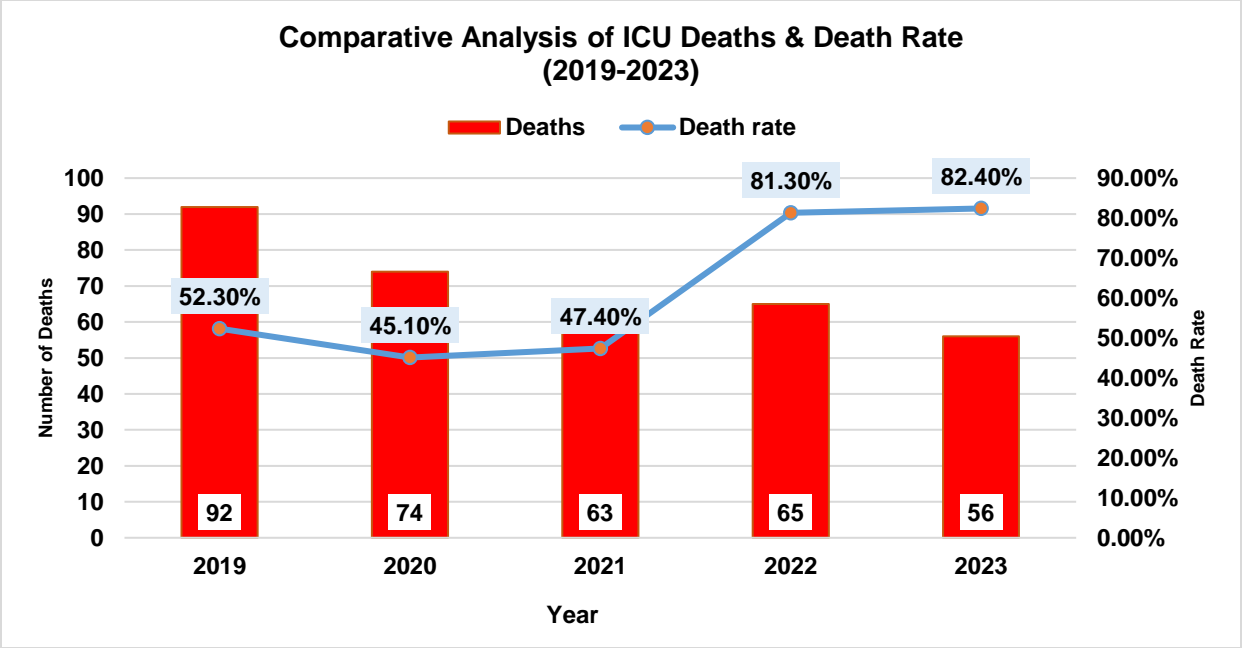


Figure 15.4. 2: Trend of Admission at the Intensive Care Unit (ICU)

Table 15.4. 1: Critical Care Unit (ICU) In-patient Service Utilization

KPI	2019	2020	2021	2022	2023	REMARKS
Admission	114	111	79	85	76	10.6% decr
Discharge	6	10	12	15	12	20% decr
Average length of stay	11.1	6.5	6.3	10.2	16.4	incr
Average daily occupancy	3	2.9	2.0	2.2	3.1	incr
% Bed occupancy	49.5%	58.4%	38.0%	58.4%	51.1%	incr
Deaths	92	74	63	65	56	13.8% decr
Death rate	52.3%	45.1%	47.4%	81.3%	82.4%	incr

CHAPTER SIXTEEN

SURGICAL SUB-BMC

16.1 BACKGROUND

The Surgical Sub-BMC is one of the Clinical Sub-BMCs established in July 2016. It is mandated to provide specialist surgical services, teaching and research, as well as outreaches within its catchment area and beyond. The Sub-BMC has a bed capacity of 77 and offers sub-specialty services in General Surgery, Orthopaedic, Urology Neurosurgery, Plastic & Reconstructive Surgery, Paediatric Surgery and Colorectal surgery services at both outpatient and inpatient level.

16.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The table below provides a summary of the key outputs and outcomes of Surgical Sub-BMC in line with the six medium-term strategic objectives of the hospital.

Table 16.2. 1: Summary of the 2023 Annual Performance of Surgical Sub-BMCs under the Strategic Objectives.

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE								
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY								
Access	2019	2020	2021	2022	2023	Target	Remarks	
Total surgical OPD Attendance	13,026	8,662	9,542	11,471	12,355	-	7.7% incr	
Surgical OPD cases seen per doctor	1:766	-	1:258	1:370	1:268	-		
Total surgeries conducted by the Sub-BMC	1,615	1,280	1,668	1,568	1,511	-	3.6% decr	
Number of surgeons	17	49	35	30	40	-	33.33% incr	
Surgery to Surgeon ratio	95:1	26:1	48:1	52:1	38:1	THs = 250:1		
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.								
<i>Performance Trend</i>								
Impact	2018	2019	2020	2021	2022	2023	Target	Remarks
Theatre Death Rate	0.3%	0.6%	0.1%	0.4%	0.1%	0.1	THs = 0.5%	Target met

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Created two (2) high dependency units (HDUs) at the Male and Female Surgical Wards
Audited all (100%) mortalities
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Renovated the treatment room at the Female Ward
Refurbished the Nurses rooms at both the Male and Female Wards
Acquired (22) medical equipment; <ul style="list-style-type: none"> ● 4 Suction machines, 1 electronic weighing scale, 1 screen, 2 patient beds, 2 patient monitors, 4 pulse oximeters, 2 BP apparatus, 1 autoclave, 1 dermatome thoracotomy set, 1 hand power drill and 3 defibrillators
Received donations of medical equipment from the Latter 's Day Saint Church; <ul style="list-style-type: none"> ● Dermatome, ● Mesher, Thoracotomy set, ● Gigli saw, ● Pulse oximeters, ● Defibrillators, ● Motor/Power Drill)
Received donation from Heritage Outreach Group; <ul style="list-style-type: none"> ● Twenty (20) bedsheets with pillowcases ● 2 boxes of hand sanitizers
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Held forty-five (45) Clinical Meetings
Conducted two (2) General meetings
Organised two (2) management meetings
Conducted two (2) Basic Life Support (BLS) Trainings with thirty-two (32) staff trained.
4.2: Human Resource Related Performance
Seven (7) Nurses recommended for further training in the following specialties; <ul style="list-style-type: none"> ● Peri-operative nursing ● BSc. Nursing ● Oncology nursing ● Paediatric Nursing

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE

CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING

5.1 Improve on Research:

Conducted and published four (4) collaborative research conducted on the ff topics;

- The importance of post-discharge surgical site infection surveillance: an exploration of surrogate outcome validity in a global randomised controlled trial (FALCON). Lancet Glob Health 2023; 11: e1178–79
- Strategies to minimise and monitor biases and imbalances by arm in surgical cluster randomised trials evidence from ChEETAh, a trial in seven low- and middle-income countries. Trials (2023) 24:259.
DOI: 10.1186/s13063-022-06852-2
- Adaptation of the Wound Healing Questionnaire universal-reporter outcome measure for use in global surgery trials (TALON-1 study): mixed-methods study and Rasch analysis.
DOI:10.1093/bjs/znad058
- Reducing the environmental impact of surgery on a global scale: systematic review and co-prioritization with healthcare workers in 132 countries. DOI:10.1093/bjs/znad092

5.2 Improve on Teaching and Learning:

Conducted the following trainings;

- Principles of antibiotic use with 42 staff trained.
- Will interstate succession law with 36 staff trained.
- 2 trainings on Informed consent with 54 and 40 staff trained respectively

Supported the training of Medical students, Residents Nurses and Residents Doctors

CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS

Collaborated with the Public Health Unit (Health Promotion Unit) embarked on the following outreaches;

- Plastic Surgery
 - Number of Community visited – 2
 - Number of people screened – 112
 - Number surgeries conducted - 49
- Orthopaedic Surgery Screening
 - Number of Community visited – 2
 - Number of people screened – 502
 - Number surgeries conducted - 45
- Brest Cancer Screening
 - Number of Community visited – 42
 - Number of people screened – 8,027

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE

- Number booked/referred - 396

16.3 SURGICAL OUTPATIENT SERVICES UTILIZATION

There was a general increase in Surgical OPD attendance by 7.7% (from 11,471 in 2022 to 12,355 in 2023). However, Orthopaedics and Neuro-Surgery clinics attendance declined by 19.9% (from 2,647 in 2022 to 2,121 in 2023) and 14.8% (from 1004 in 2022 to 855 in 2023) respectively. Furthermore, Uro-Surgery clinic attendance constituted 41.0% (5,071) of the total OPD attendance, followed by General Surgery clinic with 25.8% (3,190) and the least being Colorectal clinic (2.2%, 272). Figure 16.3.1 to Figure 16.3. 3 and table 16.3. 1 below provides details of the analysis.

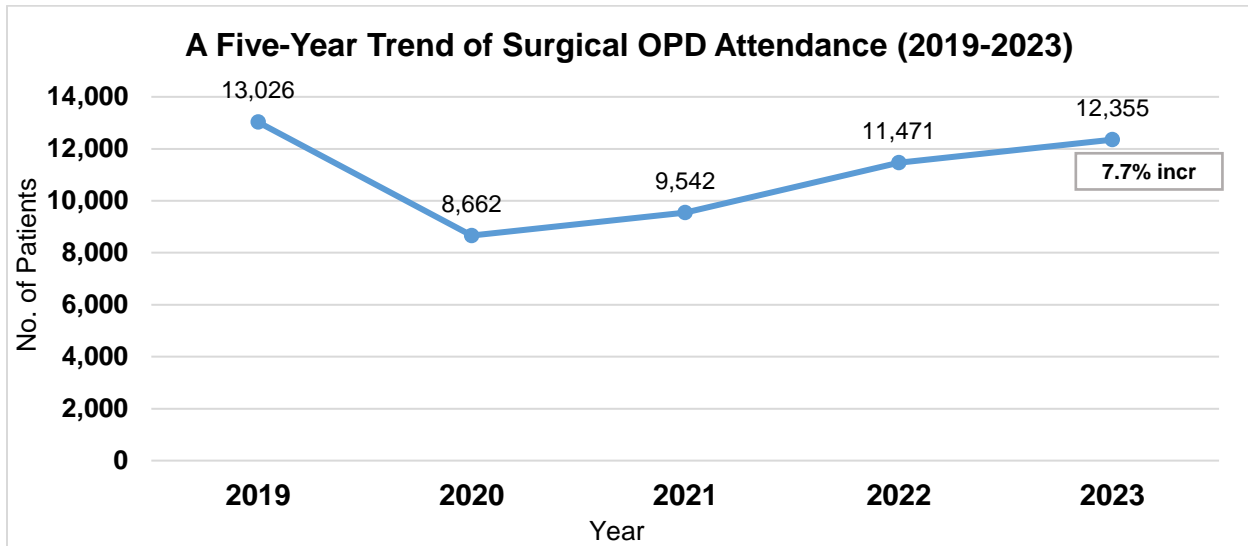


Figure 16.3. 1: A Five-Year Trend of Surgical OPD Attendance (2019-2023)

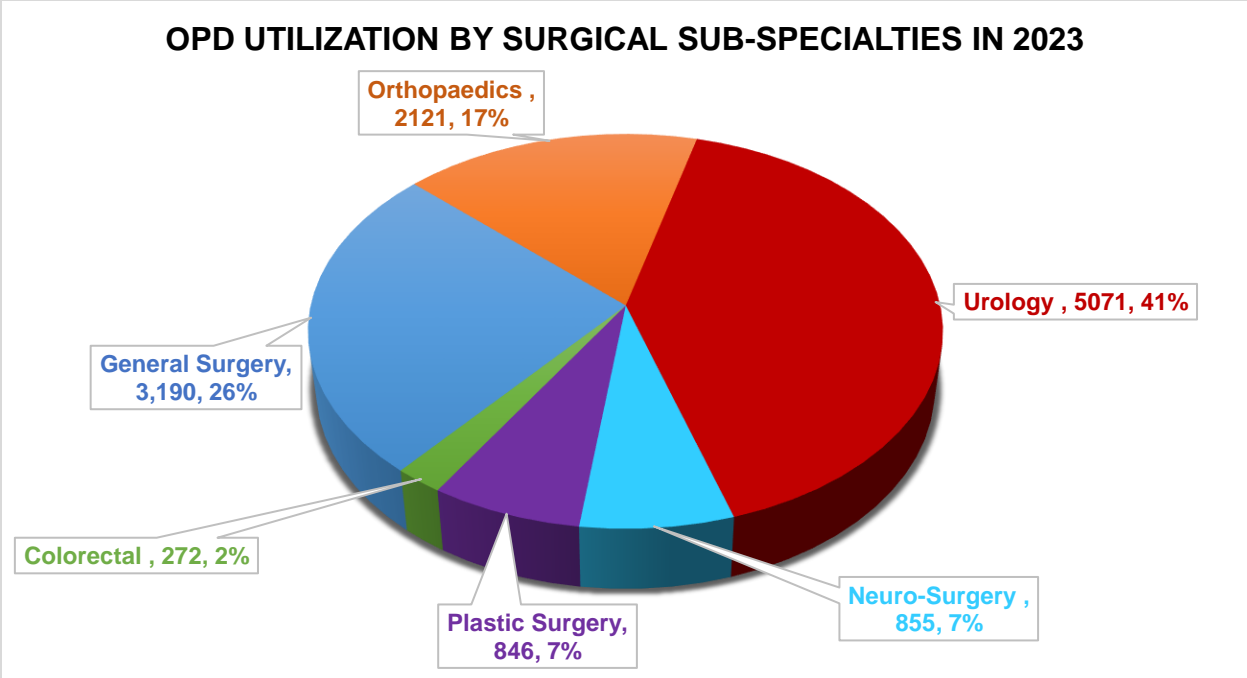


Figure 16.3. 2: OPD Utilization by Surgical Sub-Specialties in 2023

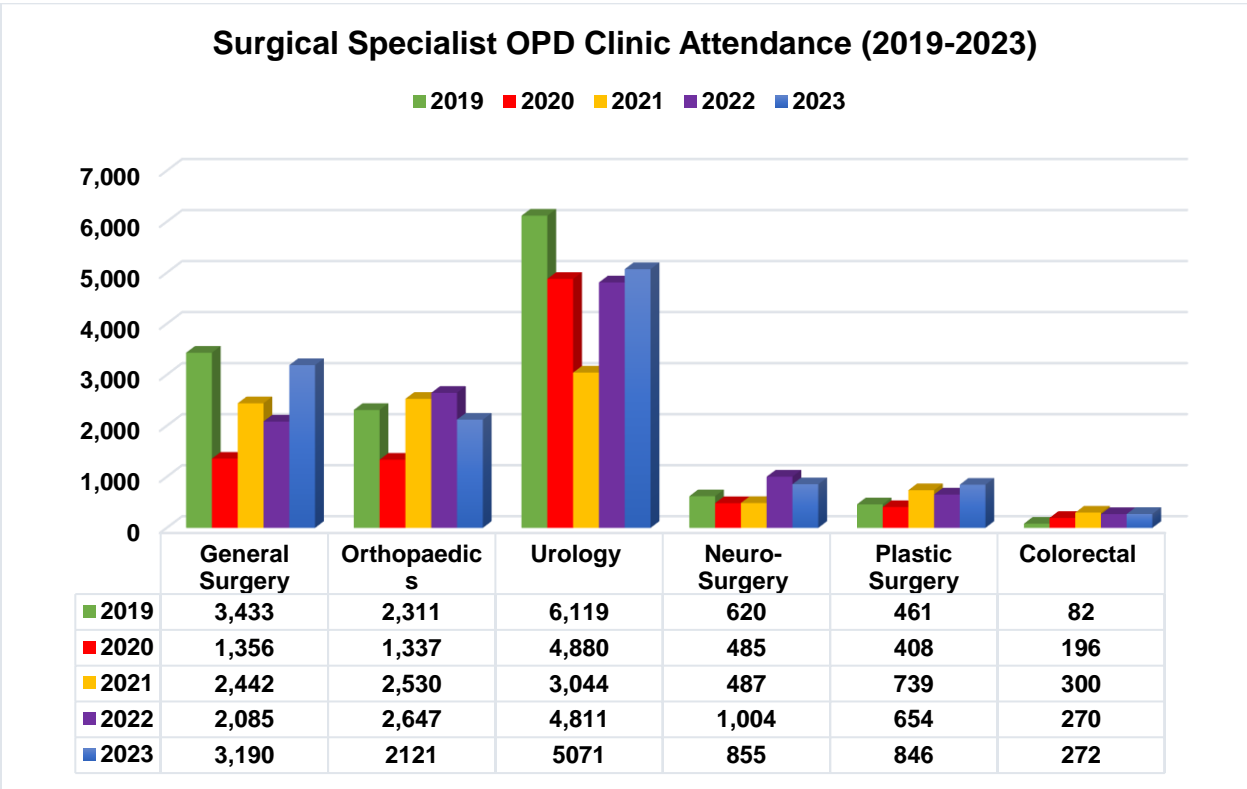


Figure 16.3. 3: Surgical Services Utilisation by Sub-Specialty (2019-2023)

Table 16.3. 1: Surgical Specialist OPD Clinic Attendance (2019-2023)

CLINICS	2019	2020	2021	2022	2023	REMARKS
General Surgery	3,433	1,356	2,442	2,085	3,190	53.0% incr
Orthopaedics	2,311	1,337	2,530	2,647	2121	19.9% decr
Urology	6,119	4,880	3,044	4,811	5,071	5.4% incr.
Neuro-Surgery	620	485	487	1,004	855	14.8% decr
Plastic Surgery	461	408	739	654	846	29.4% incr
Colorectal	82	196	300	270	272	0.7% incr.
Total	13,026	8,662	9,542	11,471	12,355	7.7% incr

16.4 SURGICAL INPATIENT SERVICES UTILISATION

Generally, the total admissions at the surgical department went up by 3.8% (from 1926 in 2022 to 1,999 in 2023). Whereas admissions to the Male Surgical Ward increased by 4.6% (from 1,303 in 2022 to 1,258 in 2023), the Female Surgical Ward also went up by 2.5% (from 723 in 2022 to 741 in 2023). On the other hand, the average length of stay on both wards declined as compared to 2022.

In addition, the total surgical deaths went up by 22.9% (from 96 in 2022 to 118 in 2023). Although the number of deaths at the theatre decreased by 50% (i.e., from 4 in 2022 to 2 in 2023), the theatre death rate remained as 0.1%. Detailed analysis is provided in figure 16.4.1 and table 16.4.1 to table 16.4.2 below.

Table 16.4. 1: Surgical In-Patient Services Utilization

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Total Admission	2,150	2,141	2,120	1,926	1999	3.8% Incr.
Total Discharges	2,098	2,095	2,112	1,926	1944	0.93% Incr.
Surgical Death (MSW + FSW+ Surgical Suite + Recovery Ward + ICU surgical cases + Paedics surgical cases)	115	159	128	96	118	22.9% Incr
Death (Theatre)	7	2	2	4	2	50% Decr.
Theatre death rate	0.6%	0.1%	0.4%	0.1%	0.1%	incr

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Death (Recovery ward)	20	12	16	2	10	400% incr

Table 16.4. 2: In-patient utilization at the Surgical Wards

INDICATOR	MALE SURGICAL WARD						FEMALE SURGICAL WARD					
	2019	2020	2021	2022	2023	REMARKS	2019	2020	2021	2022	2023	REMARKS
Admissions	1,273	1,339	1,316	1,203	1,258	4.6% incr	877	802	804	723	741	2.5% incr
Discharges	1,241	1,320	1,331	1,206	1,231	2.1% incr	857	775	781	720	713	0.97% decr
Average Length of Stay (days)	9.3	7.2	7.4	8.2	5.9	Decr	8.1	8.0	7.4	8.7	8	decr
Average Daily Bed Occupancy	33	29.1	30	28.1	25.4	Decr	20	19.3	18	18.2	17.4	decr
% Bed Occupancy	77.4	67.6	70.1	67.6	59.1	Decr	54.4	51.9	48.8	51.9	46.9	decr
Number of Deaths	64	84	65	52	53	1.9% incr	51	61	63	44	58	31.8% incr
Death Rate	4.6%	5.7%	4.4%	4.1%	4.1%		5.4%	6.9%	7.0%	5.8%	7.5%	incr

16.4.1 TOP TEN CAUSES OF SURGICAL ADMISSIONS

Hernia was recorded as the leading cause of surgical admission with the number of cases increasing by 8.0% (from 163 in 2022 to 176 in 2023). This was followed by Benign Neoplasm and Malignant Neoplasm with 159 and 149 cases respectively. Fracture (116) and Acute pain due to trauma (107) ranked 4th and 5th while Cellulitis (64) and Gastritis (64) were the least among the leading ten causes of surgical admission in 2023. Figure 16.4.1.1 and table 16.4.1.1 below provides details of the analysis.

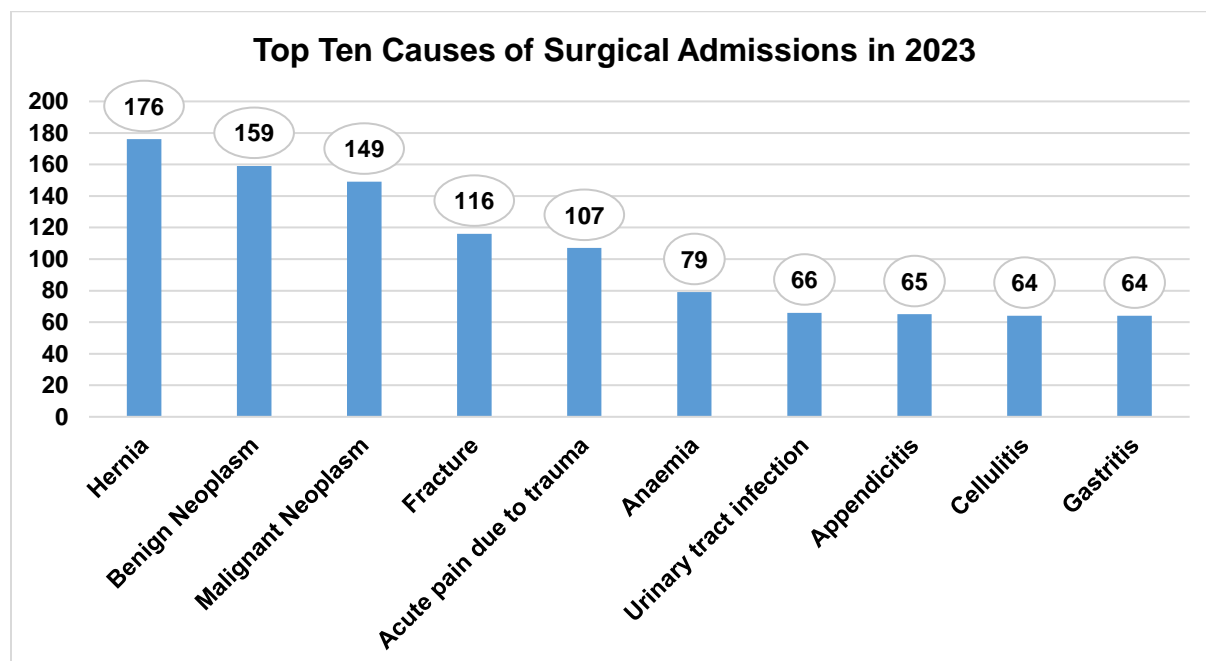


Figure 16.4.1. 1: Top Ten Causes of Surgical Admissions in 2023

Table 16.4.1. 1: Top Ten Causes of Surgical Admissions

2021		2022		2023	
Condition	No.	Condition	No.	Condition	No.
Hernia	240	Fracture	165	Hernia	176
Malignant neoplasm	220	Hernia	163	Benign Neoplasm	159
Fracture	216	Benign Neoplasm	134	Malignant Neoplasm	149
Benign neoplasm	130	Malignant Neoplasm	133	Fracture	116
Obstruction Intestinal	99	Cellulitis	94	Acute pain due to trauma	107
Cellulitis	96	Acute pain due to trauma	81	Anaemia	79

2021		2022		2023	
Condition	No.	Condition	No.	Condition	No.
Injuries	89	Intestinal Obstruction	74	Urinary tract infection	66
Abscess	85	Appendicitis	67	Appendicitis	65
Appendicitis	76	Abscess	53	Cellulitis	64
Haemorrhage	52	Haemorrhage	49	Gastritis	64

16.5 SURGERIES PERFORMED PER SUB-SPECIALTY

In 2023, there was a general drop of 3.6% in the number of surgeries performed (from 1,568 in 2022 to 1,511 in 2023). Similarly, the surgery to surgeon ratio at the surgical sub-BMC decreased from 52:1 in 2022 to 38:1 in 2023.

The number of surgeries performed by the various sub-specialties saw varied performances. The Paediatric Surgery recorded an increase of 14.1% (from 85 in 2022 to 97 in 2023). Also, the number of Plastic Surgery and Orthopaedics Surgery performed went up by 33.3% (from 93 in 2022 to 124 in 2023) and 6.0% (from 167 in 2022 to 177 in 2023) respectively. However, General Surgery and Uro-Surgery declined by 12.1% (from 863 in 2022 to 759 in 2023) and 2.2% (from 271 in 2022 to 265 in 2023) respectively. Figure 16.5.1 to figure 16.5.2 and table 16.5.1 to table 16.5.2 below provides detailed trend analysis.

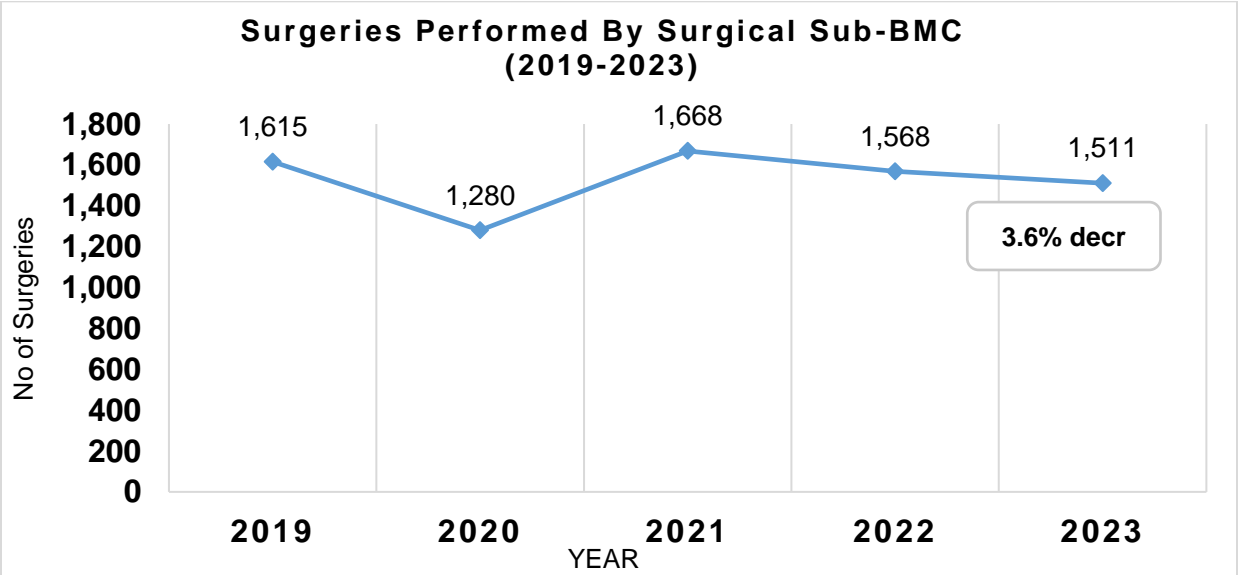


Figure 16.5. 1: Trend Analysis of Surgeries Performed by Surgical Sub-BMC (2019-2023)

Table 16.5. 1: Surgical Service Performance under THs KPI (Sub-BMC Level Performance)

KEY INDICATORS	2019	2020	2021	2022	2023	REMARKS	MEASUREMENT	TARGET
Surgery - Surgeon Ratio	95:1	26:1	45:1	52:1	38:1	decr	Total no. of surgeries performed/ total no. of Surgeons	THs = 250:1
Number of surgeons at the Surgical Department	17	49	35	30	40	Decr		

Table 16.5. 2: Surgeries Performed per Surgical Sub-Specialty

SURGICAL SPECIALTY	2019	2020	2021	2022	2023	REMARKS
General Surgery	973	690	949	863	759	12.1% decr
Uro-Surgery	191	219	256	271	265	2.2 % decr
Orthopaedics Surgery	186	130	173	167	177	6.0% incr
Plastic Surgery	82	82	102	93	124	33.3% incr
Paediatrics Surgery	98	68	100	85	97	14.1% incr
Neurosurgery	85	91	88	89	89	-
Total Surgeries	1,615	1,280	1,668	1,568	1,511	3.6% decr

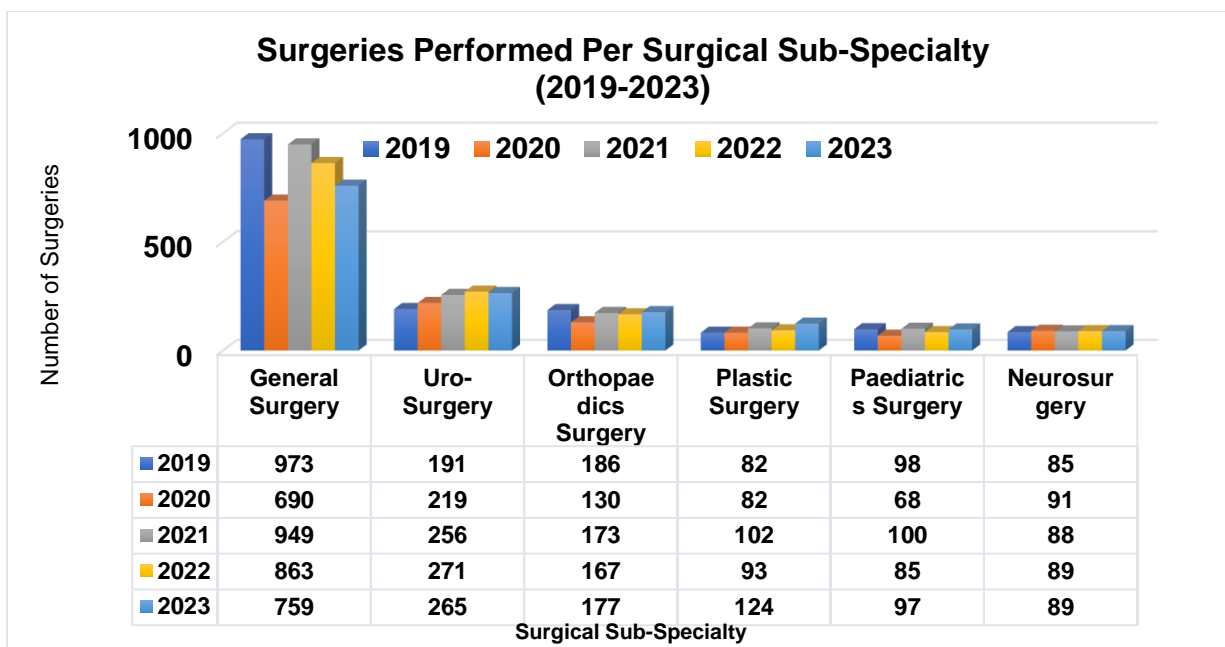


Figure 16.5. 2: Surgeries Performed Per Surgical Sub-Specialty

16.5.1 TOP TEN CAUSES OF SURGICAL PROCEDURES

Hernia repair and Laparotomy remained as the leading causes of surgeries at the Sub-BMC 273 and 246 cases respectively whiles Removal of Tonsil and Adenoids were the least among the top ten causes of surgeries at the Sub-BMC with 52 cases as shown in table 16.5.1. 1 below.

Table 16.5.1. 1: Top 10 Surgical Operations by Sub-BMC level (2021-2023)

2021		2022		2023	
Type of Case	No.	Type of Case	No.	Type of Case	No.
Hernia	294	Hernia	223	Hernia	273
Laparotomy	225	Laparotomy	205	Laparotomy	246
Appendicectomy	107	ENT surgeries (tonsil)	134	ENT surgeries	147
ENT surgeries	107	Operations on Fractures	109	Plastic surgeries	122
Operations on Fractures	99	Appendicectomy	90	Operations on Fractures	96
Other operations on G.U system	93	Neurosurgeries	86	Neurosurgeries	92
Neurosurgeries	88	Plastic surgeries	77	Appendicectomy	90
Intestinal obstruction	75	Other operations on G.U system	75	Myomectomy	72

2021		2022		2023	
Type of Case	No.	Type of Case	No.	Type of Case	No.
Plastic surgeries	72	Removal of tonsil and adenoids	75	Other operations on G.U system	71
Removal of tonsil and adenoids	57	Myomectomy	69	Removal of tonsil and adenoids	52

CHAPTER SEVENTEEN

DENTAL, EYE EAR NOSE & THROAT (DEENT) SUB-BMC

17.1 INTRODUCTION

The DEENT Sub-BMC was created in 2019 and it provides Oral and Maxillofacial, Ophthalmology, Otolaryngology, Audiology and Optometry Services. The Sub-BMC is managed by a six-member team.

17.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The general performance of the DEENT Sub-BMC is outlined against the hospital's strategic objectives. This is provided in table 17.2.1 below

Table 17.2. 1: Summary of the 2023 Annual Performance of DEENT Sub-BMC under the Strategic Objectives.

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY
Successfully performed the first Cornea transplant with seven (7) patients benefiting
Triaged 21,419 patients for further specialist management
Performed a total of 4,467 surgeries
Screened 16,793 people with 1,711 people benefiting from cataract operations
Twenty-nine (29) patients benefited from cleft-lip reconstruction surgeries
Twenty-three (23) patients benefitted from ENT surgeries
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.
Developed three (3) Protocols; <ul style="list-style-type: none"> ● Professional Etiquette of Eye staff. ● Guidelines for counselling ● Procedures and education on taking medication
Introduced an appointment system with a total of 1,200 reminders sent via phone calls and text messages
Sixteen (16) Units received sensitization programmes on various topics with 645 staff benefitting
Provided Educational Talks with 8601 clients benefitting <ul style="list-style-type: none"> ● 199 at the General OPD ● ENT-2 times a week

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
<ul style="list-style-type: none"> • Eye-2 times a week
Conducted 2 Radio Talk Shows on Pax FM and Ankaful Community Radio
Celebrated the following World Health Days; <ul style="list-style-type: none"> • Hearing Day with 85 people screened • Sight Day with 151 people screened
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Renovated two (2) consulting rooms at the ENT Clinic
Refurbished five (5) consulting rooms at the Eye Clinic
Procured the following equipment and tools: <ul style="list-style-type: none"> • Ten (10) Swivel chairs, • Four (4) Tables • Two (2) Air Conditioners
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Held one (1) Management meeting
Conducted six (6) clinical meetings conducted on the following topics <ul style="list-style-type: none"> • Laboratory user's hand book, • Septal Cellulitis • Rhinosinusitis and its Complications • General Oral Health, • Babies need Humans not Screens and • Halitosis
4.2: Human Resource Related Performance
Appraised 48% of staff
Five (5) Medical Officers were posted to the Sub-BMC <ul style="list-style-type: none"> ❖ Eye Unit – 4 ❖ ENT Unit - 1
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Research:
The Sub-BMC conducted 3 clinical researches; <ul style="list-style-type: none"> • Eye Unit- Prevalence of Glaucoma cases in CCTH

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
<ul style="list-style-type: none"> ● ENT Unit – Congenital Laryngeal Hemangioma-case Report of a Rare Presentation ● Dental Unit: Incidence and Treatment outcome of Odontogenic infections at CCTH- Done yet to publish
5.2 Teaching and Learning:
Two (2) years provisional accreditation secured from GCPS for Dental Residency Training
Rotational accreditation secured from WACPS for ENT Residency Training
Facilitated the training and supervision of 397 students; <ul style="list-style-type: none"> ● Eye- 119 (9 Ophthalmic Students, 5 Optometrist Rotation Nurses (105), 1 NMTC student and Ophthalmic Nursing Interns-3), ● ENT-151 (ENT students (8), Rotation-94/NMTC Students (46) and ENT Interns -3 ● Dental -1 Student ● Medical Students – both Eye and ENT (123) & Optometrist Interns (3)
2 Ophthalmic and 1 ENT Nurses completed specialized nursing
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
The Eye Unit with the support of the Himalayan Cataract Project collaborated with the Public Health Unit to embark on community outreaches to screen people for cataract and booked them for surgery <ul style="list-style-type: none"> ● Number of communities visited – 209 (in 5 districts) ● Number of people screened - 16,793 ● Number of surgeries conducted – 1,712
The ENT Unit undertook five (5) outreaches where a total number of 596 people benefitted
The Dental Unit went on two (2) outreaches with a total number of 181 beneficiaries
The Sub-BMC conducted joint outreaches to schools and organisations <ul style="list-style-type: none"> ● Outreaches to School <ul style="list-style-type: none"> ○ Number of Schools visited – 6 ○ Number of beneficiaries - 546 ● Outreaches to Organizations <ul style="list-style-type: none"> ○ Number of organisations = 3 ○ Number of beneficiaries = 166

17.3 DEENT OPD SERVICES UTILIZATION

In the year under review, DEENT sub-BMC OPD services utilization went up by 4.4% (from 21,150 in 2022 to 21,419 in 2023). Eye specialty clinic recorded the highest number of OPD attendance with a 5.1% increase (from 10,755 in 2022 to 11,310 in 2023).

A year-on-year analysis indicates that, DEENT referred-in cases have seen steady increments. In 2023 however, there was a decrease of 22.7% in the total number of cases

referred in from 737 in 2022 to 570 in 2023 with Eye specialty recording the highest number of cases. Similarly, the total number of cases referred out saw a decline of 24.6% (from 126 in 2022 to 95 in 2023). Majority of the cases referred out were from the Eye Unit with most of the cases sent to Korle-Bu Teaching Hospital. Detailed analysis provided in figure 17.3.1 to figure 17.3.2 and table 17.3.1 to table 17.3.3

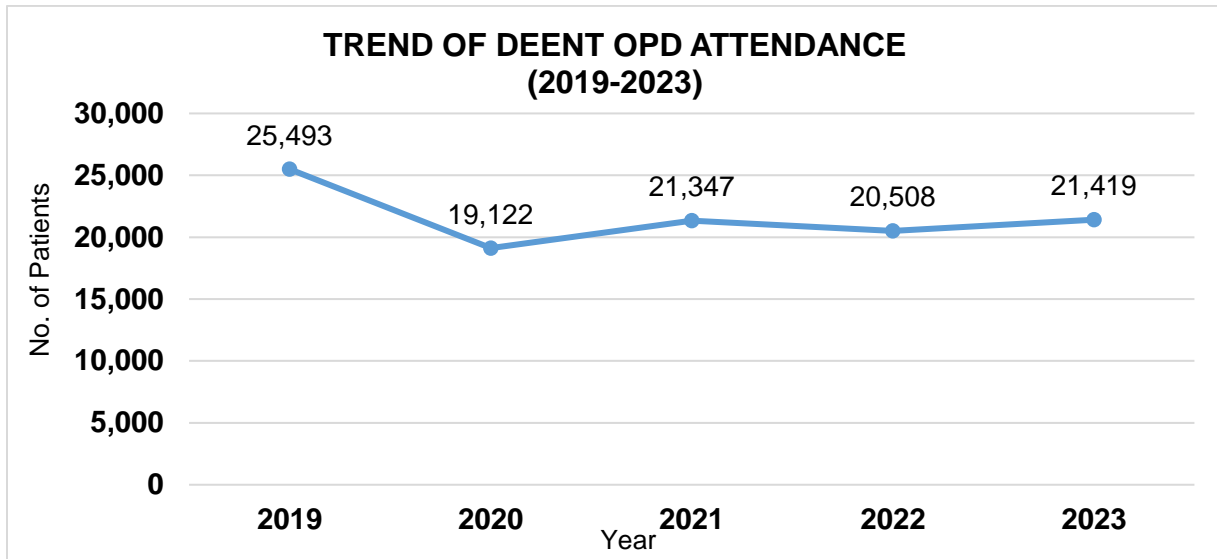


Figure 17.3. 1: Trend Analysis of DEENT OPD Clinics Attendance (2019-2023)

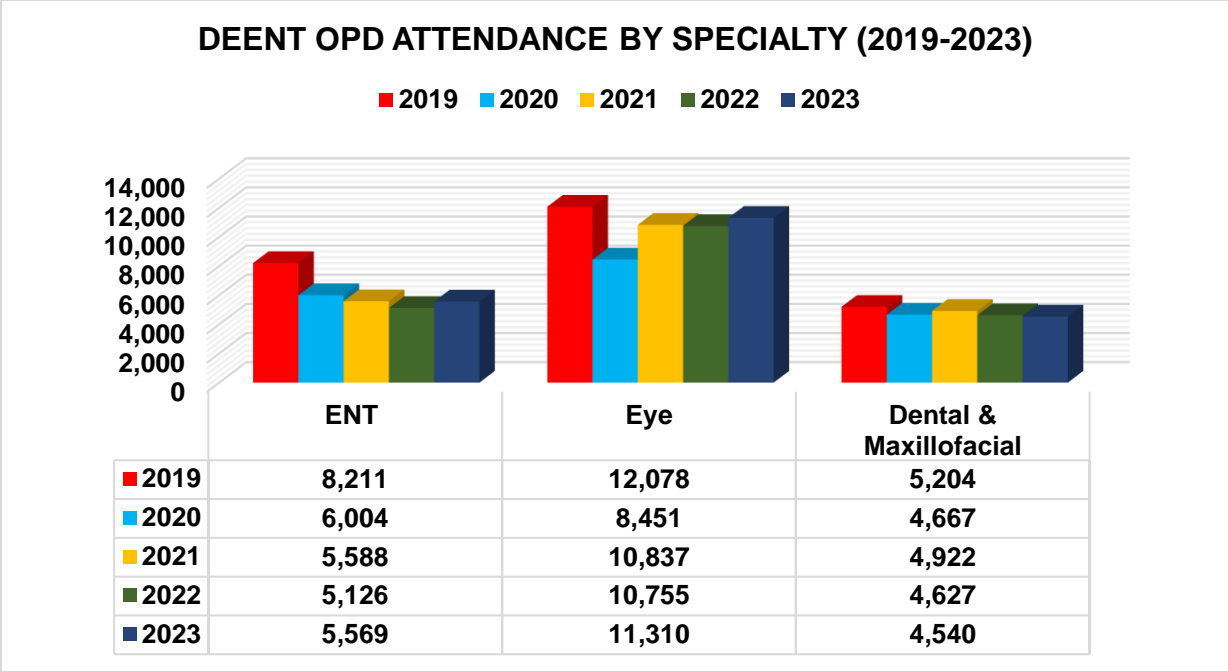


Figure 17.3. 2: DEENT OPD Attendance by Specialty (2019-2023)

Table 17.3. 1: Trend Analysis of Total DEENT OPD Attendance Per Specialty

CLINICS	2019	2020	2021	2022	2023	REMARKS
ENT	8,211	6,004	5,588	5,126	5,569	8.6% incr
Eye	12,078	8,451	10,837	10,755	11,310	5.1% incr
Dental & Maxillofacial	5,204	4,667	4,922	4,627	4,540	1.9% decr
Total Attendance	25,493	19,122	21,347	20,508	21,419	4.4% incr

Table 17.3. 2: DEENT Referrals Per Specialty (2019-2023)

CLINIC	2019	2020	2021	2022	2023	REMARKS
REFERRAL IN						
Eye	229	309	293	309	269	12.9% decr
Dental & Maxillofacial	22	41	26	98	19	80.6% decr
ENT	217	143	214	224	190	15.2% decr
Total	468	493	533	631	478	24.2% decr
REFERRAL -OUT						
Eye	79	48	47	62	48	22.6% decr
Dental & Maxillofacial	9	15	15	19	13	600% decr
ENT	11	21	28	24	20	16.7% decr
Total	99	84	90	105	81	22.9% decr

Table 17.3. 3: Referring Facilities in 2023

Referral-In		Referral- Out	
Name of Hospital	No.	Name of Hospital	No.
Our Lady of Grace Hospital	20	KBTH	28
Efia Nkwanta Regional Hospital	18	St Barnabas Family	19
Twifo Atimokwa Govt Hospital	18	Zeba Eye Centre	1
Ajumako District Hospital	17	Others	33
Elmina Polyclinic	15		
Swedru District Hospital	13		
Essikado District Hospital	12		
Ankaful Leprosarium Govt Hospital	12		
UCC Hospital	12		
Christian Eye Centre	11		
Others	422		
Total	570	Total	81

17.4 TOP TEN DEENT OPD CONDITIONS SEEN

The eye unit recorded Conjunctivitis (all forms) as the leading condition seen at the OPD with 805 cases while Lid Abnormalities was identified as the least with 25 cases. Apical Periodontitis (674) ranked 1st among the conditions reported at the Dental Unit while Cracked tooth Syndrome with 87 cases was the least among the top ten dental conditions. Further, Otitis Media with 887 cases was the highest ENT condition recorded whereas Hearing Loss with 67 cases was the lowest. Table 17.4.1 to table 17.4.3 below provides details of the top ten DEENT OPD conditions seen per specialty in 2023.

Table 17.4. 1: Top Ten Eye Conditions Seen (2021-2023)

2021		2022		2023	
Condition	No.	Condition	No.	Condition	No.
All Forms of Conjunctivitis	736	All Forms of Conjunctivitis	727	All Forms of Conjunctivitis	805
Refractive Error	606	Cataract	548	Refractive Error	537
Cataract	544	Refractive Error	501	Cataract	522
Glaucoma	346	Glaucoma	295	Glaucoma	309
Pterygium	211	Pterygium	232	Pterygium	182
Trauma	144	Retinopathies	71	Normal Eyes	62
Retinopathies	113	Trauma	64	Retinopathies	40
Lid Abnormalities	103	Normal Eyes	66	Cornea Ulcer	39
Cornea Ulcer	31	Lid Abnormalities	25	Trauma	26
Ocular Tumour	26	Cornea Ulcer	19	Lid Abnormalities	25

Table 17.4. 2: Top Ten Dental & Maxillofacial Conditions Seen (2021-2023)

2021		2022		2023	
Condition	No.	Condition	No.	Condition	No.
Apical Periodontitis	1,115	Apical Periodontitis	938	Apical Periodontitis	674
Plaque Induced Gingivitis	530	Plaque Induced Gingivitis	411	Plaque Induced Gingivitis	414
Developmental Lesion	268	Reversible Pulpitis	342	Reversible Pulpitis	392
Reversible Pulpitis	171	Periapical Abscess	289	Chronic Periodontitis	313
Fractured Tooth	171	Developmental Lesion	279	Reversible	288
Dentoalveolar Abscess	110	Chronic Periodontitis	180	Malocclusions	231
Displaced Tooth	95	Dentoalveolar Abscess	160	Retained Root	226
Periapical Abscess	63	Missing Tooth	140	Fractured Tooth	134
Fractured Jaw	59	Displaced Tooth	121	Periapical abscess	111
Irreversible Pulpitis	59	Malocclusions	90	Cracked tooth Syndrome	87

Table 17.4. 3: Top Ten ENT Conditions Seen (2021-2023)

2021		2022		2023	
Condition	No.	Condition	No.	Condition	No.
Otitis Media	911	Otitis Media	887	Otitis Media	887
Impacted wax	851	Impacted wax	822	Impacted wax	680
Otitis Externa-	736	Tonsillitis/Pharyngiti	530	Tonsillitis/Pharyngiti	499
s		s		s	
Tonsillitis/Pharyngiti	621	Otitis Externa-	504	Otitis Externa-	441
s		s		s	
Sinusitis	571	Sinusitis	480	Sinusitis	372
Allergies/Rhinitis	534	Allergies/Rhinitis	406	Allergies/Rhinitis	298
Adenoids Hypertrophy	288	Adenoids Hypertrophy	330	Adenoids Hypertrophy	249
Otomycosis	83	Hearing Loss	91	Foreign Body	130
Hearing Loss	112	Otomycosis	61	Otomycosis	92
Epistaxis	58	Epistaxis	55	Hearing Loss	67

17.5 DEENT ADMISSIONS

In 2023, DEENT admissions in general recorded a significant decline of 13.2% (from 317 in 2022 to 275 in 2023). ENT specialty recorded the highest number of admissions of 143 (52%) followed by Eye specialty, with 88 admissions. Dental and Maxillofacial specialty on the other hand recorded the least number of 44 cases admitted. Detailed trend analysis is provided in figure 17.5.1 to figure 17.5.2 and table 17.5.1 below.

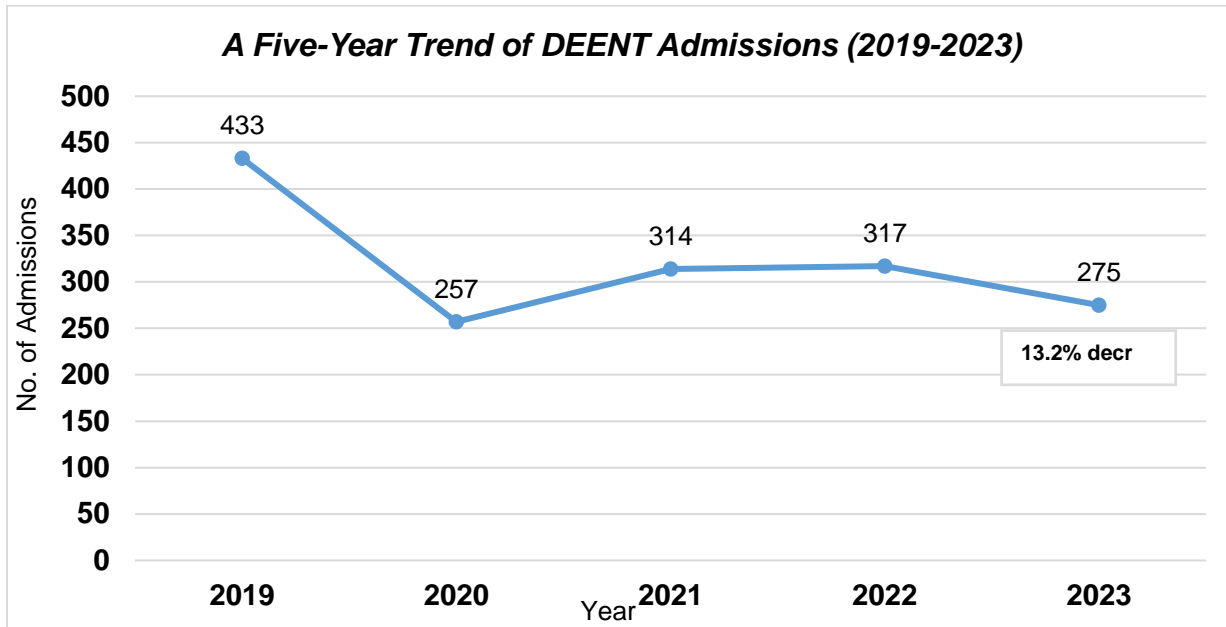


Figure 17.5. 1: A Five-Year Trend of DEENT Admissions (2019-2023)

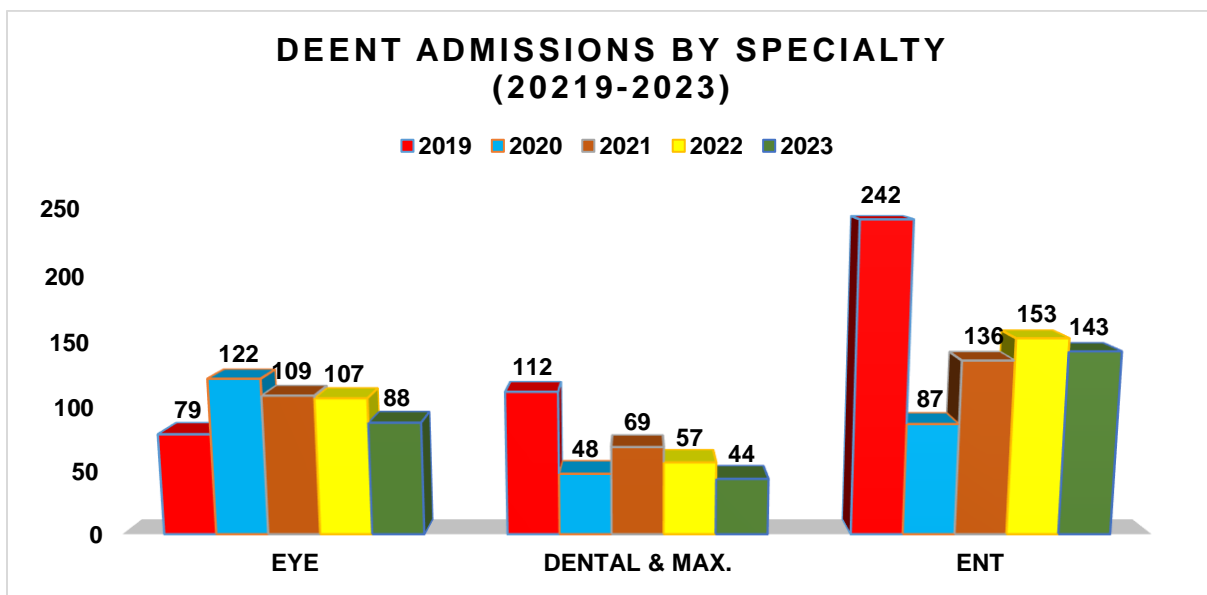


Figure 17.5. 2: Trend of DEENT Admissions by Specialty

Table 17.5. 1: Trend of DEENT Admissions by Specialty

DEPARTMENT	2019	2020	2021	2022	2023	REMARKS
Eye	79	122	109	107	88	17.8% decr
Dental & Maxillofacial.	112	48	69	57	44	22.8% decr
ENT	242	87	136	153	143	6.5% decr
Total	433	257	314	317	275	13.2% decr

17.6 SURGERIES PERFORMED BY DEENT SUB-BMC

The total number of DEENT surgeries performed declined by 6.1% (from 4,759 in 2022 to in 4,467 2023). Dental specialty contributed the highest number of surgeries performed with a 15.5% increase (from 1,887 in 2022 to 2,180 in 2023). However, Eye and ENT specialties recorded a decline of 21.5% (from 2,666 in 2022 to 2,093 in 2023) and 5.8% (from 206 in 2022 to 194 in 2023) respectively. Detailed trend analysis surgeries performed by the DEENT provided in figure 17.6.1 and table 17.6.1 to table 17.6.2 below.

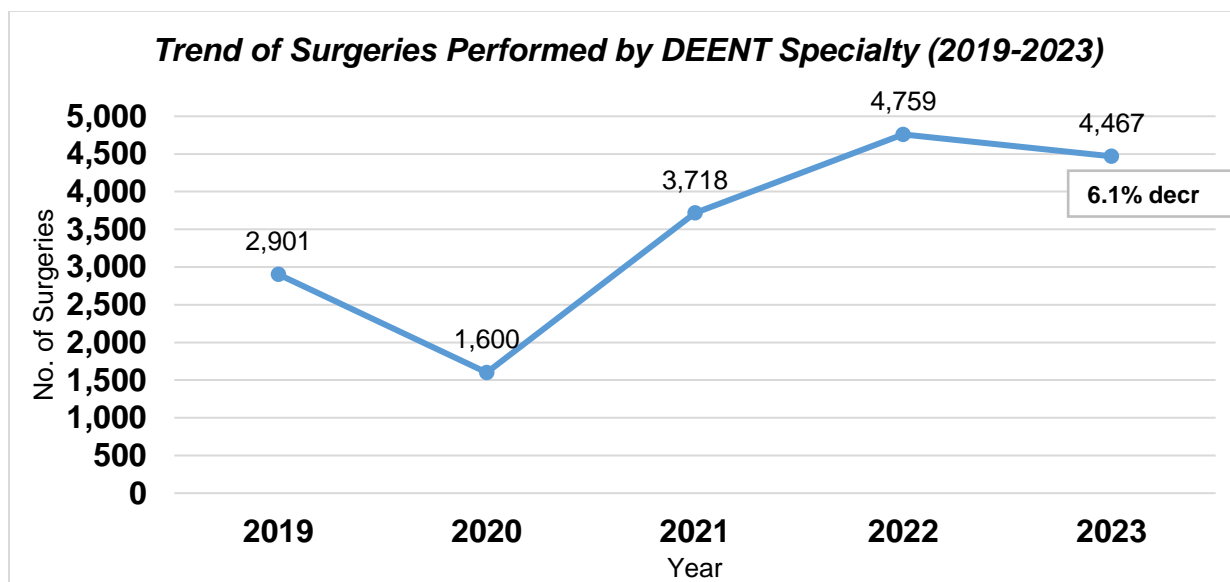


Figure 17.6. 1: Trend of Surgeries Performed by DEENT Specialty (2019-2023)

Table 17.6. 1: Total Surgeries Performed by DEENT Specialty

DEENT SPECIALTY	2019	2020	2021	2022	2023	REMARKS
Eye	1,340	534	2,295	2,666	2,093	21.5% decr
Dental & Maxillofacial.	1,334	865	1,257	1,887	2,180	15.5% incr
ENT	227	201	166	206	194	5.8% decr
TOTAL	2,901	1,600	3,718	4,759	4,467	6.1% decr

Table 17.6. 2: Surgeries Performed by DEENT Specialty

DEENT SPECIALTY	2019	2020	2021	2022	2023	REMARKS
MAJOR SURGERIES						
EYE	1,231	425	2,201	2,558	2,018	21.1% decr
ORAL	66	98	96	35	25	28.6% decr
ENT	147	103	111	142	117	17.6% decr
TOTAL	1,444	626	2,408	2,735	2160	21.0% decr
MINOR SURGERIES						
EYE	109	109	94	108	75	30.6% decr
ORAL	1,268	767	1,161	1,852	2,155	16.4% incr
ENT	80	98	55	64	77	20.3% incr
TOTAL	1,457	974	1,313	2,024	2,307	14.0% incr

17.7 OUTREACH SERVICES

Most of the outreach services by the hospital is conducted by the DEENT Sub-BMC. Schools, churches, communities, corporate organizations and peripheral health facilities within catchment areas in the region and beyond are some of the places where these outreaches were undertaken. The total number of districts visited declined from 6 in 2022 to 5 in 2023. However, the number of beneficiaries increased from 16,887 in 2022 to 17,570 in 2023. The total number of visits to schools in 2023 increased (from 3 in 2022 to 6 in 2023) with corresponding increase in the total number of beneficiaries. Table 17.7.1 to table 17.7.2 provides detailed trend analysis on the outreaches performed.

Table 17.7. 1: Performance from Outreach Programme (2019-2023)

INDICATOR	2019	2020	2021	2022	2023
Community Outreaches					
Total Districts visited	6	5	8	6	5
Total Communities Visited	159	102	398	-	209
Number of Beneficiaries	12,756 • Eye Unit = 10,791 • ENT Unit = 1,381 • Dental Unit = 584	6872 • Sub-BMC Level = 719 • Eye Unit = 4,982 • ENT Unit = 1,171 • Dental Unit = -	40,830 • Sub-BMC Level = 20,415 • Eye Unit = 19,098 • ENT Unit = 641 • Dental Unit = 676	16,887 • Eye - 16,182 • ENT – 338 • Dental - 105 • STL - 262	17,570 Eye - 16,793 ENT – 596 Dental - 181
School Outreaches					
Number of Schools visited	8	8	3	3	6
Number of Beneficiaries	495	1,142	1,271	277	546

INDICATOR	2019	2020	2021	2022	2023
Surgical Outreaches to Facilities					
Number of Health Facilities Visited for Surgical Support	4	-	1	-	-
Number of beneficiaries	86	-	28	-	-
Outreaches to Organizations					
Number of Organizations visited	-	-	4	1	3
Number of beneficiaries	-	-	540	372	166

Table 17.7. 2: DEENT Sub-BMC's Outreach Activities in 2023

EYE UNIT		ENT		DEENT SUB-BMC	
Community/School	No. of Clients Screened	Community/School	No. of Clients Screened	Community/School	No. of Clients Screened
Ahanta West	2,154	Anokyi	94	Kissi	106
Mpohor	2,123	Nkanfoa	221	Mankessim	75
Effutu	4,382	Abrem Agona	69	Total	181
Agona East	1,382	Attabadze	34		
Assin Fosu	2,843	Pedu	178		
Cape Coast North	216	Total	596		
KEEA	874				
Gomoa Central	1,263				
Mfantiman	1,556				
Total	16,793				

CHAPTER EIGHTEEN

PUBLIC HEALTH SERVICES

18.1 INTRODUCTION

The Public Health Unit contributes to the improvement of health and well-being of the population within the hospital' catchment area through Preventive, Promotional, Rehabilitative and Curative Services. Services rendered at the unit includes

- Health Promotion
- Expanded Programme on Immunization
- Child Welfare Clinic
- Family Planning
- Adolescent Health Care
- Counselling
- Post Natal Care
- Disease Surveillance
- School Health
- Home Visit
- TB Management
- HIV Management
- Health Education

18.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The general performance of the Public Health Unit's is outlined compared to the hospital's strategic objectives. This is provided in table 18.2.1 below

Table 18.2. 1: Summary of the 2023 Annual Performance of Public Health Unit under the Strategic Objectives.

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2019	2020	2021	2022	2023	Target	Remarks
Couple year protection	1,562.5	1,891.2	2,233	2,626	2,075	TH = 2,500	Target not met
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
243 sessions of public health education held on Radio/ TV							
Conducted bi-weekly training for Public Health Unit Staff on data analysis, interpretation and report writing							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
The Unit had two of its consulting rooms and waiting area refurbished as part of the general renovation embarked by the hospital.
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Conducted quarterly leadership training for unit heads and focal persons
4.2: Human Resource Related Performance
Appraised all staff
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
Conducted quarterly training for members of the Public Health Unit's research team
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
The Health Promotion section collaborated with the Eye Unit to embark on community outreaches to screen people for cataract and scheduled them for surgery <ul style="list-style-type: none"> ● Number of communities visited – 209 (in 5 districts) ● Number of beneficiaries - 16,793
The Health Promotion Unit and the Surgical Sub-BMC embarked on the following outreaches; <ul style="list-style-type: none"> ● Plastic Surgery <ul style="list-style-type: none"> ○ Number of Community visited – 2 ○ Number of people screened – 112 ● Orthopaedic Surgery Screening <ul style="list-style-type: none"> ○ Number of Community visited – 2 ○ Number of people screened – 502 ● Brest Cancer Screening <ul style="list-style-type: none"> ○ Number of Community visited – 42 ○ Number of people screened – 8,027 ○ Number booked/referred - 396
The Unit collaborated with the OPD Sub-BMC to visit one (1) community to undertake the following screening services; <ul style="list-style-type: none"> ● Diabetes screening <ul style="list-style-type: none"> ○ Number of people screened – 618 ○ Number booked/referred - 15 ● Hypertension screening <ul style="list-style-type: none"> ○ Number of people screened – 722

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
<ul style="list-style-type: none"> ○ Number booked/referred - 35
<p>Organized ninety-four (94) outreach programmes on substance abuse, teenage pregnancy, etc. to selected Senior High Schools with 3,610 students benefitting</p> <ul style="list-style-type: none"> ● , et

18.3 DOSES OF VACCINES PROVIDED (EPI)

Vaccination is a vital means of averting some illnesses that may cause certain medical conditions leading to disability or mortality. In 2023, the total number of vaccines administered dropped slightly by 1.95% (from 15,096 in 2022 to 14,802 in 2023). RTSS (Malaria Vaccine) and Vitamin ‘A’ 200,000 IU vaccinations recorded the highest increase of 36.6% and 29.7% respectively. In contrast, Tetanus in non-pregnant women saw a decline of 91.4% (from 164 in 2022 to 14 in 2023) as compared to Tetanus in-Pregnant women that recorded a drop of 57.9% (from 791 in 2022 to 333 in 2023). The total number adverse events following immunization at the hospital increased in 2023 compared to 2022 (from 3 in 2022 to 5 in 2023). Detailed trend analysis is provided in figure 18.3.1 and table 18.3.1 to table 18.3.2 below.

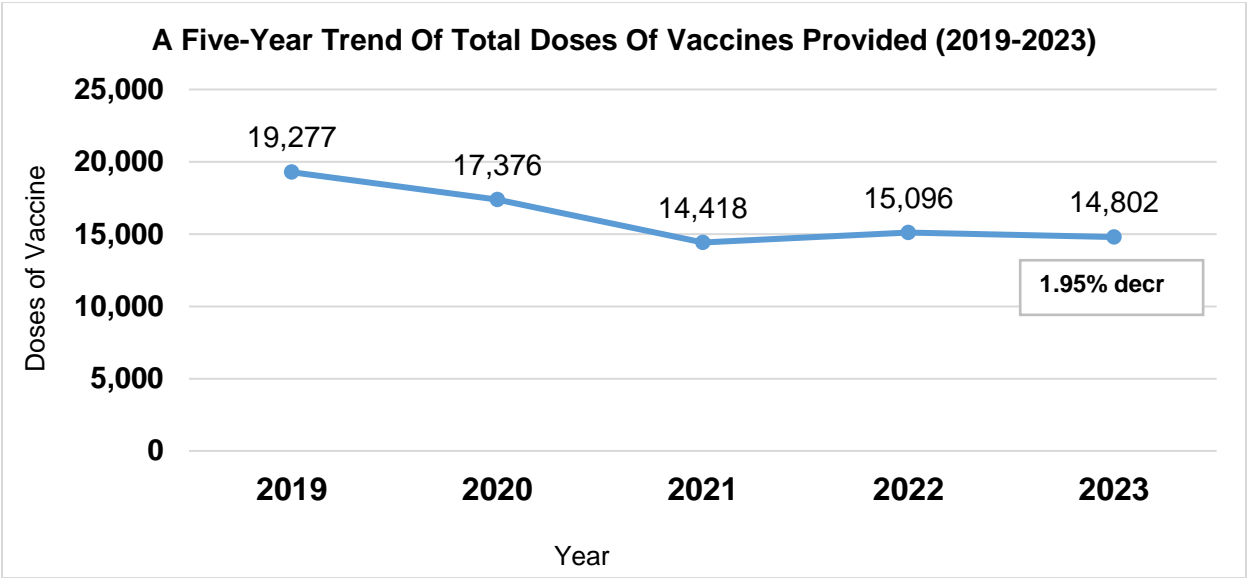


Figure 18.3 1: A Five-Year Trend of Total Doses of Vaccines Provided (2019-2023)

Table 18.3. 1: Breakdown of Total Doses of Vaccines Provided (2019-2023)

Vaccines	2019	2020	2021	2022	2023	Remarks
BCG	3,182	3,271	2,462	2,596	2,196	15.4% decr
Polio	5,398	5,003	3,853	3,232	3,506	8.5% incr
Pentavalent (1-3)	2,198	1,745	1,948	1,858	1,857	0.05% decr
• Pentavalent 1	-	-	998	1,023	1,037	1.4% incr
• Pentavalent 2	-	-	551	446	472	5.8% decr
• Pentavalent 3	-	-	399	389	348	10.5% decr
Rota Virus Vaccine (ROTA 1&2)	1,844	1,409	1,122	1,327	1425	7.4% incr
Yellow Fever	283	270	176	308	269	12.7% decr
MMR	-	-	-	-	-	
TD1/TD2	1004	734	623	610	637	4.4% incr
Vitamin 'A' 100,000 IU	181	215	281	189	291	54% incr
Vitamin 'A' 200,000 IU	296	368	343	424	550	29.7% incr
Pneumococcal Vaccine	2189	1,745	1,418	1,843	1732	6.0% decr
M.R. 1	283	270	179	285	248	13.0% decr
M.R 2	-	185	143	205	206	0.5% incr
Tetanus Pregnant	1,250	734	718	791	333	57.9% decr
Tetanus non-pregnant	422	410	158	162	14	91.4% decr
Inactivated Polio Vaccine (IPV)	354	336	296	348	342	1.7% decr
RTSS (Malaria Vaccine)	261	496	560	725	990	36.6% incr
LLIN	132	185	138	193	206	6.7% incr
Total	19,277	17,376	14,418	15,096	14,802	1.95% decr

Table 18.3. 2: Adverse Events Following Immunization (2021 – 2023)

VACCINATION	ADVERSE EVENTS	2021	2022	2023	REMARKS
Routine EPI Vaccination	Serious AEFI	6	2	1	Decr
	Non-Serious AEFI	47	0	4	Incr

VACCINATION	ADVERSE EVENTS	2021	2022	2023	REMARKS
Covid-19 Vaccination	Serious AEFI	1	1	0	
	Non-Serious AEFI	45	0	0	
	Total	99	3	5	Incr

18.4 CHILD WELFARE SERVICES

The Child Welfare Clinic (CWC) is one of the essential clinics run by the public health department and is responsible for the growth of children under five years through weight monitoring, immunization as well as educating and counselling their mothers.

In 2023, the hospital saw a significant rise in the total number of new registrants at the CWC from 406 in 2022 to 1,654 in 2023. Among these registrants, children aged 0-11 months constituted 71.8% (1,188) whereas those aged 12-23 accounted for 21.9% (362) of the total. Further, there was a general decline in the total attendants to the CWC by 6.1% (from 4761 in 2022 to 4470 in 2023). Attendance by children aged 24 months to 54 months increased by 13.2% (from 167 in 2022 to 189 in 2023), while other age categories decreased in 2023.

The number of babies with normal weight reported at CWC reduced by 16.3% (From 4717 in 2022 to 3950 in 2023) whereas the number of babies with moderate underweight and severely underweight babies recorded went by 62.7% and 200% respectively. Details illustrated in 18.4.1 and table 18.4.2 below.

Table 18.4. 1: Child Welfare Clinic Performance (2019-2023)

Age (Months)	2019	2020	2021	2022	2023	REMARKS
New Registrants by Age						
0-11	278	510	548	359	1,188	230.9% incr
12-23	47	133	156	29	362	Incr
24-59	12	79	68	18	104	477.8% incr
Total	337	722	772	406	1,654	307.4% incr
Attendant by Age						
0-11	2,681	3,209	3,346	3,923	3,629	7.5% decr
12-23	469	769	748	671	652	2.8% decr
24-59	146	265	297	167	189	13.2% incr

Age (Months)	2019	2020	2021	2022	2023	REMARKS
Total	3,296	4,243	4,391	4,761	4,470	6.1% decr

Table 18.4. 2: Weights of babies presented at Child Welfare Clinic (2019-2023)

Indicator	2019	2020	2021	2022	2023	REMARKS
Severe Underweight	13	15	0	0	2	200% incr
Moderate Underweight	467	84	0	44	118	62.7% incr
Normal Weight	2892	3473	2636	4717	3950	16.3% decr

18.5 INTEGRATED DISEASE SURVEILLANCE AND RESPONSE

Disease surveillance is an important activity undertaken by the Public Health Unit to help predict, observe and ensure the early detection, minimization as well as management of diseases. In 2023, cases of COVID-19, Measles, Meningitis, Cholera, Acute Flaccid Paralysis (AFP) as well as Human Rabies were detected which were duly investigated.

Out of the 1,532 COVID-19 cases suspected by the public health unit, only 83 were confirmed positive while 2 out of the 14 cases of meningitis suspected were confirmed positive. Table 18.5.1 and table 18.5.2 below highlight details of the analysis.

Table 18.5. 1: Surveillance Activities – Suspected and Investigated Cases

Condition	Number Suspected					Number Investigated				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
COVID-19	-	2607	4,085	227	1532	-	2607	4,085	227	1532
Measles	0	0	0	2	8	0	0	0	2	8
Yellow Fever	2	0	0	2	0	2	0	0	2	0
Meningitis	15	20	23	29	14	15	20	23	29	14
Cholera	0	0	0	0	1	0	0	0	0	1
Neonatal TT.	0	3	0	0	0	0	3	0	0	0
AFP	1	1	2	0	1	1	1	0	0	1
Human Rabies	1	1	2	3	1	1	1	2	3	1
Acute Haemorrhagic Fevers	3	0	0	3	0	3	0	0	3	0

Table 18.5. 2: Surveillance Activities – Confirmed Cases

Condition	2019	2020	2021	2022	2023
COVID-19	-	447	1,542	227	83
Measles	0	0	0	0	0
Yellow Fever	0	0	0	0	0
Meningitis	0	9	2	0	2
Cholera	0	0	0	0	0
Neonatal TT.	0	3	0	0	0
AFP	0	0	0	0	0
Human Rabies	0	0	1	3	0
Acute Haemorrhagic Fevers	0	0	0	0	0

18.6 INFLUENZA SENTINEL SURVEY

The hospital is a sentinel site for influenza and thus send suspected samples to Noguchi Memorial Institute for confirmation. The total number of influenza-like cases detected in 2023 decreased by 9.8% (from 1693 in 2022 to 1877 in 2023). Similarly, the number of samples sent for confirmatory testing declined by 66.8% (from 725 in 2022 to 241 in 2023).

The number of RTI cases confirmed positive went up significantly from 12 in 2022 to 27 in 2023 indicating an increase rate of 125%. On the other hand, 359 cases of severe acute respiratory infection (SARI) were admitted. In addition, 15 out of the 135 SARI samples that were sent for confirmation proved positive. Table 18.6.1 below shows the trend analysis of the influenza cases detected and the outcome since 2019.

Table 18.6. 1: Influenza Sentinel Survey

INDICATOR	2019	2020	2021	2022	2023	REMARKS
INFLUENZA LIKE ILLNESS						
RTI cases	1897	1475	2,247	1,877	1,693	9.8% decr
Samples Sent	215	10	26	725	241	66.8% decr
Positive Cases	19	0	5	12	27	125% incr
SEVERE ACUTE RESPIRATORY INFECTION (SARI)						
RTI Admitted	10	0	13,074	398	359	9.8% decr
Samples Sent	10	0	36	119	135	13.4% incr
Positive Cases	0	0	3	4	15	275% incr

18.7 REPRODUCTIVE AND CHILD HEALTH SERVICES

The number of supervised deliveries at the hospital declined by 12% (from 3,269 in 2022 to 2,877 in 2023). Similarly, the number of BCG vaccines administered decreased by 15.4% (from 2,596 in 2022 to 2,196 in 2023) whereas post-natal registrants dropped by

12% (4,943 in 2022 to 4,351 in 2023). Figure 18.7.1 and Table 18.7.1 provide details of the analysis.

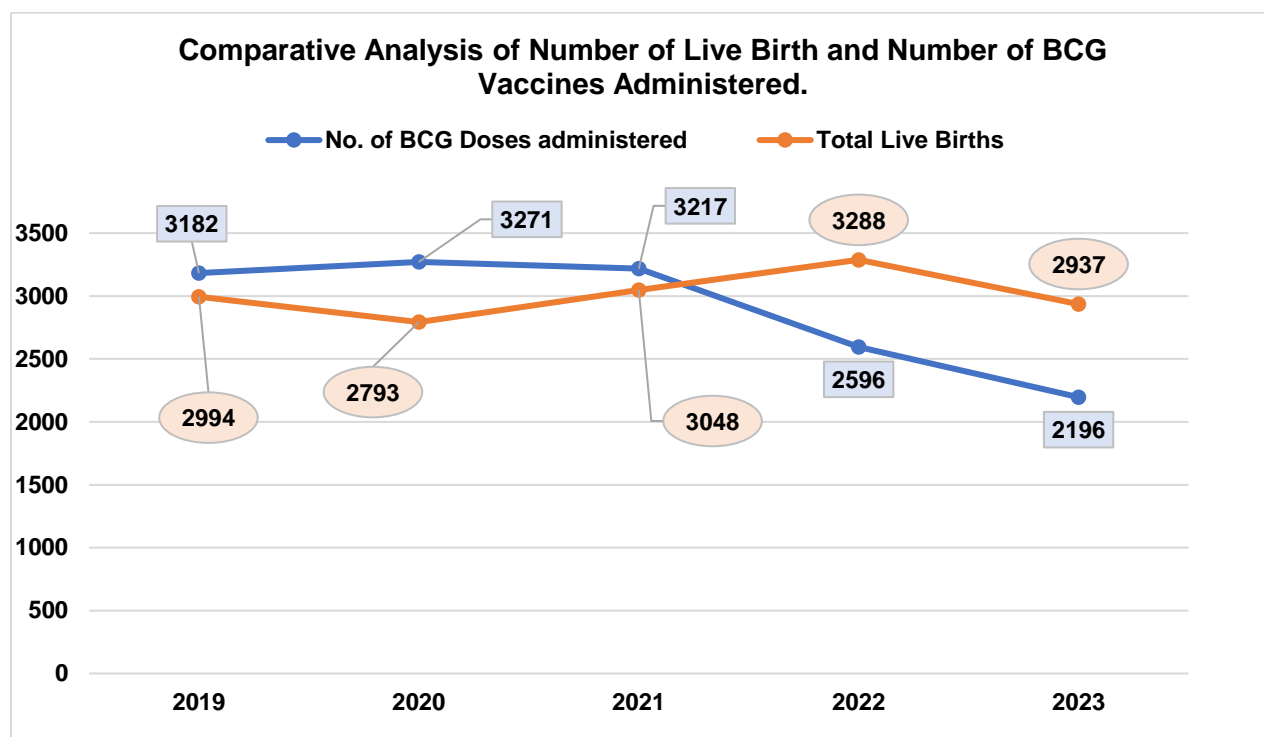


Figure 18.7. 1: Comparative Analysis of Number of Babies Delivered and Number of BCG Vaccines Administered

Table 18.7. 1: Reproductive and Child Health Services

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Total Deliveries	3,027	2,883	3,055	3,269	2,877	12% decr
Total babies	3,120	2,979	3,176	3,408	3,042	10.7% decr
Total Live Births	2994	2793	3048	3288	2937	10.7% decr
Number of BCG vaccination	3,182	3,271	3,217	2,596	2,196	15.4% decr
Number of Post-natal Registrants	3,398	3,181	3,155	4,943	4,351	12% decr
Number of Still Birth	126	89	128	118	105	11% decr
Number of Maternal Deaths	28	26	32	38	20	47.4% decr
Number of Low Birth Weight (<2.5KG)	481	512	604	676	-	

18.8 FAMILY PLANNING (FP)

In 2023, there was a general drop of 22.3% in the number of family planning acceptors (from 2,674 in 2022 to 2,079 in 2023). However, while some commodities saw an increase in their patronage, others saw significant reduction in their utilization over the period. For instance, the patronage of Implanon increased by 15% (from 60 in 2022 to 69 in 2023). On the other hand, the number of male condoms patronized decreased by 23.6% (from 687 in 2022 to 525 in 2023) whereas Jadelle declined by 65.9% (from 44 in 2022 to 15 in 2023).

Furthermore, there was a general decline in the total couple year protection (from 1705.5 in 2022 to 563.7 in 2023). Similarly, both the short-term and long-term methods decreased in 2023. Figure 18.8.1 to figure 18.8.2 and table 18.8. 1 to 18.8. 2 below provide details of the analysis.

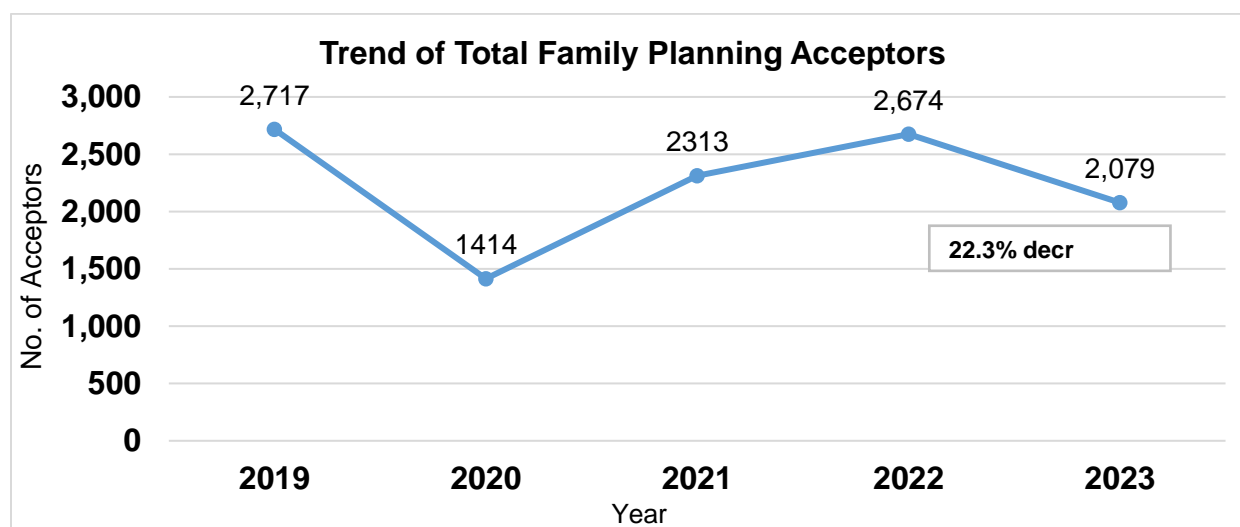


Figure 18.8. 1: Trend of Total Family Planning Acceptors

Table 18.8. 1: Family Planning Acceptors by Commodity

Acceptors	2019	2020	2021	2022	2023	Remarks
Condom M	118	184	710	687	525	23.6% decr
Condom F	0	0	0	0	0	-
Copper T	45	8	27	25	24	4.0% decr
Depo Provera	299	79	308	342	201	41.2% decr
Jadelle	111	20	24	44	15	65.9% decr
Implanon	132	21	97	60	69	15.0% incr
Cycle Beads	20	20	3	0	1	Incr
Micro G	104	34	67	114	61	46.5% decr
Micro N	154	18	4	48	0	Decr
Lus	0	0	0	0	0	-

Acceptors	2019	2020	2021	2022	2023	Remarks
Mini Lap/BTL	98	81	57	0	82	Incr
Vasectomy	0	0	0	0	0	-
Norigynon	55	25	34	0	18	incr
Emergency Contraceptives (Postinor)	-	-	0	0	0	-
LAM	1,581	924	982	1,354	1,083	20.0% decr
Total	2,717	1414	2313	2,674	2,079	22.3% decr

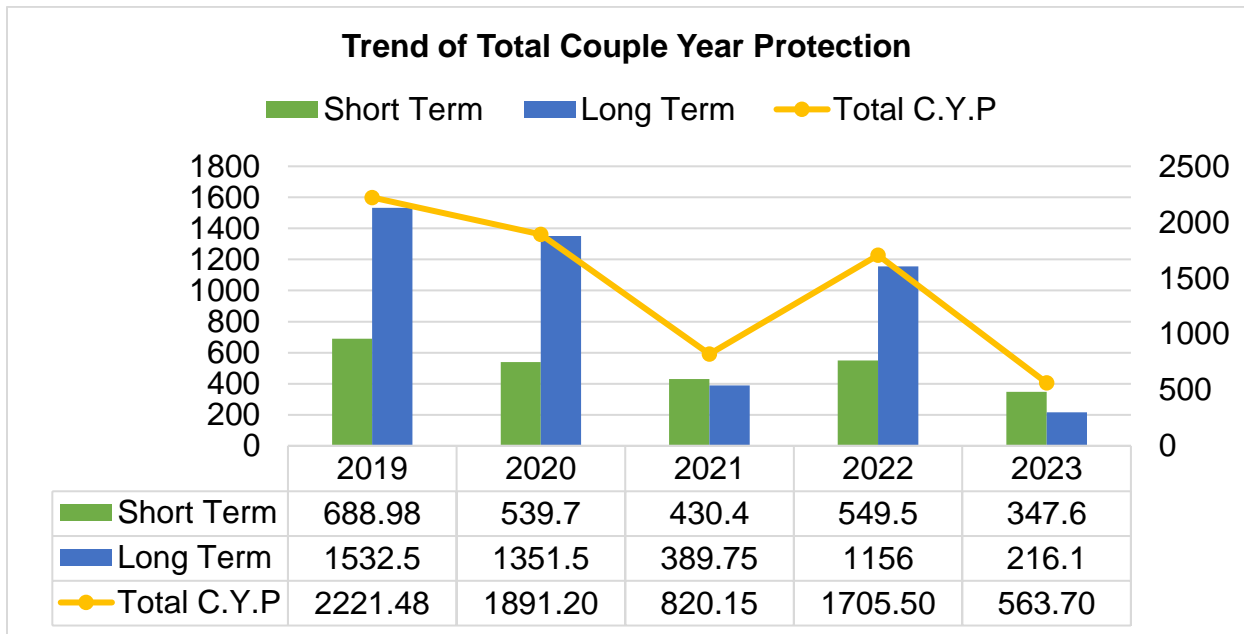


Figure 18.8. 2: Trend of Total Couple Year Protection

Table 18.8. 2: Trend of Family Planning Acceptor and CYP

Commodity	2019	2020	2021	2022	2023	Remarks
Short Term						
Pill	76.38	32.5	13.2	34.15	16.3	Decr
Condom	84.5	134.4	85	109.3	50.7	Decr
Lam	395.25	231	245.5	283.3	227.3	Decr
Depo	97.75	125	82.5	120.5	51.5	Decr
Cycle Beads	30	11.5	1.5	2.25	0.5	Decr
Norigynon	5.1	5.3	2.7	0	1.3	Incr
Total	688.98	539.7	430.4	549.5	347.6	Decr
Long Term						
Jadelle	192.5	164.5	63	70	84	Incr

Commodity	2019	2020	2021	2022	2023	Remarks
Implanon	185	152.5	225	288	27.6	Decr
Copper - T	77	143.5	87.5	105	84	Decr
C/S BTL	1078	891	14.25	693	20.5	Decr
Total	1532.5	1351.5	389.75	1156	216.1	Decr
Overall Total C.Y. P	2221.48	1891.2	820.15	1705.5	563.7	Decr

18.9 HEALTH PROMOTION ACTIVITIES

Activities aimed at raising awareness and promoting health is frequently carried out by the Public Health Unit. These activities are often organized with the intended audience in mind, along with the delivery method, locations, and a range of themes covering emerging health issues. In addition to the OPD, additional venues for the activities include radio, TV, community, schools, and churches / mosques.

Generally, there was an increase in the number of health promotional activities organized by the in 2023. With the exception of the number of school health talks that declined (from 99 in 2022 to 94 in 2023), all the other health promotional activities went up during the period. For instance, the number of OPD health talks conducted increased from 315 in 2022 to 1,110 in 2023 whereas the number of focus client education held increased from 301 in 2022 to 743 in 2023. In the same light, the total number of beneficiaries from these health promotional activities increased. Table 18.9.1 to 18.9.2 below provide details of the analysis.

Table 18.9. 1: Trend of Frequency of Health Promotion Activities

ACTIVITY	FREQUENCY					REMARKS
	2019	2020	2021	2022	2023	
OPD Health Talk	217	366	245	315	1,110	Incr
Radio Discussion	93	104	161	226	243	Incr
TV Discussion	54	45	88	219	-	
Community Outreach	159	49	429	199	293	Incr
School Health Talks	24	3	9	99	94	Decr
Focus Client Education	1,293	280	197	301	743	Incr
Video Show	0	-	7	151	231	Incr
Total	1,840	847	1,136	1,510	2,714	Incr

Table 18.9. 2: Trend of Beneficiaries of Health Promotion Activities

Activity	2020	2021	2022	2023	Remarks
OPD Talk	All OPD attendants	All OPD attendants	All OPD attendants	All OPD attendants	-
Radio / TV Discussion	General Public	General Public	General Public	General Public	-
Community Outreach	12,112	21,820	21,360	29,851	Incr
School Health Talks	675	785	3,450	3,610	Incr
Other Focus Client Education	335	266	355	1,334	Incr
Video Show	All OPD's Attendants	All OPD's Attendants	All OPD's Attendants	All OPD's Attendants	

18.10 HIV / AIDS SERVICES

HIV Counselling and Testing are some key protocols implemented to ensure the prevention and control of HIV/AIDS in Ghana. Thus, CCTH conducts regular HIV screening of clients and significant others for early detection, management as well as counselling. The hospital has over the years has recorded fluctuations in the number of people screened for HIV.

The hospital in 2023 recorded a total of 3,600 cases of HIV out of which 111 were new cases. Follow-up was done on 4,652 clients and they were all screened for TB. 11 out of the total clients screened were confirmed positive for TB and were all placed on antiretroviral treatment as shown in table 18.10.1 below.

Table 18.10. 1: Utilization of HIV/TB Services

INDICATOR	2020			2021			2022			2023		
	Adult	Kids	Total	Adult	Kids	Total	Adult	Kids	Total	Adult	Kids	Total
Total suspected Cases	4,998	339	5,337	3863	194	4,057	-	-	4,457	-	-	3,600
New Cases	18	8	94	71	4	75	70	4	74	105	6	111
Clinical Follow Ups	4,998	339	5,337	3863	194	4,057	236	4,288	4,524	203	4,449	4,652

INDICATOR	2020			2021			2022			2023		
	Adult	Kids	Total	Adult	Kids	Total	Adult	Kids	Total	Adult	Kids	Total
Total Death	2	0	2	0	3	3	0	1	1	-	-	-
No. Screened For TB	1,107	72	1,179	1,702	173	1,875	169	4,288	4,457	203	4,449	4,652
No. Diagnosed TB	12	-	12	13	0	13	7	29	36	4	7	11
No. On TB Treatment	12	-	12	13	0	13	7	29	36	4	7	11
No. Of HIV Cases Receiving ARV	1357	100	1457	1368	51	1,419	28	1,631	1,659	60	932	992

The number of people that accessed the HIV Counselling and Testing services (number screened for HIV) went up by 30.2% (from 2,765 in 2022 to 3,600 in 2023) out of which 9% (319) were confirmed positive and duly placed on treatment. Furthermore, the number of babies exposed to HIV increased significantly by 132% (from 25 in 2022 to 58 in 2023) and all of the them were tested. However, only 45 were put on antiretroviral prophylaxis. Detailed trend analysis is provided in table 18.10.2 and table 18.10.3 below.

Table 18.10. 2: HIV Testing and Counselling

Indicator	2019	2020	2021	2022	2023	Remarks
Number Screened	3159	507	4,057	2,765	3,600	30.2% incr
Number Positives	243	95	225	221	319	44.3% incr
HIV Positivity Rate	7.7%	18.7%	5.5%	7.6	9%	Incr
Number placed on treatment	215	95	225	221	319	44.3% incr
TB Screening	243	95	225	4,457	-	
Number of Exposed Babies Tested	43	37	34	25	58	132% incr
Number of Babies positive	1	1	1	0	0	

Indicator	2019	2020	2021	2022	2023	Remarks
Positivity Rate %	2.3	2.7%	2.9%	0	0	

Table 18.10. 3: Early Infant Diagnosis for HIV

	2020	2021	2022	2023	REMARKS
No. Exposed babies	37	34	25	58	132% incr
No. Tested (PCR)	37	34	25	58	132% incr
No. put on ARV Prophylaxis	37	34	24	45	87.5% incr
No. put on Septrin	37	34	24	58	141.7% incr
No. Retested @ 18mths with Antibody Test	37	34	24	0	Decr
No. Positive after Antibody Test	1	1	0	0	

18.11 PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT) PROGRAMME

The Prevention of Mother-to-Child Transmission of HIV (PMTCT) intervention is an integrated health service intervention which is offered to mothers and their babies to prevent the spread of mother to child viral infection. This intervention is implemented by the Public Health Unit of the hospital in collaboration with the Maternal Health Sub-BMC.

During the year under review, 0.29% (2) out of the 692 antenatal clinic (ANC) registrants who tested and received post-test counselling on PMTCT were confirmed HIV positive while 3 tested positive at the 34 weeks of being pregnant. Also, 14 of the ANC registrants were placed on antiretroviral (ARV) treatment in 2023 compared to 12 in 2022 as shown in table 18.11.1 below.

Table 18.11. 1: Pregnant Mother to Child Transmission (PMTCT)

INDICATORS	2019	2020	2021	2022	2023	REMARKS
Number of ANC Registrants	802	761	768	808	697	13.7% decr
Number Tested & Received Post-test Counselling	802	761	768	808	692	14.4% decr
Percentage (%) of Clients Tested	100%	100%	100%	100%	99.3%	Decr
Number Positive	4	4	0	6	2	Decr

INDICATORS	2019	2020	2021	2022	2023	REMARKS
Number Positive at 34wks	0	1	0	3	3	
Number Given ARVs	4	5	0	12	14	40% incr
Number of Babies on ARVs	-	-	42	0	0	
Number of infants Tested (EID)	43	37	34	25	58	132% incr
Number of EID Positive (6wks - 18mths)	1	1	1	0	0	
Given ARVs as Prophylaxis	43	37	42	15	45	Incr

18.12 POST EXPOSURE PROPHYLAXIS

Being exposed to HIV infection is one of the risks that traumatize people coupled with the stigma that comes with it when one becomes infected with the viral disease. Thus, it is considered courageous when an exposed person comes forward to seek for help. When such incidence occurs, HIV prophylaxis is administered to the person immediately to help reduce the probability of contracting the infection. During the period, the number of clients who reported being exposed to HIV increased by 38.2% (from 34 in 2022 to 47 in 2023). Out of the total clients exposed, 63.8% (30) were considered at low risk while 19.1% (9) were at very low risk. 17% (8) of the reported cases however were classified as high risk. Table 18.12.1 below provides details of the analysis.

Table 18.12. 1: Post Exposure Prophylaxis

INDICATORS	2019	2020	2021	2022	2023	REMARKS
Number of Cases Reported	19	30	26	34	47	38.2% incr
Number at Very Low Risk	7	4	21	5	9	80% incr
Number at Low Risk	7	9	2	26	30	15.4% incr
Number at High Risk	5 (2 Rape)	17	3	3 (3 rape)	8 (6 rape)	166.7% incr
Number who Tested Positive	0	0	0	0	0	

18.13 TUBERCULOSIS SERVICES UTILISATION

TB has been identified as a disease condition of significant public health concern. Thus, suspected cases are immediately tested and those who are confirmed positive are duly

placed on treatment. However, there are instances when clients on treatment default in taking their medications and thus relapse. The total number of normal TB cases detected in 2023 increased by 6% (from 116 in 2022 to 123 in 2023). Similarly, the number of multiple drug resistance cases (MDR) detected went up by 22.3% (from 22 in 2022 to 28 in 2023). Out of the 123 normal cases detected, 95 were referred to other DOT centres whereas 28 were registered as TB clients of the hospital.

Further, out of the 28 registered clients, 18 were confirmed positive and 4 were negative when they underwent smear test. Also, at the end of 2023, 5 of the 28 registered clients were cured while 4 successfully completed their treatment, however, the treatment of one person failed. On the other hand, 15 people unfortunately passed away in 2023. Detailed trend analysis provided in table 18.13.1 to 18.13.3 below.

Table 18.13. 1: Tuberculosis Case Detection Trend Analysis

Indicator	2019	2020	2021	2022	2023	Remarks
Total Normal Cases Detected	214	115	147	116	123	6.0% incr
MDR Cases	3 (2+1PXDR)	1	0	22	28	22.3% Incr
Total Referred	161	81	113	84	95	13.1% incr
Total Registered	28	34	26	14	28	100% incr
Total ward Deaths	-	-	-	12	-	

Table 18.13. 2: Yearly Cohort Analysis of Registered Cases

Category of Cases	2019	2020	2021	2022	2023	Remarks
New Smear positive	11	18	14	13	18	38.5% incr
Smear negative	16	8	3	4	4	
Extra Pulmonary	1	6	3	3	3	
Relapse	0	0	4	4	2	50% decr
Return after Defaulter	0	0	0	0	0	
TTT after failure	0	0	3	0	0	
Other previously	0	1	0	1	1	
Total cases	28	34	27	25	28	
Outcomes						
Cured	9	-	-	5	-	
Treatment completed	16	-	-	4	-	
Died	1	-	-	15	-	
Treatment fail	1	-	-	1	-	
Default	0	-	-	0	-	
Loss to follow	1	-	-	0	-	

Category of Cases	2019	2020	2021	2022	2023	Remarks
Cure rate%	81.8%	-	-	19.4%	-	
Treatment success%	-	-	-	36.0%	-	

Table 18.13. 3: TB Referrals to Other DOT Centres

	GENDER	2019	2020	2021	2022	2023	REMARKS
Adult	Males	75	47	70	38	35	7.9% decr
	Females	53	23	39	29	47	62.1% incr
Paediatrics	Males	21	4	2	11	9	18.2% decr
	Females	12	7	2	6	4	33.3% decr
	Total	161	81	113	84	95	13.1% incr

18.14 CERVICAL CANCER SCREENING (VIA)

Cervical cancer is one of the leading causes of mortality among women in Ghana and globally. It is therefore recommended for women of reproductive ages to undergo periodic screening to enable its early detection and management.

During the year, 11 women screened for cervical cancer at the hospital compared to 132 in 2022 as shown in table 18.14.1 below. Fortunately, none of them tested positive. Awareness of cervical cancer screening, vaccination and the condition need be intensified to improve on the outcome on cervical cases detected.

Table 18.14. 1: Trend of Cervical Cancer Screening from 2020 to 2023

INDICATOR	2020	2021	2022	2023	REMARKS
No. of Women Screened	110	151	132	11	Decr
No. Suspected for Cancer.	0	2	5	0	Decr
No. Tested Positive	0	2	1	0	Decr
No. Tested Negative	110	149	131	11	Decr

CHAPTER NINETEEN

PHARMACEUTICAL SERVICES

19.1 INTRODUCTION

The pharmacy directorate is mandated to ensure the continuous availability of medications and other pharmaceutical products. The directorate operates outlets at the OPD, Polyclinic, ward, and a 24-hour emergency service, offering retail services to enhance access to quality pharmaceutical products.

19.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

The general performance of Pharmaceutical Services is aligned with the hospital's strategic objectives, as outlined in the table below

Table 19.2. 1: Summary of the 2023 Annual Performance of Pharmaceutical Services under the Strategic Objectives.

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2019	2020	2021	2022	2023	Target	Remarks
% Tracer Drug Availability	88.5%	84.62%	95%	86.2%	93.10%	CCTH = 100% TH = 90%	Incr CCTH target not met THs target met
Prescription to pharmacy ratio	8,288:1	9425:1	6,422:1	6,495:1	6,643:1	TH = 12000:1	Incr Target not met
Percentage antibiotic prescribed	16.18%	17.1%	11.6%	8.5%	10.25%	TH = 35%	Incr Target met
Percentage Injectable	5.8%	24.2%	1.6%	7.23%	10.54%	TH = 10%	Incr Target not met
Utilization of Pharmaceutical Care interventions	99%	11.5%	21.2%	22.6%	22.4%	TH = 30%	Target not met
Improved Tracer Medicines Availability • From 86.25% in 2022 to 93.1% in 2023							
Manufactured the following products: • 6,345L (23700) liquid soap							

2023 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
<ul style="list-style-type: none"> ● 2,125L (7500) strong antiseptic ● 8,242L (9320) distilled water ● 50L (150) of Syrup
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.
Expanded Discharge Counselling services to Female Medical Ward
Counselled 884 patients after discharge
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Conceptualized and developed an architectural drawing for the construction of 24-Hour Pharmacy Stores and Conference Room <ul style="list-style-type: none"> ○ Proposal and design approved ○ BOQ also approved ○ Construction scheduled to begin in 2024
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
1 Pharmacist granted study leave to attend the Ghana College of Pharmacist
7 Pharmacists and 1 Pharmacy Technologist attended their AGMs
2 manufacturing staff sent to KATH manufacturing unit for training
Organised one (1) In-service training in NHIS Claims processing
Organised monthly meetings for pharmacy managers
Managers submitted monthly attendance report of pharmacy staff
Pharmacy managers submitted monthly reports
4.2: Human Resource Related Performance
All staff appraised
Received two (2) pharmacists <ul style="list-style-type: none"> ○ One pharmacist ○ One specialist pharmacist
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Teaching:
Organised Forty-six (46) Clinical Meetings
Carried out Seventy-three (73) Case presentations
Conducted One hundred and one (101) General Ward Rounds
Completed Thirty-nine (39) Pharmacist-Only ward rounds
Thirty (30) ADR's forms filled and submitted to FDA
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Provided support for Medevac orthopaedic and Himalayan cataract surgeries
Assisted in medical outreaches conducted as part of the 25 th Anniversary Celebration

19.3 PERFORMANCE TREND OF PHARMACY DEPARTMENT

The hospital recorded 6.85% increase in the availability of tracer medicines (from 86.25% in 2022 to 93.1% in 2023). Similarly, the number of prescriptions served increased by 2.3% (from 149,390 in 2022 to 152,800 in 2023). Additionally, the prescription-to-

pharmacist ratio increased from 6,495:1 from 2022 to 6,643:1 in 2023. However, clinical pharmacy practice on the wards decreased from 76% in 2022 to 52% in 2023.

The 24hr Pharmacy unit remained the outlet with the highest the number of prescriptions received, although it recorded a marginal decrease of 3.7% (from 57,180 in 2022 to 55,154 in 2023). Prescriptions served at the Outpatient (main) pharmacy experienced a slight increase of 0.3% (from 19,159 in 2022 to 19,223 in 2023) whereas prescriptions served at the Accident and Emergency pharmacy saw an increase of 8.3% (from 22, 947 in 2022 to 25,016 in 2023).

The TB clinic recorded a significant increase of 20.5% in number of prescriptions served (from 299 in 2022 to 376 in 2023). Prescriptions served at the oncology suite also increased substantially by 9.6% (from 649 in 2022 to 718 in 2023). Similarly, the in-patient/ward pharmacy recorded a 2.7 % increase in prescriptions served (from 21,815 in 2022 to 222,428 in 2023). The ART clinic experienced a 5.1% rise in prescriptions served (from 4,896 in 2022 to 5,157 in 2023). During the period, the hospital operationalised the polyclinic whose pharmacy served 1,925 prescriptions to clients.

Furthermore, the Outpatients Annex pharmacy recorded a marginal increase of 1.0% in prescriptions served (from 22,445 in 2022 to 22,803 in 2023). On the other hand, utilization of pharmaceutical care interventions declined slightly from 22.6% in 2022 to 22.4% in 2023 falling below the teaching hospital’s target of 30%. Details are presented in table 19.3.1 to table 19.3.3 below.

Table 19.3. 1: Trend Performance of Pharmacy Department

Indicator	2019	2020	2021	2022	2023	Remarks
% Tracer Medicines Availability	88.5%	84.62%	95%	86.25%	93.1%	incr
Clinical Pharmacy Practice on Wards	90%	90%	90%	76%	52%	Decr
No of Drug Bulletins issued	2	4	4	2		
No of Students trained	13	11	106	90	171	90% incr
Total number of prescriptions served	149,294	169,655	160,563	149,390	152,800	2.3% incr

Indicator	2019	2020	2021	2022	2023	Remarks
Prescriptions to Pharmacists ratio	8,288:1	9425:1	6,422:1	6,495:1	6,643:1	Incr
No of Researches conducted	1	2	2	1	1	No change

Table 19.3. 2: Five-Year Trend of Prescriptions Served by Various Pharmacy Outlets

PRESCRIPTIONS SERVED AT OUTLETS	2019	2020	2021	2022	2023	REMARKS
Out-Patient Dept. (OPD) Main	26,944	18,916	21,677	19,159	19,223	0.3% incr
Out-Patient Dept. (OPD) Annex	21,895	17,431	22,377	22,445	22,803	1.0% incr
Accident & Emergency	33,964	52,548	26,265	22,947	25,016	8.3% incr
In-Patient/Ward Pharmacy	8,539	11,966	20,600	21,815	22,428	2.7% incr
24hour Pharmacy	57,952	62,548	62,996	57,180	55,154	3.7% decr
Oncology suite	-	314	264	649	718	9.6% incr
Polyclinic	-	-	-	-	1,925	100% incr
TB Clinic	-	456	663	299	376	20.5% incr
ART Clinic	-	6,276	5721	4,896	5,157	5.1% incr
Total	149,294	169,655	160,563	149,390	152,800	2.2% incr

Table 19.3. 3: Pharmaceutical Services Performance under THs KPI

KPI	2019	2020	2021	2022	2023	REMARKS	TARGET	MEASUREMENT
Tracer Drug availability	88.5%	84.62	95%	86.25 %	93.1%	incr	CCTH = 100% TH = 90%	Medicines available / Total medicines in the tracer medicines list * 100

KPI	2019	2020	2021	2022	2023	REMARKS	TARGET	MEASUREMENT
Prescriptions - Pharmacist Ratio	8,288:1	9425:1	6422:1	6495:1	6,643:1	incr	TH = 12000:1	Total no. of prescription served / total no. of pharmacists
Percentage antibiotic prescribed	16.2%	17.13	11.58 %	8.5	10.25 %	1incr	TH = 35%	Total number of antibiotic / Total of medicines on a prescription * 100
Percentage injectable prescribed	5.8%	24.16	1.61%	7.23	10.54 %	incr	TH = 10%	Total number of injectable / Total of medicines on a prescription * 100
Utilization of pharmaceutical care interventions	99% (1.7% incr)	11.52 %	21.2%	22.6	22.4%	decr	TH = 30%	No. of interventions / no. of cases seen * 100
Proportion of ward round inputs by clinical pharmacist utilized	-	89.29 %	100%	100%	95%	decr		Number of clinical pharmacist inputs utilized / Total number of inputs

19.4 ANTI-RETRO VIRAL THERAPY (ART)

The total number of HIV clients served with ART in 2023 increased by 5.3% (from 4,896 in 2022 to 5,157 in 2023). The average number of clients seen per month also went up by 5.4% (from 408 in 2022 to 430 in 2023). However, the number of children under 14 years placed on ARV drugs decreased by 25% (from 4 in 2022 to 3 in 2023). The number of HIV-exposed babies receiving prophylaxis remained unchanged at 56. A detailed analysis is provided in table 19.4.1 below.

Table 19.4. 1: Summary of Performance - Anti-Retro Viral Therapy (ART)

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Attendance (Total no. of Clients)	5,520	6,276	5,721	4,896	5157	5.3% incr

INDICATOR	2019	2020	2021	2022	2023	REMARKS
Average. number of Client Seen per month	460	523	477	408	430	5.4% incr
New Adults	84	81	77	57	86	50.9% incr
• Males	22	20	26	19	31	63.2% incr
• Females	62	61	51	38	55	44.7% incr
No. of Children below 14yrs put AVR drugs	6	13	3	4	3	25% decr
• Males	2	6	1	3	1	66.7% decr
• Females	4	7	2	1	2	100% incr
No. of HIV exposed babies given prophylaxis	55	66	65	56	56	
No. of post exposure prophylaxis	43	47 (42 CCTH cases)	39	34	50	47.1% incr

19.5 RATIONAL USE OF MEDICINE (RUM)

Globally, the irrational use of medicines remains a significant concern. Medications are often inappropriately prescribed, dispensed, misused, overused or underused, resulting in drug scarcity or posing potential health risks. Additionally, the issue of “poly pharmacy” further exacerbate these challenges. The rational use of medicines requires that patients receive medications that are appropriate to their clinical needs, at doses that meet their own individual requirements, for an adequate period, and at the lowest cost to both the patient and the community, (WHO 2019 and WHO, 1988).

The Rational Use of Medicines (RUM) survey has been conducted regularly in CCTH over the past years in collaboration between Drug and Therapeutics Committee and the Pharmacy Directorate. The results were disseminated to all clinical staff, and measures were implemented to enhance performance.

19.5.1 RUM SURVEY FINDINGS

During the period, the hospital recorded an increase in its average dispensing communication time from 80 sec to 126.7 sec. The average waiting time for clients in the Pharmacy also increased by 4.23 mins (from 10.27mins in 2022 to 14.5mins in 2023). The percentage of generic medicines prescribed went up by 4.21% (from 92.29% in 2022 to 96.5% in 2023). Similarly, the percentage of antibiotics prescribed increased by 3.1% (from 8.5% in 2022 to 11.6% in 2023).

The availability of tracer drug availability improved by 6.85% (from 86.25 in 2022 to 93.1% in 2023). Additionally, the percentage of medicines prescribed from Essential Drug List

(EDL) increased from 89.88% in 2022 to 92.5% in 2023. However, the percentage of injectables prescribed declined significantly, from 7.23% in 2022 to 0.5% in 2023. Details provided in table 19.5.1.1 to table 19.5.1.2 below.

Table 19.5.1. 1: RUM Survey Result - Prescriber Indicator

Rum Prescribing Indicators	2019	2020	2021	2022	2023	Remarks	Target
Average consulting time	-	21.9 mins	16.12	10.27 mins	12.5 mins	incr	-
Av dispensing communication time	75 sec	69.51 sec	70.20 sec	80 sec	126.7 sec	incr	-
Average waiting time	30.8 mins	11.9 mins	24.45 mins	10.27 mins	14.5 mins	incr	-
% Generic medicine prescribed	-	97.25%	92.60%	92.29%	96.5%	incr	-
% Antibiotics prescribed	16.18%	17.13%	11.58%	8.5%	11.6%	Incr	TH = 35%
% of injectable prescribed	5.8%	24.16%	1.61%	7.23%	0.5%	decr	TH = 10%
% of medicines prescribed from Essential Drug List (EDL)	-	93.88%	85.85%	89.88%	92.5%	incr	-
% of medicines adequately labelled	89.9%	89%	86%	94.24%	97.5%	incr	-
% with knowledge of correct dosage regimen	77.9%	83.75%	79.25%	85.92%	79.5%	decr	-

Table 19.5.1. 2: RUM Survey Result - Dispensing Indicators

RUM Patient Care Indicators	2019	2020	2022	2023	Remarks	Target
Av dispensing comm time	69.51 sec	70.20 Sec	80 Sec	126.7 sec	incr	

RUM Patient Care Indicators	2019	2020	2022	2023	Remarks	Target
Av waiting time	11.9 mins	24.45 mins	10.27 mins	14.5 mins	incr	
% of tracer drug availability	84.62%	95%	86.25%	93.1%	incr	CCTH = 100% TH = 90%
% Of medicines adequately labelled	89%	86%	94.24%	97.5%	incr	
% With knowledge of correct dosage regimen	83.75%	79.25%	85.92%	79.5%	decr	

SECTION 5_ CONCLUSION AND RECOMMENDATIONS

CHAPTER TWENTY

CHALLENGES, MITIGATING STRATEGIES, WAY FORWARD

20.1 CHALLENGES AND MITIGATING STRATEGIES

The challenges encountered by the hospital in 2023 and the mitigating strategies used in addressing them are highlighted in the table below.

Table 20.1. 1: Challenges and Mitigating Strategies

KEY CHALLENGES	MITIGATION STRATEGIES
High Institutional Maternal and Neonatal Mortalities	Dialogue with GHS to support periphery referring facilities through training and MOs support
Absence of NICU and PICU	Continue engagement of key stakeholders for support
Inadequate space for Clinical Services (Inadequate Infrastructure)	Continue engagement of key stakeholders for support
Delay in NHIS reimbursement	Continuous dialogue with NHIA yielded some positive results. However more will be done going forward
Illegal sale, development and encroachment of hospital lands	Continue with court issue and others measures to prevent illegal developments on the hospital land
Inadequate Staff Accommodation	Pursue the PPP agreement for the construction of 270 accommodation units
Inadequate and ageing equipment e.g., Power Generators, Laundry and CSSD equipment, etc.	Work with MOH for replacement of obsolete equipment and machinery (Laundry, CSSD, Generator Sets, etc).
MRI Machines not functioning	Still engaging key stakeholders for support
Funding Challenges for key projects	Continue to engage key stakeholders for support
Sustainability of the programme initiatives due to funding	Implementation of Sustainability plans

20.2 WAY FORWARD/OUTLOOK FOR 2024

The hospital aspires to pursue the following activities in 2024;

1. Expansion of existing infrastructure and equipment.
2. Retooling of equipment and furniture and Development of new infrastructure with equipment
3. Scale up existing Sub-Specialist Services
4. Improve clinical pharmacy and pharmaceutical services
5. Introduce new specialized services
6. Strengthen client's relations
7. Improvement on the availability of Blood and Blood products for service delivery
8. Reduction in communicable and non-communicable disease burden
9. Reduce Institutional mortalities
10. To increase access to specialist services
11. To improve the quality of care at the hospital
12. To improve the infrastructure and equipment base for the delivery of quality services
13. To strengthen the governance system
14. To improve health research
15. To improve capacity of staff
16. To improve residency training
17. To intensify support to the lower level of health facilities

20.3 CONCLUSION

The hospital recorded considerable improvements in 2023 over the previous year as a result of shared effort from all stakeholders. However, some gaps were identified in performance, which are of great concern, hence, the need for more support from the key stakeholders across board as well and individual / partners to help bridge the gap.

The Hospital's 25th anniversary celebration which was planned and organized successfully as a result of management's proactiveness, was achieved through the support received from the various proposal that were submitted for support and provided a framework for the celebration. The pivotal role played by the Board in granting approval for the celebration gave a renewed sense of pride to all involved.

Management's proactive approach in effective planning and organization of the Hospital's 25th anniversary celebration, which marked a great milestone in its history and warrants commendation. Additionally, the Board's essential role in approving the celebration instilled a renewed sense of pride among all involved in the celebration.