

CAPE COAST TEACHING HOSPITAL



2024 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.	ARV	-	Anti-Retroviral
6.	ART	-	Anti-Retroviral Treatment
7.	BCG	-	Bacillus Calmette Guérine
8.	BID	-	Brought in Dead
9.	BMC	-	Budget Management Center
10.	CCTH	-	Cape Coast Teaching Hospital
11.	CEO	-	Chief Executive Officer
12.	CPD	-	Continuous Professional Development
13.	CSSD	-	Central Sterilization Supply Department
14.	CT	-	Computed Tomography
15.	CVA	-	Cerebrovascular Accident
16.	CWC	-	Child Welfare Clinic
17.	CYP	-	Couple Year Protection
18.	DOTS	-	Directly Observed Treatment Short Course
19.	DTC	-	Drug & Therapeutic Community
20.	EmOC	-	Emergency Obstetric Care
21.	EmONC	-	Emergency Obstetric and Neonatal Care
22.	ENBC	-	Essential Neonatal Basic Care
23.	ENT	-	Ear Nose and Throat
24.	EPI	-	Expanded Programme Immunisation
25.	ETAT	-	Emergency Triage Assessment & Treatment
26.	EQA	-	External Quality Assessment
27.	FBS	-	Fresh Still Birth
28.	FP	-	Family Planning
29.	GCNM	-	Ghana College of Nurses and Midwives
30.	GCPS	-	Ghana College of Physicians and Surgeons
31.	G. C Pharm	-	Ghana College of Pharmacist
32.	GH¢	-	Ghana Cedi
33.	GHS	-	Ghana Health Service
34.	GRMNA	-	Ghana Registered Nurses' and Midwives' Association
35.	GOG	-	Government of Ghana
36.	HDU	-	High Dependency Unit
37.	HIM	-	Health Information Management
38.	HIV	-	Human Immunodeficiency Virus

39.	HMS	-	Hyperactive Malarial Splenomegaly
40.	HO	-	Health Objective
41.	HOs	-	House Officers
42.	ICT	-	Information Communication and Technology
43.	ICU	-	Intensive Care Unit
44.	IGF	-	Internally Generated Fund
45.	IPC	-	Infection Prevention and Control
46.	LB	-	Live Birth
47.	LFT	-	Liver Functioning Test
48.	KFT	-	Kidney Functioning Test
49.	KHRC	-	Kintampo Health Research Centre
50.	MCH	-	Maternal and Child Health
51.	MO	-	Medical Officer
52.	MOH	-	Ministry of Health
53.	MMR	-	Maternal Mortality Rate
54.	MVPE	-	Malaria Vaccine Pilot Evaluation
55.	MSB	-	Macerated Still Birth
56.	NHIA	-	National Health Insurance Authority
57.	NHIS	-	National Health Insurance Scheme
58.	NICU	-	Neonatal Intensive Care Unit
59.	NMIMR	-	Noguchi Memorial Institute for Medical Research
60.	OBS & Gynae	-	Obstetrics and Gynaecology
61.	OPD	-	Out-patient Department
62.	PMTCT	-	Prevention of Mother-to-Child Transmission
63.	PNC	-	Postnatal Clinic
64.	PPB	-	Policy Planning and Budget
65.	PPM	-	Planned Preventive Maintenance / Measure
66.	RCH	-	Reproductive and Child Health
67.	RTI	-	Respiration Tract Infection
68.	RUM	-	Rational Use of Medicine
69.	SATS	-	South African Triage Scale
70.	SB	-	Still Birth
71.	SCBU	-	Special Care Baby Unit
72.	SMS	-	School of Medical Science
73.	STI	-	Sexually Transmitted Infections
74.	SVD	-	Spontaneous Vagina Delivery
75.	TB	-	Tuberculosis
76.	THs	-	Teaching Hospitals
77.	U5MR	-	Under-Five Mortality Rate
78.	UCC	-	University of Cape Coast

79. UTI - Urinary Tract Infection

ACKNOWLEDGEMENT

The successful execution of the 2024 Annual Performance Review (APR) and the publication of this report was made possible through the shared dedication and support of the Hospital's leadership.

Management expresses its sincere appreciation to the Hospital Governing Board and Executive Management for their strategic direction, guidance and continuous support in advancing the Hospital's mandate. Appreciation is also extended to the Heads of Sub-Business Management Centers (Sub-BMCs), Unit Management Teams, and the entire staff of Cape Coast Teaching Hospital (CCTH). Their exceptional professionalism, hard work, and teamwork throughout the year under review remain the bedrock of our institutional achievements.

CCTH is grateful to the Ministry of Health and its development partners, collaborating institutions and stakeholders for their continued collaboration, technical assistance and support towards the delivery of quality healthcare, teaching, training and research. In particular, the Hospital acknowledges the contributions and support of:

- Health development partners and donors, both local and international
- The Central Regional Coordinating Council
- The Central Regional Health Directorate, Ghana Health Service
- The University of Cape Coast, particularly the School of Medical Sciences
- Other collaborating institutions, partners and stakeholders
- Clients, patients and their families, whose experiences and feedback continue to inform improvements in service delivery and
- The media for its role in public information, institutional visibility and engagement.

Finally, special commendation is accorded to the Working Group for its technical guidance and exemplary coordination of the Performance Review Conference and their diligent efforts in compiling this report.

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MESSAGE FROM THE CHIEF EXECUTIVE OFFICE



Performance assessment is an essential component of institutional accountability, organizational learning and continuous improvement. It enables us to reflect on our achievements, identify areas requiring further attention and make informed decisions to strengthen our capacity to deliver on our mandate. The 2024 Annual Performance Report therefore provides an important account of the Cape Coast Teaching Hospital's (CCTH) progress, challenges and priorities during the year under review.

The year 2024 marked a significant milestone in the history of CCTH, as the Hospital commemorated a decade of service as a teaching hospital. Over the past ten years, the Hospital has experienced steady growth and transformation, driven by innovation, resilience and the collective commitment of its staff, partners and stakeholders. I wish to express my sincere appreciation to all staff for their dedication and professionalism, which continue to underpin the Hospital's progress.

During the year under review, CCTH made significant strides in strengthening service delivery, expanding infrastructure and improving its equipment base. These interventions were aimed at enhancing clinical effectiveness, operational efficiency and the overall quality and safety of care. Management also remained committed to staff welfare and instituted the review and rebranding of the Sick Staff Policy as the CCTH Medical Welfare Package, with the objective of providing a more comprehensive and sustainable framework for staff support.

Human resource development remained a key priority. During the year, staff benefited from promotions, professional development opportunities and international training and sponsorship programmes in countries including Germany, the Republic of Korea, India, the United States, Vietnam and Taiwan. The recruitment of 116 additional staff across various professional categories further strengthened the Hospital's workforce and enhanced its capacity to respond to growing service demands. Management has also placed renewed emphasis on structured mentorship for newly recruited staff, alongside plans to strengthen leadership, management and technical competencies among senior managers and key support staff.

Recognizing the importance of a supportive working environment, the Hospital continued to pursue measures to address staff accommodation and other institutional infrastructure needs. Proposals for the construction of a 300-unit staff accommodation facility were resubmitted to the Ministry of Health for consideration. Management also initiated consideration of a provident fund to support future institutional development initiatives, subject to the requisite Board approval. In addition, organizational

strengthening was pursued through the appointment of new Hospital Administrators and Deputy Chief Nursing Officers.

Institutional resilience and business continuity also remained priorities during the year. In response to recurring water supply challenges within the region, Management initiated the All-Year Water Availability Plan, which includes the development of additional boreholes and the mechanization of rainwater harvesting systems to improve the reliability and sustainability of the Hospital's water supply.

As a tertiary healthcare institution, CCTH remains committed to aligning its operations with national health policies, standards and priorities. During the year, the Hospital continued to position its programmes and interventions within relevant national frameworks, including the National Medical Oxygen Policy, Ghana Health Infrastructure Standards and the National Surgical, Obstetric and Anaesthesia Plan (NSOAP). These frameworks provide important guidance for strengthening healthcare infrastructure, clinical services, patient safety and quality of care.

While the achievements recorded in 2024 are encouraging, we recognize that significant challenges remain. Sustaining progress will require continued investment, innovation, effective resource utilization, collaboration and a strong culture of accountability. Management remains committed to addressing identified gaps, learning from performance evidence and strengthening systems that support high-quality, equitable and sustainable healthcare delivery.

I extend my profound appreciation to the Board, Management, staff, development partners, collaborating institutions, patients, clients and the communities we serve for their continued support and confidence in CCTH. As we look ahead, I encourage all of us to renew our commitment to integrity, teamwork, accountability and excellence.

Together, we will continue to strengthen Cape Coast Teaching Hospital as a leading center of excellence in tertiary healthcare, medical education, training and research, while contributing meaningfully to the health and wellbeing of the people we serve.

Thank you.



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

PREFACE

This 2024 Annual Performance Report presents a comprehensive account of the hospital's performance over the year under review, highlighting key achievements, challenges encountered and the outlook for 2025. The Report also serves as a record of accountability and reference/learning document, underscoring the hospital's commitment to transparency, continuous quality improvement, and evidence-based management in the delivery of tertiary healthcare, training and research.

The Report is structured into nineteen (19) chapters and organized under four (4) main sections.

Section One, comprising Chapter One, provides an introduction and background to the Report, as well as a summary of the institutional performance aligned with the six strategic objectives of the Hospital.

Section Two (2) contains Chapters Two (2) to Six (6), and it analyses Human Resource performance, Clinical Services performance, Support and General Services performances, Financial performance and Key Collaborations and Partnerships during the year.

Section Three (3) provides detailed performances of the Clinical Sub-Management Centres (Sub-BMCs) and Units, in addition to Pharmaceutical Services captured under chapters seven (7) through to eighteen (18).

Section Four (4) consists of Chapter Nineteen (19) and it summarizes the major challenges encountered during the year, and the mitigating strategies adopted, the way forward for 2025, and concludes the Report.

SECTION 1

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND

Performance evaluation is a critical component in the life cycle of any institution, as it ensures accountability for the outputs and outcomes of planned activities while promoting transparency and responsible stewardship. The year 2024 marked the fifth year of implementation of the Hospital's Second Medium-Term Strategic Plan (2020–2025), and this report has been developed within that context. The report provides a comprehensive assessment of the Hospital's performance in 2024, aligning it with the six (6) medium-term strategic objectives of the hospital and comparing it with previous years. It also highlights key challenges encountered during the pursuit of these achievements. The report is intended to serve as an information source for planning, aimed at enhancing the quality of care provided at CCTH. It also aimed at supporting Management in decision-making, while also serving as a reference for research.

1.1 PROFILE OF CCTH

Established as one of the ultramodern regional hospitals in August 1998, the Cape Coast Teaching Hospital attained Teaching Hospital's status on 21st March 2014 when the University of Cape Coast enrolled its first batch of Medical Students, becoming Ghana's fourth teaching hospital

As an apex health institution, CCTH is accredited to train health professionals in Obstetrics and Gynaecology, Urology, Orthopaedics, Internal Medicine, Otorhinolaryngology (ENT), Dentistry, Advanced Midwifery, Pharmacy among others from the Ghana College of Physicians and Surgeons, Medical and Dental Council, West African College of Physicians and Surgeons (WACPS), Ghana College of Pharmacy and Ghana College of Nursing and Midwifery. In addition, the hospital also serves as a training ground for other clinical and non-clinical students who want to gain practical experience.

As a 450-bed capacity tertiary hospital, CCTH serves not only the people of Central Region but also the people of Western, Western-North and beyond due to its unique location on the Lome-Abidjan corridor. CCTH is located in Cape Coast – the formal capital of Ghana and the Regional Capital of Cape Coast. It is bordered on the north by Abura Township, on the south by Pedu Estate and fourth Ridge, on the east by Nkanfoa, and on the west by Abura.

The hospital has five directorates, nine clinical and two non-clinical Sub-Budget Management Centers (Sub-BMCs), as well as five clinical and seven non-clinical units.

1.1.1 MANDATE

The mandate of the hospital, as enshrined in the Ghana Health Service and Teaching Hospital Act, 525, is to;

- ❖ Provide advanced tertiary healthcare services to the population.
- ❖ Deliver medical education and training for healthcare professionals.
- ❖ Undertake research geared towards providing evidence to support decision-making and enhance quality of lives.

- ❖ Support lower-level health facilities through technical assistance, capacity building and service collaboration.

1.1.2 VISION

To be a world-class leader in tertiary health care, medical education and research

1.1.3 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.

1.1.4 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 healthcare 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 hospital offers a range of specialized services as part of its mandate in providing advanced clinical care. These services are listed below.

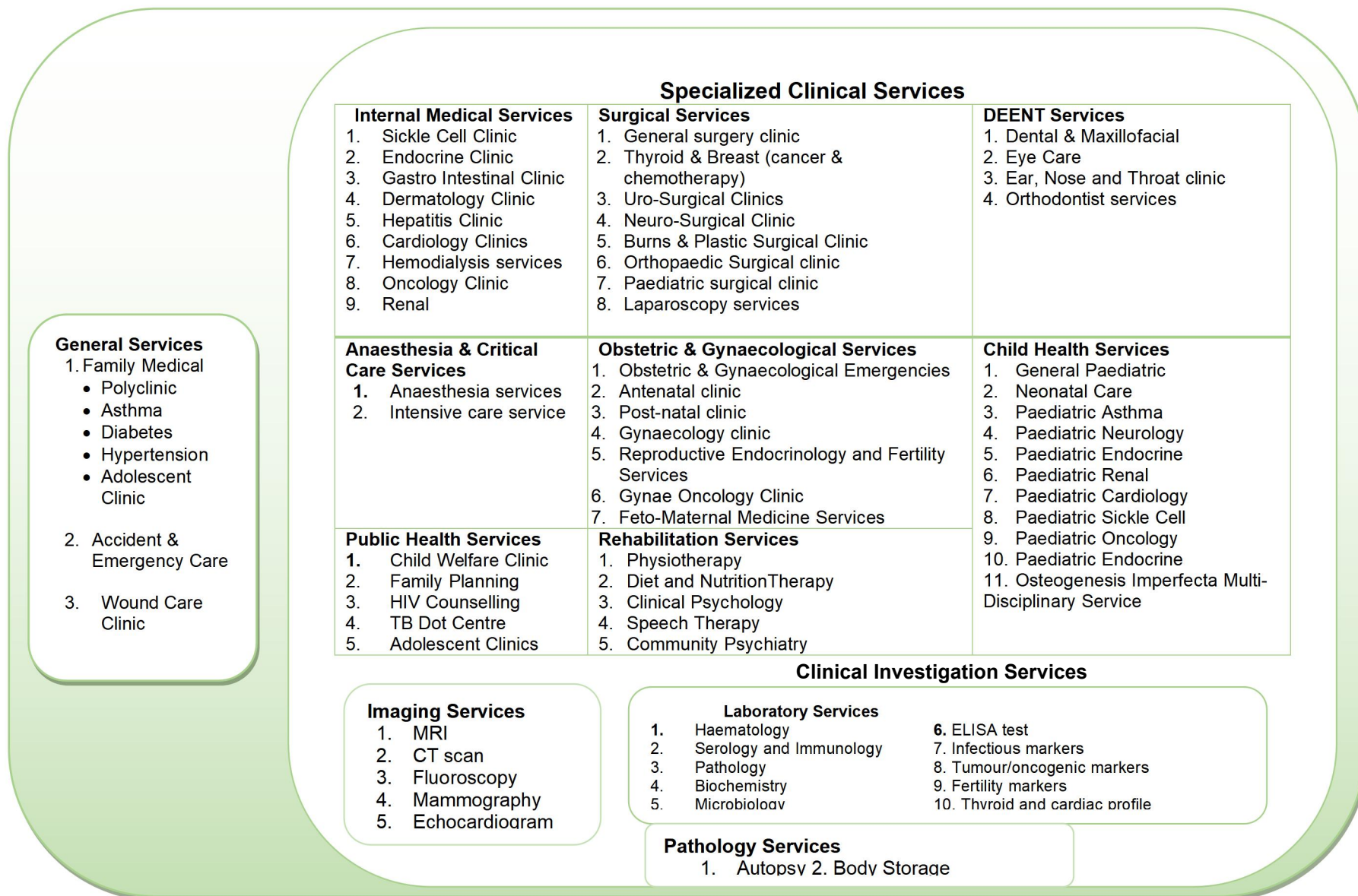


Figure 1.3. 1: Clinical Services provided at CCTH

1.4 KEY PRIORITIES FOR 2024

- i. Improve access to specialist and sub-specialty services
- ii. Intensify Clinical Care and Nursing Services
- iii. Expand Drug & Non-Drug Consumable and Commodity base
- iv. Deepen Institutional Public Health Interventions
- v. Sustain gains in Governance, Finance, Management and Leadership Systems
- vi. Boost Human Resource Base for service improvement
- vii. Expand Research, Training and other learning portfolio
- viii. Scale up Support to Lower Levels of care
- ix. Broaden Technology, Equipment, Infrastructure and Residential Base for service delivery

1.5 SUMMARY OF 2024 CCTH PERFORMANCE UNDER THE STRATEGIC OBJECTIVES

The table below summarises the overall achievements of the hospital, based on key outputs and outcomes aligned with the six medium-term strategic objectives of the hospital.

Table 1.5. 1: Summary of 2024 Performance under the Strategic Objectives

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
HOSPITALWIDE LEVEL							
Access	2020	2021	2022	2023	2024	Target	Remarks
Total OPD Attendance	125,772	152,364	170,441	172,839	165,640	CCTH = 15% ↑	4.17% ↓ Target not met
OPD cases seen per doctor	1:749	1:952	1:1033	1:843	1:828	THs= 1:1080	Decr Target not met
Total Specialist OPD attendance	67,266	76,990	87,063	89,505	86,402	CCTH = 5% ↑	3.47% ↓ Target not met
OPD Cases seen per specialist	1:989	1:1242	1:1146	1:861	1:785	THs = 1:1040	decr
Total Referrals–In	5,659	4,312	6,655	4,785	7,387	-	54.4% ↑
Total Referral- Out	64	-	-	186	318	-	70.97% incr
Total Patients admission	10,578	12,930	12,622	12,557	12,309	CCTH = 5% ↑	1.98% ↓ Target not met
Specialist Nurse to Admission Ratio	1:10,578	1:4,310	1:3,156	1:897	1:648	-	Improved
Percentage of patients admitted due to external referrals	21.6%	18.81%	19.27%	40.63%	28.03%	-	Decr
Percentage of neonatal admissions due to external referrals	25.5%	15%	13.80%	11.24%	5.95%	THs = 30%	Decr Target not met
Percentage of maternal admissions due to external referrals decreased	21.2%	23%	26.71%	72.74%	49.84%	THs = 60%	Decr Target not met

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
Nurse and Midwife admission ratio	1:13	1:13	1:13	1:14	1:15	THs = 1:25	Incr Target not met
Percentage bed occupancy	55.5%	52.20%	54.0%	57.5%	59.9%	THs = 75%	Incr Target not met
Total surgical operations	3,883	5,961	5,357	5,824	5,130	CCTH = 5% ↑	11.9% ↓ Target not met
Surgery to Surgeon ratio	108:1	199:1	179:1	108:1	92:1	THs = 250:1	Decr Target not met
Total deliveries	2,883	3055	3,269	2,877	2,750	CCTH = 5% ↑	4.41% ↓ Target not met
Delivery to midwife ratio (all midwives at the institution)	18:1	15:1	14:1	15:1	15:1	THs = 20:1	Target not met
Couple year protection	1,891.2	2,233	2,626	2,075	2013.8	TH = 2,500	Decr Target not met
Caesarean section rate	53.3%	51.4%	50.4%	52.69%	57.30%	TH = 40%	Incr Target not met
% Tracer Drug Availability	84.62%	95%	86.2%	93.10%	91.20%	CCTH = 100%	Decr Target not met
Prescription to pharmacy ratio	9425:1	6,422:1	6,495:1	6,643:1	5,939:1	TH = 12000:1	Decr Target not met
Percentage antibiotic prescribed	17.1%	11.6%	8.5%	10.25%	8.6%	TH = 35%	Decr Target Met
Percentage Injectable	24.2%	1.6%	7.23%	10.54%	1.67%	TH = 10%	Decr Target Met
Utilization of Pharmaceutical Care interventions	11.5%	21.2%	97.0%	98.0%	98.9%	TH = 30%	Incr Target Met
Utilisation of laboratory services	260.3%	221.3%	524%	505.1%	555.55%	TH = 60%	Incr
Total laboratory Investigation	241,858	180,415	558,298	519,363	393,955	CCTH = 10% ↑	24.15% ↓ Target not met
Utilisation of radiological services	530.7%	87%	123.3%	114.41 %	-	TH = 60%	
Radiology investigation	23,697	20,587	20,787	22,758	24,506	CCTH = 10% ↑	7.69% ↑ Target not met
HOSPITALWIDE LEVEL OUTPUTS							
Successfully introduced laparoscopic surgical services, performing two (2) cases with technical and logistical support from KOFIH							
Organized laparoscopic training for selected multidisciplinary staff – including surgeons, anaesthetists, perioperative nurses, and biomedical engineers with support from KOFIH to build internal capacity.							
Set up a Family Medicine Clinic to serve as the primary receiving point for general referrals, particularly cases without clearly defined specialty referral destinations, thereby improving patient flow and reducing inappropriate referrals to specialist units							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
HOSPITALWIDE LEVEL							
Impact	2020	2021	2022	2023	2024	Target	Remarks
Total Institutional Death	1,379	1,306	1,072	994	1,076	CCTH = 5% ↓	8.2% ↑ Target not met
Institutional death rate	12.3%	11%	8.5%	8.4%	8.7%	THs = 5%	Decr Target not met

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
Theatre Death Rate	0.4%	0.3%	0.3%	0.2	0.5%	THs = 0.5%	Incr
Low birth rate	16.8%	19.4%	20.5%	23.2%	21.0%	THs = 12%	Decr Target not met
Stillbirth rate (/1000LB)	31	42	35	37	32	THs = 15	Decr Target not met
Total Fresh Still birth	38	43	54	42	36	-	14.3% ↓
Fresh Still Birth Rate	42.7	35.1	46.6	40.0	40.9	-	Incr
Total Macerated Still Birth	52	85	86	63	52	-	17.5% decr
Institutional Maternal mortality ratio (/100,000LB)	931	1,050	1,186	681	862	THs = 300	Incr Target not met
% of maternal mortalities audited	100%	100%	100%	100%	100%	THs = 100%	
Number of institutional maternal deaths	26	32	39	20	24	CCTH = 50% ↓	20.0% ↑ Target not met
Institutional infant mortality rate (/1000LB)	89	88	77	67	50	THs = 15	Decr Target Not Met
Number of Infant deaths	284	267	252	197	138	-	29.9% ↓
Institutional neonatal mortality rate (/1000)	81	78	67	58	40	TH = 25	Decr Target Not Met
Number of institutional neonatal deaths	233	239	219	170	112	CCTH = 5% ↓	34.1% ↓ Target Not Met
Under-five mortality rate (/1000LB)	106	95	80	72	55	-	Decr
Number of Institutional under-five mortality	307	290	264	213	152	CCTH = 5% ↓	28.6% ↓
Average length of stay (Proxy-C/S, Appendectomy, severe malaria in children)	5.9	5.6	5.5	6.0	6.3	THs = 6	Incr Target Not Met
Partograph use rate	48.7%	48.5%	47.6%	62.01%	63.00%	THs = 60%	Incr Target Not Met
Surgical site infection rate	12.61%	-	-	0	-	THs = 5%	
Average length of stay at the Emergency ward	2.0	2.9	1.0	1.1	1.1	THs = 2.0	Target Met
Availability and access to appropriate hand hygiene institution	0.21	0.18	0.23	0.23	0.19	-	Decr
Number of hands washing basins	368	368	433	443	434	-	2.03% ↓
Availability of toilet institution	0.43	0.42	0.41	0.37	0.38	THs = 0.25	Incr
Total number of	173	169	165	165	165	-	

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
functioning toilets at the institution							
Percentage of clients satisfied with overall services at the institution	93.4%	84.3%	-	82.2%	80.1%	THs = 95%	Decr Target Not Met
Adverse Events Recorded	159	46	19	26	42	THs = 40	61.54% ↑ Target not met
HOSPITALWIDE LEVEL OUTPUTS							
Enhanced the appointment scheduling system for specialist clinics to streamline patient flow and reduce congestion.							
Conducted a Peer Review exercise, with the Laboratory Unit emerging s overall best performer.							
Continued to conduct mortality audits and implemented recommendations to improve patient outcomes.							
Organized in-service trainings on customer care, quality assurance, basic life support (BLS) and infection prevention and control (IPC).							
Revised and expanded Tracer medicines list for CCTH							
Completed roll out of the Logistics/Medical Stores Management component of LHIMS, enabling ward in - charges to request supplies electronically.							
Procured and distributed 87 pairs of safety boots and uniform materials for Security Personnel to enhance occupational safety and promote professional appearance respectively							
Conducted comprehensive training sessions for 87 security guards to enhance vigilance, incidence response and operational readiness							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
HOSPITALWIDE LEVEL ACTIVITY OUTPUTS							
Output	2020	2021	2022	2023	2024	Target	Remarks
Equipment Down time (proxy: CT SCAN)	0%	82.5%	100%	0%	3.85%	THs = 5%	Incr Target Met
PPM (Planned Preventive Maintenance) Output achieved	75%	61.7%	50%	55%	64%	THs = 80%	Incr Target Not Met
Equipment Utilisation (Proxy: CT SCAN)	98.72%	21.4%	0%	14.17%	17.88%	THs = 90%	Incr Target Not Met
HOSPITALWIDE LEVEL OUTPUTS							
Received donation of a laparoscopic tower and accessories from KOFIH Foundation							
Acquired 5 new ventilators to strengthen critical care capacity							
Commenced the implementation of an electronic Assets Registration system for effective tracking and management							
Refurbished the second oxygen plant, expanding oxygen production capacity of the hospital							
Provided backup power for the Polyclinic to ensure uninterrupted power supply in the event of power outage							
Collaborated with Hospital Engineering Limited and African-German Health Association (AGHA) to develop a new software for equipment maintenance and management							
Achieved 100% completion and operationalization of the Patients' Relatives' Hostel to provide decent and affordable accommodation to CCTH clients. (Operational from 26th February 2025).							
Achieved 100% completion and partial operationalization of the Infectious Disease Centre							
62% completion of the Eye Centre project							
55% Completion of the Accident & Emergency (A&E) expansion project.							
Renovated the Dialysis and Laundry Units							
Constructed a Waste Transfer Station to improve waste management							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
Installed new laundry equipment donated by Ministry of Health, including; • 2 Laundry Dryers • 2 Washing Machines • 1 Centrifugal Hydro Extractor (Spinner) • 2 Stain Removers • 1 Roller Ironer • 1 Steam Ironers							
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM							
4.1: Governance Related Performance							
HOSPITALWIDE LEVEL ACTIVITY OUTPUTS							
Output	2020	2021	2022	2023	2024	Target	Remarks
Number of Board meetings held	4	1	4	4	4	-	
Number of additional accreditations secured	0	0	3	3	9	-	
HOSPITALWIDE LEVEL OUTPUTS							
Reinsured all medicines through an insurance company							
Trained sub-BMC and Unit management teams on Program-Based Budgeting, Monitoring, Evaluation and Reporting.							
Granted study leave to 207 staff across various professional cadres							
Facilitated local and international workshops and short courses for senior managers, consultants and specialists to enhance competencies							
Conducted quarterly monitoring of the Annual Programme of Work and report and reported findings to key stakeholders to guide decision-making							
Sustained collaborations with partners, including: 1. Himalayan Cataract Project/National Cataract Outreach Program - free cataract surgeries. 2. Operation-Smile Ghana - free cleft lip and palate surgeries. 3. University of Utah - ENT surgeries. 4. The Czech Republic Governmental Medical Program (MEDEVAC) – Plastic and Orthopaedic Surgeries 5. University of Cape Coast School of Medical Science – Academic and Clinical collaboration 6. Korea Federation of International Health (KOFIH) – laparoscopy capacity development 7. International Healthcare Volunteers – Obstetrics and gynecological surgeries							
Created security office and secretariat to coordinate hospital security activities							
4.2: Human Resource Related Performance							
HOSPITALWIDE LEVEL							
Indicator	2020	2021	2022	2023	2024	Target	Remarks
Total number of staff	1792	2,051	1,915	1,915	1,949	-	0.36% ↑
% change in total number of staffs	10.1% incr	14.5% incr	6.6% decr	1.41% incr	0.36% incr	-	Decr
Number of staffs sponsored for training	77	60	57	115	207	-	Incr
Proportion of Staff appraised	45.13%	30.9%	45.21%	36.62%	38.42%	TH = 100%	Incr Target Not Met
% of staff retained after study leave	100%	100%	-	-	-	-	
Workplace related injury resulting in death or	0%	0%	0%	0%	0%	THs = 1%	

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
incapacitation							
Total staff injury recorded	146	298 (24-injury & 274 – COVID-19 infected)	115 (20-injury & 95 – COVID-19 infected)	26 Excludes COVID-19 infection	42	-	61.54% ↑
Health workers who benefited from occupational health and safety interventions	100%	100%	100%	100%	100%	-	
Percentage of staff satisfied at the institution	46.5%	-	-	22.7%	-	THs = 70%	Staff satisfaction survey not conducted
Percentage of health staff with accidental needle injury	0.67%	1.1%	0.78%	1.08%	1.33%	THs = 1%	Incr Target Not Met
Consultant to resident doctor ratio	1:5	1:1	1:2	1:1	1:2	THs = 1:3	Incr Target Not Met
Doctor to Nurse and midwife ratio	5:1	6:1	4:1	4:1	4:1	THs = 1:5	
Delivery to midwife ratio (i.e., all midwives at the institution)	18:1	15:1	14:1	15:1	15:1	THs = 20:1	Target not met
Delivery to midwife ratio (i.e., productivity of the midwives at only the delivery suite)	70:1	46:1	50:1	55:1	59:1	-	Incr
Doctor to pharmacist ratio	9:1	6.4:1	7.5:1	8.5:1	6.7:1	THs = 10:1	Incr Target Met
Prescription to pharmacy ratio	9,425:1	6,422:1	6,495:1	6,643:1	5,939:1	THs = 12000:1	Decr Target Not Met
Number of welfare packages available for staff	1	1	3	3	3	-	
Surgeon to surgery ratio	108:1	199:1	179:1	108:1	92:1	THs = 250:1	Decr Target not met
Nurse and midwives to admission ratio	1:13	1:13	1:13	1:14	1:15	THs = 1:25	Incr Target not met
HOSPITALWIDE LEVEL OUTPUTS							
Appointed 3 Hospital Administrators and 4 Deputy Chief Nursing Officers.							
Renewed the appointments of 3 Directors and 4 Deputy Directors.							
Recruited 116 new staff across various cadres to strengthen service delivery, including							
1. Medical Officers – 12 2. Professional Nurses – 5 3. Health Service Administrator/Administrative Manager – 12 4. Accountant – 6 5. Procurement Manager/Supply Manager – 6 6. Pharmacist – 6 7. Other staff - 69							
Conducted two promotional interviews with 644 staff benefitting from it							
i. Promotion – 510 ii. Upgrading – 117							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
iii. Conversion – 10							
iv. Appointment – 7							
4.3 Finance related performance							
HOSPITALWIDE OUTCOME/IMPACT							
indicator	2020	2021	2022	2023	2024	Target	Remarks
Revenue Proxy							
Total Revenue GH¢	93,104,864.08	104,624,597.67	134,547,634.17	170,398,748.10	231,380,942.55		
% change in the hospital's revenue	33.1% incr	12.4% incr	28.6% incr	26.6% incr	35.8% incr	-	Incr
Proportion of total revenue generated from partners/donors	0.78%	0.9%	11.08%	3.1%	10.1%	-	incr
Proportion of total revenue from IGF	24%	23.1%	24.4%	29.32%	26.6%	-	incr
IGF Revenue	22,268,693.6	24,217,381.36	32,100,188.39	48,472,268.32	55,182,809.05	-	13.8%↑
% change in IGF revenue	+ 3.2%	+73.9%	+32.6%	+51.0%	+13.8%	-	Decr
Total service income	15,816,701.56	22,786,950.76	34,979,685.32	34,979,685.32	39,999,139.81	-	14.3% ↑
Proportion of IGF revenue generated from services	67.8%	67%	70.99%	72.2%	72.5%	-	incr
Total Medicine Income GH¢	7,179,169.88	8,400,679.80	9,313,237	13,492,583.00	15,183,669.24	-	12.5% ↑
Proportion of IGF revenue generated from pharmaceutical services	32.2%	33%	29.01%	27.8%	27.5%	-	Decr
Ratio of cash revenue to NHIA reimbursement	0.85:1	1.1:1	1.61:1	0.995:1	1.914:1	-	
Expenditure Proxy							
Total Expenditure GH¢	24,832,641.11	24,665,476.40	30,816,999	42,103,946	55,065,117.56	-	30.8% ↑
Proportion of IGF spent on PPM	3.8%	5.4%	3.53%	3.55%	3.80%	THs = 5%	incr
Percentage IGF paid as compensation	10.82%	9.4%	8.93%	8.55%	10.65%	THs = 10%	incr
Other Indicators							
Percentage of submitted claims paid	11.2%	53.1%	65.97%	107.3%	89.19%	THs = 75%	Decr
Debtors' days	215	194	126.78	164.86	167.61	THs = 90	
Creditor's days	182	224.8	233.77	234.37	246.64	THs = 120	incr
Ratio of cash revenue to NHIA reimbursement	0.85:1	1.1:1	1.61:1	0.995:1	1.914:1	-	
Percentage of NHIA Claims Submitted on	100%	100%	100%	100%	100%	-	

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
time							
Percentage of rejection on claims submitted to NHIS	-	-	-	-	6.16%	-	
Proportion audit recommendations implemented	100%	100%	100%	100%	100%	THs = 100%	
Number of Audit Committee meetings	4	4	2	3	4	4	Incr target met
HOSPITALWIDE LEVEL ACTIVITY OUTPUTS							
Mobile Money (MoMo) payment services were introduced, generating a total of two hundred eighty-four thousand, one hundred and fifty-one cedis, fourteen pesewas (GH¢ 284,151.14) from 714 transactions.							
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING							
5.1 Improve on Research:							
HOSPITALWIDE LEVEL							
Indicator	2020	2021	2022	2023	2024	Target	Remarks
Operational research conducted	2	14	9	15	22	TH = 4	
Number of researches published	10	15	12	17	12	TH = 20	
No. of Research Applications received at the Facility	112	135	200	296	198	-	Incr
No. of Researches Approved	110	121	187	248	197	-	Decr
% of research applications approved by the facility/ERC	98.2%	89.6%	93.5%	83.8%	99.5%	-	Incr
Received a total of 198 research applications out of which 99.5% (197) were granted approval							
A total of 12 researches were published in various journal by staff. These are;							
- Feasibility of the use of Kangaroo mother care in the transfer of preterm and low-birth-weight infants: a two-arm nonrandomized controlled cluster feasibility study of neonatal transport in Cape Coast, Ghana Authors: Emmanuel Okai, Frankie Fair, Hilda Danquah Konadu, Eugene KM Darteh, Hora Soltani https://doi.org/10.1186/s12887-024-05340-7 - Comparison of microscopic and xpert MTB diagnoses of presumptive mycobacteria tuberculosis infection: retrospective analysis of routine diagnosis at Cape Coast Teaching Hospital Authors: Kwame Kumi Asare, Daniel Edem Azumah, Czarina Owusua Adu-Gyamfi, Yeboah Kwaku Opoku, Edward Morkporkpor Adela, Philip Afful, Godwin Kwami Abotsi, Ernest Awuakye Abban, Paul Ekow Duntu, Akwasi Anyamful, Alberta Bedford Moses, Emmanuel Botchway, Philimon Mwintige, Samuel Kyei, Linda Eva Amoah, Emmanuel Owusu Ekuman https://pubmed.ncbi.nlm.nih.gov/38956504/ - Radiologic patterns of distant organ metastasis in advanced breast cancer patients: Prospective review of computed tomography images. Cancer Rep (Hoboken)-2024 Feb;7(2): e1988. doi:10.1002/cnr2.1988							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE

4. Accuracy of the Wound Healing Questionnaire in the diagnosis of surgical-site infection after abdominal surgery in low-and middle-income countries
Br J Surg-2024 Jan 31;111(2): znad446. doi: 10.1093/bjs/znad446.
5. Outcomes after surgery for children in Africa (ASOS-Paeds): a14-day prospective observational cohort study
Lancet. 2024 Apr 13;403(10435):1482-1492. doi:10.1016/S0140-6736(24)00103-X. Epub 2024 Mar 22.
6. Routine sterile glove and instrument change at the time of abdominal wound closure to prevent surgical site infection (ChEETAH): a model-based cost-effectiveness analysis of a pragmatic, cluster-randomised trial in seven low-income and middle-income countries
Lancet Glob Health-2024 Feb;12(2):e235-e242.doi:10.1016/S2214-109X(23)00538-7
7. Global access to technologies to support safe and effective inguinal hernia surgery: prospective, international cohort study. <https://doi.org/10.1093/bjs/znae164>
8. Access to and quality of elective care: a prospective cohort study using hernia surgery as a tracer condition in 83 countries. Lancet Glob Health. 2024 jul;12(7):e1094-e1103.doi:10.1016/S2214-109X(24)00142-6. Epub 2024 May 23.
9. Variation of elective healthcare in west Africa: secondary analysis of an inguinal hernia international cohort study. Impact Surgery, 1(4), 145-153 <https://doi.org/10.62463/surgery.80>
10. Mechanisms and causes of death after abdominal surgery in low-income and middle-income countries: a secondary analysis of the FALCON trial. Lancet Glob Health 2024 Published Online September 5,2024 [https://doi.org/10.1016/S2214-109X\(24\)00318-8](https://doi.org/10.1016/S2214-109X(24)00318-8)
11. Microbiology testing capacity and antimicrobial drug resistance in surgical-site infections: a post-hoc, prospective, secondary analysis of the FALCON randomized trial in seven low-income and middle-income countries. Lancet Glob Health.2024 e1816-e1825. doi :10.1016/s2214-109x (24)00330-9.Epub 2024 Sep 5.
12. Structures, processes and outcomes between first referral and referral hospitals in low-income and middle-income countries: a secondary preplanned analysis of the FALCON and ChEETAH randomised trials. NHR Global Health Research Unit on Global surgery; P.BMJ Glob Health. 2024 Nov 7;9(Supple 4): e015599.doi:10.1136/bmjgh-2024-015599.

5.2 Improve on Teaching and Learning:

HOSPITALWIDE LEVEL

Indicator	2020	2021	2022	2023	2024	Target	Remarks
Resident pass rate for doctors	-	91%	87.5%	94.7%	100%	THs= 60%	Target achieved
Number of doctors enrolled in postgraduate colleges	23	38	25	28	35	-	Incr
Consultant to Resident Doctor ratio	1:5	1:1.4	1:1.9	1:1.4	1:5	THs = 1:3	Incr
Proportion/number of clinical staffs	23	38	47 25 – Dr.	28 Dr – 27	35	-	incr

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
enrolled in postgraduate colleges			7 = Pharm. 2 = Midwives 13 Prof. Nurses	Nurses – 1			
HOSPITALWIDE LEVEL OUTPUTS							
Achieved 100% pass rate for Residents (Doctors) who completed postgraduate training.							
Senior Managers, Consultants and Specialists participated in local and international workshops and short courses to enhance skills and strengthen institutional capacity.							
Secured a 2-year provisional accreditation from Ghana College of Physicians and Surgeons (GCPS) for Maxillofacial Residency Training, with one resident currently enrolled							
Obtained rotational accreditation from West African College of Physicians and Surgeons (WACPS) for ENT Residency Training, with 5 residents in active training.							
Successfully maintained all existing accreditations with training colleges and professional institutions, including: - Partial accreditations from the Ghana College of Physicians and Surgeons (GCPS) in: - Anaesthesia - Dental - Surgery - Neurosurgery - Full accreditation from Ghana College of Physicians and Surgeons (GCPS) - Internal Medicine - Obstetrics & Gynaecology - Child Health - Accreditation from WACPS for ENT Residency Training - Accreditation from Ghana College of Nursing & Midwifery for Advanced Midwifery training							
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS							
Indicator	2020	2021	2022	2023	2024	Target	Remarks
Number of outreach visits carried out	100%	100%	100%	100%	68%	THs = 16%	
Outreach visits carried out	164	398	1,063	324	283	-	
Total number of outreaches planned visits carried out	164	398	1,063	324	418	-	
Number of Beneficiaries recorded	8,276	20,415	38,896	33,003	28,127	THs= 11,215	
HOSPITALWIDE LEVEL OUTPUTS							
Provided mentorship support to lower-level health facilities across the Central Region - Number of mentorship programs = 5 - Total beneficiaries during mentorship visits = 1,962							
Delivered HIV Viral Load and Early Infant Diagnosis (EID) laboratory services to all ART sites in the Central Region							
Supplied blood and blood products to private and lower-level facilities within the Cape Coast Metropolis							
Some laboratory staff served as Regional Outreach Training and Supportive Supervision (OTSS) and External Quality Assessment (EQA) supervisors							
Conducted 283 outreach activities, categorized as follows;							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE

- Community/Church Outreaches
 - i. Number of Community/ Church = 262
 - ii. Beneficiaries = 26,980
- School Outreaches
 - i. Schools visited = 13
 - ii. Pupils reached = 775
- Organizational Outreaches
 - i. Institutions engaged = 2
 - ii. Beneficiaries = 272

SECTION 2

CHAPTER TWO

HUMAN RESOURCE

2.1 INTRODUCTION

Human resources are pivotal in the health system, especially within the service delivery institutions, as they are central to the provision of quality health services. Their roles, expertise, and knowledge significantly impact the performance of hospitals and the overall effectiveness of the health system. Hence, CCTH continuously implements innovative strategies and approaches aimed at improving staff capacity as evident in the Second Medium-Term (2020-2025) Strategic Plan as well as the human resource needs assessment of the hospital. The chapter highlights the human resource performance of in 2024 compared to the previous years.

2.2 STAFF STRENGTH ANALYSIS

The hospital in 2024 recorded a marginal increase of 0.36% in the total staff strength (from 1,942 in 2023 to 1,949 in 2024). The distribution across directorates reveals that the Nursing Directorate formed the largest proportion, accounting for 46.07% (898) of the of the workforce. This was followed by the Medical Directorate with 25.76% (502) and the Administration Directorate with 21.65% (422). The remaining staff were distributed among the Finance Directorate (3.28%, 62), Pharmacy Directorate (2.62%, 51) and the Human Resource Management Directorate (0.62, 12).

The total number of doctors generally increased from 2020. However, there was a reduction in 2023 and 2024. Despite the overall reduction in 2024, there were significant increase in specific categories. The number of residents, senior specialists and specialists went up by 81.8%, 11.8% and 5.3% respectively, suggesting an improvement in highly-skilled clinical capacity within the period.

Similarly, the total number of nurses and midwives dropped by 6.8% (from 936 in 2023 to 872 in 2024). This decline was influenced by the 7.5% reduction in professional nurses. However, this trend was partially minimized by substantial 35.7% increase in specialist nurses, which rose from 14 in 2023 to 19 in 2024. Also, while the number of midwives declined by 5.2% (from 193 in 2023 to 183 in 2024), the combined number of Nursing Assistant Clinical and Nursing Assistant Preventive staff saw a marginal decrease of 2.4% (from 41 in 2023 to 40 in 2024).

Further, the number of pharmacists decreased by 9.5% (from 21 in 2023 to 19 in 2024). However, the number of Accountants & Finance Officers and Health Services Administrators went up by 22.7% (from 44 in 2023 to 54 in 2024) and 25% (from 12 in 2022 to 15 in 2024) respectively. Details of the analysis is shown in Figures 2.2. 1, 2.2. 2 and Tables 2.2. 1, 2.2. 7 below.

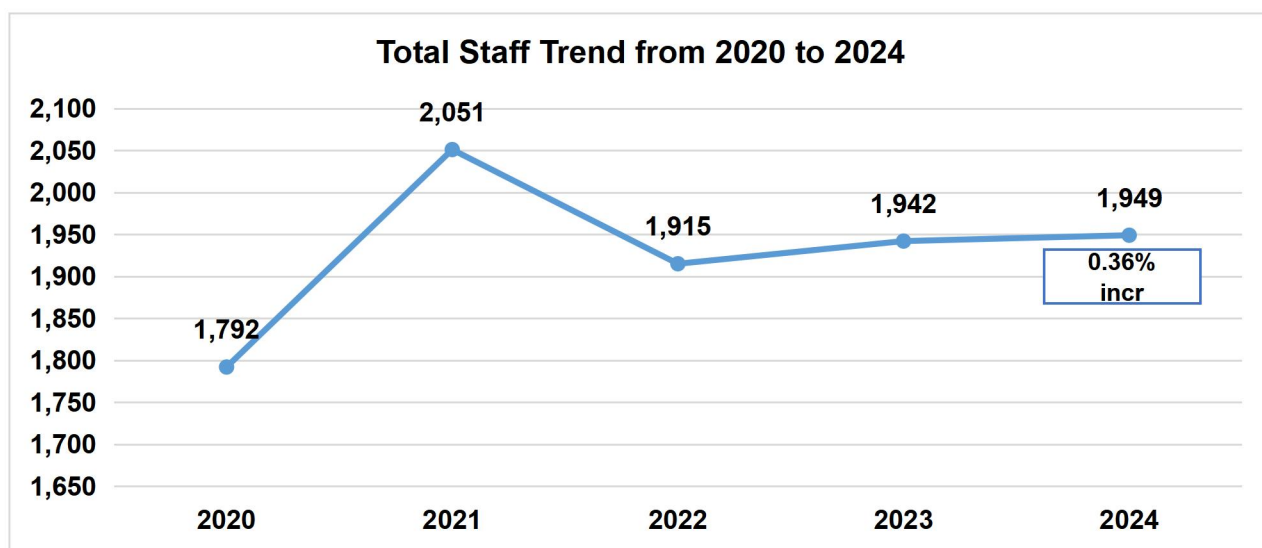


Figure 2.2. 1: A Five-Year Trend of Staff Strength at CCTH (2019 - 2024)

Table 2.2. 1: Breakdown of Total Staff Classification by Directorates

DIRECTORATE	PERMANENT	UCC SMS	CCTH STAFF	SECONDMENT	TOTAL
Administration	337	-	81	4	422
Finance	63	-	1	-	64
Human Resource	12	-	-	-	12
Medical	457	25	19	1	502
Nursing	898	-	-	-	898
Pharmacy	41	-	10	-	51
Total	1,808	25	111	5	1,949

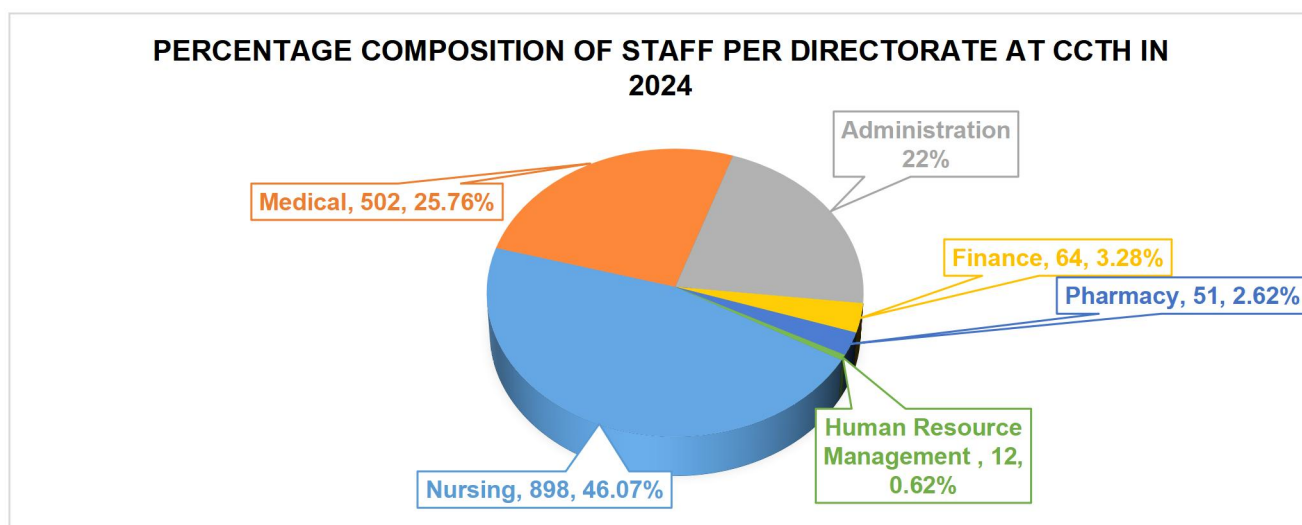


Figure 2.2. 2: Percentage Composition of Staff by Directorates at CCTH for 2024

Table 2.2. 2: Annual Trend of Staff by Directorates at CCTH (2020 – 2024)

DIRECTORATE	2020	2021	2022	2023	2024	REMARKS
Nursing	918	1,062	1,049	965	898	6.94% decr
Medical	450	547	448	504	502	0.40% decr
Administration	332	336	324	361	422	16.90% incr
Finance	51	57	49	60	64	6.67% incr
Pharmacy	41	49	45	42	51	21.43% incr
Human Resource Management	-	-	-	10	12	20.0% incr
Grand Total	1,792	2,051	1,915	1,942	1,949	0.36% incr

Table 2.2. 3: Trend of Staff Cadre at CCTH (2020 – 2024)

Cadre	2020	2021	2022	2023	2024	Remarks
Doctors	291	299	376	279	274	1.8% decr
Radiographers	6	6	5	14	14	
Professional Nurses	643	784	737	702	649	7.5% decr
Midwives	164	199	231	193	183	5.2% decr
Nursing Assistant Clinical & Nursing Assistant Preventive	77	76	80	41	40	2.4% decr.
Pharmacist	18	25	22	21	19	9.5% decr
Pharmacist Tech	7	7	8	6	11	83.3% incr
Accountants & Finance Officers	31	47	42	44	54	22.7% incr
Laboratory & Lab Tech	51	46	76	77	70	9.7% decr
Health Services Administrators	9	13	12	12	15	25.0% incr
Optometrist	2	6	6	7	6	14.3% decr
Other GOG Pay Roll Staff	501	278	236	516	485	6.0% decr
CCTH Pay Roll Staff	76	49	51	93	111	19.4% incr
Total Staff	1,792	2,051	1,915	1,942	1,949	0.40% incr

Table 2.2. 4: Trend of Doctors Composition from 2020 – 2024

CATEGORY	2020	2021	2022	2023	2024	REMARKS
Consultants	4	6	6	12	12	
Senior Specialist	9	21	21	17	19	11.8% incr
Specialists	55	49	49	75	79	5.3% incr
Residents	62	38	50	33	60	81.8% incr
Medical Officers	38	46	39	68	30	55.9% decr
House Officers	123	139	155	74	74	
TOTAL	291	299	376	279	274	1.8% decr

Table 2.2. 5: List of Medical Specialists Available in 2024

Specialty	Consultants	Senior Specialists	Specialists	Medical Officers	Residents	Grand Total
Anaesthesia	0	0	4	0	4	8
Cardiology	0	0	1	0	0	1
Child Health	0	3	6	0	7	16
Community Medicine	0	1	0	0	0	1
Dental Surgery	0	0	0	0	1	1
Emergency Medicine	0	0	1	0	6	7
Endocrinology	1	0	0	0	0	1
ENT	1	1	1	0	3	6
Family Medicine	0	1	5	0	0	6
Haematology	1	0	0	0	0	1
Internal Medicine	1	1	12	0	6	20
Laboratory Medicine	0	0	4	0	2	6
Maxillofacial Surgery	1	0	2	0	0	3
Medical Officer	0	0	0	0	0	30
Microbiology	0	0	1	0	0	1
Neurosurgeon	0	1	1	0	4	6
Obstetrics and Gynaecology	2	4	7	0	10	23
Ophthalmology	0	1	4	0	3	8
Oral Pathology	0	0	1	0	0	1
Orthodontist	0	0	2	0	1	3
Orthopaedics	1	0	0	0	0	1
Pathology	1	0	2	0	0	3
Pediatric Surgery	0	0	1	0	0	1
Plastic Surgery	0	1	0	0	0	1

Specialty	Consultants	Senior Specialists	Specialists	Medical Officers	Residents	Grand Total
Psychiatry	0	0	1	0	1	2
Public Health	0	0	1	0	1	2
Radiation Oncology	0	0	4	0	0	4
Radiology	0	2	2	0	5	9
Surgery	3	2	16	0	6	27
Urology	0	1	0	0	0	1
Grand Total	12	19	79	30	60	200

Table 2.2. 6: Trend of Nurses and Midwives by Category (2020 – 2024)

CADRE	2020	2021	2022	2023	2024	REMARKS
Professional Nurses	643	769	737	702	649	7.5% decr
i. Specialists (Membership & Fellows)	1	3	4	14	19	35.7% incr.
Midwives	164	209	231	193	183	5.2% decr
Nursing Assistant Clinical & Nursing Assistant Preventive	77	76	80	41	40	2.4% decr.
i. Enrolled Nurses	70	69	71	37	35	5.4% decr
ii. Community Health Nurses	7	7	9	4	5	25.0% decr
Total	884	1,054	1,048	936	872	6.8% decr

2.3 STAFF GAP ANALYSIS IN 2024

Human resource gap analysis is an essential management tool to identify shortages in staff strength, as well as skills and knowledge gap that could affect the attainment of the goals of an organization. Hence, the Hospital HR needs assessment was conducted in 2020 in line with the 2020-2025 Medium-Term Strategic Plan. This identified the need to have an optimal staff strength of 2,500 to deliver the various sub-specialty clinical and support services to enable the hospital to effectively achieve the set goals and objectives of the Medium-Term Strategic Plan. However, as at 2024, there were gaps across several key professional categories.

In 2024, a gap of 117 was identified in expected number of medical doctors. However, 63 were undergoing various forms of specialist training, including 10 in obstetrics and gynaecology, 7 in pediatrics and 6 in Physician Specialist training, which is expected to partially bridge the gap in the medium to long term. Also, out of the 157 pharmacists required at the hospital, only 39 were available in 2024. Similarly, 81 allied health professionals were available out of the 214 minimum required while a substantial gap of 666 nurses and midwives were identified from a total requirement of 1,502.

To mitigate some of these HR gaps, the hospital recruited a total of 116 staff in 2024, comprising 12 medical officers, 6 pharmacists and 5 professional nurses among others. Table 2.3. 1 presents a detailed gap analysis for selected staff cadres, while Table 2.3.2 outlines the staff recruited during in 2024.

Table 2.3. 1: Gap Analysis

CADRE	MINIMUM REQUIRED	AVAILABLE	GAP	UNDER TRAINING
Gap Analysis for Doctors				
Medical Officers (This includes residents)	56	90	-34	-
Maxillofacial surgeon	5	3	2	0
Specialist Community Oral Health /Dentist	6	0	6	0
Specialist Orthodontist	2	2	0	1
Specialist Restorative Dentistry	4	0	4	0
Cardiologist	4	1	3	1
Dermatologist	2	0	2	1
Doctor Anaesthetist	27	4	23	4
Emergency Medicine Physician	22	1	21	6
Endocrinologist	2	1	1	0
Family Physician	7	6	1	0
Gastroenterologist	4	0	4	0
Infectious Disease Specialist	4	0	4	0
Nephrologist	3	0	3	0
Neurosurgeon	2	2	0	7
Obstetrician & Gynaecologist	21	13	8	10
Ophthalmologist	7	5	2	3
Paediatric Endocrinologist	2	0	2	0
Paediatric Nephrologist	2	0	2	0
Paediatric Neurologist	2	0	2	0
Paediatric Oncologist	2	0	2	0
Paediatrician (General)	16	9	7	7
Pathologist/Laboratory Medicine	6	7	-1	2
Physician Specialist	32	14	18	6

CADRE	MINIMUM REQUIRED	AVAILABLE	GAP	UNDER TRAINING
Respiratory Physician	2	0	2	0
Rheumatologist	2	0	2	1
Specialist Hematology	5	1	4	1
Specialist Microbiology	5	1	4	0
Trauma & Orthopedic Specialist	6	1	5	1
Urologist	4	1	3	0
General Surgeon	11	21	-10	3
Pediatrics Surgeon	8	0	8	0
Clinical Medical Physicist	8	0	8	0
ENT specialist	5	3	2	3
Radiologist/Radiology	7	4	3	5
Radiation Oncologist	9	4	5	0
Specialist, Psychiatry	-	1	-1	1
TOTAL	312	195	117	63
Gap Analysis for Nurses and Midwives				
Midwives	234	183	51	31
Community Health Nurse (all level)	19	15	4	0
General Nurses	955	544	411	13
Critical Care Nurse	183	19	164	6
Emergency Nurse	5	2	3	7
ENT Nurse	8	6	2	1
Oncology Nurse	8	4	4	1
Ophthalmic Nurse	10	8	2	6
Peri-Operative Nurse	32	14	18	3
Mental Health Nurses	14	16	-2	1
Neonatal Intensive Care	5	3	2	2
Nephrology Nurse	8	2	6	1
Paediatric Nurse	5	10	-5	0
Paediatric Oncology	1	3	-2	0
Public Health Nurse	12	5	7	4
Speech Therapist	2	2	0	2
Orthopaedic	1	0	1	1
TOTAL	1,502	836	666	79
Gap Analysis for Pharmacists				
Pharmacists	57	19	38	0
Pharmacy Specialist – Drug Information	7	0	7	0
Pharmacy Specialist- Manufacturing	6	0	6	0
Pharmacy Specialist –	6	0	6	0

CADRE	MINIMUM REQUIRED	AVAILABLE	GAP	UNDER TRAINING
Oncology				
Pharmacy Specialist- Infectious Diseases	5	2	3	0
Pharmacy Specialist - Renal	7	0	7	0
Pharmacy Specialist – Anaesthesia/ICU	5	1	4	0
Pharmacy Specialist – Emergency/Critical Care	6	1	5	0
Pharmacy Specialist –Radio	5	0	5	0
Clinical Pharmacist-Specialist	15	5	10	6
Pharmacy Technician	38	11	27	0
Total	157	39	118	6
Gap Analysis for Allied Health Professionals				
Physiotherapists	29	9	20	0
Physiotherapy Assistants	12	8	4	0
Dieticians	12	5	7	1
Nutritionists	7	7	0	1
Optical Technicians	2	4	-2	1
Optometrists	4	6	-2	0
Radiographers/ X-ray Technicians	17	14	3	0
Biomedical Scientists	96	47	49	8
Dental Technologist/ Technicians	6	12	-6	0
Biostatistics Officers	11	9	2	0
Technical Officers (Biostats/HI)	18	12	6	0
TOTAL =	214	133	81	11

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

Table 2.3. 2: Categories of Newly Recruited Staff at CCTH in 2024

Category	Number
Medical Officer	12
Professional Nurse	5
Health Service Administrator/Administrative Manager	12
Accountant	6
Procurement Manager/Supply Manager	6
Pharmacist	6
Other staff	69
Total	116

2.4. PROMOTIONS AND STAFF DEVELOPMENT

The Hospital over the years has consistently adopted staff promotion as a key strategy for retaining staff as it fosters a sense of belonging among staff. In line with this policy, two change-of-grade interviews are conducted annually to enable eligible staff fair and timely opportunities for career progression. In 2024, a total of 644 staff experienced changes of grade, representing a rise of 67.2% compared to the 386 in 2023). Out of this, seven (7) were appointed to managerial positions while ten (10) were converted to new professional grades. In addition, 510 staff were promoted and 117 were upgraded to higher ranks as shown in Table 2.4.1 below.

Table 2.4. 1: Trend of Change of Grades by Categories (2020 - 2024)

Category	2020	2021	2022	2023	2024	REMARKS
Appointment	10	0	1	10	7	42.9% Decr
Conversion	16	7	9	12	10	16.7% Decr
Promotion	194	81	322	310	510	64.5% Incr
Upgrading	14	50	50	54	117	116.7% Incr
Grand Total	234	138	382	386	644	67.2% Incr

In addition to opportunities for promotion, the Cape Coast Teaching Hospital (CCTH) remains committed to supporting staff development through continues education and advanced training. A key strategy has been the granting of study leave to enable staff pursue further studies, aimed at bridging critical human resource gaps and enhancing professional competencies.

During the reporting period, the institution granted study leave to 81 staff; 80 staff on study leave with pay and 1 staff member on study leave without pay. In terms of qualifications approved, the majority of study leaves were granted for Membership programs (29) and Bachelor of Science (BSc) programs (27). This was followed by Master's programs (12). Fewer approvals were recorded for Diploma programs (7), Fellowship programs, (4) and Associate Membership programs (2). In terms of mode of study, the regular mode constituted the highest number of approvals (48), followed by sandwich, weekend and online programs (29), while only 4 approvals were recorded for programs.

Further, as at the end of 2024, a total of 207 staff were actively enrolled in various academic and professional programs. Among them, 133 were studying on regular basis, 45 on sandwich programs, and 1 via online learning. With regards to the type of learning, 88 staff pursued degree programs, 74 enrolled in membership programs, and 27 undertook fellowship training. By professional category, this comprised 74 medical doctors, 50 professional nurses and 37 midwives. Details are presented in Figures 2.4.1, 2.4.2 below.

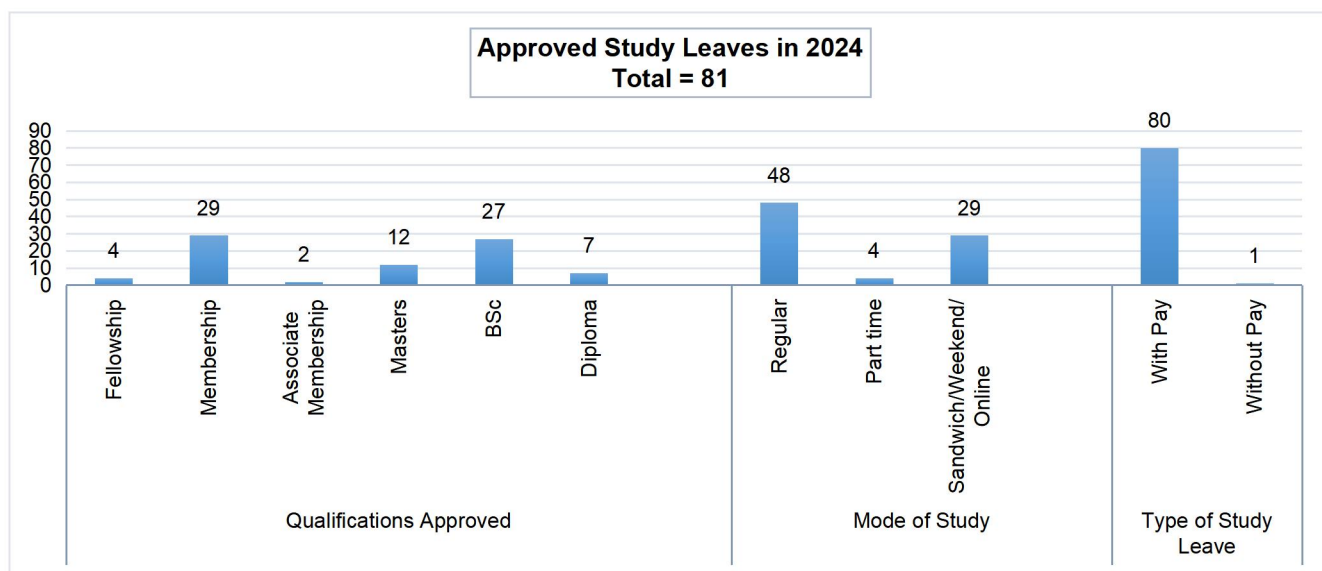


Figure 2.4. 1: Approved Study Leaves in 2024

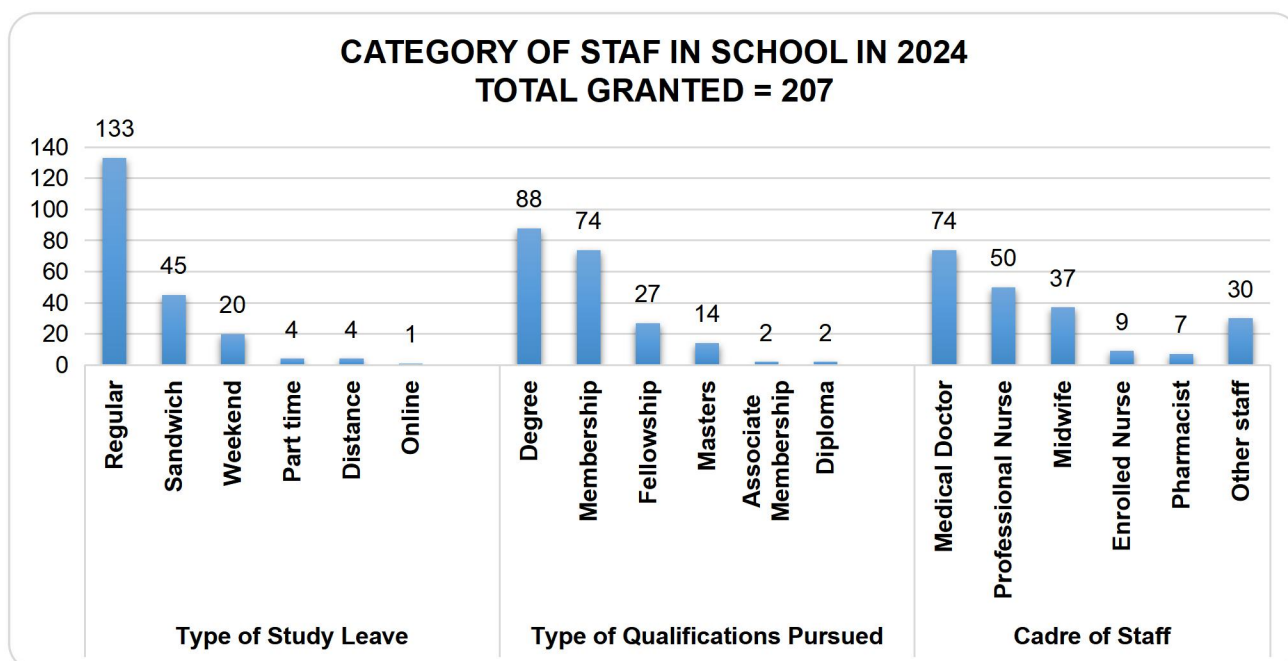


Figure 2.4. 2: Staff in Training as at 2024

2.4.1 PERFORMANCE APPRAISAL

Performance appraisal is an essential tool for assessing employee's performance. It also forms part of career development as it identifies and leverage on staff strengths to improve institutional performance whiles also recommending possible strategies to improve on their weaknesses. This is aimed at enhancing the performance of staff as well as the institution.

The hospital since 2020 has been unable to achieve the target of appraising all eligible staff, despite the periodic education and awareness creation highlighting the importance of performance appraisal. Nonetheless, the hospital recorded a marginal increase in proportion of staff appraised, rising from 36.62% in 2023 to 38.42% in 2024 as shown in Table 2.4.1.1 below. Sensitization of staff on the benefit of performance appraisal needs to be strengthened to help staff know its benefit to them as well as the institution.

Table 2.4.1. 1: A Five-Year Trend of Staff Appraised (2020 – 2024)

Indicator	2020	2021	2022	2023	2024	Remarks	Target	Measurement
Proportion of Staff Appraised	45.13%	52.07%	45.21%	36.62%	38.42%	incr	THs = 100%	Number of staff appraised / total number of staff * 100
Number Appraised	575	830	790	669	702	4.7% incr	-	
Number Expected to be appraised	1274	1594	1747	1827	1827		-	

2.5 TRANSFERS

Staff transfers remain a key human resource management strategy in the hospital, ensuring equitable distribution of staff, addressing service delivery needs, and maintain operational efficiency within the hospital. In 2024, a total of 38 staff were transferred out of the hospital, compared to 50 in 2023, representing a decline of 24%. Majority if the staff that transferred out were clinical personnel, with professional nurses accounting for the highest number (15), followed by midwives (9) and laboratory technical officers (4). On the other hand, staff transfers into the hospital marginally went up by 16.7% (from 6 in 2023 to 7 in 2024).

Figure 2.5.1 presents a five-year trend of transfers at the hospital, whiles Table 2.5.1 provides a detailed breakdown of staff transferred by cadre in 2024.

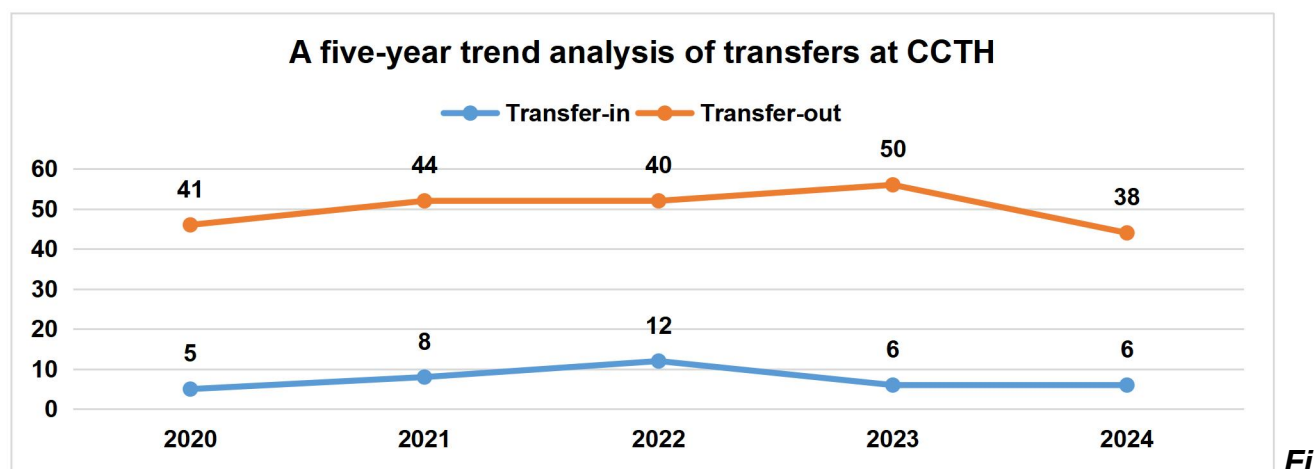


Figure 2.5. 1: Trend of Staff Transfers at CCTH (2020 – 2024)

Table 2.5. 1: Cadre of Staff who Transferred-in and out in 2024

TRANSFER - OUT		TRANSFER - IN	
Cadre	Number	Cadre	Number
Professional Nurses	15	Technical Officer (lab)	2
Midwife	9	Midwife	2
Technical Officer (lab)	4	Executive Officer	1
Biomedical Scientist	2	Technologist, Clinical Engineering	1
Accountant	2	Enrolled Nurse	1
Human Resource Manager	1		
Health Service Administrator	1		
Technical Officer (Nutrition)	1		
Mortuary Attendant	1		
Artisan	1		
Total	38	Total	7

2.6 HUMAN RESOURCE WASTAGE

During the reporting the period, the hospital recorded an increase in the total number of staff exit by 24.6% (from 65 in 2023 to 81 in 2024). Out of that, 31 vacated their post, while an equal number (31) proceeded on leave without pay. Additionally, 6 staff resigned whiles and another 6 retired from active service. Regrettably, 5 staff passed away while in active service during year. Table 2.6.1 below provides a five-trend of the staff exits, providing insights into the patterns of human resource attrition within the hospital.

Table 2.6. 1: Trend of Staff Exits (2020 – 2024)

TYPE OF WASTAGE	2020	2021	2022	2023	2024	REMARKS
Voluntary Retirement	-	1	12	0	-	

TYPE OF WASTAGE	2020	2021	2022	2023	2024	REMARKS
Compulsory Retirement	7	7	0	5	6	20% Incr
Death	3	1	3	4	5	25% Incr
Resignation	4	7	12	8	6	25% Decr
Vacation of Post	5	18	35	48	33	31.25% Decr
Leave without pay	-	10	26	-	31	
Grand Total	19	44	88	65	81	24.6% incr

2.7 IMPROVING TEACHING AND LEARNING

As part of its core mandates, the Cape Coast Teaching Hospital (CCTH) serves as a centre for training and development of health professionals. In line with this responsibility, the hospital provides an enabling academic and clinical environment that supports the training of clinical professionals aimed at enhancing the quality-of-service delivery. In addition to clinical training, the hospital also offers training opportunities for non-clinical staff to strengthen their skills and improve institutional performance.

The performance of the hospital in line with its mandate of training in 2024.

2.7.1 GENERAL TRAINING PERFORMANCE

The following performances were achieved under general training;

- i. The hospital secured several accreditations for the training of clinicians in several specialties. These are as follows;
 - Partial accreditation in Anaesthesia from Ghana College of Physicians and Surgeons
 - Partial accreditation in Dental from Ghana College of Physicians and Surgeons
 - Partial accreditation in Surgery from Ghana College of Physicians and Surgeons
 - Partial accreditation in Neurosurgery from Ghana College of Physicians and Surgeons
 - Accreditation in Internal Medicine from Ghana College of Physicians and Surgeons
 - Accreditation in Obstetrics & Gynaecology from Ghana College of Physicians and Surgeons
 - Accreditation in Child Health from Ghana College of Physicians and Surgeons
 - Accreditation in otorhinolaryngology from West African College of Physicians and Surgeons (WACPS) for ENT Residency Training
 - Accreditation in Advanced Midwifery from Ghana College of Nursing and Midwifery
 - Accreditation for the training of pharmacist from the Ghana College of Pharmacists
 - West African Postgraduate College of Pharmacists
- ii. Various workshops and short course were attended (Local & International) by Senior Managers, Consultants and Specialists to upgrade their skills and capacity
- iii. Staff at the laboratory participated and excelled in EQA for TB, Malaria, HIV

2.7.2 POSTGRADUATE TRAINING PERFORMANCE

A. Resident Doctor Training

- i. The hospital trained 40 resident doctors across various specialties, 19 CCTH of whom were CCTH staff
- ii. In addition, 37 CCTH doctors undertook their residency (membership) training in other accredited institutions as shown in Table 2.7.2.1 below.

B. Nursing and Midwifery Membership Training

- iii. A total of 32 nurses and midwives trained for their membership in CCTH.
- iv. Also, 13 CCTH nurses and midwives trained with external institutions for their membership. Details shown in table 2.7.2.2 below.

C. Pharmacy Postgraduate Training

- v. The hospital provided membership training for 9 pharmacists from the Ghana College of Pharmacists across different specialty areas as highlighted in table 2.7.2.3 below

D. Fellowship Training for Specialist Doctors

- vi. Eleven (11) specialist doctors, including 10 CCTH staff, undertook fellowship training at the hospital.
- vii. In addition, 30 CCTH specialist doctors pursued their fellowship training in other accredited institutions as shown in table 2.7.2.4

E. Other Postgraduate Training

- viii. One management staff member completed a Certificate Fellowship in Health Economics and Financing at Seoul National University-Republic of Korea.

Table 2.7.2. 1: Membership Training of Doctors in 2024

Membership Training of Doctors at CCTH			Membership Training of CCTH staff (Doctors) in Different Institutions		
Programme	No.	Institution of Student	Programme	No.	Institution of Study
Surgery	11	CCTH (4), Other facilities (7)	Anaesthesia	1	KBTH
Dental/ Maxillofacial	1	CCTH	Emergency	6	KBTH (5), KATH (1)
Obstetrics & Gynaecology	16	CCTH (7), Other (9)	ENT	3	KBTH (3)
Internal Medicine	3	CCTH (2), Winneba Trauma (1)	Internal Medicine	4	KBTH (3), KATH (1)
Anaesthesia	2	CCTH (2)	Lab Medicine	2	KBTH
DEENT	1	KBTH	Neurosurgery	1	South Africa

Membership Training of Doctors at CCTH			Membership Training of CCTH staff (Doctors) in Different Institutions		
Family Medicine	3	Other facilities	Obstetrics & Gynaecology	3	KBTH (2), KATH (1)
Neurosurgery	2	CCTH	Ophthalmology	3	KBTH
Orthopaedics	1	CCTH	Orthodontics	1	KATH
			Paediatric	7	KBTH (3), KATH (4)
			Public Health	1	GCPS/KBTH
			Radiology	5	KBTH (2), KATH (1), 37 MIL (2)
Total	40		Total	37	

Table 2.7.2. 2: Membership Training of Nurses and Midwives in 2024

Membership Training of Nurses and Midwives at CCTH		Membership Training of CCTH staff (of Nurses and Midwives) in Different Institutions		
Programme	No.	Programme	No.	Institution of Study
Well Woman	18 (3 CCTH Staff)	Family Health Nursing	2	Ghana College of Nursing and Midwifery
Advanced Midwifery	14 (5 CCTH Staff)	Infectious Diseases	2	Ghana College of Nursing and Midwifery
		Emergency Nursing	3	Ghana College of Nursing and Midwifery
		Neuroscience Nursing	2	Ghana College of Nursing and Midwifery
		Critical Care Nursing	1	Ghana College of Nursing and Midwifery
		Nephrology Nursing	1	Ghana College of Nursing and Midwifery
		Oncology Nursing	1	Ghana College of Nursing and Midwifery
		Orthopaedic Nursing	1	Ghana College of Nursing and Midwifery

Membership Training of Nurses and Midwives at CCTH		Membership Training of CCTH staff (of Nurses and Midwives) in Different Institutions		
Programme	No.	Programme	No.	Institution of Study
Total	32	Total	13	

Table 2.7.2. 3: Residents (Membership) Training of Pharmacists in 2024

Programme	No.	Institution of Student
Obstetrics & Gynaecology and Endocrinology	2	Ghana College of Pharmacists
Obstetrics & Gynaecology and Dermatology	1	Ghana College of Pharmacists
Infectious Diseases & Endocrinology	1	Ghana College of Pharmacists
Infectious Diseases and Obstetrics & Gynaecology	1	Ghana College of Pharmacists
Cardiology and Endocrinology	1	Ghana College of Pharmacists
Cardiology	1	Ghana College of Pharmacists
Pediatrics	1	Ghana College of Pharmacists
Ophthalmology and Endocrinology	1	Ghana College of Pharmacists
Total	9	

Table 2.7.2. 4: Fellowship Training Doctors Program in 2024

Fellowship Training at CCTH			Fellowship Training of CCTH staff in Different Institutions		
Programme	No.	Institution of Student	Programme	No.	Institution of Study
Urology	2	CCTH (1), Effia Nkwanta Regional Hospital (1)	Anaesthesia	1	South Africa
Family Medicine	1	CCTH	Cardiothoracic	1	National Cardio Centre
General Surgery	2	CCTH	Family Medicine	3	KATH (1), KBTH (1), UCC (1)
Obstetrics & Gynaecology	2	CCTH	Internal Medicine	4	KBTH
Orthopaedics	3	CCTH	Lab Medicine	2	KBTH
Uro Gynaecology	1	CCTH	Neurology	1	South Africa
Advanced Obstetrics & Gynaecology	1	CCTH	Neurosurgery	3	KBTH (1), GARCH (1), Morocco (1)
			Obstetrics & Gynaecology	4	KATH

Fellowship Training at CCTH			Fellowship Training of CCTH staff in Different Institutions		
Total	11		Ophthalmology	2	KBTH/India (1), Belarus (1)
			Oral Pathology	1	KBTH
			Orthodontist	1	KBTH
			General Pediatrics	1	KBTH
			Radiology	2	KATH (1), KBTH (1)
			Urology	1	KBTH (1)
			Gynae Oncology	1	KATH
			Maternal Fetal Medicine	1	KATH
			Neonatology	1	KATH
			Total	30	

Table 2.7.2. 5: Fellowship Training of other Staff in 2024

Fellowship Training of CCTH staff in Different Institutions		
Programme	Number	Institution of Study
Health Economics and Financing	1	Seoul National University-Republic of South Korea

The resident pass rate for doctors generally showed strong performance since 2021, despite minor fluctuations. The pass rate marginally decreased from 91.0% in 2021 to 87.5% in 2022. However, performance improved to 94.7% in 2023, and 100% in 2024, thereby meeting the teaching hospital's target. Further, the consultant to resident doctor ratio also showed fluctuations between 1:1 and 1:2 over the period. In 2024, the ratio increased from 1:1 in 2023 to 1:2 in 2024. Details of the analysis is shown in table 2.7.2.6 below.

Table 2.7.2. 6: Residency Training Under the THs KPIs

KPI	2021	2022	2023	2024	REMARKS	TARGET S	MEASUREME NT
Resident Pass (%) rate for doctors	91.0	87.5	94.7	100	incr	THs = 100%	Number of final year medical residents passes /Total number of medical residents (Students) presented
Consultant To Resident Doctor Ratio	1:1	1:2	1:1	1:2	incr	THs = 1:3	Total number of consultants and snr specialist/ Resident Doctors

2.7.3 IN-SERVICE TRAINING AND INTERNSHIP

The hospital in addition to granting study leave to staff to pursue further education and advance their career also routinely organises in-service training programmes aimed at updating staff knowledge and strengthening their skills on emerging and priority issues within their respective specialties. In 2024, a total of 17 Sub-BMCs and Units conducted intensive workshops and in-service training programs, benefitting 1,171 staff across various professional cadres as detailed in Table 2.7.3.1 below.

Further, the hospital provided practical training opportunities for tertiary students as part of its training mandate. A total of 798 tertiary students with clinical and non-clinical backgrounds, undertook internship and practical attachments at the hospital. These enabled students acquire hands-on experience to complement the theoretical knowledge gained in their respective programs. Also, 194 national service personnel were posted to the hospital in 2024. This comprised 97 nurses and midwives' while 97 diploma or degree holders with different professional backgrounds.

Details of the analysis are presented in Table 2.7.3.1 to Table 2.7.3.4.

Table 2.7.3. 1: In-Service Training Held in 2024

NO	SUB-BMC/UNIT	Topic	Number Trained
1.	Human Resource (HR)	Performance Management Training, HRMIS (ORACLE) Training, Modern Trends in HR	11
2.	A & E/ Male Medical Ward/ Delivery Suite Recovery/ DEENT/ Child Health/ Dialysis/ Female Medical Ward/ ANC/ Oncology/ IT/ CSSD/Laundry/ Kitchen	Performance Management Training/Leaves/ Sick Staff Policy/Other HR Matters	378
3.	Account	LHIMS Training	45
4.	Records	Refresher Training on LHIMS	9
5.	House Officers	BLS Training	34
6.	New Medical Officers	LHIMS Training	9
7.	Laparoscopy Team	Laparoscopy Training	26
8.	DEENT	Gender Equality & Inclusivity/Laparoscopy	59
9.	House Officers	LHIMS Training	6
10	Nursing Directorate	Report Writing	66
11	Security	Security Training	43
12	Accident & Emergency	Infection prevention and control, Cardiopulmonary Resuscitation (CPR) workshop, Triaging and START	50
13	Surgery	Infection prevention and control workshop	79
14	Laboratory	Training on new Hematology analyzer, Training on new Disyiller, Quality assurance on Haematology and clinical chemistry	247

NO	SUB-BMC/UNIT	Topic	Number Trained
		analyzer, Laboratory diagnostics of tuberculosis update on MSc, MPhil, PhD in Medical Laboratory Diagnostics, National strategy for screening of donated blood and immunohematology testing, QA, IPC, in POCT, QM Straining, QMS preparation for external audit	
15	Maternal Health	IPC-Hand Hygiene, Decontamination, disinfection and dusting in environments, Customer Care, Proper hand washing and wearing of scrubs, General IPC and mode of disease transmission	18
16	Diagnostics	Client satisfaction Training	25
17	Child Health	• ETAT Training, • Common surgical conditions children (Intussusception and Biliary Atresia) • Assessment of management of Severe Acute Malnutrition and Adherence of Management Protocol in CCTH, • Opinion of Ghanaian women on breast milk bank • LHIMS Training, • Common skin infections in children, • Sickle cell Disease • Seminar on Neonatal Jaundice for peripheral facilities • Nephrotic Syndrome, • Paediatric TB, • Diabetes, • Birth Asphyxia, • Meningitis, • Child Right and Patient charter, • Advance Paediatric Life Support (APLS) training by international health care volunteers' team • Customer Relationship, • Joining hands to fight childhood cancer, Prolonged Jaundices	66
	Total Trained		1,171

Table 2.7.3. 2: Internship (Non-Clinical) at CCTH in 2024

NO	INSTITUTION	NUMBER
1.	University of Cape Coast	569
2.	Cape Coast Technical University	43
3.	University of Health and Allied Sciences	19
4.	Kwame Nkrumah University of Science and Technology, Kumasi	14

NO	INSTITUTION	NUMBER
5.	Takoradi Technical University	11
6.	University of Ghana, Legon	9
7.	Pentecost University	5
8.	Methodist Health Training Institute	5
9.	Accra School of Hygiene, Korle Bu	4
10.	University for Development Studies	4
11.	Jomars Catering Institute	4
12.	Klintapo College of Health and Allied Sciences	3
13.	School of Anaesthesia, 37 Military Hospital	3
14.	College of Health and Wellbeing, Kintampo	3
15.	Koforidua Technical University	3
16.	University of Education, Winneba	2
17.	College of Health, Yamfo	2
18.	University of Energy and Natural Resources, Sunyani	2
19.	Ghana TVET Service - Cape Coast Technical Institute	2
20.	Catholic Health Service Trust Ghana	2
21.	Cambridge International College	1
22.	Ghana Christian University College	1
23.	Social Welfare Girls' Technical Institute	1
24.	Nkroful Agric Senior High School (NASS)	1
25.	Effutu Senior High School	1
26.	Komenda Senior High Technical School	1
27.	Valley View University	1
28.	KAAF University College	1
	TOTAL	717

Table 2.7.3. 3: Internship (Clinical) at CCTH in 2024

NO.	PROGRAMME	INSTITUTION	NO.
1.	BSc Physician Assistantship	UCC	71
2.	BSc Medical Laboratory Science	UCC	5
3.	BSc Health Administration and Education	University of Education, Winneba	2
4.	BSc Nutrition and Dietetics	Allied Health Professional Council	2
5.	BSc Physician Assistantship	Presbyterian University College	1
	TOTAL		81

Table 2.7.3. 4: National Service Personnel Posted to CCTH – 2024

CATEGORY	NUMBER
Nurses/Midwives	97

CATEGORY	NUMBER
Others (Diploma/Degree)	97
Total	194

2.7.4 INTERNATIONAL MEDICAL TRAINING COLLABORATION

The hospital also collaborates with foreign medical institutions as part of strategies to improve service delivery. These partnerships provide opportunities for knowledge exchange and skills improvement. In 2024, the hospital received a total of eighteen (18) foreign medical trainees from six (6) different countries, representing diverse professional backgrounds, including medical students, interns, and resident doctors. Further details are presented in Table 2.7.4.1 below.

Table 2.7.4. 1: Foreign Trainees – 2024

NO	INSTITUTION	NO.
1.	Wake Forest University, United States of America	6
2.	Pacific University, United States of America	3
3.	University of New South Wales, Australia	2
4.	Hubei Minzu University, China	1
5.	Massachusetts College of Pharmacy and Health Sciences, United State of America	1
6.	University of Wisconsin	1
7.	Medical University of South Carolina College of Medicine, United States of America	1
8.	Saint Catherine University, United States of America	1
9.	University Zu Koln, Germany	1
10.	Bangor University, United Kingdom	1
	TOTAL	18

2.8 STAFF WELFARE AND RECOGNITION PROGRAMMES

As part of the strategies to motivate staff, the hospital introduced a sick staff policy in 2020, designed to support staff and their dependents with medical expenses. Since its introduction, the policy has seen consistent increase in utilization. In 2024, a total of 926 staff and 352 dependents benefitted from the policy, compared to 734 staff and 270 dependents in 2023. This represents a 26.1% increase in staff beneficiaries and 30.4% increase in dependents from 2023 to 2024, indicating improvement in uptake and effectiveness of the policy.

Table 2.8. 1: Sick staff policy uptake (2020-2024)

Indicator	2022	2023	2024	Remarks
Number of staff who benefitted from the sick staff policy	250	734	926	26.1% incr

Indicator	2022	2023	2024	Remarks
Total number of staff dependants who benefited from the stick staff policy	-	270	352	30.4% incr

Further, to promote continuous quality improvement and recognize outstanding performance, the hospital enhanced its peer review and staff award programs in 2024. A seven-member committee was constituted to coordinate the organization of the departmental peer review exercise. Following the assessment, the Laboratory Unit emerged as the overall-best performing department, with the Pharmacy and Surgical departments placing first and second runners-up respectively.

In addition, a separate committee organized the Best and Long-Serving Staff Awards as part of the 2024 End of Year Celebration. In total, 17 staff members were recognized for outstanding performance, commitment and professionalism, while 15 retired staff in 2024 were recognized for their years of dedicated service. These initiatives have strengthened staff motivation, fostered a culture of excellence and reinforced the institution's commitment to rewarding merit and dedication.

CHAPTER THREE

CLINICAL CARE SERVICES

3.0 INTRODUCTION

This chapter presents a comprehensive overview of the clinical services delivered by the hospital during the reporting year in comparison with previous years. It also examines the trend of service utilization across the various clinical specialties at both the outpatient and inpatient level.

3.1 OUT-PATIENT SERVICES UTILIZATION

The hospital recorded a steady increase in the overall OPD attendance from 125,772 in 2020 to a peak of 172,839 in 2023. However, in 2024, the hospital saw a general decline of 4.17% in total OPD attendance, (decreasing from 172,839 in 2023 to 165,640). This dip was accompanied by a reduction in OPD cases seen per doctor, which fell from a ratio of 1:843 in 2023 to 1:828 in 2024 and below the teaching hospital's target of 1:1080.

Additionally, the number of new OPD registrants decreased by 6.0%, (from 22,823 in 2023 to 21,455 in 2024), returning to levels close to 2020. The average daily OPD visits in 2024 declined by 4.2% (from 474 in 2023 to 454 in 2024), corresponding to the general decline in total OPD attendance. OPD utilization was higher in January and February compared to the months of November and December.

Furthermore, the number of insured clients declined by 4.03% in 2024 (from 151,584 to 145,476), in contrast to a 2.4% increase recorded in 2023 (from 148,031 in 2022 to 151,584 in 2023). Similarly, the number of non-insured clients dropped by 5.13% (from 21,255 in 2023 to 20,164 in 2024) despite prior fluctuations. Details of the analysis are illustrated in Figures 3.1.1, 3.1.2, 3.1.3 and Table 3.1.1 ,3.1.2 below.

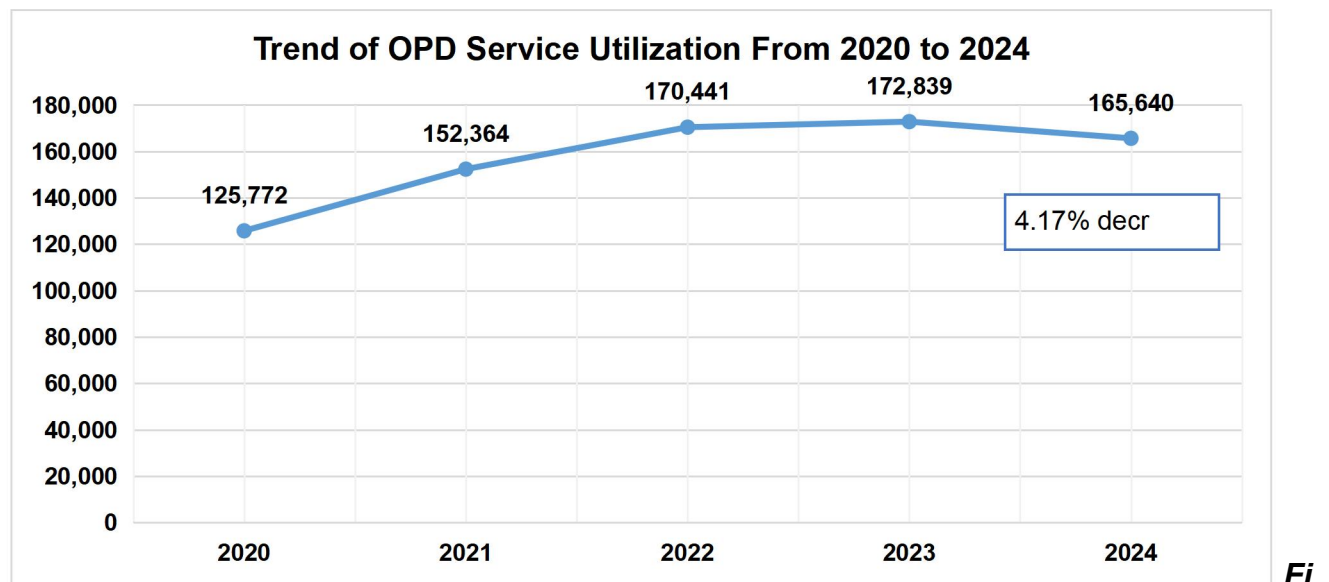


Figure 3.1. 1: Trend Analysis of Total OPD Attendance

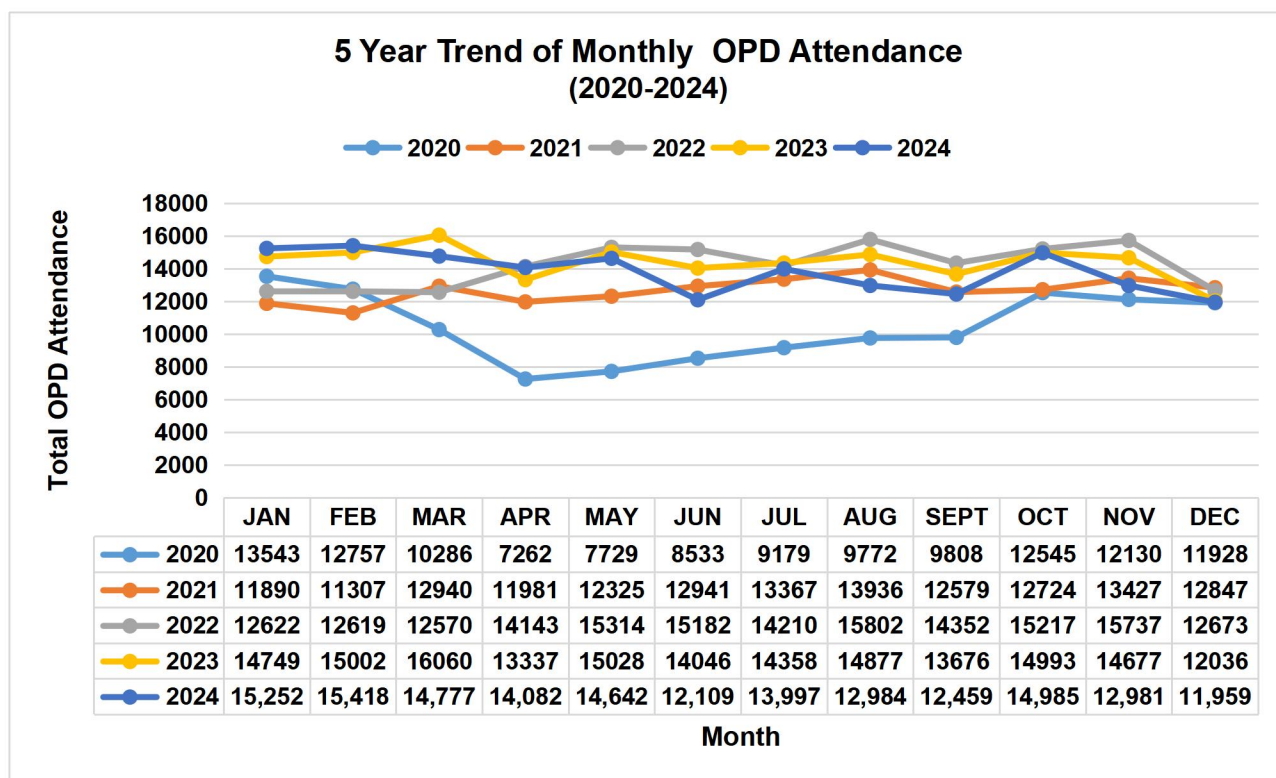


Figure 3.1. 2: Monthly Trend of Total OPD Services Utilization

Table 3.1. 1: General OPD Clinic Attendance

INDICATORS	2020	2021	2022	2023	2024	REMARKS
OPD Attendance	125,772	152,364	170,441	172,839	165,640	4.17% decr
New OPD Registrants	22,636	24,266	22,933	22,823	21,455	6.0% decr
Average Daily OPD Visit	345	417	467	474	454	4.22% decr
Insured Patients	107,169	129,530	148,031	151,584	145,476	4.03% decr
Non-Insured Patients	18,603	22,834	22,410	21,255	20,164	5.13% decr

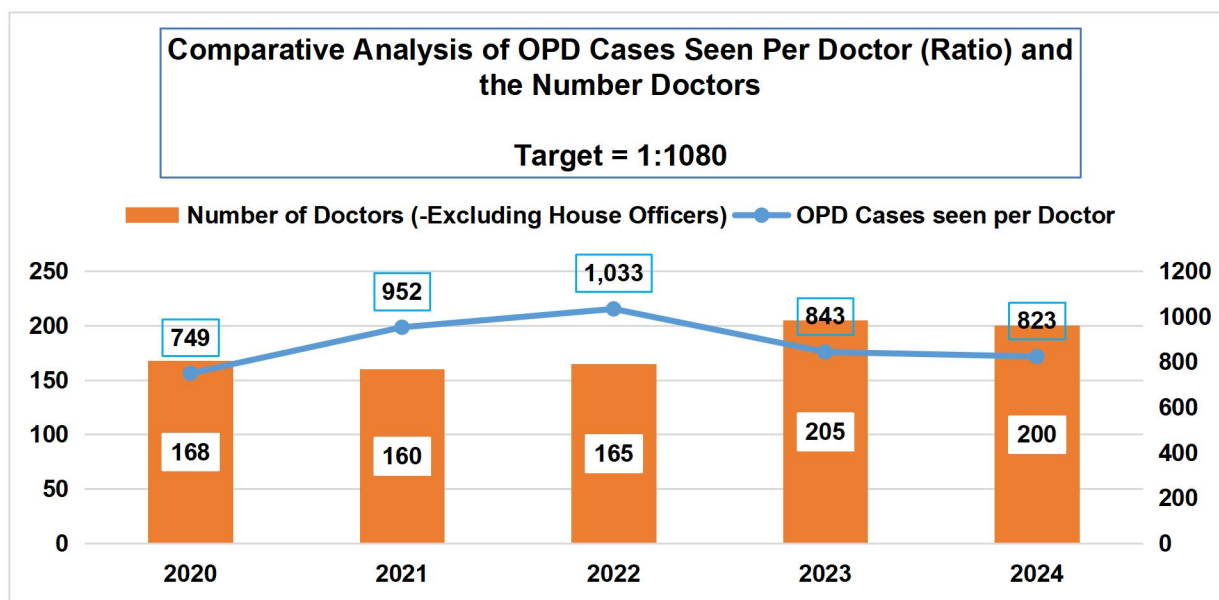


Figure 3.1. 3: Comparative Analysis of OPD Cases Seen Per Doctor (Ratio) and the Number Doctors

As a tertiary-level healthcare facility, CCTH remains committed to enhancing access to specialized medical services. In 2024, the hospital recorded a total of 86,402 specialist OPD attendance, representing a 3.47% decrease (from 89,505 recorded in 2023) and falling below the target of 5% increase. Correspondingly, the OPD cases seen per specialist declined from 1:861 in 2023 to 1:785 in 2024. This reduction reflects both a decrease in the number of specialists – including Senior Specialists and Consultants, and the marginal decline observed in the total specialist OPD attendance

Furthermore, regarding service distribution, Family Medicine services remained the largest share of specialist OPD utilization, and constituting 27.79 in 2024%, while Anaesthesia clinic accounted for the lowest utilization (1.52%). Details presented in Figure 3.1. 4 to Figure 3.1.6 and Table 3.1.2 to Table 3.1.4 below.

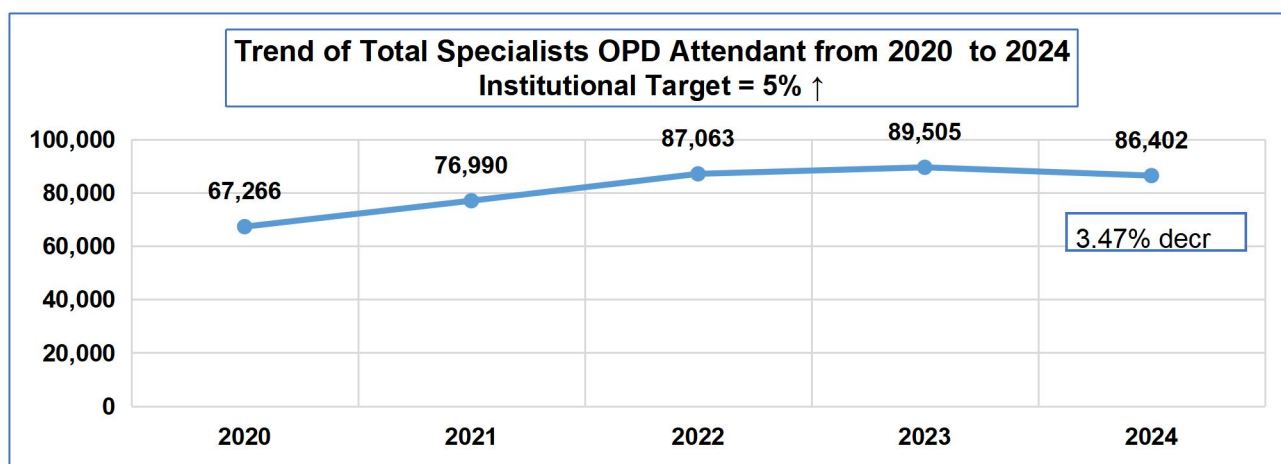


Figure 3.1. 4: Trend in utilisation of OPD Specialised Services

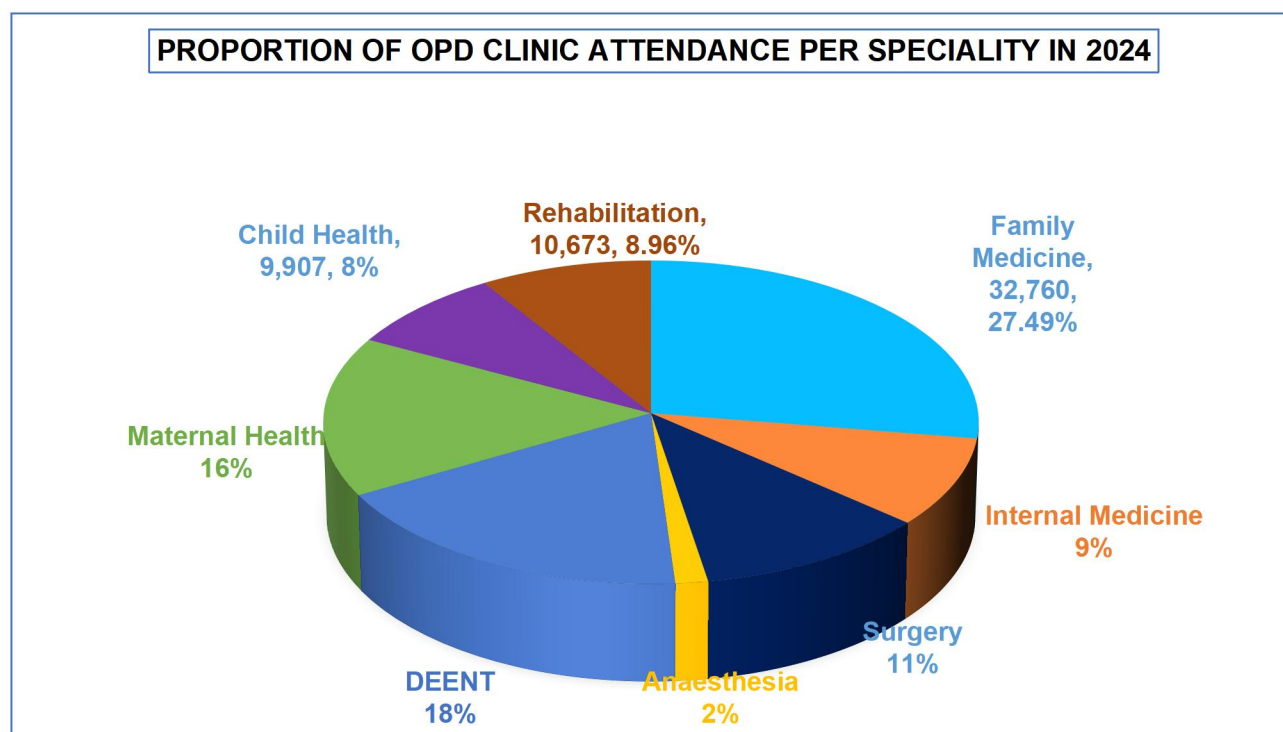


Figure 3.1. 5: OPD Utilization by Specialties in 2024

Table 3.1. 2: Trend of OPD Utilization by specialty from 2020 to 2024

Clinical Specialty	2020	2021	2022	2023	2024	Remarks
Family Medicine	28.86%	27.45%	23.91%	22.32%	27.49%	Increased
DEENT	20.44%	20.12%	18.09%	18.89%	17.88%	Decreased
Maternal Health	12.83%	14.58%	16.36%	17.56%	15.97%	Decreased
Surgery	8.95%	8.71%	9.79%	10.57%	10.98%	Increased
Rehabilitation	8.00%	7.21%	12.55%	10.77%	8.96%	Decreased
Internal	12.82%	10.57%	9.48%	9.92%	8.89%	Decreased
Child Health	7.58%	10.39%	9.13%	9.19%	8.31%	Decreased
Anaesthesia	0.51%	0.98%	0.69%	0.77%	1.52%	Increased

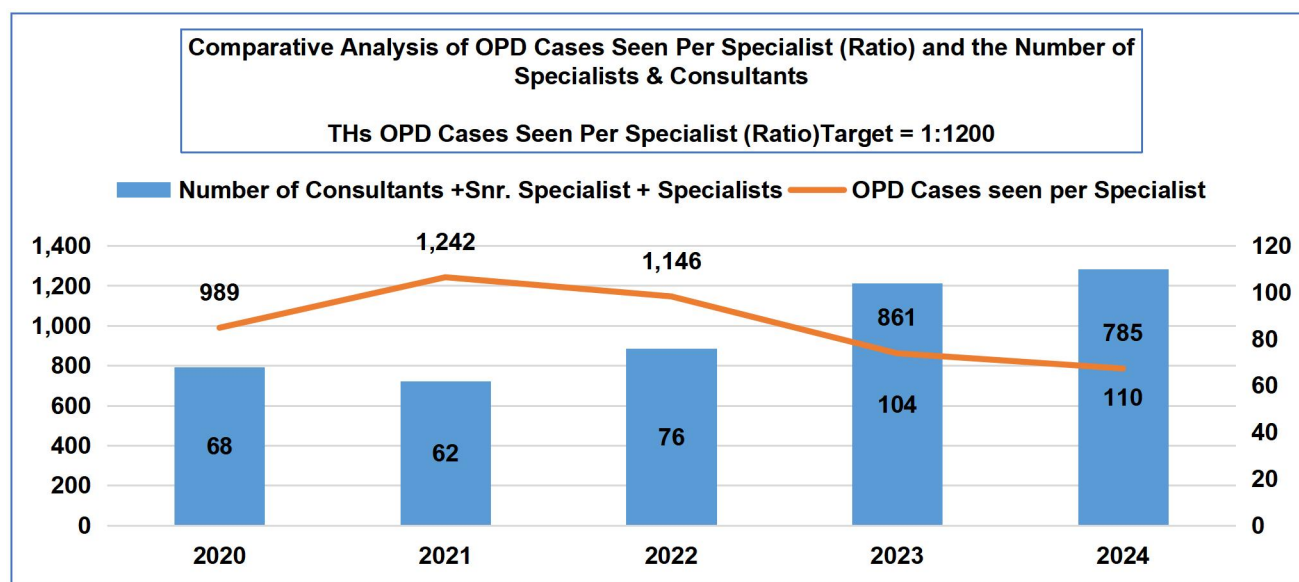


Figure 3.1. 6: Comparative Analysis of OPD Cases Seen Per Specialist (Ratio) and the Number of Specialists & Consultants

Table 3.1. 3: Specialist OPD Performance under THs KPIs

Indicator	2020	2021	2022	2023	2024	Remarks	Target	Measurement
OPD Cases seen per specialist	1:989	1:1,242	1:1,146	1:861	1:785	decr	THs = 1:1040	Total no. of client attending specialist OPDs / Total no. of specialist/ Snr. Specialists/ Consultants
Total Specialists OPD Attendant	67,266	76,990	87,063	89,505	86,402	3.47% decr	CCTH = 5% ↑	
Total number of specialist /Snr. Specialists/ Consultants	68	62	76	104	110	5.77% incr		

In 2024, the hospital offered a total of 49 sub-specialty services at the outpatient department (OPD) level. Out of these, 27 clinics experienced an increase in patient attendance. Notably, the Tuberculosis (TB), Paediatric Renal, and Anaesthesia Clinics recorded considerable growth in attendance, with percentage increases of 134.96%, 127.5%, and 104.27%, respectively with the Plastic Surgery Clinic recording the smallest increase at 1.18%.

On the other hand, 22 clinics experienced a decline in attendance. Among these, the Osteogenesis Imperfecta Clinic recorded the most significant reduction of 27.3%, with attendance falling from 33 in 2023 to 24 in 2024. It is important to note that the absence of a dermatologist during the reporting period resulted in the unavailability of dermatological services for patients.

A detailed analysis of the sub-specialty clinic performance over a 5-year period is presented in Table 3.1.4 below.

Table 3.1. 4: Trend in Specialist Clinic OPD Utilization

CLINICS	2020	2021	2022	2023	2024	REMARKS
TB Clinic	292	271	187	123	289	134.96% incr
Paedics Renal	216	115	79	98	223	127.5%incr
Anaesthesia Clinic	480	1,042	784	889	1,816	104.27% incr
Orthodontist Services	-	25	191	351	592	68.66% incr
Haematology	396	427	366	435	690	58.62% incr
Feto-Maternal services	-	-	912	1,256	1,891	50.56% incr
Adolescent Clinic	126	102	162	110	161	46.36% incr
General Medical/ Polyclinic	17,385	19,046	17,068	16,404	23,274	41.88% incr
Adult Sickle Cell Clinic	595	269	301	301	424	40.86% incr
Oncology Clinic	62	183	200	320	427	33.44% incr
Neuro-Surgery	485	487	1,004	874	1,158	32.49% incr
HIV Clinic	5,337	4,057	4,457	4,646	3,162	31.94% incr
Paediatrics - Sickle Cell clinic	328	351	463	619	801	29.4% incr
Paedics Asthma	57	102	111	118	144	22.03%incr
Gynae	2,553	3,368	3,904	3,826	4,641	21.3% incr
Reproductive Endocrinology & Fertility Services	-	271	357	526	447	15.02% incr
Orthopaedic	1,337	2,530	2,647	2,191	2,476	13.01% incr
Gynae. Oncology	-	11	77	502	567	12.95% incr
Uro-Surgery	4,880	3,044	4,811	5,071	5,606	10.55% incr
Cardiology	2,558	2,718	2,438	2,586	2,811	8.70% incr
Paediatrics Oncology	48	22	23	25	27	8.0% incr
Community Psychiatry	56	66	225	212	223	5.2% incr.
Asthma	819	626	691	734	769	4.77% incr
Uro-gynae	-	-	134	255	264	3.53% incr
ENT	6,004	5,588	5,126	5,569	5,739	3.05% incr
Diet Clinic	393	425	557	438	442	0.91% incr
Plastic Surgery	408	739	654	846	856	1.18% incr
Renal Clinic	919	1005	1167	1,154	1,149	0.43% decr
Diabetes	8,965	9,356	8,590	8,266	8,089	0.82% decr

CLINICS	2020	2021	2022	2023	2024	REMARKS
Clinical Psychology	557	798	428	725	717	1.1% decr
Gastroenterology	662	866	663	766	753	1.70% decr
Dental & Maxillofacial	4,667	4,922	4,627	4,540	4,364	3.88% decr
Hepatitis B	850	775	748	737	706	4.21% decr
ANC	7,717	9,298	10,449	9,400	8,831	6.1% decr
Eye	8,451	10,837	10,755	11,310	10,613	6.16% decr
General Surgery	1,356	2,442	2,085	3,200	2,989	6.59% decr
Endocrinology	97	184	136	190	177	6.84% decr
Post Natal Clinic	1,866	2,520	3,027	4,471	4,157	7.02% decr
General Paediatrics Clinic	6,003	9,244	8,461	8,408	7,678	8.7% decr
Paedics Neuro	213	245	294	276	250	9.42% decr
Paediatric Endocrine	-	-	17	44	39	11.4% decr
Physiotherapy	5,670	5,055	11,498	9,493	7,808	17.8% decr
Speech Therapy	208	415	642	556	449	19.3% decr
Paedics Cardio	60	58	38	77	60	22.1% decr
NICU Follow-Up	247	890	958	888	661	25.6% decr
Osteogenesis Imperfecta	-	-	8	33	24	27.3% decr
Dermatology	353	462	185	178	0	<i>The clinic did not run as there was no specialist</i>

3.2 TOP TWENTY OPD MORBIDITIES

The OPD morbidity pattern of the hospital since 2022 has demonstrated a shift from non-communicable diseases (NCDs) to communicable diseases, especially respiratory and acute infections. In 2022, hypertension ranked first among the OPD morbidities accounting for 22.02% (5489) of reported cases. However, upper respiratory tract infections (URTI) emerged as the leading cause of OPD attendance in 2023 (19.63%) and 2024 accounting for 26.5% (2728) of the OPD morbidities. The rise in the presentation of malaria, urinary tract infection, diarrhoea diseases and pneumonia in 2024 indicates the increasing demand for acute infection management and primary care related services at the OPD. This coincides with the operationalisation of the polyclinic in 2024, expanding access to primary care OPD services and likely contributed to the increased capture of lower-acuity and communicable conditions. While this reflects improved service accessibility, it underscores the increasing overlap between primary and tertiary care functions, with implications for OPD congestion, referral efficiency and specialist workload as a teaching hospital.

Despite the increasing burden of communicable conditions, chronic NCD remained significant in 2024. Cases of rheumatism/other joint pain/arthritis recorded went up from 5.6% in 2023 to 8.4% 2024. Cardiac diseases increased from 4.32% in 2023 to 4.9% in 2024. Also, Diabetes mellitus rose from 0.84% in 2023 to 1.6% in 2024. Skin diseases formed 3.8% (394) of OPD morbidities in 2024; however, the absence of a dermatologist necessitated management by other specialists. This indicates a service delivery and

training gap. Intestinal worms with 77 (0.8%) cases were reported as the least condition among the top twenty.

Further, communicable diseases (CDs) constituted the majority (67.97%) of the top 20 OPD morbidities in 2024, largely driven by URTI (26.5%), diarrhoea diseases, pneumonia, skin and other acute infections, while non-communicable diseases (NCDs) formed 32.02%. Comparatively in 2023, communicable and non-communicable diseases accounted for 33.09% and 66.91% of the top 20 OPD cases presented. On the other hand, 66.38% of the OPD morbidities in 2022 were largely NCDs (66.38%) while CDs constituted 33.61%.

Figure 3.2.1 below presents a three-year trend of the distribution of OPD morbidities by communicable and non-communicable while Table 3.2.1 provides a three-year trend of the top twenty causes of OPD morbidities from 2022 to 2024.

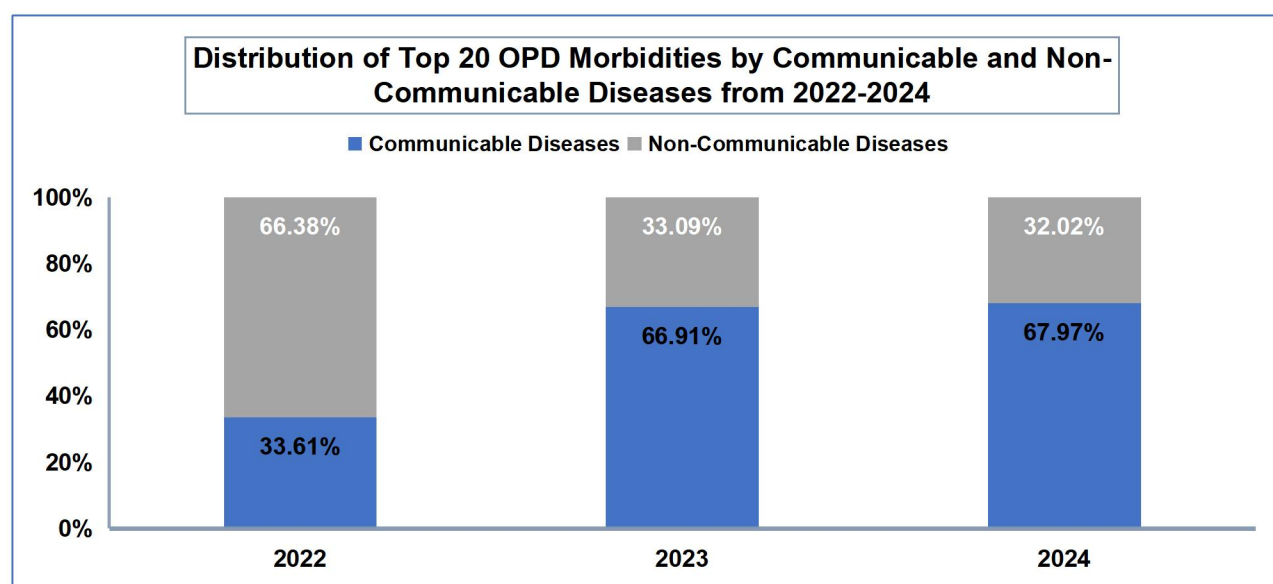


Figure 3.2. 1: Distribution of Top 20 OPD Morbidities by Communicable and Non-Communicable Diseases from 2022-2024

Table 3.2. 1: Top Twenty OPD Morbidities from 2022 to 2024

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	%	CONDITION	NO. (%)
Hypertension	5489 (22.02%)	Upper Respiratory Infection	19.63%	Upper Respiratory Tract Infection	2728 (26.5%)
Acute Urinary Tract Infection	1865 (7.48%)	Uncomplicated Malaria	6.40%	Urinary Tract Infection	923 (9%)
Rheumatism/Other Joint Pain/Arthritis	1445 (5.80%)	Rheumatism/Other Joint Pain/Arthritis	5.56%	Rheumatism/Other Joint Pain/Arthritis	863 (8.4%)
Gynaecological Conditions	943 (3.78%)	Acute Eye Infection	5.03%	Anaemia	689 (6.7%)

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	%	CONDITION	NO. (%)
Diarrhoea Diseases	898 (3.60%)	Pneumonia	4.62%	Malaria	669 (6.5%)
Upper Respiratory Tract Infections	821 (3.29%)	Diarrhoea Disease	4.55%	Acute Eye Infection	501 (4.9%)
Cataract	696 (2.79%)	Anaemia	4.33%	Cardiac Disease	500 (4.9%)
Stroke	686 (2.75%)	Cardiac Disease	4.32%	Diarrhoea Diseases	494 (4.8%)
Urethral Discharge	680 (2.73%)	Hypertension	3.79%	Otitis Media	458 (4.4%)
Diabetes Mellitus	537 (2.15%)	Otitis Media	2.59%	Pneumonia	416 (4%)
Pneumonia	453 (1.82%)	Acute U Tract Infection	2.28%	Skin Disease	394 (3.8%)
Anomia	445 (1.79%)	Typhoid Fever	2.23%	Hypertension	306 (3%)
Prostate Cancer	437 (1.75%)	Cataract	2.08%	Cataract	271 (2.6%)
Periodontal Diseases	361 (1.45%)	Periodontal Disease	1.68%	Periodontal Disease	260 (2.5%)
Kidney Related Diseases	358 (1.44%)	Viral Hepatitis	1.3%	Viral Hepatitis	170 (1.7%)
Cerebral Palsy	356 (1.43%)	Stroke	1.11%	Diabetes Mellitus	166 (1.6%)
Acute Eye Infection	338 (1.36%)	Skin Diseases	1.04%	Typhoid Fever	157 (1.5%)
Hiv/Aids Related Conditions	327 (1.31%)	Other Eye Acute Infection	0.87%	Acute Ear Infection	136 (1.3%)
Viral Hepatitis	297 (1.19%)	Gynaecological Condition	0.85%	Stroke	128 (1.2%)
Typhoid Fever	275 (1.10%)	Diabetes Mellitus	0.84%	Intestinal Worms	77 (0.8%)

3.3 EMERGENCY SERVICES UTILISATION

Emergency services form a crucial entry point in the hospital, as it provides timely, life-saving care to patients with acute and life-threatening conditions, while also acting as a key platform for clinical training, research and specialist referral services. The Cape Coast Teaching Hospital (CCTH) offers comprehensive Accident and Emergency (A&E) services (for general emergency presentation) as well as specialized obstetrics and gynecology (O&G) emergency care.

The hospital since 2020 has experienced fluctuations in the overall emergency cases seen, with the peak of 22,361 recorded in 2021. In 2024, the overall emergency cases recorded went up by 7.32% (from 16,325 in 2023 to 17,521 in 2024). In terms of distribution, A&E

cases formed the majority of 70.1% (12,290) with O&G emergencies constituting 29.9% (5,231). Obstetrics and gynecology emergency cases declined in 2024 by 2.2% (from 5346 in 2023 to 5231 in 2024) while Accident and Emergency (A&E) cases increased by 11.89% (from 10,979 in 2023 to 12,290 in 2024). Total emergency admissions increased by 6.04% (from 8,796 in 2023 to 9,327 in 2024). This rising trend in emergency admissions highlights the increasing strain on the limited emergency admission capacity, notably at the Accident and Emergency department, necessitating the early completion of the accident and emergency (A&E) expansion project. O&G emergency admissions have consistently increased since 2020, and recorded a 12.4% rise in 2024 (from 1,632 in 2023 to 1,834 in 2024). This indicates improved detection and referral of high-risk maternal cases. A&E detentions/admissions also went up by 12.4% (from 7,164 in 2023 to 7,493 in 2024).

The number of emergency cases discharged revealed mixed performance. Total discharges went up significantly in 2024 to 3,886. This was largely driven by A&E discharges, which went up to 3,493 cases in 2024. This suggests improvement in emergency case management, triage efficiency and/or shorter observation periods. The total emergency mortalities remained relatively stable since 2020, ranging between 313 (in 2023) and 442 (in 2021) deaths annually. The total decline trend from 442 in 2021 to 319 in 2024 indicates progress in the quality of emergency care rendered by the hospital, given the increasing volume of emergency cases seen and admitted. This indicates improvement in the delivery of emergency services. Table 4.4.1 and figure 3.3.1 provides details of the analysis

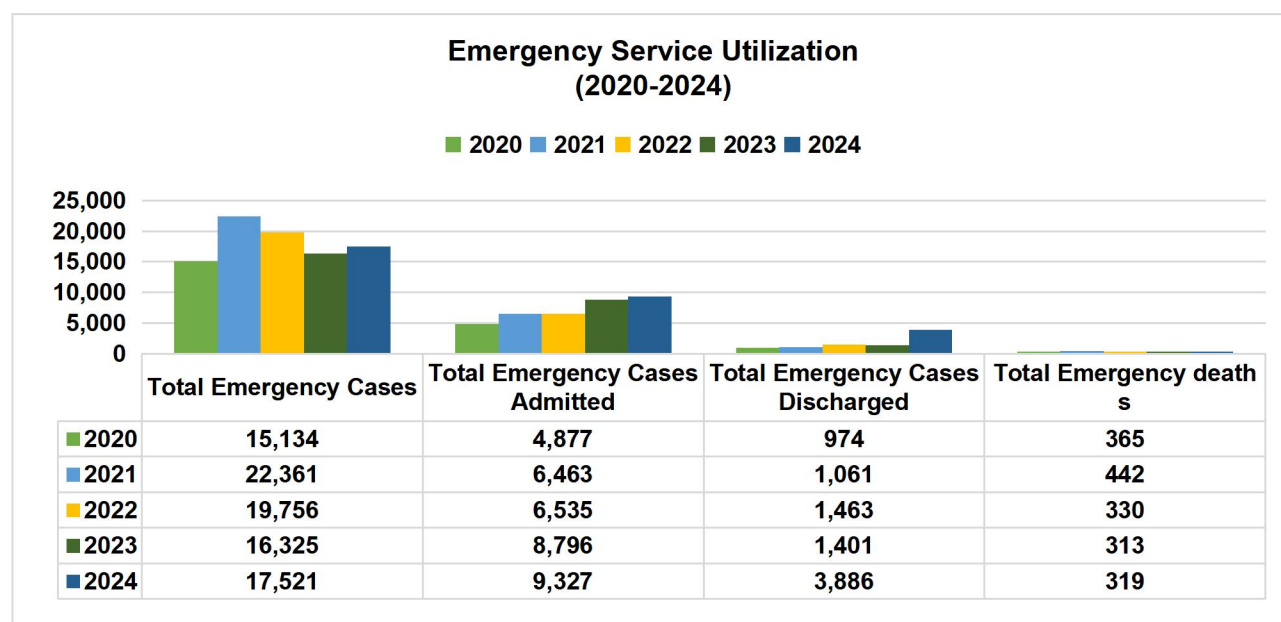


Figure 3.3. 1: Emergency Service Utilization (2020-2024)

Table 3.3. 1: Emergency Service Utilization by Category (2020 – 2024)

Indicator	2020	2021	2022	2023	2024	Remarks
Emergency Cases Seen						
Obs. & Gynae. Emergency cases	1,988	5,858	6,271	5,346	5,231	2.2% decr
Accident & Emergency cases	13,146	16,503	13,485	10,979	12,290	11.89% incr
Total Emergency Cases	15,134	22,361	19,756	16,325	17,521	7.3% incr
Emergency Cases Detained (Admissions)						
Obs. & Gynae. Emergency cases admitted/detained	-	1,280	1,674	1,632	1,834	12.4% incr
Accident & Emergency	4,877	5183	4,861	7,164	7,493	4.59% incr
Total Emergency Cases Admitted	4,877	6,463	6,535	8,796	9,327	6.0% incr
Emergency Cases Discharged						
Obs. & Gynae. Emergency cases discharged	-	153	317	270	393	45.6% incr
Accident & Emergency cases discharged	974	908	1,146	1,131	3,493	208.8% incr
Total Emergency Cases Discharged	974	1,061	1,463	1,401	3,886	177.4% incr
Emergency Mortality						
Number of Obs. & Gynae. Emergency deaths	-	6	-	8	9	12.5% incr
Number of Accident & Emergency deaths	365	436	330	305	310	1.6% incr
Total Emergency deaths	365	442	330	313	319	1.9% incr

3.4 INSTITUTIONAL REFERRALS

The hospital as part of its mandates provides referral support to lower-level health facilities, aimed at ensuring the continuity and delivery of care, especially for cases that require specialized care.

The trend in institutional referrals from 2020 shows fluctuation performance. In 2024, the hospital received a total of 7,387 referral cases, representing an increase of 54.4% from 4,78 in 2023. Of these referrals, 60.50% (4,470) cases were managed through the specialist outpatient department (OPD) clinics, 16.14% (1,192) were received through the

Accident and Emergency department, while 23.36% (1,725) cases were managed by the Maternal Emergency Department (ETAT). Out of the total number of referrals received, 52.39% (3,871) were admitted into various wards. The Maternal Health Department accounted for the majority of admissions, receiving 65.87% (2550) of the total admitted referral cases.

In addition to receiving referrals, the hospital also referred patients to other health facilities when services are not available. During the period under review, 318 cases were referred out, compared to 186 cases in 2023, representing a 70.97% increase. This increasing trend highlights the rising complexities of cases managed. Detailed referral patterns are illustrated in Figure 3.4.1 and Table 3.4.1 below.

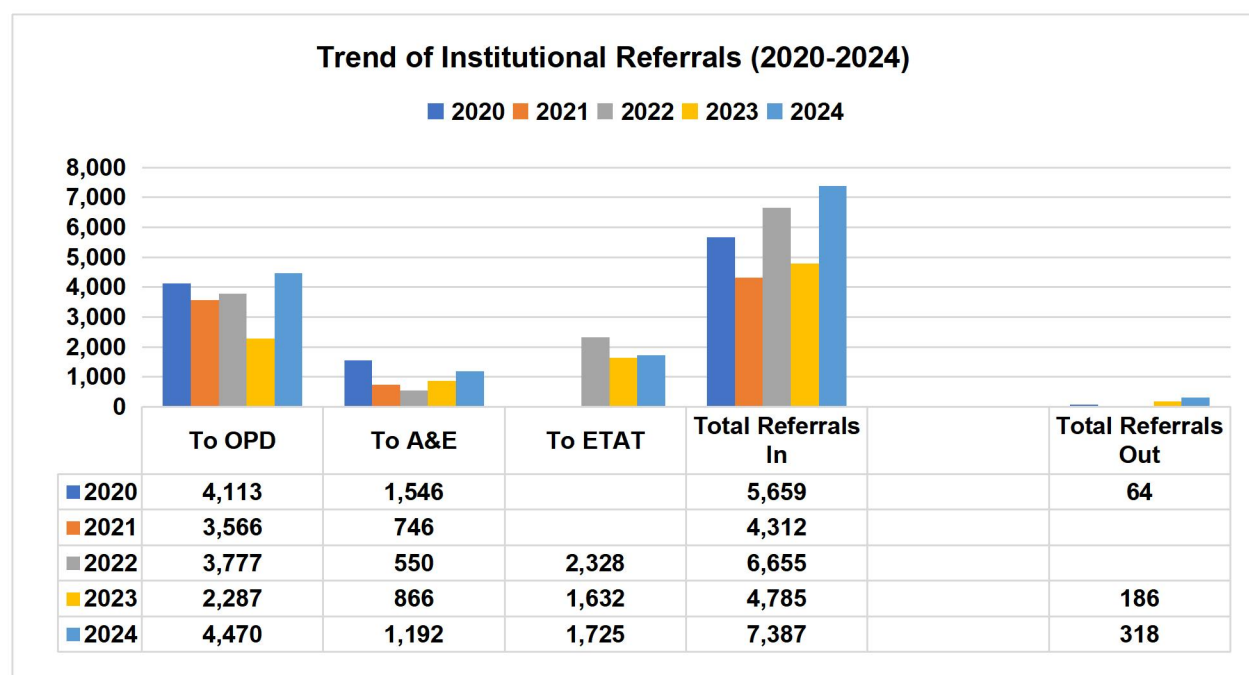


Figure 3.4. 1: Trend of Institutional Referrals (2020-2024)

Table 3.4. 1: Trend of Institutional Referrals (2020-2024)

INDICATORS	2020	2021	2022	2023	2024	REMARKS
Referrals In						
Referrals In to OPD	4,113	3,566	3,777	2,287	4,470	95.45% incr
• Referrals from CCTH Polyclinic	-	-	-	-	1,614	
• Referrals from other facilities	4,113	3,566	3,777	2,287	2,856	24.9% incr
Referrals in to A&E	1,546	746	550	866	1,192	37.6% incr
Referrals In to Obs. & Gynae ETAT	-	-	2,328	1,632	1,725	5.70% incr
Total Referrals In	5,659	4,312	6,655	4,785	7,387	54.4% incr
Referrals Out						
Total Referrals Out	64	-	-	186	318	70.97% incr

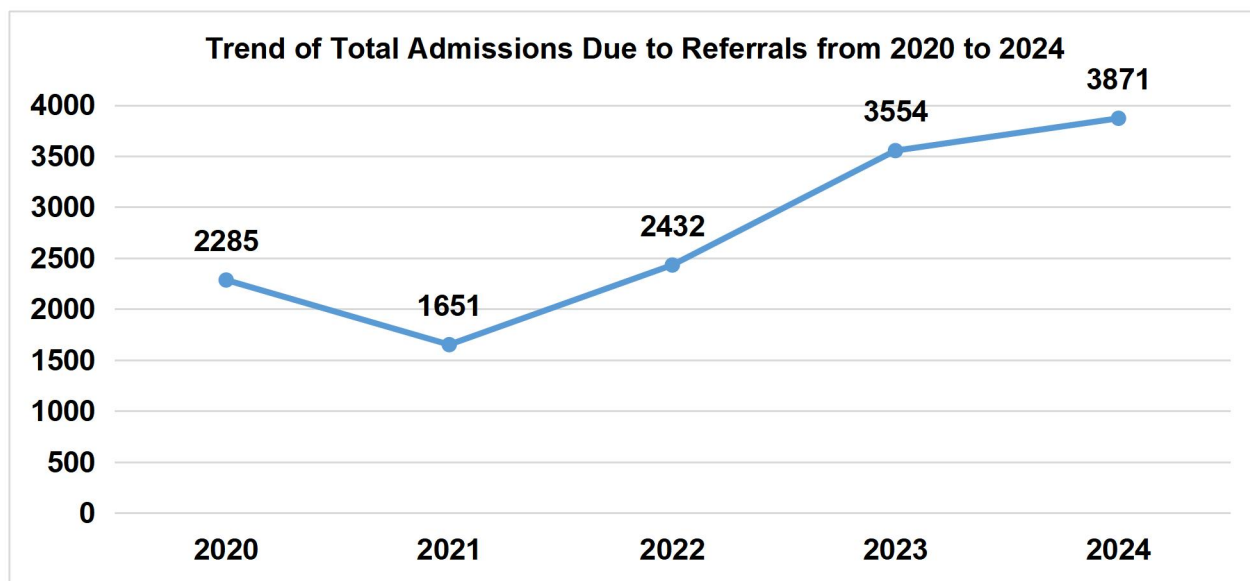


Figure 3.4. 2: Admissions Due to External Referrals (2020-2024)

Table 3.4. 2: Referral Cases Admitted to the Various Sub-BMCs (Wards)

Sub-BMC	WARD	2020	2021	2022	2023	2024	REMARKS
Maternal Health	Obstetrics & Gynaecology	407	161	302	399	285	28.6% decr
	ETAT	-	-	-	1,552	1,600	3.1% incr
	Delivery Suite	369	395	775	721	665	7.8% decr
	Total	776	556	1077	2672	2550	4.6% decr
Child Health	NICU	290	131	149	118	47	60.2% decr
	Paediatrics	293	347	367	116	368	217.2% incr
	Total	583	478	516	234	415	77.4% incr
Surgery	Male Surgical	241	226	328	182	69	62.1% decr
	Female Surgical	169	115	148	135	211	56.3% incr
	Total	410	341	476	317	280	11.7% decr
Internal Medicine	Male Medical	232	86	162	137	265	93.4% incr
	Female Medical	249	183	191	126	315	150.0% incr
	Executive Suite	-	-	-	4	2	50.0% decr
	Total	481	269	353	267	582	118.0% incr
Anaesthesia & Critical Care	ICU	35	7	10	64	44	31.3% decr
Total Referral Cases Admitted		2,285	1,651	2,432	3,554	3,871	8.9% incr

3.5 IN-PATIENT SERVICE UTILIZATION

Over the years, the hospital has experienced fluctuations in the total number of admissions with the peak (12,930) recorded in 2021. In 2024, total admissions recorded a marginal decrease of 1.98%, (declining from 12,557 in 2023 to 12,309 in 2024), although admissions remained above the teaching hospitals (THs) target of 12,000. Admissions across the clinical Sub-BMCs were mixed. Internal Medicine, DEENT, and Anaesthesia & Critical Care Sub-BMCs recorded an increase in the number of cases admitted while Maternal Health, Child Health and Surgical Sub-BMCs saw a decline in cases admitted. In terms of proportion of cases admitted in 2024, 42.54% (5,236) were maternal health related, 21.20% (2,610) were child health related, 13.86% (1,706) were surgical related, whereas 3.22% (396) and 0.73% (90) were DEENT and Anaesthesia and Critical Care related cases respectively.

Further, the total number of beds increased by 12.5% (from 400 in 2023 to 450 in 2024). The additional 50 beds are distributed to the infectious disease center (45 beds) and the polyclinic (5 beds).

Details are presented in Figures 3.5. 1, 3.5.2 and Tables 3.5. 1, 3.5.2 below.

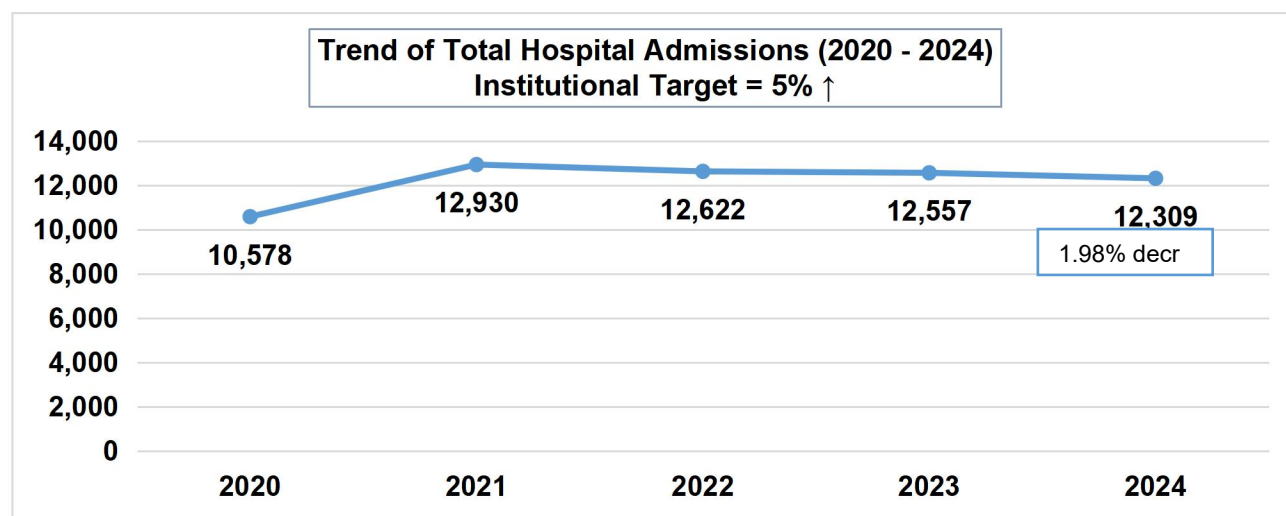


Figure 3.5. 1: Trend on Total Hospital Admissions

Table 3.5. 1: Trend on Bed Capacity and Total Hospital Admissions

INDICATOR	2020	2021	2022	2023	2024	REMARKS	TARGETS	MEASUREMENT
Bed Complement	400	400	400	400	450	12.5% incr Target met	450	-

INDICATOR	2020	2021	2022	2023	2024	REMARKS	TARGETS	MEASUREMENT
Number of Admissions	10,578	12,930	12,622	12,557	12,309	1.98% decr	THs = 12,000 CCTH = 5% Incr	Total no. of clients admitted

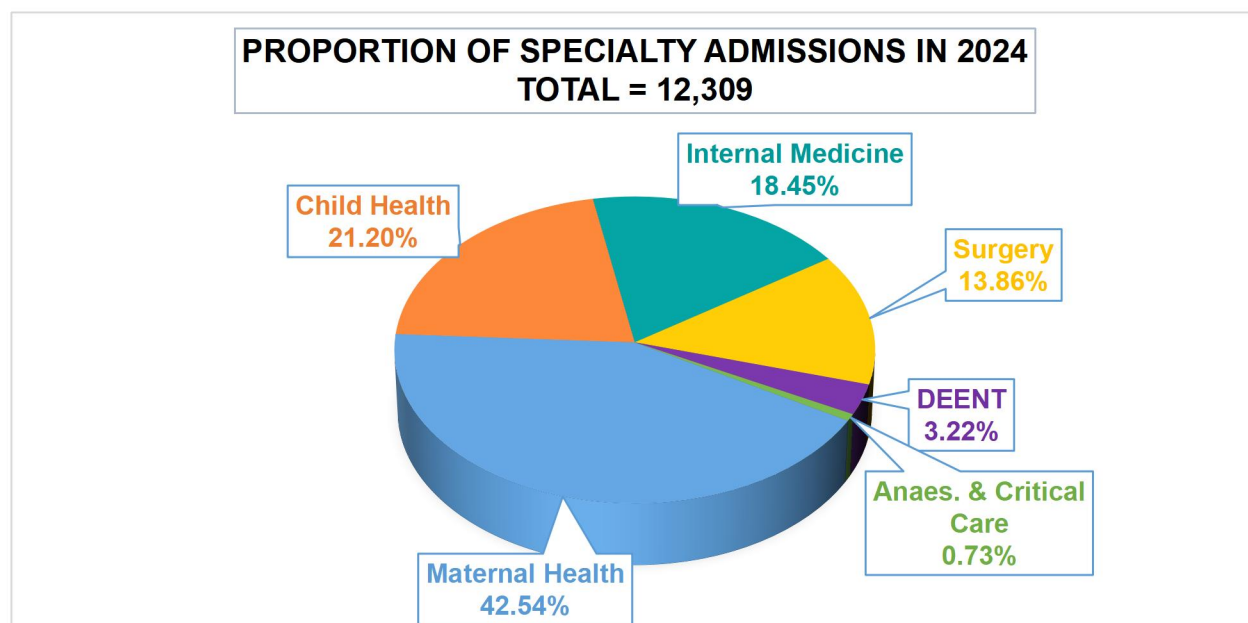


Figure 3.5. 2: Proportion of Specialty Admissions in 2024

Table 3.5. 2: Admission Trend of Clinical Sub-BMCs (2020-2024)

Specialty	2020	2021	2022	2023	2024	Remarks
Maternal Health	3,655	5,108	5,706	5,305	5,236	1.3% decr
Child Health	2,709	3,871	2,974	2,970	2,610	12.1% decr
Internal Medicine	2,039	1,752	1,931	2,207	2,271	0.03% incr
Surgery	1,816	1,806	1,609	1,724	1,706	1.04% decr
DEENT	257	314	317	275	396	44.0% incr
Anaesthesia & Critical Care	111	79	85	76	90	18.42% incr

Performance in nursing and midwifery care planning improved over the period but remains below the 65% target (THs). The Proportion of inpatients managed on nursing and midwifery care plan rose from 10.1% in 2023 to 20.8% in 2024. Equally, the number of

admissions managed with nursing and midwifery care plan significantly increased by 101.6% (from 1,269 in 2023 to 2,558 in 2024). Staffing indicators showed variations in performance. The Nurse and Midwife to admission ratio increased from 1:14 in 2023 to 1:15 in 2024. Also, the specialist nurse to admission ratio improved over the years, declining from 1:10,578 in 2020 to 1:648 in 2024.

The bed occupancy rate consistently increased since 2021, reaching 59.9% in 2024 but remain the THs target of 75%. Similarly, the average length of stay (ALOS) increased from 6.0 days (144 hours) in 2023 to 6.3 days (151.2 hours) in 2024.

Additionally, there was notable reduction in the proportion of percentage of patients admitted due to external referrals in 2024 (decreasing from 40.63% in 2023 to 28.03% in 2024). In the same light, the percentage of maternal admissions due to external referrals declined from 72.74% in 2023 to 49.84 in 2024, falling below the 60% THs target. The percentage of neonatal admissions due to external referrals declined from 11.24% in 2023 to 5.95% in 2024, below the target of 30%. This could indicate improved neonatal care at the lower-level facilities.

Further details are presented in Tables 3.5. 2.

Table 3.5. 3: In-Patient Service Performance under THs KPIs (2020-2024)

INDICATOR	2020	2021	2022	2023	2024	REMARKS	TARGETS	MEASUREMENT
Proportion of inpatients managed on nursing and midwifery care plan (%)	-	-	17.1%	10.1%	20.8%	incr	THs = 65%	No. of admissions managed with nursing/midwifery care plan / Total admissions *100
No. of admissions managed with nursing/midwifery care plan	-	-	2,156	1,269	2,558	101.6% incr	-	
Specialist Nurse admission ratio	1:10,578	1:4,310	1:3,156	1:897	1:648	Decr	-	Total Specialist Nurses (Member and Fellows)/Total Admission

INDICATOR	2020	2021	2022	2023	2024	REMARKS	TARGETS	MEASUREMENT
Nurse and Midwife admission ratio	1:13	1:13.2	1:13	1:14	1:15	Incr	THs = 1:25	Total no. of clients admitted / total no. of nurses and midwives
% Bed Occupancy	55.50 %	52.20 % (decr)	54% (Incr)	57.5% (incr)	59.9%	Incr	THs = 75%	No. of client days / No. of beds * No of days in the period
Average Length of Stay (institutional)	5.9 (incr.)	5.6 (decr)	5.5 (Decr)	6.0 (incr)	6.3	Incr	THs = 6	No. of client days / No. of Discharges + Deaths
Percentage of patients admitted due to external Referrals	21.6%	18.81 %	19.27 %	40.63 %	28.03 %	decr	-	No. of admissions due to referrals / Total admissions*100
Percentage of maternal Admissions due to external Referrals	21.2%	23%	26.71 %	72.74 %	49.84 %	decr	THs = 60%	No. of Maternal admissions due to referrals / Total Maternal admissions* 100
Percentage of neonatal Admissions due to external Referrals	25.5%	15%	13.85 %	11.24 %	5.95%	Decr	THs = 30%	No. of Neonatal admissions due to referrals / Total neonatal admissions* 100

3.5.1 TOP TEN CAUSES OF ADMISSIONS

Pregnancy-related complications remained the leading cause of hospital admissions in 2024, accounting for 11.6% (1,218) cases. This was followed by Leiomyoma and Sepsis, which constituted 6% (628 cases) and 5.5% (581 cases), respectively. Anaemia ranked tenth, with 2.6% (270 cases). Table 3.5.1.1 below presents the trend of admission causes from 2022 to 2024.

Table 3.5.1. 1: Top Ten Causes of Admission

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Pregnancy Related Complications	796 (9.3%)	Pregnancy Related Complication	1155 (26.68%)	Pregnancy related complications	1218 (11.6%)
Jaundice(neonatal)	568 (6.7%)	Sepsis	504 (11.64%)	Leiomyoma	628 (6%)
Sepsis	439 (5.1%)	Pneumonia	490 (11.31%)	Sepsis	581 (5.5%)
Pneumonia	344 (4.0%)	Jaundice	484 (11.18%)	Urinary Tract Infection (UTI)	500 (4.7%)
Malaria	297 (3.5%)	Malaria	412 (9.51%)	Jaundice	427 (4.1%)
Anaemia	288 (3.4%)	Hypertension	305 (7.04%)	Pneumonia	378 (3.6%)
Asphyxia	287 (3.4%)	Pre-Maturity	253 (5.84%)	Female infertility	319 (3%)
Preterm (Prematurity)	245 (2.9%)	Kidney Diseases	250 (5.77%)	Hypertension	308 (2.9%)
Hypertension	240 (2.8%)	Asphyxia	240 (5.54%)	Malaria	296 (2.8%)
Diabetes	239 (2.8%)	Diabetes	236 (5.45%)	Anaemia	270 (2.6%)

3.6 THEATRE SERVICES UTILIZATION

Over the years, the hospital has demonstrated fluctuations in the theatre service utilization. Generally, a total of 5,130 surgical procedures were conducted in 2024, indicating a 11.9% decline from 5,824 procedures recorded in 2023. Major surgeries remain the largest component of procedures conducted in 2024, although it recorded a 12.0% reduction (from 5,490 in 2023 to 4,829 in 2024). Major general surgeries declined by 20.4% (from 3722 in 2023 to 2963 in 2024). However, major obstetrics and gynaecology (O&G) surgeries went up by 5.5% (From 1,768 in 2023 to 1,866 in 2024). Minor surgeries constituted a smaller proportion of the surgeries in 2024. Total minor surgeries experienced a 9.9% reduction, decreasing from 334 in 2023 to 301 in 2023. Minor general surgeries decreased by 5.1% (From 272 in 2023 to 258 in 2024) while minor O&G procedures recorded a 30% decline (from 62 in 2023 to 43 in 2024).

The surgery-surgeon ratio declined from 108:1 in 2023 to 92:1 in 2023, below the teaching hospitals target of 250:1. Detailed trend analysis is illustrated in figure 3.6.1 and tables 3.6.1 to 3.6.2 below.

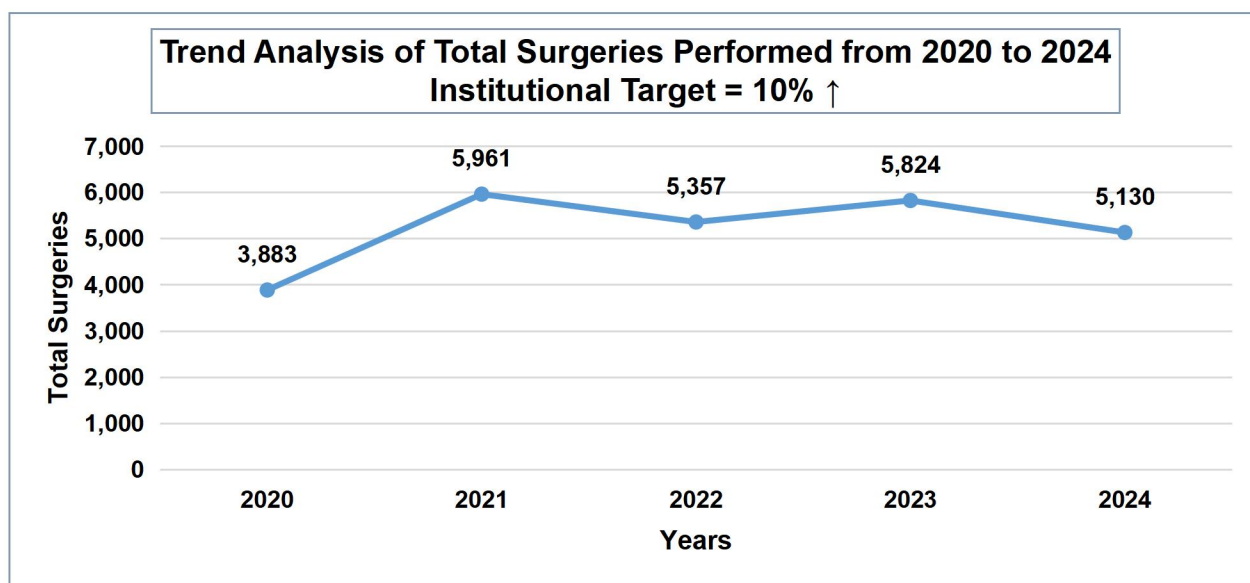


Figure 3.6. 1: Trend Analysis of Total Surgeries Performed at the Hospital

Table 3.6. 1: Trend of Theatre Service Utilization at the Hospital

Surgical Procedure	2020	2021	2022	2023	2024	Remarks
Major Gen. Surgery	1,875	3,908	3,152	3,722	2,963	20.4% Decr.
Major – O&G	1,632	1,676	1,918	1,768	1,866	5.5% Incr.
Total Major Surgeries	3,507	5,584	5,070	5,490	4,829	12.0% decr
Minor Gen. Surgery	289	350	268	272	258	5.1% Decr.
Minor – O&G	87	27	19	62	43	30.6% Decr.
Total Minor Surgeries	376	377	287	334	301	9.9% decr
Total Surgeries Performed	3,883	5,961	5,357	5,824	5,130	11.9% Decr.

Table 3.6. 2: Surgical Service Performance under THs KPI (Hospital Level Performance)

KEY INDICATORS	2020	2021	2022	2023	2024	REMARKS	TARGET	MEASUREMENT
Surgery - Surgeon Ratio	108:1	199:1	179:1	108:1	92:1	Decr	THs = 250:1	Total no. of surgeries performed/ total no. of Surgeons

3.6.1 SURGERIES PERFORMED BY SPECIALTY

The hospital in 2024 experienced mixed performance in surgical output across the 10 surgical specialties provided. Several specialties recorded significant rise in the number of surgical cases. Plastic surgery recorded the highest increase in cases performed by 65.3% (from 124 in 2023 to 205 in 204). ENT surgery went up by 49% (from 194 in 2023 to 286 in 2024) respectively. General surgery continued its upward trend since 2020, recording a 46.2% increase (from 759 in 2023 to 1110 in 2024) while orthopaedic surgery rose by 41.2% (from 177 in 2023 to 250 in 2024). Obstetrics and gynaecology consistently formed the largest share of surgical volumes since 2020, recording a marginal increase of 4.3% (from 1830 in 2023 to 1909 in 2024). However, three specialties saw a decline in surgical output within the period. Paediatric surgery decreased by 7.2% (from 97 in 2023 to 90 in 2024) while dental and maxillofacial surgery showed a marginal reduction of 0.64% (from 2,180 in 2023 to 2,166 in 2024). Ophthalmology also saw recorded a significant decline of 41.4% (from 2,093 in 2023 to 1,226 in 2024) as seen in Table 3.6.1.1

Table 3.6.1. 1: Surgeries Performed by Specialty from 2020 to 2024

SURGICAL SPECIALTY	2020	2021	2022	2023	2024	REMARKS
General Surgery	690	949	863	759	1,110	46.2% incr
Uro-Surgery	219	256	271	265	335	26.4% incr.
Orthopaedics Surgery	130	173	167	177	250	41.2% incr
Plastic Surgery	82	102	93	124	205	65.3% incr
Neurosurgery	91	88	89	89	113	27.0% incr
Paediatrics Surgery	68	100	85	97	90	7.2% decr
Obstetrics & Gynaecology	1,719	1,703	1,937	1,830	1,909	4.3% incr
ENT	201	166	206	194	286	49.0% incr
Ophthalmology	534	2,295	2,666	2,093	1,226	41.4% decr
Dental & Maxillofacial Surgery	98	1,257	1,887	2,180	2,166	0.64% decr

3.6.2 TOP TEN SURGICAL OPERATIONS

Caesarean section was recorded as the leading cause of surgical operations in 2024 with 31% (1,578). This was followed by Eye Surgeries with 24.1% (1226) and Hernia 5% (253). On the other hand, Neurosurgeries 1.9% (97) and Myomectomy 1.6% (80%) ranked 9th and 10th among the top ten surgeries performed in 2024 as presented in Table 3.6.2. 1 below.

Table 3.6.2. 1: Top Ten Surgical Operations Performed

2022		2023		2024	
Type of Case	No.	Type of Case	No.	Type of Case	No.
Eye Surgeries	1723	Caesarean	1518	Caesarean	1578

2022		2023		2024	
Type of Case	No.	Type of Case	No.	Type of Case	No.
	(32.2%)	section	(37.0%)	Section	(31%)
Caesarean Section	1691 (31.5%)	Eye surgeries	559 (13.61%)	Eye Surgeries	1226 (24.1%)
Hernia Reducible	198 (3.7%)	Plastics surgeries	255 (6.2%)	Hernia	253 (5%)
Laparotomy for Exploratory	147 (2.7%)	Hernia surgeries	252 (6.14%)	ENT Surgeries	227 (4.5%)
ENT Operations	134 (2.5%)	laparotomy	246 (6.0%)	Laparotomy	179 (3.5%)
Operation on Fractures	109 (2.0%)	ENT surgeries	147 (3.6%)	Appendectomy	131 (2.6%)
Appendectomy	90 (1.7%)	Fracture operations	96 (2.3%)	Plastic Surgeries	115 (2.3%)
Neurosurgeries	86 (1.6%)	neurosurgeries	92 (2.2%)	Operation on Fracture	105 (2.1%)
Plastics Surgeries	77 (1.4%)	appendicectomy	90 (2.19%)	Neuro Surgeries	97 (1.9%)
Removal of Tonsils Adenoids	75 (1.4%)	myomectomy	72 (1.8%)	Myomectomy	80 (1.6%)
others	1,286 (24.0%)	others	2,452 (42.1%)	others	1,239 (24.2%)
Total	5,357	Total	5,824	Total	5,130

3.6.3 COLLABORATIVE SURGERIES

CCTH over the years has strengthened its partnership with both local and international partners to provide specialized surgical care that would otherwise be inaccessible to many patients. These partnerships have not only expanded access to complex surgical interventions in the hospital but have also served as platforms for knowledge exchange and skill transfer, enhancing the hospital's overall surgical capacity.

In 2024, the hospital worked with 1 local partner, Operation-Smile Ghana, to provide free cleft and palate corrective surgeries for 54 patients. In addition, the hospital collaborated with 7 international organizations to perform a total of 1171 surgeries across various specialties; including; plastic surgery, obstetrics and gynaecology, orthopaedics, ENT and ophthalmology. Figure 3.6.3.1 and Table 3.6.3.1 below provide details of the partners and the total collaborative surgeries performed with partners from 2020 to 2024.

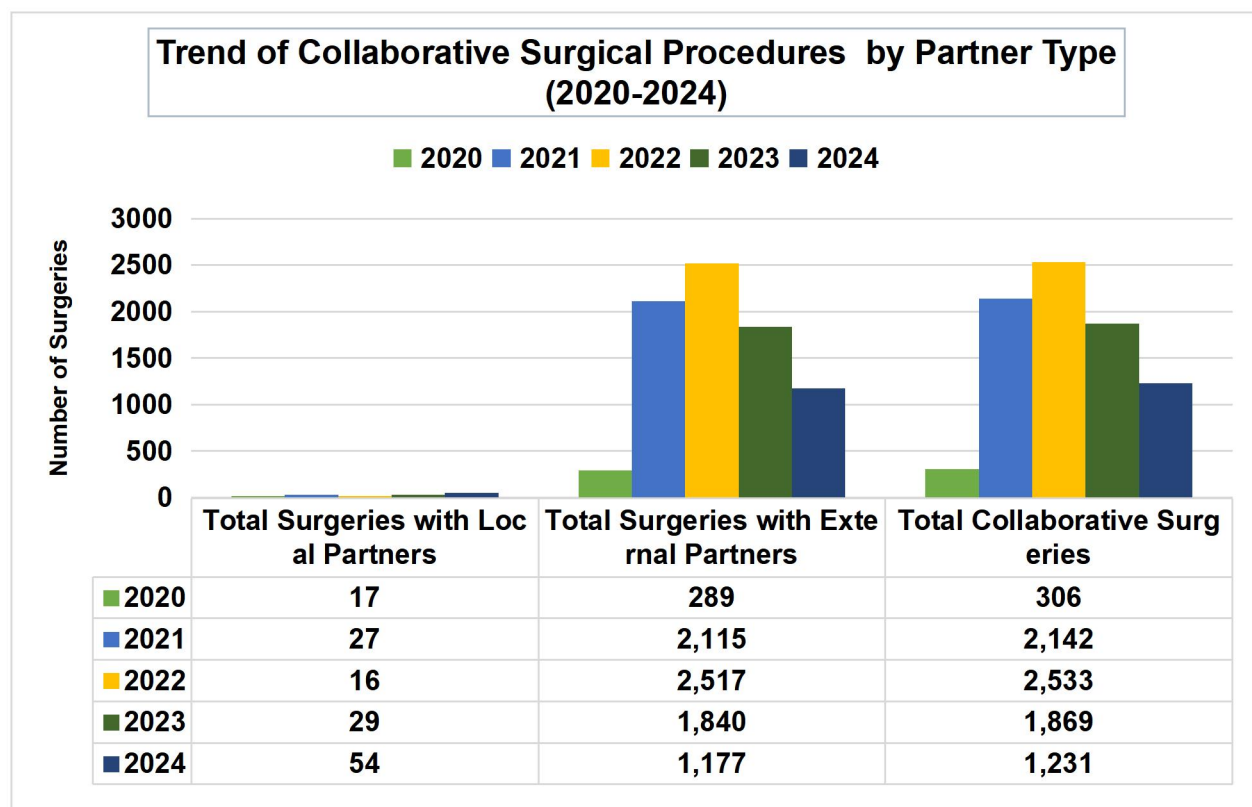


Figure 3.6.3. 1: Trend in Collaborative Surgical Procedures by Partner Type (2020-2024)

Table 3.6.3. 1: Trend in Collaborative Surgical Procedures per Partner (2020-2024)

COLLABORATORS	2020	2021	2022	2023	2024	Remarks
Surgeries with Local Partners						
Operation-Smile Ghana	17	27	8	29	54	incr
Ghana Cleft Foundation	-	-	8	-	-	
Total Surgeries with Local Partners	17	27	16	29	54	86.2% incr
Surgeries with External Partners						
Himalayan Cataract Project, USA	262	2,083	2,415	1712	934	Decr
University of UTAH ENT Team	22	-	23	23	56	Incr
Phoenix Children's Hospital & Mayo Clinic Medical School, Arizona, USA	-	-	-	-	19	
International Healthcare	5	0	10	12	10	Decr

COLLABORATORS	2020	2021	2022	2023	2024	Remarks
Volunteers to perform Obstetrics & Gynaecological surgeries						
Medevac Orthopaedics Team	-	32	43	45	51	Incr
Medevac Plastics Team, Czech Republic	-	0	27	49	105	Decr
KOFIH Foundation, South Korea (Laparoscopy surgery)	-	-	-	-	2	Service introduced in December 2024
Total Surgeries with External Partners	289	2,115	2,517	1,840	1,177	36.1% decr
Total Collaborative Surgeries	306	2,142	2,533	1,869	1,231	32.2% decr

3.7 DIAGNOSTIC SERVICES UTILIZATION

The hospital provides three main diagnostic services; laboratory, radiology (imaging), and pathology services. In 2024, the number of clients accessing laboratory services declined by 31%, decreasing from 102,820 in 2023 to 70,912. This reduction corresponded with a 24.15% decrease in the number of laboratory investigations conducted, which fell from 519,363 in 2023 to 393,955 in 2024. Radiological investigations however increased by 7% (from 22,903 in 2023 to 24,506 in 2024). Similarly, the number of radiology clients went up by 7.2% (from 19,940 in 2023 to 21,371 in 2024). Additionally, the number of autopsies conducted rose by 6.5% (from 232 in 2023 to 247 in 2024). A detailed trend analysis is presented in Table 3.7.1 below.

Table 3.7. 1: Diagnostics Services Utilisation (2020 – 2024)

KEY INDICATORS	2020	2021	2022	2023	2024	REMARKS	TARGET	MEASUREMENT
LABORATORY SERVICES								
Number of clients	55,652	55,871	64,967	73,667	58,153	21.06% decr	-	-
Total Lab request	92,907	73,953	103,638	102,820	70,912	31.0% decr	-	-
Number of laboratory tests conducted	241,858	180,422	558,298	519,363	393,955	24.15 % decr	CCTH = 10% ↑	
Utilization of Laboratory services	260.3 %	221.3 %	524%	505.1%	555.56%	Incr	THs = 60%	Total laboratory Investigations

KEY INDICATORS	2020	2021	2022	2023	2024	REMARKS	TARGET	MEASUREMENT
								/ Total Lab request * 100
RADIOLOGY SERVICES								
Number of radiology clients	21,792	17,983	16,857	19,940	21,371	7.2% incr	-	
Total Radio. request	4,465	17,962	16,857	19,940			-	
Number of tests conducted	23,697	20,587	20,787	22,903	24,506	7.0% incr	CCTH = 10% ↑	
Utilization Radiological services	530.7 %	87%	123.3 %	114.41 %			THs = 60%	Total Radiological Investigations / Total Radio. request * 100
PATHOLOGY SERVICES (AUTOPSY)								
Number of Autopsy	166	227	250	232	247	6.5% incr	-	

3.8 TRANSFUSION MEDICINE SERVICES

Blood and blood product transfusions remain an essential life-saving medical intervention in clinical care. In 2024, the hospital recorded a 7.7% increase in whole blood units crossmatched increased (from 4,703 in 2023 to 5,064 in 2024). However, the number of units of whole blood transfused declined by 1.8%, (from 4,703 in 2023 to 4,620 in 2024). Similarly, the transfusion of fresh frozen plasma (FFP) reduced by 29.1% (from 1,112 units in 2023 to 788 units in 2024).

In response to the challenges posed by the declined in the availability of blood and blood products, the hospital, through the Transfusion Medicine Unit implemented periodic blood donation campaigns targeting second-cycle and tertiary academic institutions. Also, pregnant women receiving antenatal care are encouraged to pre-deposit blood prior to delivery to ensure timely access during childbirth if necessary. Through this initiative, the hospital collected a total of 2,123 units of blood from voluntary blood donors, representing a 6.6% reduction compared to 2264 units collected in 2023. On the other hand, the number of replacement donations went up significantly, from 2,567 units in 2023 to 3,407 units in 2024, representing an increase of 32.7%. Similarly, walk-in donations increased substantially, from 99 in 2023 to 715 in 2024. However, blood deposits at the AND clinics decreased by 27.8% (from 371 in 2023 to 268 in 2024), which may have implications for obstetrics emergency preparedness. Detailed trends are presented in figures 3.8.1 to 3.8.2 below.

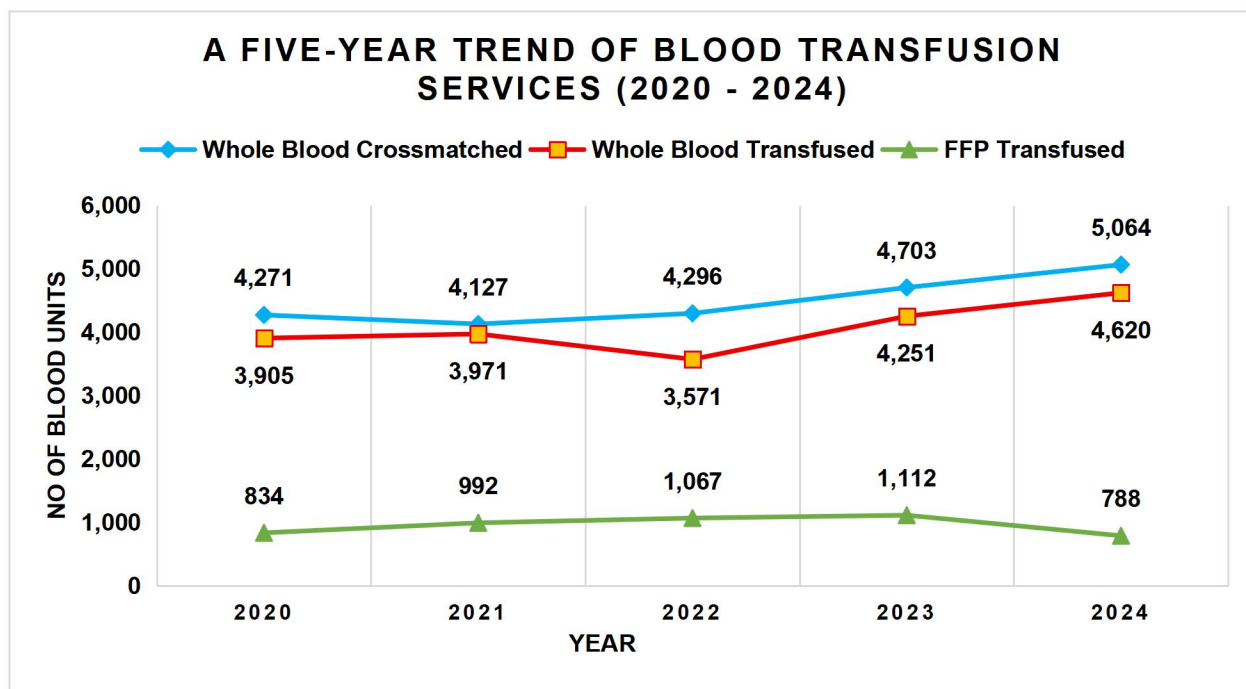


Figure 3.8. 1: A Five-Year Trend of Blood Transfusion Services (2019 - 2023)

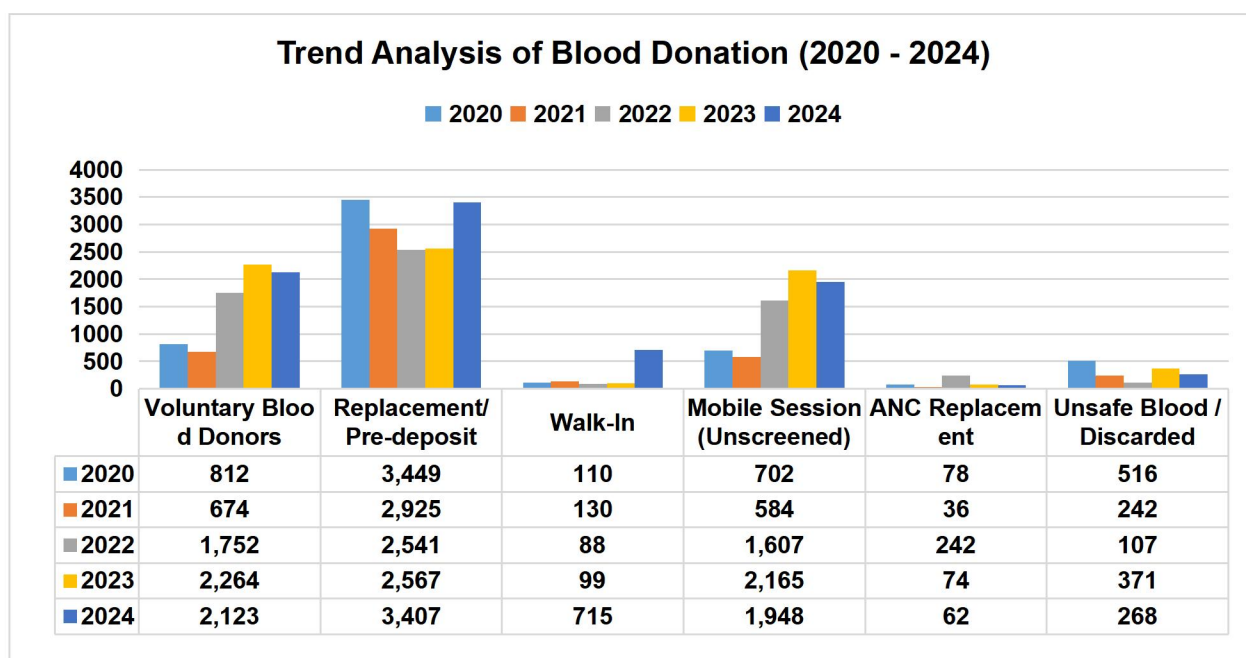


Figure 3.8. 2: Trend Analysis of Blood Donation

3.9 RENAL SERVICES UTILIZATION

The Cape Coast Teaching Hospital dialysis centre is one of the major renal service providers in the country, providing specialised renal services to clients from the Central and Western regions and beyond.

Generally, the utilization of renal outpatient services went up in 2024. Total renal OPD attendance increased by 9.6% (from 1252 in 2023 to 1372 in 2024). While the paediatric renal clinic attendance rose significantly by 127.6% (from 98 in 2023 to 223 in 2024), the adult renal clinic attendance decreased marginally by 0.43% (from 1154 in 2023 to 1149 in 2024).

In December 2024, the Government of Ghana introduced the Free Dialysis Policy under the National Health Insurance Scheme, which provides up to 8 dialysis sessions per month for patients with end-stage kidney diseases. Cape Coast Teaching Hospital is among the accredited health institutions implementing this policy. Following the introduction, the number of patients that accessed dialysis services at the hospital went up by 23.52% (from 85 in 2023 to 105 in 2024). Out of the 105 patients, 51% (54) were males and 49% (51) were females. The age distribution revealed that 43% (45) of the patients were aged 40 – 59 years, 29% (31) were aged 20 – 39 years, 22% (23) were 60 years and above while 6% (6) were aged 10-19 years. Also in 2024, 5 patients defaulted on treatment, while 28 died.

Despite the increase in the number of dialysis patients, the total number of dialysis sessions declined by 12.85% (from 2824 in 2023 to 2461 in 2024). This decrement may be attributed to the late policy rollout within the year, mortality or treatment defaults.

The leading complications reported during dialysis sessions within the period were intradialytic hypotension (149), intradialytic hypertension (134) and muscle cramps (125). Detailed utilization patterns and complication profiles are provided in Table 3.9.1 to Table 3.9.2 below.

Table 3.9. 1: Utilisation of Renal Services from 2020 to 2024

Indicator	2020	2021	2022	2023	2024	Remarks
Adult Renal Clinic	919	1,005	1,167	1,154	1,149	0.43% decr
Paediatric Renal Clinic	216	115	79	98	223	127.6% incr
Total Renal OPD Attendance	1135	1,120	1,246	1,252	1,372	9.6% incr

Table 3.9. 2: Utilization of Dialysis Services from 2020 to 2024

Indicator	2020	2021	2022	2023	2024	Remarks
Patients on Dialysis	160	185	107	85	105	23.52% incr
Number of Dialysis Sessions	3,075	3,534	3,229	2,824	2,461	12.85% decr

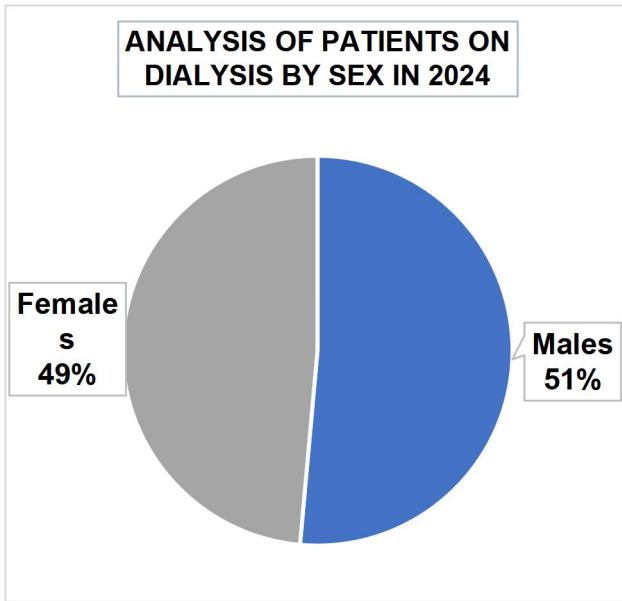


Figure 3.9. 1: Analysis of Patients on Dialysis by Sex In 2024

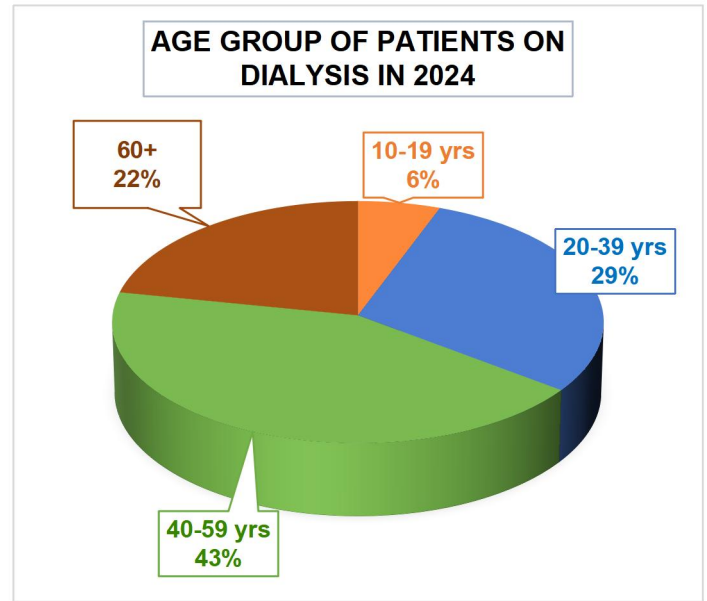


Figure 3.9. 2: Age Group of Patients on Dialysis In 2024

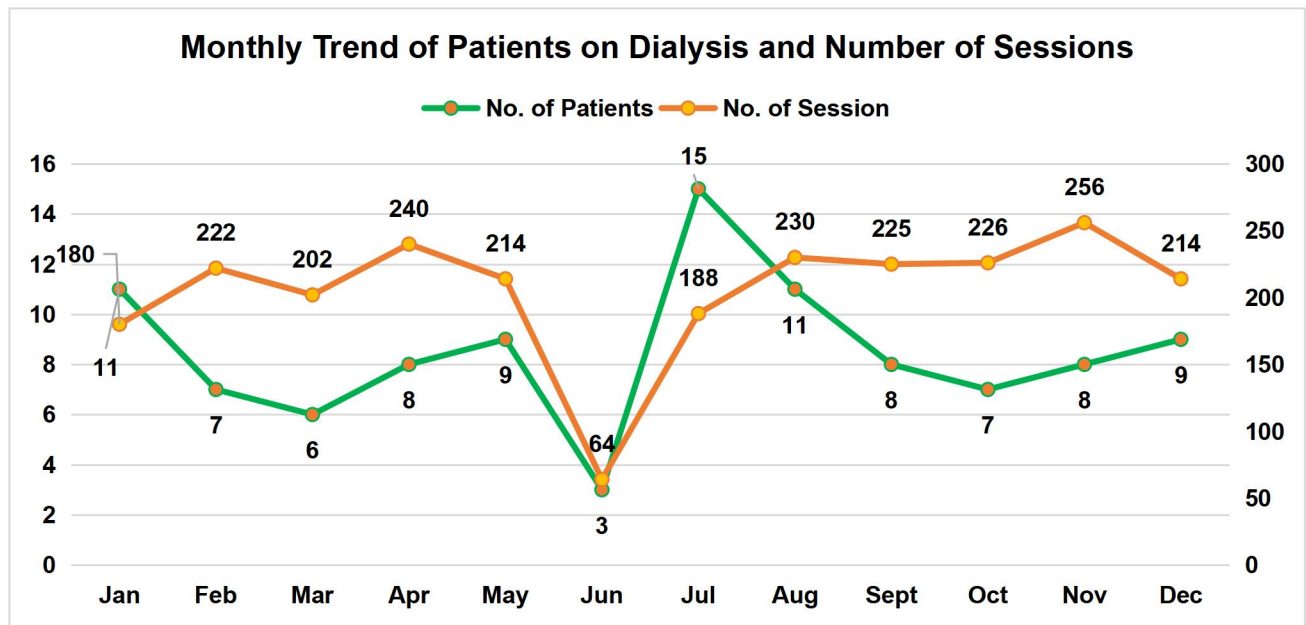


Figure 3.9. 3: Monthly Trend of Patients on Dialysis and Number of Sessions

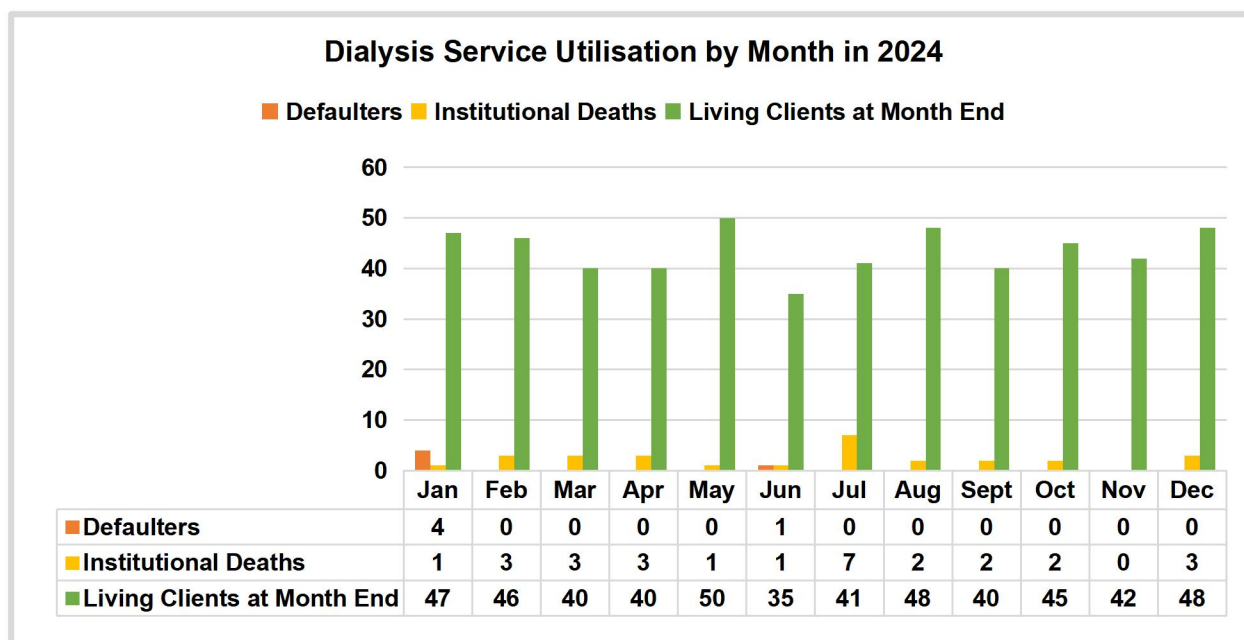


Figure 3.9. 4: Dialysis Service Utilisation by Month in 2024

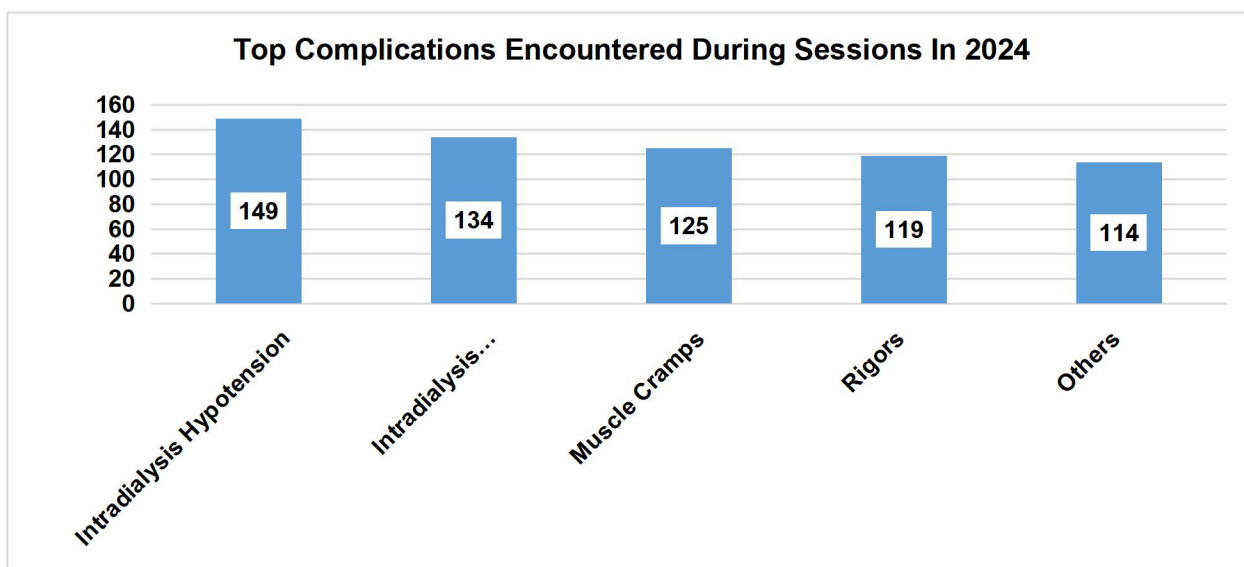


Figure 3.9. 5: Top Complications Encountered During Sessions In 2024

3.10 INSTITUTIONAL MORTALITY

The hospital between 2020 and 2023 saw a continuous decline in the total institutional deaths from 1379 in 2020 to 994 in 2023. This reflected in the mortality rate, which also recorded a reduction from 12.35% in 2020 to 8.4%. However, in 2024, total institutional deaths went up by 7.9% (from 994 in 2023 to 1076 in 2024). Equally, the institutional mortality rate rose from 8.4% in 2023 to 8.7% in 2024. Mortality on the wards showed

varied performance. Deaths on the wards increased by 9.3% (from 688 in 2023 to 298 in 2024). However, Accident and Emergency deaths decreased marginally by 1.0% (from 301 in 2023 to 298 in 2024). Deaths at the theatre recovery wards rose from 4 in 2023 to 22 in 2024, representing an increase of 450%. The number of theatre deaths also significantly increased by 300% from 1 in 2023 to 4 in 2024. Theatre death rate went up from 0.1% in 2023 to 0.51% in 2024. Further, the number of cases brought-in-dead went up by 185.7% (from 63 in 2023 to 180 in 2024). Detailed analysis is shown in Figure 3.10.1 and Table 3.10.1 below.

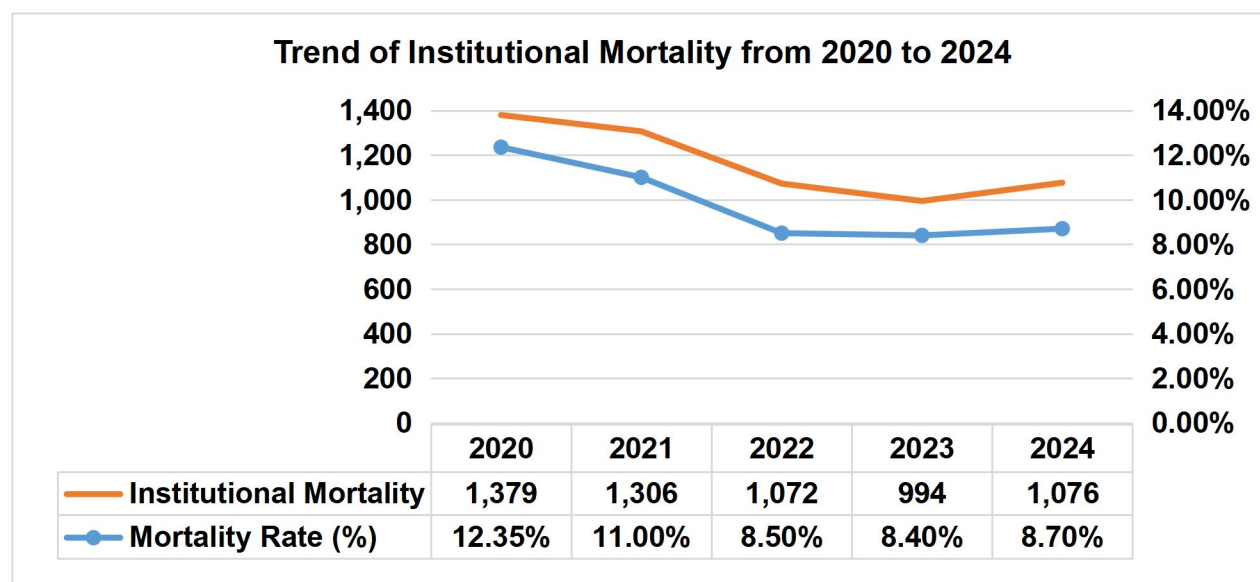


Figure 3.10. 1: A Five-Year Trend of Institutional Mortality (2020 - 2024)

Table 3.10. 1: Institutional Mortality Categorization

INDICATORS	2020	2021	2022	2023	2024	REMARKS	TARGET
Deaths (Ward)	1,001	852	736	688	752	9.3% incr	-
Death (A&E)	365	436	330	301	298	1.0% decr	-
Death (Theatre)	2	2	4	1	4	300% incr	-
Death (Recovery ward)	12	16	2	4	22	450% incr	-
Total Hospital Death	1,379	1,306	1,072	994	1,076	7.9% incr	CCTH = 5%↓
Mortality Rate (%)	12.35%	11%	8.5%	8.4%	8.7%	Incr	THs = 5%
Theatre death rate	0.1%	0.4%	0.1%	0.1%	0.51%	Incr	-
Brought in Dead	74	44	57	63	180	185.7% incr	-

3.10.1 TOP TEN CAUSES OF INSTITUTIONAL MORTALITY

The hospital in 2024 recorded stroke and sepsis as the leading cause of institutional mortality, each accounting for 14.3% (60) death. While sepsis remained as the leading cause, the absolute number of sepsis-related deaths consistently declined, reducing

from 84 in 2020 to 66 in 2023 and further to 60 in 2024. This decrease in trend suggests continuous improvement in infection prevention, early detection and clinical management. In comparison, stroke experienced a significant rise from being absent in 2022 to the eighth rank in 2023 and further to the first position in 2024. This rise in cases indicates a growing concern with regards the survival outcomes of cerebrovascular cases and underscores the need to create the stroke unit to enhance compressive management of the condition. Pneumonia remained at the third leading cause of mortality, accounting for 13.3% in 2024, compared to the 9.7% (49) recorded in 2023.

Respiratory distress syndrome declined to the fourth position, contributing 9.1% (38) compared to 10.1% (51) in 2023. Kidney diseases, although declined to the fifth position with 8.6% (36) continued to persist among the leading cause of mortality indicating the growing impact of chronic renal conditions. Heart failure appeared in all three years contributing 6.0% (25) in 2024. This indicates the sustained burden of cardiovascular disease. Perinatal and neonatal conditions such as birth asphyxia, prematurity and necrotising enterocolitis (NEC) were more predominant in 2022 and 2023 but decreased in number in 2024. This indicates improvements in neonatal care and perinatal interventions, although birth asphyxia persists among the top ten causes in over the three years. Other causes of mortality in 2024 included liver failure (5.5%), shock (5.2%) and anaemia (2.9%). Table 3.10.1.1 below provides the causes of institutional mortality at CCTH from 2022 to 2024.

Table 3.10.1. 1: Top Ten Causes of Institutional Mortality

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Sepsis	84 (15.7%)	Sepsis	66 (13.1%)	Stroke	60 (14.3%)
Respiratory Distress Syndrome	64 (12.0%)	Respiratory distress syndrome	51(10.1%)	Sepsis	60 (14.3%)
Asphyxia	44 (8.2%)	Pneumonia	49 (9.7%)	Pneumonia	56 (13.3%)
Kidney Disease	29 (5.4%)	Kidney disease	41(8.1%)	Respiratory Distress Syndrome	38 (9.1%)
Pneumonia	29 (5.4%)	Birth asphyxia	33(6.5%)	Kidney disease	36 (8.6%)
Cerebrovascular Accident	22 (4.1%)	Heart failure	25(5.0)	Heart failure	25 (6%)
Heart Failure	14 (2.6%)	Prematurity	19(3.8%)	Liver failure	23 (5.5%)
Necrotising Enterocolitis (NEC)	12 (2.2%)	Stroke	18(3.6%)	Shock	22 (5.2%)

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Tuberculosis	12 (2.2%)	Liver failure	16(3.2%)	Anaemia	12 (2.9%)
Hepatic Encephalopathy	10 (1.9%)	Septic shock	14(2.8%)	Birth Asphyxia	12 (2.9%)

3.10.2 MATERNAL MORTALITY

Maternal mortality continues to pose significant challenges to the hospital's obstetrics services. In response, several interventions were implemented during the year to improve maternal mortality including periodic mentorship programs jointly organised in collaboration with the Central Regional Health Directorate to build capacity of critical staff in lower-level health facilities. These initiatives are targeted to critical staff in lower-level health facilities geared towards improving skills, early detection, stabilization and timely referral of obstetric emergencies.

Despite these efforts, maternal mortality in 2024 was high. The number of maternal deaths increased by 20% (from 20 in 2023 to 24 in 2024). Majority of these deaths – 87.5% (21) were referred from lower-level facilities. Similarly, the maternal mortality ratio rose from 681/100,000 livebirths in 2023 to 863/100,000 livebirths in 2024.

This upward trend reinforces the need to intensify efforts to strengthen referral systems/networks, improve communication between facilities, and further strengthen the mentorship of the lower-level facilities to enhance the capacity of staff in managing cases before being referred for further care. Figure 3.10.2.1 below provide trend of the analysis.

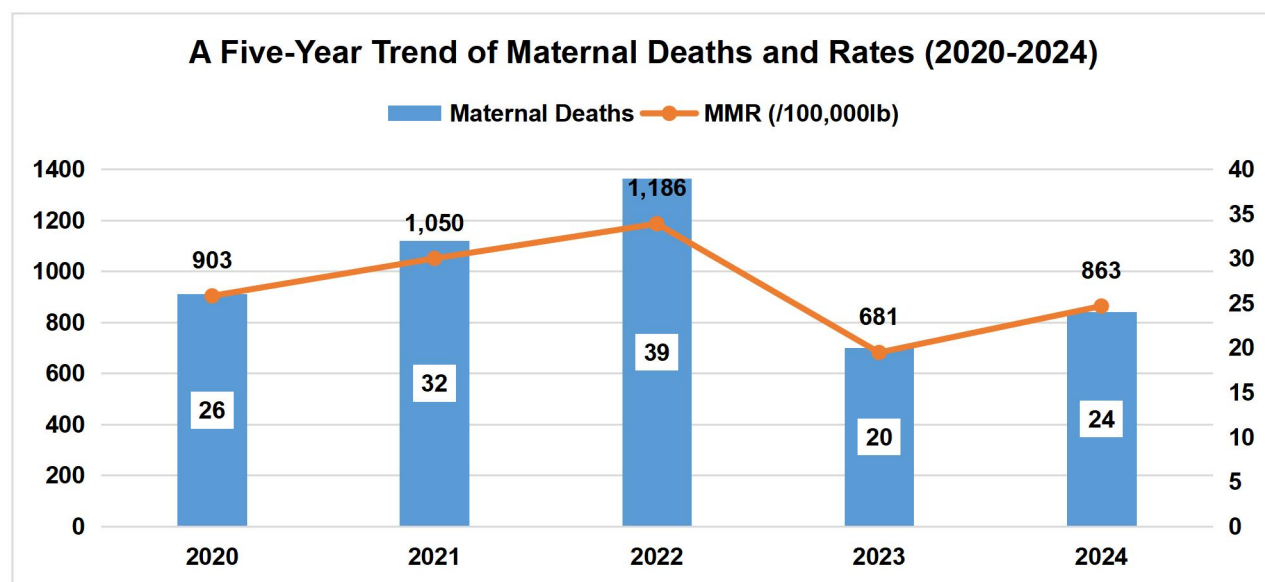


Table 3.10.2. 1: A Five-Year Trend of Maternal Deaths and Rates (2020-2024)

3.10.3 CHILD MORTALITY

CCTH remained committed to improving child survival outcomes in 2024, with deliberate focus on high-risk groups, especially neonates and infants. During the review period, the hospital strengthened efforts child survival interventions through mentorship support for staff at lower-level health facilities, community awareness campaigns, maternal education on priority child conditions such as neonatal jaundice, prematurity, birth asphyxia, breastfeeding and childhood cancers.

These targeted initiatives yielded remarkable improvements across all major child mortality indicators. reducing child mortality. The infant mortality rate decreased from 67 per 1000 livebirths in 2023 to 50 per 1000 livebirths in 2024. In the same light, neonatal mortality rate declined from 170 per 1000 livebirths in 2023 to 112 per 1000 livebirths in 2024, while the under-five mortality rate dropped from 72 per 1000 livebirths in 2023 to 55 per 1000 livebirths in 2024. Details of the analysis is provided in Table 3.10.3.1 below.

Table 3.10.3. 1: Child Mortality

INDICATORS	2020	2021	2022	2023	2024	REMARKS	TARGET
Infant Deaths	284	267	252	197	138	30% decr	-
Institutional Infant mortality rate (/1000LB)	89	88	77	67	50	decr	THs = 15/1000LB
Number of under 5 Deaths	307	290	264	213	152	28.6% decr	-
Under 5 Mortality Rate (/1000 LB)	106	95	80	72	55	decr	-
Neonatal Deaths	233	239	219	170	112	34.1% decr	5↓
Neonatal Mortality Rate (/1000LB)	81	78	67	58	40	decr	THs = 25/1000LB

3.11 MENTORSHIP AND OUTREACHES

3.11.1 MENTORSHIP

In line with its core mandate, the Cape Coast Teaching Hospital continue to play a critical role in strengthening service delivery at lower-levels of care. This commitment is evident in the hospital's 2020-2025 Medium-Term Strategic Plan, which prioritizes the intensification of support to lower- level health facilities and service delivery points. To actualize this strategic objective, CCTH has implemented well-structured mentorship

and targeted mentorship programs. These initiatives are designed to enhance the competencies of healthcare staff, foster development and promote the delivery of quality health services. By building capacity at lower-level facilities, the mentorship programmes have contributed to improved health outcomes, broadened access to specialised services and strengthened the overall healthcare delivery system within the region.

In 2024, the hospital implemented five mentorship programs, primarily in the area of maternal and child health as well as accident and emergency care. A total of 1,962 health professionals from lower-level facilities benefitted from these interventions. Details of the mentorship activities and beneficiaries are presented Table 3.11.1.1 below.

Table 3.11.1. 1: Mentorship Activities in 2024

No.	Department	Mentorships Program	Beneficiaries
1.	A&E	Principles of resuscitation for UCC hospital	63
2.	Child health	• A 4-months specialist-led mentorship undertaken to 16 health facilities • A 2-month mentorship program in neonatal care organized for 2 staff of Elmina Polyclinic • Organised a health symposium on infection prevention and control (IPC) at the NICU for peripheral healthcare professionals	98
3.	Maternal Health	Safe Motherhood and Life-support System training in collaboration with the regional health directorate for staff within 1061 health facilities (both public and private)	1801
	Total		1,962

3.11.2 OUTREACHES

As part of the strategies to increase access to specialist health services, CCTH conducts regular outreach programs to communities, schools, religious institutions and cooperate organizations. These outreaches play a critical role in promoting early detection of health conditions, increasing health awareness and providing targeted health education aimed at promoting healthy lifestyles and disease preventions.

During the reporting period, the hospital conducted a total of 262 community outreaches, addressing various health conditions and benefitting 26,980 individuals. Additionally, health screening and education sessions were held in 13 Basic and Senior High Schools, reaching 775 pupils. The hospital also extended its outreach programs to three cooperate organizations, with 272 employees benefiting.

Out of the 418 planned outreaches activities for 2024, 278 were successfully carried out representing 66.5% achieved plan. This is below the teaching hospital's target of 70%. Details are presented in Table 3.11.2.1 below.

Table 3.11.2. 1: Outreaches and Beneficiaries from 2020-2024

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Community Outreaches						
Number of communities Visited	102	398	1,059	209	262	25.4% incr
Number of Beneficiaries	6,872	20,415	38,247	17,570	26,980	53.3% incr
School Outreaches						
Number of Schools visited	8	3	3	6	13	116.7% incr
Number of pupils benefited	1,142	1,271	277	546	775	41.9% incr
Outreaches to Organizations						
Number of cooperate organizations visited	-	4	1	3	3	• Oguaa Teachers Credit Union • Ankaful Prisons • Teachers Credit Unit
Number of people screened	-	611	72	52	272	incr

Table 3.11.2. 2: Outreach Performance under Teaching Hospital's KPI's

KPI	2024	REMARKS	TARGETS	MEASUREMENT
Percentage of specialist's outreach visit carried out	66.5%	Decr.	THs = 70%	Total number of Specialist outreach carried out / Total visit planned*100
Total number of outreach visits carried out	278	2.6% incr	-	
Total visits planned	418		-	
Number of beneficiaries during specialist outreach visit	28,127	53.9% Incr		Count of clients seen during specialist outreach

CHAPTER FOUR

SUPPORT AND GENERAL SERVICES

4.1 INTRODUCTION

Support and General Services play a crucial role in sustaining the hospital's operational efficiency and overall quality of care. They help maintain a clean, safe and functional clinical environment, while ensuring that essential logistics, infrastructure, information systems and administrative processes effectively support patient care. These services are delivered through the Technical Service and Domestic Services Sub-BMCs, General Administration, Cooperate Affairs, Supply Chain Management, Health Information Management, Policy, Planning and Budgeting, Research Monitoring & Evaluation as well as Internal Audit Units.

4.2 TECHNICAL SERVICES

The hospital's Technical Services are delivered through the Estate, Equipment and ICT Units, to ensure the continuous availability, reliability and safety of the hospital's physical infrastructure, biomedical equipment and digital systems to support uninterrupted clinical service delivery. The key achievements in 2024 are outlined below.

4.2.1 ESTATE UNIT – PHYSICAL INFRASTRUCTURE

In 2024, the Estate Unit prioritized on infrastructure maintenance, renovation and systems improvement to support uninterrupted clinical services. Key achievements in 2024 are as follows;

- i. Renovated the Laundry Unit to improve workflow.
- ii. Constructed a Waste Transfer Station to strengthen waste management practices and enhance compliance with environmental health regulations.
- iii. Refurbished the Dialysis Unit, creating an improved environment for renal service delivery.
- iv. Provided a backup power supply to the Polyclinic, ensuring continuity of clinical services during power outages.
- v. Serviced the hospital's main switchgear supplying power to the transformers, preventing unplanned downtime and electrical faults
- vi. Repaired 50 faulty power packs, restoring functionality to a number of non-operational desktop computers.
- vii. Supervised the defect liability period for the newly built Infectious Diseases Centre and coordinated timely correction of identified defects.
- viii. Led the redesign of the proposed Maintenance Workshop and successfully obtained management approval for Phase I of the construction work.

4.2.2 ICT & DIGITAL INFRASTRUCTURE

During the review period, the ICT unit strengthened digital connectivity, improved inter-departmental communication and supported the optimization of hospital information systems. Key achievements in 2024 included;

- i. Successfully completed the rollout of the logistics and medical stores management module of the Light Hospital Information Management System (LHIMS), enhancing inventory control and accountability.
- ii. Supported the Claims Processing Department to submit claims through the new ClamIT platform, contributing to improved submission processes.
- iii. Conducted targeted LHIMS user trainings and troubleshooting sessions to address system-use challenges and improve accuracy and completeness of clinical and administrative documentations.
- iv. Installed 20 additional IP phones to enhance internal communication across departments.
- v. Extended the hospitals network connectivity to the Infectious Disease Centre (Annex B), ensuring seamless connectivity and system access.
- vi. Developed guidelines for the Website and Social Media Management Committee to improve consistency, governance, and professionalism in the hospital's digital communication platforms.

4.2.3 EQUIPMENT UNIT - MEDICAL EQUIPMENT, PLANT AND FURNITURE

The Equipment unit in 2024 focused on equipping servicing, installation, repairs and asset management. Key achievements in 2024 are as follows;

- i. Achieved 64% of planned preventive maintenance rate for medical equipment, furniture and plants.
- ii. Successfully installed new laundry equipment donated by the Ministry of Health, including;
 - iii. 2 Laundry Dryers
 - iv. 2 Washing Machines
 - v. 1 Centrifugal Hydro Extractor (Spinner)
 - vi. 2 Stain Removers
 - vii. 1 Roller Ironer
 - viii. 1 Steam Ironers
- ix. Installed 122 new medical equipment and furniture items acquired through the Ministry of Health allocations and support from partners.
- x. Installed 17 air-conditioners to and 2 domestic refrigerators in clinical and administrative areas.
- xi. Serviced a total of 665 medical and general equipment and medical furniture to ensure functionality and safety.
- xii. Repaired 140 defective medical equipment, reducing downtime and service interruption.
- xiii. Updated the hospital's Asset Register on a monthly basis and supported the disposal of unserviceable equipment following formal de-junking exercise
- xiv. Undertook major de-junking exercises and preparation of unserviceable and unusable assets lists and contributed to processes leading to their appropriate disposal.

4.2.3.1 EQUIPMENT UTILIZATION AND DOWN TIME ANALYSIS

The effective utilization and optimal functioning of medical equipment are essential to ensuring uninterrupted clinical service delivery. Over the years, the equipment unit has continued to implement preventive maintenance schedules, troubleshoot equipment failures and undertake repairs across departments aimed at minimising downtime and improving utilisation.

In 2024, key diagnostic machines experienced varying levels of downtime. The old CT-Scan machine recorded 100% downtime due to its breakdown. On the other hand, the new CT-Scan machine recorded a downtime rate of 3.85%, enabling service continuity. The mammogram machine remained non-operational throughout the year due to unsuccessful attempts to procure replacement components. Similarly, the magnetic resonance imaging (MRI) machine, which has been out of service for some time remains under consideration for repair in collaboration with the Ministry of Health.

Despite these challenges, essential diagnostic equipment such as the Fuji x-ray machine, fluoroscopy machine and echocardiography unit remained functional, recording zero downtime during the period. A detailed equipment downtime summary is presented in Tables 4.2.3.1 below.

Table 4.2.3. 1: Trend of Selected Equipment Downtime of Imaging Equipment

Equipment Type	2020	2021	2022	2023	2024	Remarks
CT-Scan (New)	N/A	N/A	N/A	0	3.85%	Acquired in 2023
CT-Scan (old)	0%	82.52%	100%	100%	100%	Not Serviceable
Mammogram Machine	N/A	N/A	n/a	8.09%	100%	This equipment developed a fault in May 2023. All efforts made to get the required parts to repair it has so far not yielded any positive results
X-Ray Machine 2 (Fuji)	*47.00 %	0%	N/A	N/A	0%	There was no downtime
Fluoroscopy Machine	N/A	0%	N/A	N/A	0%	There was no downtime
Magnetic Resonance Imaging (MRI)	100%	100%	100%	100%	100%	Not Serviceable

Equipment Type	2020	2021	2022	2023	2024	Remarks
Echo Machine	N/A	N/A	N/A	N/A	0%	There was no downtime
Ultrasound Machine (Old – Philips)	*30.89%	0%	N/A	N/A	-	

Generally, there was notable improvement in equipment utilization rates in 2024. Utilization of the new CT-Scan machine went up from 14.17% in 2023 to 17.88% in 2024. The Siemens ultrasound machine utilization rate increased from 30.29% in 2023 to 34.15% in 2024, while the VINNCX1A ultrasound showed a slight increase from 34.06% in 2023 to 34.54% in 2024. However, utilization of VINNCX1B ultrasound machine declined rate from 34.065 in 2023 to 23.42% in 2024.

In addition, the Planned Preventive Maintenance (PPM) rate achieved increased from 55% in 2023 to 64% in 2024, reflecting ongoing improvements in maintenance planning and execution. Further details are provided in Table 4.2.1 and Table 4.2.2 below.

Table 4.2.3. 2: Equipment Utilization for Selected Imaging Equipment

Equipment Type	Average Equipment Operating Hours	Equipment Utilization Rate for Year					Remarks
		2020	2021	2022	2023	2024	
CT-Scan Machine (New)	12hrs per day (all days)	Not Applicable			14.17%	17.88%	Use of this new equipment started in February 2023
CT-Scan Machine (Old)	8 hrs. per working day 2 hours for weekends & public holidays	*98.72%	*21.39% (Jan. – Dec. 2021)	N/A	0%	0%	Faulty. Needs to be replaced.
Ultrasound Machine (Siemens)	8 hrs. per working day 2 hours for weekends & public holidays	*69.11%	*74.27% (Jan. – Nov. 2021)	N/A	*30.29% *Utilization Rate is for the period Feb. – Dec. 2023	34.15%	

Equipment Type	Average Equipment Operating Hours	Equipment Utilization Rate for Year					Remarks
		2020	2021	2022	2023	2024	
Ultrasound Machine (VINNCX1A)	8 hrs. per working day 2 hours for weekends & public holidays	Not Applicable			*34.06% *Utilization Rate is for the period Feb. – Dec. 2023	34.54%	
Ultrasound Machine (VINNCX1B)	8 hrs. per working day 2 hours for weekends & public holidays	Not Applicable			*34.06% *Utilization Rate is for the period Feb. – Dec. 2023	33.42%	
X-Ray Machine 1 (Fuji)	8 hrs. per working day 2 hrs. for weekends & public holidays	*53.44%	*65.03% (Jan. – Nov. 2021)	N/A	54.26%	54.42%	
Fluoroscopy Machine	6 hrs. per working day (Tuesdays & Fridays only)	N/A	N/A	N/A	9.25%	9.4%	
Mammogram Machine	6 hrs. per working day (Tuesdays & Thursdays only)	N/A	N/A	N/A	8.09%	0%	This equipment developed a fault in May 2023 and has been out of use since. Efforts still on-going to get parts needed to repair it
Echo Machine	6 hrs. per working day (Tuesdays & Thursdays only) plus 2 hours for emergencies	N/A	N/A	N/A	30.96%	41.75%	incr

4.3 GENERAL ADMINISTRATION SERVICES

The General Administration Services supports clinical service delivery by ensuring security, social welfare, effective communication and reliable transport logistics. These services are offered through the Security, Medico-Social, Telecommunication and Transport Units.

4.3.1 SECURITY SERVICES

During the year, the Security Unit continued to safeguard the hospital's premises and protect staff, patients and assets. Key achievements in 2024 included;

- i. Strengthened security operations, leading to the interception and arrest of individuals involved in unauthorized and disruptive activities within the hospital premises.
- ii. Significantly reduced external hawkers within the hospital environment, contributing to improved sanitation and patient movement flow.
- iii. Decline in reported theft incidents at both hospital service areas and staff residential facilities through intensified patrols and improved access control measures.
- iv. Organized regular aerobic and fitness exercises for 87 guards to promote physical wellness and improve endurance during operations

4.3.2 MEDICO-SOCIAL SERVICES

The Medico-Social Unit provided essential support to socially vulnerable patients, facilitating access to care and social protection resources. Key achievements in 2024 were;

- i. Facilitated the free treatment of 17 needy patients through coordinated social support and clinical referrals.
- ii. Approval and placement of 2 infants in temporary residential care homes to ensure safety and continuity of care.
- iii. Assisted 9 patients to register with the National Health Insurance Scheme (NHIS) and renewed the health insurance cards for 6 patients.
- iv. Transferred 2 abandoned babies to accredited child welfare homes in collaboration with the Central Regional Directorate of Social Welfare
- v. Recovered GH¢26,977.00 from discharged patients through structured undertakings and follow-up mechanisms.
- vi. Provided treatment support valued at GH¢1,600.00 to 2 patients through Management intervention
- vii. Granted exemptions and waiver amounting to GH¢22,733.75 to 6 vulnerable patients with Management support.
- viii. Mobilization of GH¢12,550.00 from benevolent organizations and individuals to settle medical bills for 14 patients.

4.3.3 TELECOMMUNICATION SERVICES

The Telecommunication Services Unit in 2024 ensured effective communication to support clinical coordination and administrative activities within the hospital. Key performance included;

- i. Maintained and ensured uninterrupted intercom connectivity across key clinical units, improving coordination and response times
- ii. Procured and installed a new PABX digital telephone system to upgrade the hospital's internal communication infrastructure and improve call management
- iii. Successfully integrated the digital communication system at Annex B (Infectious Disease Centre), ensuring seamless connectivity between the main facility and Annex B.
- iv. Acquired and distributed 20 new telephone handsets to departments to strengthen internal communication support.
- v. Reactivated previously non-functional internal telephone lines, restoring effective communication links in affected units and improving service reliability.

4.3.4 TRANSPORT SERVICES

The Transport Unit ensured reliable mobility support for clinical and administrative activities across the hospital. Major achievements in 2024 included;

- i. Implemented and adhered to the 5000km run planned preventive maintenance schedule for operational vehicles
- ii. Renewed roadworthiness certification and insurance coverage for the all-vehicle fleet
- iii. Consistently provided fuel to support uninterrupted transport operations.
- iv. Conducted technical assessment of 4 faulty vehicles and submitted overhaul recommendations to the Ministry of Health for support
- v. Initiated the process for the auction and boarding-off of 7 aging vehicles, with documentation submitted for approval
- vi. Maintained accurate documentation and monitoring of all vehicle movements and related logistics
- vii. Coordinated and executed 450 official trips within the review period
- viii. Managed fuel usage efficiently, with total consumption recorded at 54,744.43 Liters.

4.3.4.1 VEHICLE INVENTORY

Generally, the hospital recorded a marginal increase of 7.1% in fleet of vehicles (from 14 in 2023 to 15 in 2024). Equally, there was improvement in the age profile during the period. Vehicles within the 1-5 years category (green zone) went up from 5 in 2023 to 7 in 2024. Similarly, the number of vehicles within the 6-9 years category (yellow zone) increased from 4 in 2023 to 5 in 2024. However, vehicles aged 10 years and above (red zone) declined from 5 in 2023 to 3 in 2024.

Out of 15 vehicles in 2024, 46.7% (7) were in good condition, 33.3% (5) were in fair condition (yellow zone) and 20.0% (3) were in poor condition. This reveals that one-fifth of the vehicles require replacement or major servicing/refurbishment to ensure their operational reliability. A breakdown of vehicle types further indicates that, the green zone vehicles comprised 2 pickups and 5 motorbikes, while the yellow zone vehicles consisted of 3 pickups, 1 mini bus and 1 ambulance. Also, 3 pick-ups were classified in the red zone.

A detailed information on the vehicle inventory, including age distribution and color-coded condition status, is provided in Table 4.3.3.1, Table 4.3.3.2 and Figure 4.3.3.1 below.

Table 4.3.4. 1: Vehicle Inventory by Age Block - A

AGE BLOCK/ZONE	2020	2021	2022	2023	2024
1-5 years	4	3	5	5 (1 mini bus)	7
6-9 years	3	4	4	4	5
10 and above	5 (3)	5(2)	5(1)	5(1)	3

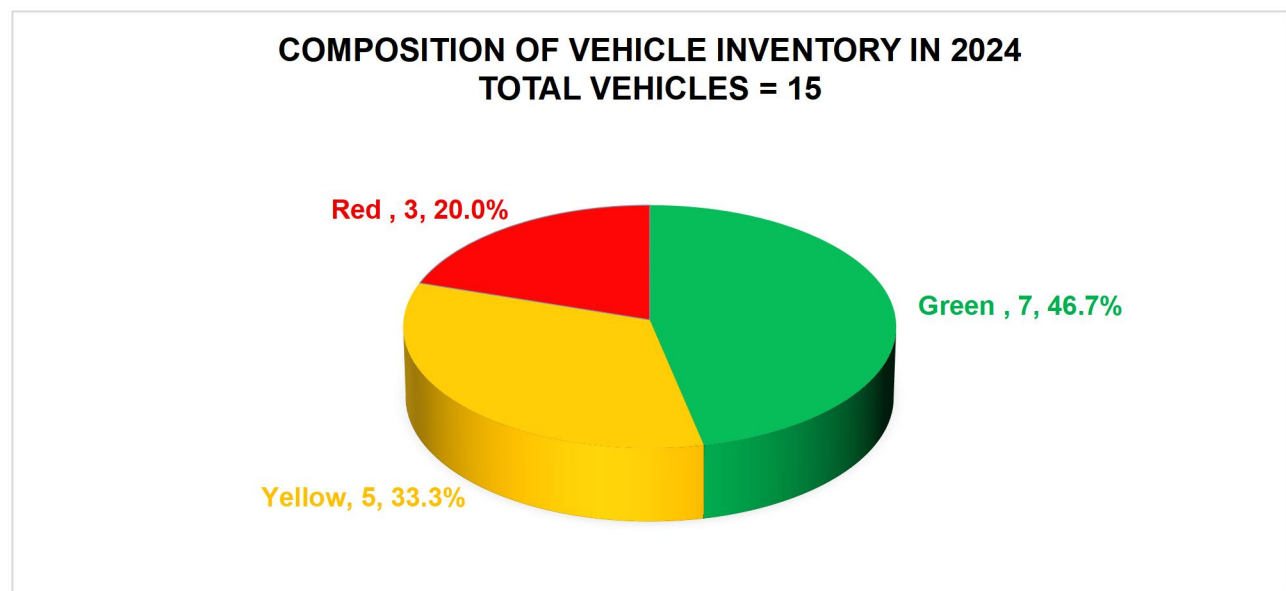


Figure 4.3.4. 1: Composition of Vehicle Inventory in 2024

Table 4.3.4. 2: Vehicle Inventory by Age Block in 2024

VEHICLE	TOTAL	GREEN (1 – 5 YRS)	YELLOW (6 – 9 YRS)	RED (10 YRS/ABOVE)
Pick ups	8	2	3	3
Buses	1	-	1 (mini bus)	-
Ambulance	1	-	1	-
Motorbikes	5	5	-	-
Total	15	7	5	3

4.4 COOPERATE AFFAIRS UNIT

The Cooperate Affairs Unit is responsible for protecting and enhancing the hospital's cooperate image, ensuring efficient and transparent communication with stakeholders, and strengthening strategic partnerships. The unit in 2024 implemented a range of initiatives geared towards improving public visibility, staff engagement, service quality and community relation. Key achievements are highlighted below.

A. Brand Building and Public Engagement

- i. Produced and secured national broadcast of a 30-minute documentary about the hospital on GTV, aired twice to increase public awareness of CCTH's services.
- ii. Successfully organized an Open Day to showcase the hospital services, promote transparency and community engagement.
- iii. Hosted a 'Press Soiree' to engage with the media partners and enhance collaboration in public information dissemination.

B. Staff Engagement and Internal Culture

- i. Introduced an institutional-wide monthly keep-fit exercise to promote staff wellness and teamwork.
- ii. Coordinated the two staff durbars to facilitate communication between management and staff, and address operational and welfare concerns
- iii. Coordinated the organization of the 2024 End-of-Year Awards and Thanksgiving Program in collaboration with the planning committee, recognizing outstanding staff and departments performance and the dedication of retirees.

C. Service Quality and Capacity Building

- i. Organized 11 customer service training sessions for various units geared at improving client relations and service delivery standards.
- ii. Established a dedicated Compliant Unit at the Polyclinic to promote patient feedback mechanisms, resolve issues promptly and improve client satisfaction.

D. Strategic Partnerships and Community Presence

- i. Coordinated the Annual 'Prah Agyensam Annual Games' (football and volleyball) against GCB Bank, promoting community interaction, staff participation and enhancing the hospital's brand through a decisive victory.

4.5 DOMESTIC SERVICES

The domestic services of the hospital are collectively provided by the Catering, Laundry, CSSD, Tailoring, and Environmental Health Units. These units ensure quality nutrition, reliable linen supply, sterile clinical instruments, a clean environment as well overall clinical outcomes. The key achievements in 2024 are highlighted below.

- i. **Sterile Supply Services:** The CSSD Unit produced and distributed 241,929 sterile packs to clinical service points and maintained buffer stocks to support emergency cases. Sterilization practices were enhanced through the adoption of

double-wrapping techniques for surgical items, improving infection control measures.

- ii. **Linen and Laundry Operations:** A total of 235,765 linen units were processed, encompassing decontamination, washing, drying and distribution to consulting rooms, wards and theatres.
- iii. **Patient Nutrition Services:** The Catering Unit prepared and served 57,475 servings meals to inpatients, adhering to nutritional standards to support patient recovery and well-being.
- iv. **Environmental Health:** Routine deep cleaning and disinfection of high-risk clinical areas were conducted. The Unit also fumigated wards following the discharge of infectious diseases cases, supporting infection prevention and control protocols.
- v. **Occupational Health and Safety:** Medical screening was conducted for kitchen staff and students, in line with the Public Health Act 851 (2012) and the Cape Coast Metropolitan Assembly (CCMA) 2023.bye-laws

4.5.1 PERFORMANCE TRENDS OF DOMESTIC SERVICES UTILIZATION

Generally, the Domestic Services Sub-BMC experienced mixed performance in 2024, reflecting fluctuations in inpatient admissions, theatre activities and operational capacities across the units. The Tailoring Unit recorded a decline of 1.4% in linen and clothing production (from 15,485 in 2023 to 15,269 in 2024). This reduction corresponds with the marginal decline in inpatients numbers, which resulted in the decrease in the demand for new patient wear and ward linen replacements.

Similarly, the Catering Unit reported a 5.3% decrease in meals served to inpatients (from 60,691 in 2023 to 57,475 in 2024) despite the higher overall bed occupancy rate observed in 2024. The Central Sterile Services Department (CSSD) Unit also experienced a 12.4% decline in sterile packs processed (from 276,314 in 2023 to 241,929 in 2024). This reduction closely mirrors the decline in surgical procedures conducted within the period.

However, the Laundry Unit achieved a significant 39.8% increase in the number of linens processed (from 168,617 in 2023 to 235,765 in 2024). This increment is largely attributed to the installation of new high-capacity laundry equipment donated by the Ministry of Health and improved linen replacement cycles.

Figure 4.5.1.1 and Table 4.5.1.1 below present the comparative performance trends.

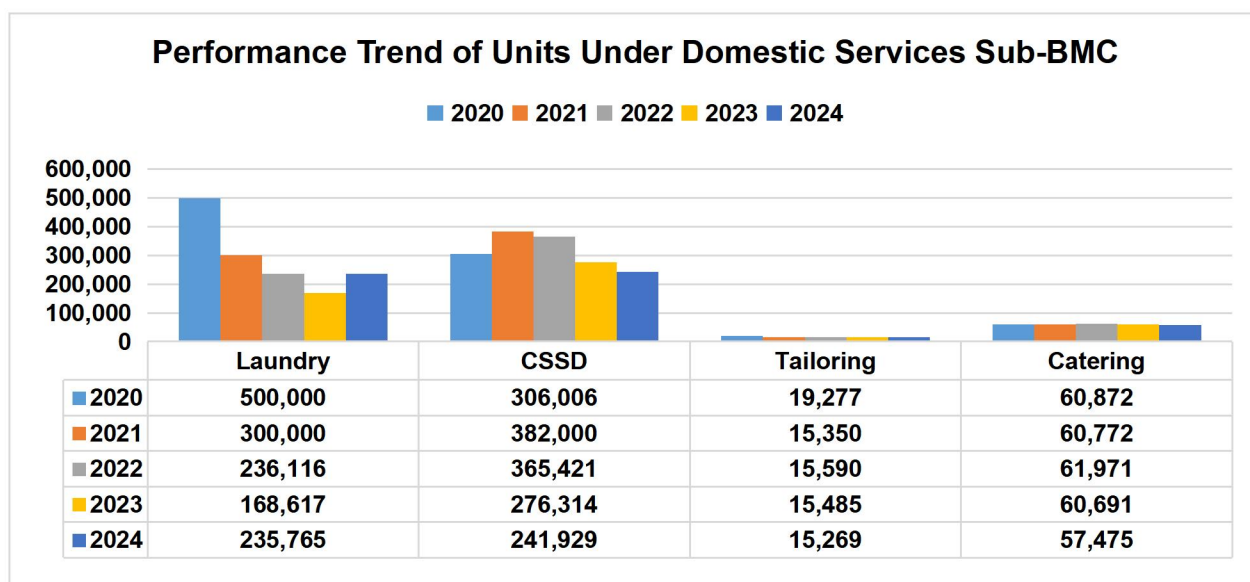


Figure 4.5.1. 1: Performance Trend of Units under Domestic Services Sub-BMC

Table 4.5.1. 1: Performance Trend of Units under Domestic Services Sub-BMC (2020-2024)

UNIT	2020	2021	2022	2023	2024	REMARKS
Laundry	500,000	300,000	236,116	168,617	235,765	39.8% incr
CSSD	306,006	382,000	365,421	276,314	241,929	12.4% decr
Tailoring	19,277	15,350	15,590	15,485	15,269	1.4% decr
Catering	60,872	60,772	61,971	60,691	57,475	5.3% decr

4.6 SUPPLY CHAIN MANAGEMENT SERVICES

The Supply Chain Management Services form a critical operational pillar of the Cape Coast Teaching Hospital, supporting effective and uninterrupted clinical care. This function is delivered through the Procurement and Medical Stores Unit, which are responsible for the forecasting, procurement, receipt, storage, distribution and documentation of both medical and non-medical consumables supplies. These activities are carried out in accordance with the Public Procurement Act, Public Financial Management regulations and the hospital Standard Operating Procedures. Key achievements in 2024 are as follows;

A. Procurement Planning and Supplier Management

- i. Expanded the supplier base of the hospital by identifying and pre-qualifying suppliers for medicines, consumables, works and services, enhancing competition procurement value.
- ii. Prepared and coordinated all documentation and processes for the 2024 procurement cycle.

- iii. Successfully organized a suppliers' forum to strengthen vendor relationships and improve service responsiveness
- iv. Completed and submitted the 2025 Procurement Plan in line with regulatory timelines

B. Inventory and Stock Management

- i. Ensured timely replenishment of essential items, preventing stock-outs and minimizing excess stock levels.
- ii. Conducted quarterly and annual stock counts including valuation of closing inventory
- iii. Maintained proper receiving, inspection and documentation procedures before admitting items into the stores.
- iv. Effectively issued medical and non-medical consumables to Sub-BMCs and Units based on approved requests and consumption patterns.
- v. Prepared periodic requirements (quarterly/annually) for stock replenishment and procurement planning.
- vi. Operationalized and maintained the LHMS inventory database to support real-time stock monitoring and reporting.

C. Infrastructure and Project Support

- i. Initiated procurement processes for key capital and service improvement projects; including;
 - o Construction of Waste Transfer Station.
 - o Phase I construction of the Technical Services Workshop.
 - o Construction of the Human Resource Office.

D. Training and Capacity Development

- i. Staff participated in capacity building activities in e-Procurement, GIFMIS (Purchase Order and SRA processes) and LHMS stock management procedures.
- ii. Provided practical training and mentorship to 13 tertiary students on undertaking internships in procurement and stores management.

4.6.1 PERFORMANCE TRENDS OF AVAILABILITY OF NON-MEDICINE CONSUMABLES

The availability of non-medicine consumables is essential for the delivery of quality health services. These consumables- including medical sundries, office supplies, cleaning materials, support service delivery, infection prevention and control (IPC) and patient safety.

The hospital over the five-year period (2020-2024) has seen improving trend in the availability of non-medicine consumables. The availability in 2020 was 68.34%. This reflected the global and national supply chain constraints caused by the COVID-19 pandemic. This improved to 73.06% in 2023 as supply chain began to stabilize. However, this progress was not sustained in 2022, where marginally declined to 71.88%, reflecting residual supply challenges and increased service utilization pressures.

Significant improvement occurred in 2023, with availability rising to 86.64%. This increase suggests enhanced procurement planning, expansion of the hospital's supplier base, strengthened contract management and improved inventory monitoring supported by LHIMS/GIFMIS systems. In 2024, availability was sustained, increasing further to 88.25%, the highest level over the five-year period. Figure 4.6.1.1 and Table 4.6.1.1 present the five-year trend in the availability of non-medicine consumables from 2020 to 2024.

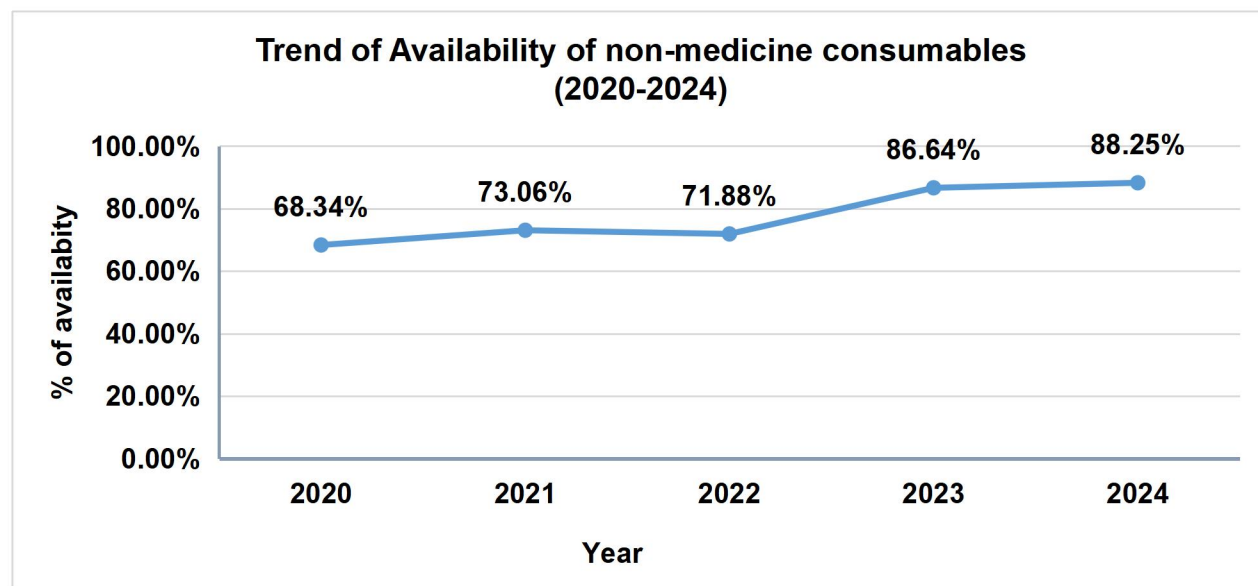


Figure 4.6.1. 1: Trend of Availability of non-drug consumables from 2020 to 2024

Table 4.6.1. 1: Availability of non-drug consumables from 2020 to 2024

Key Indicator	2021	2022	2023	2024	REMARKS	Measurement
Availability of non-medicine consumables	73.06 %	71.88%	86.64%	88.25%	incr	Non-drug consumables available / Total non-drug consumables in the baskets (Baskets to be determined e.g., Gloves, Gauze, Syringes, Plasters, Cannulas, Catheter, Infusion, Cleaning Agent etc.)

4.7 INTERNAL AUDIT SERVICES

Internal Audit services play a critical role in promoting accountability, transparency and prudent financial management within the hospital. This service is delivered through the Internal Audit Unit, whose activities are regulated by the Public Financial Management Act, 2016 (Act 921) as well as the Internal Audit Standards. The unit provides independent assurance on adequacy and effectiveness of internal control systems, risk management practices and governance processes. Through periodic reviews, audits and advisory services, the Unit supports Management in safeguarding institutional assets, ensuring compliance with regulatory frameworks and enhancing operational efficiency.

In 2024, the Internal Audit Unit focused on strengthening risk-based audit approaches, improving follow-up on audit recommendations and supporting the implementation of financial and operational controls across departments. Key performances during the period are as follows;

- i. Conducted HR audit to assess compliance with established policies, payroll controls and staff record management. This contributed to improved accountability and risk mitigation in personnel administration.
- ii. Reviewed procurement and stores management processes to assess adherence to the Public Procurement Act and internal procedures.
- iii. Audits were conducted targeted Sub-BMCs – Surgical and Technical Services, to assess resource utilization, and compliance with approved operational guidelines.
- iv. Participated in the annual stocktaking exercise, including verification of inventory records and physical stock, geared towards strengthening inventory control and reporting accuracy.
- v. Undertook pre-audits and transaction verifications to ensure compliance with financial regulations and prevent unauthorized expenditure
- vi. Monitored the implementation of status of prior audit recommendations and engaged management on corrective actions, thereby reinforcing accountability and continuous improvement in internal controls.

4.7.1 IMPLEMENTATION OF AUDIT RECOMMENDATIONS

The implementation of audit recommendations is a key measure institutional governance, internal control effectiveness and accountability. It demonstrates the hospital's commitment to sound financial stewardship, regulatory compliance and continues operational improvement.

Over the last five years, the hospital has maintained strong performance in implementing external recommendations particularly in 2020 and 2021 where all recommendations were fully executed (100%). Although implementation dropped slightly in 2022 and 2023, performance remained above 90%, indicating effective collaboration between management, the auditing function, as well as a proactive approach of the hospital in addressing identified risks and control deficiencies.

However, the implementation of internal audit recommendations showed a gradual downward trend during the same period. While full compliance was achieved in 2020 (100%), the implementation rate progressively declined, reaching 85.0% in 2024. This suggests challenges with timely closure of audit issues, competing operational priorities and the need for enhanced monitoring and accountability. To improve on performance, there is the need to strengthen follow-up and tracking mechanisms, ensure clearer assignment of responsibilities for each recommendation and support affected units to promptly resolve audit issues. Figure 4.7.1.1 and Table 4.7.1.1 present the five-year performance trend (2020 to 2024).

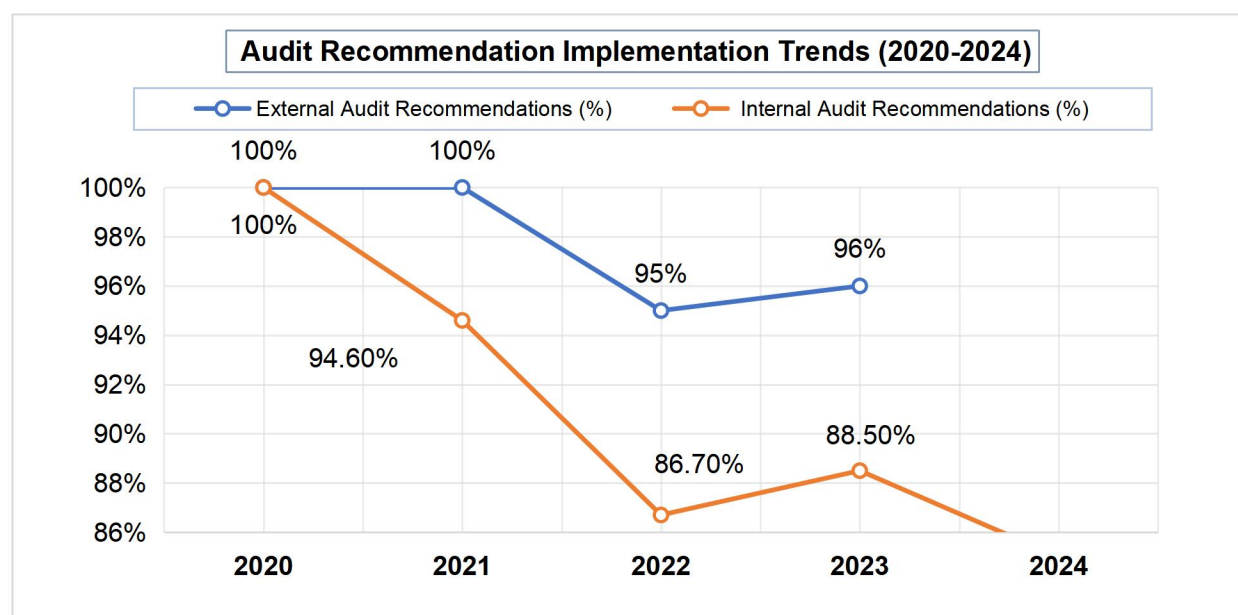


Figure 4.7.1. 1: Audit Recommendation Implementation Trends (2020-2024)

Table 4.7.1. 1: Audit Recommendation Implementation Trends (2020-2024)

Key Indicator	2020	2021	2022	2023	2024	Target	Measurement
Percentage of External Audit recommendations implemented	100%	100%	95%	96%	Yet to be conducted	100%	Total number of external audit recommendations successfully implemented / total number of external audit recommendations made
Total number of external audit recommendations successfully	24	20	19	24		-	

Key Indicator	2020	2021	2022	2023	2024	Target	Measurement
<i>implemented</i>							
<i>total number of external audit recommendations made</i>	24	20	20	25		-	
Percentage of Internal Audit recommendations implemented	100%	94.6%	86.7 %	88.5 %	85%	100%	Total number of internal audit recommendations successfully implemented / total number of internal audit recommendations made
<i>Total number of internal audit recommendations successfully implemented</i>	6	35	13	23	17	-	
<i>total number of internal audit recommendations made</i>	6	37	15	26	20	-	

4.8 HEALTH INFORMATION MANAGEMENT SERVICES

Health Information Management (HIM) plays a central role in ensuring quality healthcare delivery by managing patient information and institutional data in a structured, secure and efficient manner. The unit is responsible for patient records management, data collection, validation and the optimisation of digital health platforms such as the Lightwave Health Information Management Systems (LHIMS). Through these functions, the unit supports clinical decision-making, performance monitoring and overall service efficiency across the hospital. Key achievements in 2024 are as follows;

- i. Increased utilization of the electronic medical records systems through the capturing of clinical and administrative data in the LHIMS, contributing to enhanced continuity of patient information and improved workflow efficiency across care units.
- ii. Reinforced adherence to information governance standards, ensuring that patient data access, confidentiality and privacy measures were upheld in line with institutional and national regulatory guidelines.
- iii. Conducted training for HIM staff to improve competencies in data validation, documentation procedures and system usage.
- iv. Provided structured data retrieval support for researchers, clinical audit and operational reviews, thereby advancing the hospital's academic and performance improvement agenda

4.9 POLICY, PLANNING AND BUDGETING

Policy Planning and Budgeting (PPB) unit provide strategic and operational frameworks that guide the hospital's resource allocation, service delivery priorities and institutional

development. The Unit also support policy formulation, strategic and annual planning, and coordination of budgeting cycle to ensure alignment with national priorities and institutional goals and objectives. Key achievements in 2024 are as follows;

A. Planning and Policy Coordination

- i. Coordinated the implementation of the 2024 Annual Program of Work (APOW), representing the fifth year of the 2020-2025 Strategic Plan
- ii. Facilitated the development and signing of the 2024 performance contracts between the Chief Executive Officer and Directors to strengthen performance accountability
- iii. Organized capacity-building training for 75 staff on the preparation of the 2025 APOW and budget to enhance planning competencies

B. Resource Mobilization and Proposal Development

- iv. Developed and submitted multiple proposals to government, development partners and philanthropic organizations to support service expansion, medical equipment acquisition, infrastructure improvement and staff development.

C. Coordination of Donor-Funded Projects and Clinical Outreach Programs

- v. Coordinated the implementation of specialized clinical outreach programs and donor-supported interventions, which contributed to improved access to surgical and specialist care.

4.10 MONITORING & EVALUATION AND RESEARCH

Monitoring, Evaluation and Research play a pivotal role in promoting evidence-based planning, performance management and knowledge generation within the hospital. The Unit is responsible for coordinating and validating institutional performance data, conducting analysis, facilitating reporting, supporting operational as well as clinical research processes. Through routine indicator tracking, performance reviews, supportive supervision and timely dissemination of findings, the Unit helps management and departments to assess progress toward targets, identify performance gaps and implement corrective measures. The Unit also fosters research culture by supporting ethical review processes and data access requests. These efforts contribute to improved service quality, clinical outcomes and enhanced institutional learning. Key achievements in 2024 are as follows;

A. Monitoring and Evaluation Achievement

- i. Conducted quarterly monitoring on the implementation status of the 2024 Annual Program of Work (APoW) across Units and Sub-BMCs and submitted report to Management to inform decision-making.
- ii. Led the organization of the Hospital's 2023 annual performance review (APR) in collaboration with the APR Technical Team in February, 2024.
- iii. Coordinated the evaluation of the Hospital's 2023 performance and produced the Annual Performance Report booklet.
- iv. Prepared and submitted all mandatory institutional performance reports to the Ministry of Health and other stakeholders as required.

- v. Organized capacity-building training for Sub-BMC/Unit Management Teams on programme-based budgeting with focus on Monitoring, Evaluation and Reporting.

B. Research and Development Achievements

The Unit worked closely with the Institutional Ethical Review Committee (ERC) to ensure that all researches conducted within the hospital met established ethical standards. During the review period;

- A total of 198 research applications were processed in collaboration with the ERC
- Of these, 197 applications (99.5%) were approved after meeting ethical requirements
- Additionally, 22 operational research studies were carried out during the period, with outcomes contributing to service delivery improvements in various clinical and support areas.

CHAPTER FIVE

FINANCIAL PERFORMANCE

5.1 INTRODUCTION

This chapter report on the hospital's financial performance for the period under review, focusing on key revenue streams and expenditure patterns for the period in comparison with previous years as well as the budget execution trends to highlight performance.

5.2 SOURCES OF FUNDING

The hospital financial resources are derived from three main sources namely; Government Subvention (GOG), Internally Generated Funds (IGF) and Donor Support.

- a. Government Subventions: Government subventions is a key source of funding for the hospital. These funds are provided by the Government of Ghana to the hospital primarily as compensations to cover the salaries for permanent staff and support capital investments and infrastructure development. Further, government subventions also include allocations to sustain specific operational activities and public health interventions to ensure financial stability as well as continuity of services delivery.
- b. Internally Generated Funds (IGF): IGF is one of the essential sources of funding to the hospital and it is used to support both recurrent and capital expenditures. This includes the procurement of medicines and consumables, logistics, basic equipment, staff remunerations and payment of utility bills. It consists of income accrued from two main streams; health insurance (National Health Insurance Scheme and cooperate insurance) and out-of-pocket payment.
- c. Donor Funds: Donor funding is received from development partners, philanthropists and cooperate organisations to support specific programs such as Malaria, HIV/ADIS, TB, Cataract surgeries and other public health initiatives. This source of funds also supports the procurement of medical supplies, equipment and other resources geared towards the improvement of healthcare delivery.

5.3 REVENUE PERFORMANCE

5.3.1 REVENUE BUDGET EXECUTION

The hospital since 2020 has demonstrated a steady upward trend in the total revenue generated. In 2024, the total revenue went up by 35.8%, (rising from GH¢ 170,398,748.10 in 2023 to GH¢ 231,380,942.55 in 2024), reflecting improved resource mobilization and external support. This total comprised 66% (GH¢ 152,767,790.97) from GOG compensation, 24% (GH¢ 55,182,809.05) from Internally Generated Funds (IGF) while donor support accounted for 10% (GH¢ 23,430,342.53). All revenue streams recorded significant growth within the period.

IGF revenue went up by 13.8%, (from GH¢ 48,472,268.32 in 2023 to GH¢ 55,182,809.05 in 2024). GOG compensation increased by 31% (from 116,611,691.71 in

2023 to 152,767,790.97 in 2024) while donor funding recorded the most significant rise, increasing by 340.9% (from GH¢ 5,314,788.07 in 2023 to GH¢ 23,430,342.53 in 2024), reflecting increased external support for hospital initiatives and projects.

Overall, the hospital achieved a revenue budget execution rate of 116.3% in 2024, exceeding its target of GH¢ 198,939,523.86 by generating GH¢ 231,380,942.55. This performance slightly improved from 116% in 2023 (i.e.; GH¢ 170,398,748.10 realized against GH¢ 146,900,000 budgeted) and higher than the 89.9% actualised in 2022 (GH¢ 134,547,634.17 against GH¢ 149,600,000 budgeted).

By funding source, IGF revenue exceeded its target by 10%, generating GH¢ 55,182,809.05 against a budget of GH¢ 50,156,544.36. Similarly, GOG compensation exceeded expectations, achieving 102.8% of its budgeted amount (i.e.; GH¢ 152,767,790.97 against a budget of GH¢ 148,582,979.50). Donor funding amounted to GH¢ 23,430,342.53, marking a substantial improvement over previous years and contributing meaningfully to the overall revenue growth. Figures 5.3.1.1 and Tables 5.3.1.1 and 5.3.1.2 provides details of the analysis.

Table 5.3.1. 1: Revenue execution from 2020 to 2024

Sources of Funds (SOF)	2020			2021			2022			2023			2024		
	Budget (GH¢)	Actual	% execution	Budget	Actual	% execution	budget	Actual	% execution	Budget	Actual	% execution	Budget	Actual	% execution
IGF	24,426,359	22,268,693.60	91.2%	27,987,110.96	24,217,381.36	86.5%	31,500,000	32,100,188.39	101.95%	44,400,000	48,472,268.32	109.2%	50,156,544.36	55,182,809.05	110%
GOG Compensation	62,530,568.00	70,106,668.84	112.1%	79,407,405.56	79,407,405.56	100%	95,000,000	98,448,203.54	106.3%	102,500,000	116,611,691.71	113.7%	148,582,979.50	152,767,790.97	102.8%
GOG Service	100,000	-	-	198,200.00	-	-	22,100,000	-	-	-	-	-	200,000.00	-	-
Donor	-	729,501.64	-	-	999,810.75	-	-	3,999,242.24	-	-	5,314,788.07	-	-	23,430,342.53	-
Total	87,056,927.00	93,104,864.08	106.9%	107,592,716.52	104,624,597.67	97.2%	149,600,000	134,547,634.17	89.9%	146,900,000	170,398,748.10	116.0%	198,939,523.86	231,380,942.55	116.3%

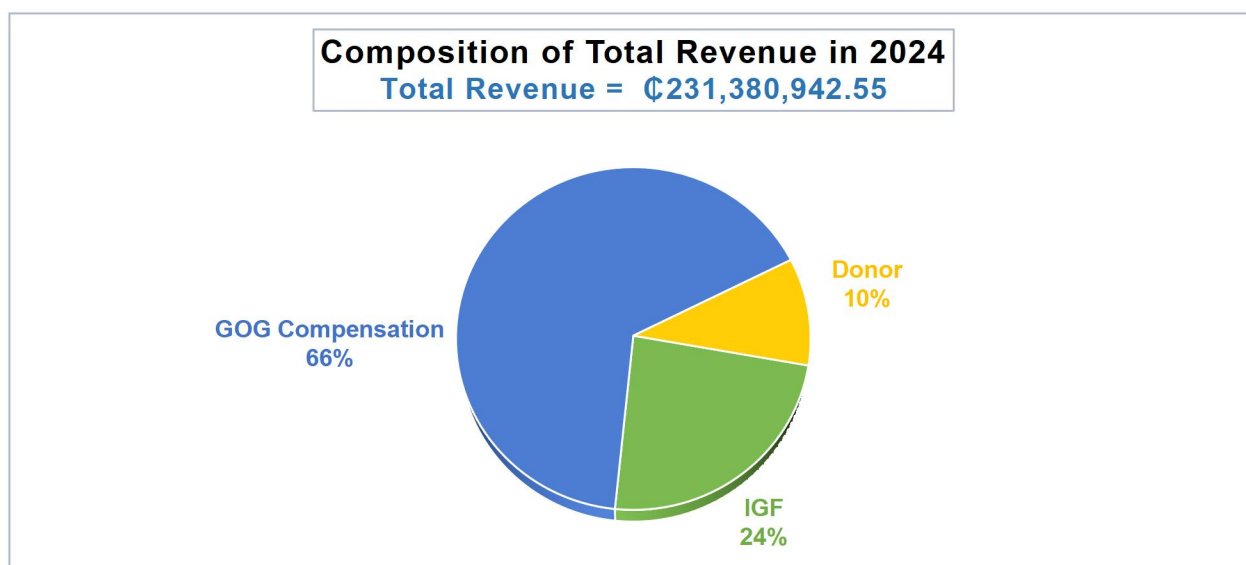


Figure 5.3.1. 1: Composition of total revenue in 2024

Table 5.3.1. 2: Source of Hospital Revenue from 2020 to 2024

Sources of Funds (SOF)	2020 GH¢	2021 GH¢	2022 GH¢	2023 GH¢	2024 GH¢	% Change
IGF	22,268,693.60	24,217,381.36	32,100,188.39	48,472,268.32	55,182,809.05	13.8% incr
GOG Compensation	70,106,668.84	79,407,405.56	98,448,203.54	116,611,691.71	152,767,790.97	31.0% incr
Donor	729,501.64	999,810.75	3,999,242.24	5,314,788.07	23,430,342.53	340.9% incr
Total Revenue	93,104,864.08	104,624,597.67	134,547,634.17	170,398,748.10	231,380,942.55	35.8% incr

5.3.2 INTERNALLY GENERATED FUNDS (IGF) REVENUE PERFORMANCE

The hospital's 2024 total revenue from Internally Generated Funds (IGF) increased by 13.4%, rising from GH¢ 48,472,268.32 in 2023 to GH¢ 55,182,809.05 in 2024. This growth, though lower than the 51% increase recorded in 2023 (from GH¢ 32,100,188.39 in 2022 to GH¢ 48,472,268.32 in 2023), reflects sustained improvement in internal revenue mobilization. This 2024 IGF revenue comprised 72.48% service income (GH¢ 39,999,139.81) and 27.52% (GH¢15,183,669.24) from medicine-related revenue

Service-related revenue recorded a 14.3% growth, (from GH¢ 13,492,583.00 in 2023 to GH¢ 39,999,139.81 in 2024). Out of this amount, out-of-pocket payment constituted 60.48% (GH¢ 24,194,617.65). NHIA reimbursements accounted for 34.24% (GH¢ 13,700,883.79) while cooperative insurance contributed 5.26% (GH¢2,103,638.37). In comparison with 2023, out-of-pocket payment went up by 27.7% (from GH¢

18,940,191.98 in 2023 to GH¢ 24,194,617.65 in 2024) while cooperative insurance revenue recorded a significant 514.9% increment, (from GH¢ 342,101.29 in 2023 to GH¢ 2,103,638.37 in 2024). On the other hand, NHIA revenue from service declined by 12.7% (from GH¢ 15,697,392.05 in 2023 to GH¢ 13,700,883.79 in 2024).

Revenue from medicines also increased by 12.5% (from GH¢ 13,492,583.00 in 2023 to GH¢ 15,183,669.24 in 2024). Out-of-pocket payments contributed GH¢ 6,897,174.42, representing 45.42% of the total medicine revenue. NHIA component accounted for GH¢ 7,810,828.01, equivalent to 51.44% of the total while cooperative insurance contributed GH¢ 475,666.81, forming 3.13%. Comparatively, all three components recorded a year-on-year growth. Out-of-pocket payments went up by 14.2% (from GH¢ 6,038,148.32 in 2023 to GH¢ 6,897,174.42 in 2024), NHIA component increased by 5.3% from GH¢ 7,415,158.63 in 2023 to GH¢ 7,810,828.01 in 2024 while cooperative insurance revenue showed substantial rise from GH¢ 39,276.05 in 2023 to GH¢ 475,666.81 in 2024, representing an increase of 1111.1%.

Details of the analysis are shown in Table 5.3.2.1, and Table 5.3.2.2 below.

Table 5.3.2. 1: Internally Generated Fund (IGF) Revenue Performance by Category, 2020–2024

Category	2020	2021	2022	2023	2024	% Change
Services	15,089,523.72	15,816,701.56	22,786,950.76	34,979,685.32	39,999,139.81	14.3% incr
Medicines	7,179,169.88	8,400,679.80	9,313,237.63	13,492,583.00	15,183,669.24	12.5% incr
Total	22,268,693.6	24,217,381.36	32,100,188.39	48,472,268.32	55,182,809.05	13.4% incr

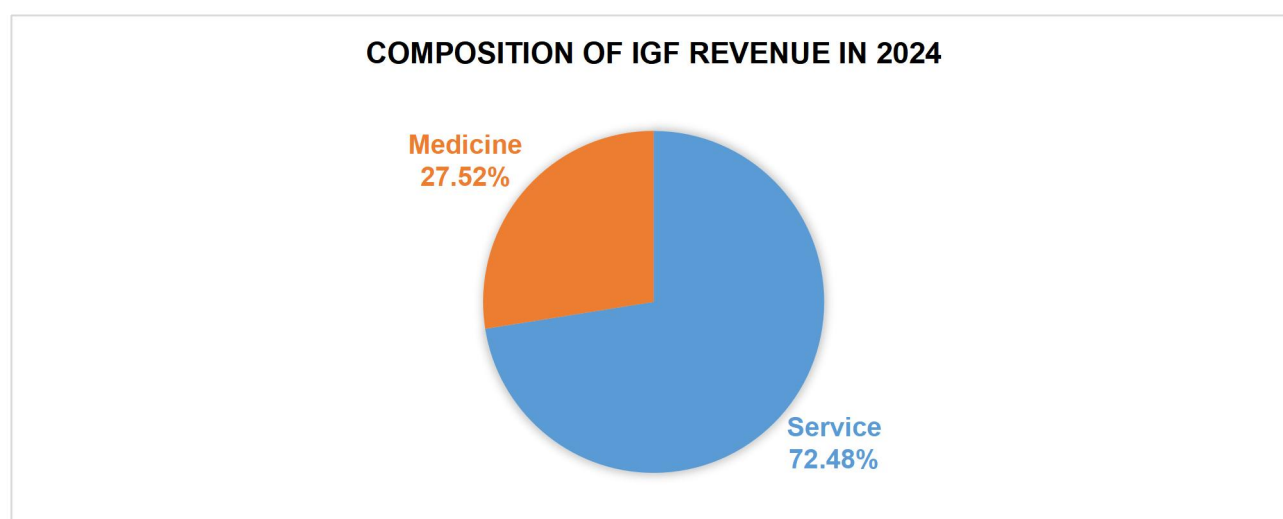


Figure 5.3.2. 1: Composition of IGF Revenue in 2024

Table 5.3.2. 2: Internally Generated Fund (IGF) Revenue from Services and Medicines by Source, 2020 - 2024

INDICATOR	2020	2021	2022	2023	2024	REMARKS
SERVICES						
Total Revenue Earned from Service	15,089,523.72	15,816,701.56	22,786,950.76	34,979,685.32	39,999,139.81	14.3% incr
NHIA Component	8,077,704.07	8,366,343.13	10,537,872.74	15,697,392.05	13,700,883.79	12.7% decr
% NHIA Component	53.5%	52.9%	46.25%	44.88%	34.25%	decr
Revenue from Corporate Insurance	117,569.33	142,814.98	240,203.07	342,101.29	2,103,638.37	514.9% incr
% of corporate component	0.8%	0.9%	1.05%	0.98%	5.26%	incr
Out of Pocket Payment	6,894,250.32	7,307,543.45	12,008,874.95	18,940,191.98	24,194,617.65	27.7% incr
% Out of Pocket Payment	45.7%	46.2%	52.70%	54.15%	60.48%	incr
MEDICINES						
Total Revenue Earned from Medicine	7,179,169.88	8,400,679.80	9,313,237.63	13,492,583.00	15,183,669.24	12.5% incr
NHIA Component	3,290,432.91	3,937,944.33	4,919,295.70	7,415,158.63	7,810,828.01	5.3% incr
% NHIA Component	45.80%	46.90%	52.82%	54.96%	51.44%	Decr
Revenue from Corporate Insurance	17,246.87	24,752.54	34,480.14	39,276.05	475,666.81	1111.1% incr
% of corporate component	0.24%	0.29%	0.37%	0.29%	3.13%	Incr
Out of Pocket Payment	3,871,490.1	4,437,982.93	4,359,461.79	6,038,148.32	6,897,174.42	14.2% incr
% Out of Pocket Payment	53.9%	52.8%	46.81%	44.75%	45.42%	Incr

5.3.3 DEPARTMENTAL AND SERVICE-POINT REVENUE CONTRIBUTIONS

Since 2020, the contributions of various departments and service point to the hospital's total revenue have shown fluctuating trends. In 2024, the total departmental revenue increased by 14.6%, (rising from GH¢ 34,979,679.32 in 2023 to GH¢ 40,108,191.51 in 2024). This growth, however, was lower than the 51.0% increase recorded in 2023, when departmental total revenue rose from GH¢ 32,100,188.39 in 2022 to GH¢ 48,472,268 in 2023.

Surgical services remained the leading contributor, generating GH¢ 9,909,427.45, which accounted for 24.71% of the total departmental revenue. Also, the surgical services saw a substantial increase of 110.4% in revenue in 2024 (from GH¢ 4,710,224.80 in 2023 to 9,909,427.45 in 2024). Maternal Health services generated GH¢ 4,696,594.31 in 2024, constituting 11.71%, declining from the 13.4% contributed in 2023. Medical Services experienced a marginal decline of 0.81% (from GH¢ 4,194,788.00 in 2023 to GH¢ 4,160,644.79 in 2024) with its share of total revenue reducing from 12.0% in 2023 to 10.37% in 2024.

Diagnostic services showed increase in revenue during the review period. Laboratory and other diagnostics services revenue went up by 19.85% (from GH¢ 3,008,334.00 in 2023 to 3,605,480.34 in 2024), while also contributing 8.99% to the total revenue. CT-Scan revenue rose by 47.9% to GH¢ 2,408,842.40, increasing its revenue share from 4.7% to 6.0%. X-ray services went up by 24.28% to GH¢ 1,965,803.70.

Non-clinical income streams – such as ambulance services, bus hiring, ethical review fees, facility user fees, internet connectivity charges, medical and police report fees, recruitment forms, rents and supplier's registration – collectively contributed GH¢ 3,619,722.92 representing 10.25% of the total departmental revenue in 2024. Table 5.3.3.1 below provide a five-year detailed summary of the departmental and service-point revenue contributions in the hospital from 2020 to 2024.

Table 5.3.3. 1: Revenue Contribution by Clinical and Support Services (2020-2024)

SERVICES	Total Revenue (GH¢)						Proportion of Revenue	
	2020	2021	2022	2023	2024	% diff in 2024	2023	2024
Surgical	3,176,479.31	3,544,206.00	2,955,722.25	4,710,224.80	9,909,427.45	110.38% ↑	13.47%	24.71%
Maternal Health	2,236,267.12	2,436,670.14	3,682,093.17	4,692,257.00	4,696,594.31	0.09% ↑	13.41%	11.71%
Medical	2,041,275.38	1,857,318.67	3,131,203.05	4,194,788.00	4,160,644.79	0.81% ↓	11.99%	10.37%
Laboratory and other Diagnostics services	943,553.27	1,172,912.00	1,998,352.56	3,008,334.00	3,605,480.34	19.85% ↑	8.60%	8.99%
OPD	1,647,485.01	1,711,465.80	2,390,064.53	5,081,625.00	3,020,080.84	40.57% ↓	14.53%	7.53%
Child Health	1,028,066.03	1,191,082.97	1,730,924.84	2,329,444.00	2,187,902.74	6.08% ↓	6.66%	5.46%

SERVICES	Total Revenue (GH¢)						Proportion of Revenue	
	2020	2021	2022	2023	2024	% diff in 2024	2023	2024
CT-Scan	1,066,527.00	383,411.00	517,985.00	1,629,277.20	2,408,842.40	47.85%	4.66%	6.01%
X-ray	911,600.00	891,275.70	1,229,191.00	1,581,801.32	1,965,803.70	24.28% ↑	4.52%	4.90%
Dialysis	647,214.07	839,061.50	798,417.00	967,452.00	1,012,184.80	4.62% ↑	2.77%	2.52%
Eye Care	350,939.81	702,666.70	917,873.30	1,276,429.00	954,954.00	25.19% ↓	3.65%	2.38%
Physiotherapy	182,476.84	268,317.44	286,140.08	617,282.00	702,182.96	13.75% ↑	1.76%	1.75%
Ear, Nose & Throat	183,974.37	214,559.44	344,377.11	515,528.00	719,086.06	39.49% ↑	1.47%	1.79%
Dental	206,726.44	247,023.03	390,677.33	470,022.00	740,041.20	57.45% ↑	1.34%	1.85%
Mortuary	313,730.00	329,904.20	316,047.89	320,486.00	405,243.00	26.45% ↑	0.92%	1.01%
Others	285,987.33	321,687.46	2,103,880.87	3,584,729.00	3,619,722.92	0.98% ↑	10.25%	9.02%
Total	15,222,301.98	16,111,562.05	22,792,949.98	34,979,679.32	40,108,191.51	14.66% ↑	100.00%	

5.4 EXPENDITURE PERFORMANCE

The hospital's total expenditure continued to rise in 2024, increasing by 36.2%, (from GH¢ 169,809,951.78 to GH¢ 231,263,251.06 in 2024). This was relatively higher than the 27.4% increase recorded in 2023, when the total expenditure rose from GH¢ 133,244,009.04 in 2022 to GH¢ 169,809,951.78 in 2023. This sharp increase was mainly driven by rising cost of medical supplies, under recovery in the provision of dialysis service coupled with delay payments for services rendered, increased operational and overhead expenses such as fuel. Additionally, capital investments (Capex) during the review period rose significantly by 547.2% (from GH¢ 2,054,599.56 in 2023 to GH¢ 13,297,939.82 in 2024). GOG compensation and IGF compensation also increased by 31.0% and 42.5% respectively within the same period. The increase in IGF compensation expenditure could be driven by the payment of 13th - month salary of staff. Also, the rise in the GOG compensation expenditure could be influenced by the marginal increase of 0.36% in staff strength (from 1942 in 2023 to 1949 in 2024).

In terms of expenditure composition, 68.60% (GH¢ 158,642,415.90) was from compensation (covering both GOG and IGF). Goods & Services accounted for 25.65% (GH¢ 59,322,895.34) while investments (Capex) constituted 5.75% (GH¢ 13,297,939.82).

Further, overall expenditure budget execution in 2024 reached 149.2% of the approved budget (GH¢ 231,263,251.06 actual against GH¢ 154,968,414.49 budgeted). GOG compensation recorded an execution rate of 147.9%, (with GH¢ 152,767,790.97 spent

against a budget of GH¢ 103,273,506.20). This is an increase compared to the 124.2% execution rate in 2023 (GH¢ 116,611,691.71 spent against a budget of GH¢ 93,885,005.68). IGF Compensation expenditure execution rate was 173.5% (with GH¢ 5,874,624.93 spent compared to a budget of GH¢ 3,385,800.00), higher than the 134.0% recorded in 2023 (GH¢ 4,123,325.84 against GH¢ 3,078,000.00). Goods & Services expenditure execution rate declined to 123.7% (GH¢ 59,322,895.34 against GH¢ 47,952,000.00), from 181.4% in 2023 (GH¢ 47,020,334.67 against GH¢ 25,920,000.00). Investment (Capex) expenditure budget execution rate on the other hand recorded the highest variance, with GH¢ 13,297,939.82 spent against a budget of GH¢ 357,108.29, resulting in a significant higher execution rate of 3723.8%. Figure 5.4.1 and Table 5.4.1 to Table 5.4.2 provide details of the analysis.

Table 5.4. 1: Composition of Expenditure from 2020 to 2024

Expenditure Line	2020	2021	2022	2023	2024	Remarks
GOG Compensation)	70,106,668.84	79,407,405.56	98,448,203.54	116,611,691.71	152,767,790.97	31.0% incr
IGF Compensation	2,358,342.86	2,264,144.25	2,873,897.53	4,123,325.84	5,874,624.93	42.5% incr
Goods & Services	22,564,880.80	22,840,421.30	31,598,000.23	47,020,334.67	59,322,895.34	26.2% incr
Investment (Capex)	638,919.10	560,721.60	323,907.74	2,054,599.56	13,297,939.82	547.2% incr
Total	95,668,811.60	105,072,692.71	133,244,009.04	169,809,951.78	231,263,251.06	36.2% incr

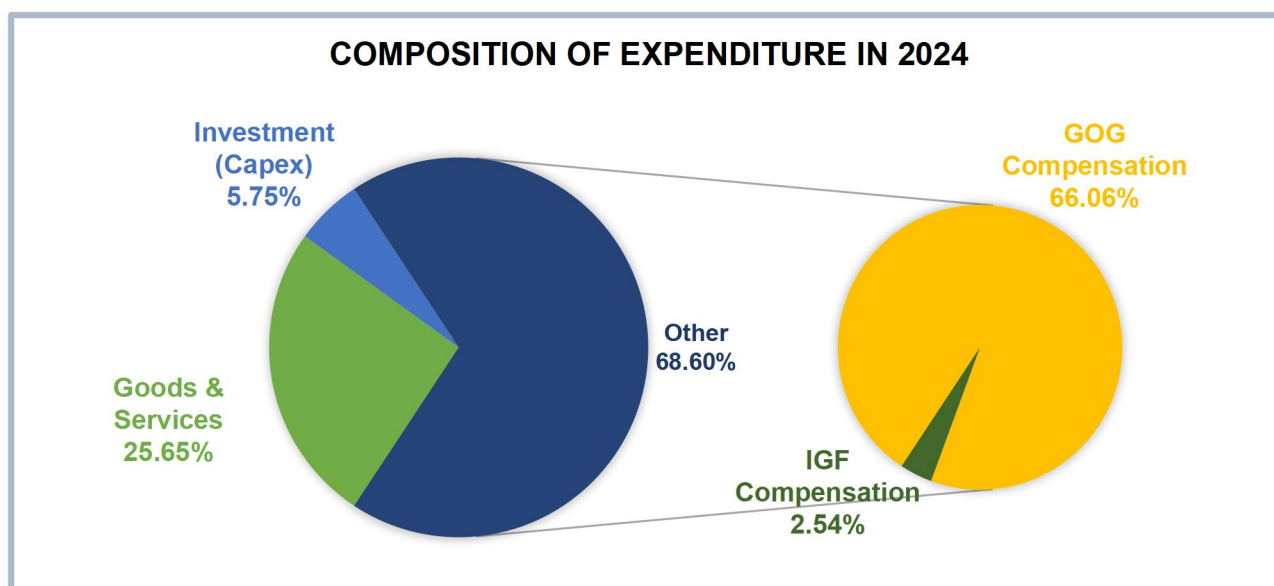


Figure 5.4. 1: Composition of Expenditure in 2024

Table 5.4. 2: Expenditure Budget Execution

Expenditure Line	2020			2021			2022			2023			2024		
	Budget (GH¢)	Actual	% execution	Budget	Actual	% execution	budget	Actual	% execution	Budget	Actual	% execution	Budget	Actual	% execution
GOG Compensation)	62,530,568.00	70,106,668.84	112.1%	73436655	79,407,405.56	108.1%	65,926,540.50	98,448,203.54	149.3%	93,885,005.68	116,611,691.71	124.2%	103,273,506.20	152,767,790.97	147.9%
IGF Compensation	2,408,362.87	2,358,342.86	97.9%	2233434.25	2,264,144.25	101.4%	2,959,634.23	2,873,897.53	97.1%	3,078,000.00	4,123,325.84	134.0%	3,385,800.00	5,874,624.93	173.5%
Goods & Services	21,885,359.16	22,564,880.00	103.1%	20646545.71	22,840,421.30	110.6%	27,831,110.17	31,598,000.23	113.5%	25,920,000.00	47,020,334.67	181.4%	47,952,000.00	59,322,895.34	123.7%
Investment (Capex)	639,919.10	638,919.10	99.8%	518861	560,721.60	108.1%	323,907.74	323,907.74	100.0%	340,103.13	2,054,599.56	604.1%	357,108.29	13,297,939.82	372.8%
Total	87,464,209.13	95,668,811.60	109.4%	96,835,495.96	105,072,692.71	108.5%	97,041,192.64	133,244,009.04	137.3%	123,223,108.81	169,809,951.78	137.8%	154,968,414.49	231,263,251.06	149.2%

5.4.1 INTERNALLY GENERATED FUNDS (IGF) EXPENDITURE PERFORMANCE

The hospital's total Internally Generated Funds (IGF) expenditure recorded increment over the five-year period, more than doubling between 2020 and 2024. After a marginal decline of 0.67% in 2021 (from GH¢ 24,832,641.11 in 2020 to GH¢ 24,665,476.40 in 2021), spending surged significantly in subsequent years. In 2024, total IGF expenditure increased by 15%, (from GH¢ 47,883,472.00 in 2023 to GH¢ 55,065,117.56 in 2024). IGF expenditure on services went up by 13% (from GH¢ 37,248,627.77 in 2023 to GH¢ 42,079,273.34 in 2024). Similarly, IGF spent on medicines recorded an increase of 22.1% (from 10,634,844.23 in 2023 to GH¢ 12,985,844.23 in 2024).

With regard to Planned Preventive Maintenance (PPM), the hospital achieved the Teaching Hospital's target of 5% in 2021 (5.4%). Subsequently, the proportion of IGF spent on PPM remain below target, ranging between 3.53% and 3.8%. In spite of this, a moderate improvement was achieved in 2024, with the proportion rising from 3.55% in 2023 to 3.8% in 2024. In absolute terms, PPM expenditure went up by 15.7% (from GH¢ 1,812,909.81 in 2023 to GH¢ 2,098,210.28 in 2024).

Performance under compensation expenditure showed mixed outcomes. The hospital met the Teaching Hospital's 10% target in the proportion of IGF spent on compensation in both 2020 (10.82%) and 2024 (10.65%). However, absolute amount of IGF spent on compensation declined over the years. Despite this, IGF expenditure on compensation increased by 7.8% (from GH¢ 2,233,434.25 in 2023 to GH¢ 2,408,362.87 in 2024).

On the other hand, IGF spent on investment experienced a sharp decline in 2024. The amount dropped by 49.9% from GH¢ 2,054,599.56 in 2023 to GH¢ 1,030,043.66 in 2024. In the same light, the proportion of IGF revenue spent on investment in 2024

reduced from 4.3% in 2023 to 1.9% in 2024. Table 5.4.1.1 and table 5.4.1.2 provides details of the analysis.

Table 5.4.1. 1: IGF Expenditure (GH¢) Highlights

Category	2020	2021	2022	2023	2024	% Change
Services	17,574,513.18	18,472,801.38	22,344,909.49	37,248,627.77	42,079,273.34	13.0% incr
Medicines	7,258,127.93	6,192,675.02	8,451,653.77	10,634,844.23	12,985,844.23	22.1% incr
Total	24,832,641.11	24,665,476.40	30,706,563.26	47,883,472.00	55,065,117.56	15.0% incr

Table 5.4.1. 2: Composition of IGF Expenditure (GH¢)

Indicator	2020	2021	2022	2023	2024	Remarks	Targets	Measurement
Total IGF Expenditure	GH¢ 24,832,641.11	GH¢ 24,665,476.40	GH¢ 30,706,563.26	GH¢ 47,883,472.00	GH¢ 55,065,117.56	15.0% incr	-	Compensation Expenditure + Goods and Services + Investment/ Capital Expenditure
Proportion of IGF revenue spent on PPM	3.80%	5.40%	3.53%	3.55%	3.80%	Incr	THs = 5%	IGF spent on PPM/ Total revenue
Total IGF revenue spent on PPM	GH¢ 845,488.00	GH¢ 1,316,705.44	GH¢ 1,131,764.06	GH¢ 1,812,909.81	GH¢ 2,098,210.28	15.7% incr	-	
Proportion IGF Paid as Compensation	10.82%	7.80%	8.93%	8.55%	10.65%	Incr	THs = 10%	IGF paid as compensation/ total revenue
Total IGF Paid as Compensation	GH¢ 5,874,624.93	GH¢ 4,143,680.99	GH¢ 2,866,897.00	GH¢ 2,233,434.25	GH¢ 2,408,362.87	7.8% incr	-	
Proportion of IGF revenue spent on investment	2.6%	2.2%	1.1%	4.3%	1.9%	decr	-	

Indicator	2020	2021	2022	2023	2024	Remarks	Targets	Measurement
Total IGF spent on investment	GH¢ 639,919.10	GH¢ 518,861.00	GH¢ 323,907.00	GH¢ 2,054,599.56	GH¢ 1,030,043.66	49.9% decr	-	

5.5 STATUS OF NHIS CLAIMS

The hospital submitted a total claim of GH¢ 25,415,965.98 to the National Health Insurance Authority (NHIA) for reimbursement in 2024, representing 10.0% increase compared to the GH¢ 23,112,550.68 submitted in 2023. Despite the increase in claims submitted, total NHIA reimbursement (claims paid) received declined by 9.7% (from GH¢ 25,097,766.46 in 2023 to GH¢ 22,667,854.18 in 2024), following a significant increase of 146% in 2023 (from GH¢10,197,212.92 in 2022 to GH¢25,097,766.46 in 2023). Also, the outstanding NHIA claims improved in 2024, decreasing by 11.5% (from GH¢ 10,069,763.40 in 2023 to GH¢ 8,913,621.24 in 2024). In terms of revenue structure, the ratio of cash revenue to NHIA reimbursement went up to 1.914:1 in 2024, compared to 0.995:1 in 2023. The outstanding number of months for NHIA reimbursement remained at 5 months as at the close of 2023, better than the 9 months recorded in 2022, as shown in table 5.5.1 below.

Table 5.5. 1: Status of NHIS Claims

INDICATOR	2020	2021	2022	2023	2024	REMARKS	TARGETS	MEASUREMENT
Total claims submitted	11,368,136	12,304,287.46	15,457,168.44	23,112,550.68	25,415,965.98	10.0% incr		
Claims Submitted NHIS	11,368,136	12,304,287.46	15,457,168.44	23,112,550.68	22,836,660.80	1.2% decr	-	
Claims Submitted Corporate & Private HIS	-	-	-	-	2,579,305.18			
Total Claims Paid	12,715,888	10,748,624.26	10,197,212.92	25,097,766.46	22,667,854.18	9.7% decr		
NHIS Claims Reimbursement Rate (submitted claims paid)	11.20%	52.10%	65.97%	108.6%	99.3%	Decr	THs = 75%	Total claims settled/total submission
Ratio Of Cash Revenue to NHIA Reimbursement	0.85:1	1.1:1	1.61:1	0.995:1	1.914:1	Incr		Cash Revenue/ NHIS revenue

INDICATOR	2020	2021	2022	2023	2024	REMARKS	TARGETS	MEASUREMENT
Percentage of NHIA Claims Submitted on Time	100%	100%	100%	100%	100%	Sustained		Total number of claims submitted to NHIS at the end of the ensuing month / Total Number of claims submitted to NHIA by all facilities * 100
Percentage of Rejection on Claims Submitted To NHIS	0%	0%	0%	-	6.16%			Total number of rejected claims received from NHIS / Total Number of claims submitted to NHIA by all facilities * 100
Total Unpaid Claims Bal B/F NHIS	12,643,564	11,416,564.00	6,795,023.88	-	11,502,461.42		-	
<i>Unpaid Claims Bal B/F NHIS</i>	<i>12,643,564</i>	<i>11,416,564</i>	<i>6,795,023.88</i>	<i>-</i>	<i>8,744,814.62</i>		-	
<i>Unpaid Claims Bal B/F Corporate & Private HIS</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>2,757,646.80</i>		-	
Outstanding as at Close (NHIS)	11,416,143	6,795,023.88	12,054,979.92	10,069,763.40	8,913,621.24	11.5% decr	-	
Adjustment for Unrecoverable Claims	-	6,177,203.32	-	-	-		-	
No. of Month Outstanding	6	6	9	5	5		-	

Further, debtors' days fluctuated over the five-year period (2020 -2024), although it consistently remained above the target of 90 days. The debtors' ratio declined from 215 days in 2020 to 126.78 days in 2022. However, it increased to 164.86 days in 2023 and 167.61 days in 2024. In spite of the improvement between 2020 and 2022, the hospital's average collection period remains nearly twice as the target (90 days), indicating a persistent challenge with NHIA reimbursement delays and slow credit recovery from clients.

Similarly, creditors days went up steadily from 182 days in 2020 to 246.64 days in 2024, far exceeding the target of 120 days. This indicates delay in payments to suppliers, a potential attempt to manage cash flow constraints arising from the delay in NHIA reimbursements. However, this may affect the hospital's relationship with suppliers which could affect procurement of essential goods if suppliers become strict on credit terms. Details of the analysis are highlighted in table 5.5.2 below

Table 5.5. 2: Trend Analysis of Debtors' and Creditors' Days (2020-2024)

INDICATOR	2020	2021	2022	2023	2024	REMARKS	TARGETS	MEASUREMENT
Debtors' days	215.00	194.00	126.78	164.86	167.61	Incr	THs = 90	Debtors / credit revenue * 365
Creditors days	182.00	224.80	233.77	234.37	246.64	Incr	THs = 120	Creditors / total purchases

5.6 ASSETS AND LIABILITIES

The assessment of the hospital's financial from 2020 to 2024 reveals a steady improvement in asset growth, prudent liability management and significant strengthening of its overall net worth. Total assets increased substantially from GH¢ 22,437,451.03 in 2020 to GH¢ 615,152,172.89 in 2024, mainly driven by the increase in the non-current assets.

Current assets showed a consistent upward trend during the review period, rising by 17.1% from GH¢ 24,612,448.78 in 2023 to GH¢ 28,825,329.77 in 2024. Cash and cash equivalents increased from GH¢ 763,698.88 in 2020 to GH¢ 2,488,171.72 in 2023, before recording a marginal decline by 3.6% to GH¢ 2,398,501.93 in 2024. This reduction may be attributed to higher operational expenditures or delays in reimbursement.

Account receivables went up by 12% (from GH¢ 11,416,143.98 in 2020 to GH¢ 11,884,898.27), suggesting possible delay in debt recovery from clients and partners.

Staff receivables showed modest fluctuations since 2021, rising slightly by 15.6% (from GH¢ 17,920.00 in 2023 to GH¢ 20,720.00 in 2023). Similarly, inventory levels increased from GH¢ 11,494,653.28 in 2023 to GH¢ 14,521,209.56 in 2024, representing a 26.3% growth.

Non-current assets showed significant improvement over the period. From a consistent increase between 2020 (GH¢ 3,755,238.78) and 2023 (GH¢ 6,694,467.68), the hospital recorded a substantial rise to GH¢ 586,326,843.12 in 2024. This growth is likely attributed to various construction projects, such as the construction of the eye surgical centre and the infectious disease centre.

In terms of liabilities, the hospital recorded a consistent increase from GH¢ 9,442,470.60 in 2020 to GH¢ 15,512,010.07 in 2023, and a further 3.3% rise to GH¢ 16,020,716.12 in 2024. Account payables went up slightly by 0.43% between 2023 (GH¢ 14,544,922.43) and 2024 (GH¢ 14,607,296.17). Trust monies increased significantly by 46.2% (from GH¢ 967,087.64 in 2023 to GH¢ 1,413,419.95 in 2024).

Further, the hospital's net asset declined from 12,996,026.25 in 2020 to 9,341,137.84 in 2022, indicating the impact of expenditure pressures or previous deficit. However, it went up to 15,794,906.39 in 2023, indicating financial recovery and efficient resource utilisation. This growth was financed primarily by a rise in the accumulated fund, which increased significantly from 9,341,137.84 in 2023 to 582,475,638.95 in 2024. The surplus of 16,655,817.82 in 2024 further demonstrates improved operational efficiency and resource mobilisation.

Details of the asset and liability position are presented in Table 5.6.1 below

Table 5.6. 1: Trend of Assets and Liabilities

Indicator	2020	2021	2022	2023	2024	Remarks
ASSETS						
Current Assets:						
Cash & Cash Equivalent	763,698.88	1,073,813.65	2,097,224.17	2,488,171.72	2,398,501.93	3.6% decr
Accounts Receivables	11,416,143.98	8,873,138.10	12,412,453.51	10,611,703.78	11,884,898.27	12.0% incr
Staff Receivables	-	47,200	29,750.00	17,920.00	20,720.00	15.6% incr
Inventories	6,445,365.39	7,357,920.65	7,357,920.65	11,494,653.28	14,521,209.56	26.3% incr
Total Current Assets (GH¢)	18,682,212.25	17,352,072.4	21,897,348.33	24,612,448.78	28,825,329.77	17.1% incr
Non-Current Assets						
Property, Plant & Equipment	3,755,238.78	4,315,960.38	4,639,868.12	6,694,467.68	586,326,843.12	Incr
Total Assets	22,437,451.03	21,668,032.78	26,537,216.45	31,306,916.46	615,152,172.89	Incr

Indicator	2020	2021	2022	2023	2024	Remarks
LIABILITIES						
Current Liabilities						
Account Payables	9,337,117.28	11,774,418.76	15,898,019.24	14,544,922.43	14,607,296.17	0.43% incr
Trust Monies	105,353.32	234,448.08	1,298,059.37	967,087.64	1,413,419.95	46.2% incr
Total Current Liabilities	9,442,470.60	12,008,866.84	17,196,078.61	15,512,010.07	16,020,716.12	3.3% incr
Net Assets						
Total Net Assets	12,996,026.25	9,659,165.94	9,341,137.84	15,794,906.39	-	
Financed By						
Accumulated Fund B/F	14,247,417.29	12,996,026.25	9,659,165.94	9,341,137.84	582,475,638.95	Incr
Surplus /Deficit Recorded	-1,251,391.05	1,025,181.82	1,407,844.68	-	16,655,817.82	Incr
Accumulated Fund Carried Over	12,996,026.25	9,659,165.94	9,341,137.84	15,794,906.39	-	

5.7 CASH FLOWS

Generally, the hospital's overall cash flow performance showed substantial increase in both inflows and outflows over the five-year (2020-2024) period. Total cash inflows went up from GH¢ 55,655,156.13 in 2023 to GH¢ 66,045,699.97 in 2024, representing an 18.7% increase. This was largely driven by the out-of-pocket (OOP) payments, which recorded an increase of 73.7% (from GH¢ 24,978,870.30 in 2023 to GH¢ 43,377,845.79 in 2024). In contrast, NHIA reimbursement saw a decline of 9.7% in 2024 (from GH¢ 25,097,766.46 in 2023 to GH¢ 22,667,854.18 in 2024), following a substantial 146.1% increase recorded in 2023 (from GH¢ 10,197,212.92 in 2022 to GH¢ 25,097,766.46 in 2023).

In terms of the expenditure, the hospital in 2023 recorded an increase of 83.8% in the total cash outflows (from GH¢ 30,086,216.16 in 2022 to GH¢ 55,655,156.13 in 2023). However, a marginal reduction of 2.3% was seen in 2024 (from GH¢ 55,655,156.13 in 2023 to GH¢ 54,035,073.90 in 2024). IGF compensation went up by 43.5%, (rising from GH¢ 4,093,629.04 in 2023 to GH¢ 5,874,624.93 in 2024), indicating the rising personnel-related obligations towards staff. Goods and services continued to account for the largest share of total cash outflows, increasing from GH¢ 43,875,045.86 in 2023 to GH¢ 48,160,448.97 in 2024, reflecting a 9.8% rise, likely due to increase in inflation, high cost of medical supplies and planned preventive maintenance (PPM), etc. Also, the hospital recorded a net cash outflow of GH¢ 12,010,626.07 in 2024, representing a

386% compared to GH¢ 2,471,121.71 in 2023. Details are presented in Table 5.7.1 below.

Table 5.7. 1: Cash Flow

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Cash Inflow						
Out of Pocket	10,764,780.42	11,745,526.38	16,368,336.74	24,978,870.30	43,377,845.79	73.7% incr
NHIA Re-Imbursement	12,715,888.45	10,748,624.26	10,197,212.92	25,097,766.46	22,667,854.18	9.7% decr
Other Receipts	1,025,610.80	1,578,033.91	4,069,441.44	5,511,699.37	-	-
Total Inflows:	24,506,279.67	24,072,184.55	30,634,991.1	55,655,156.13	66,045,699.97	18.7% incr
Cash Outflows:						
IGF Compensation	2,357,163.82	2,173,839.80	2,773,865.54	4,093,629.04	5,874,624.93	43.5% incr
Goods/Services	22,048,723.65	20,176,117.65	24,235,782.43	43,875,045.86	48,160,448.97	9.8% incr
Salary Advance	30,900.00	45,200	-	-	-	
Trust Payments	-	-	2,925,141.64	5,606,432.58	-	
GRA-Tax Payment	-	543,820.51	151,426.55	1,709,669.95	-	
Total Outflow	24,436,787.47	23,779,567.58	30,086,216.16	55,284,644.56	54,035,073.90	2.3% decr
Net Cash Outflow	69,492.20	292,616.97	2,085,220.65	2,471,121.71	12,010,626.07	386% incr

CHAPTER SIX

COLLABORATION AND SUPPORT

6.1 INTRODUCTION

Collaborations remain a key strategy for the hospital in its effort to provide quality healthcare services. The hospital engages in both local and international partnerships aimed at enhancing the service delivery, strengthening staff capacity and expanding access to specialist care. These engagements reflect the hospital's continued commitment to working across sectors and borders to improve health outcomes, optimize the use of resources and drive innovation in healthcare

This chapter highlights the key collaborations and partnerships undertaken by the hospital as well as the corresponding support provided to the institution in 2024.

6.2 LOCAL COLLABORATIONS

In 2024, the hospital engaged with a range of local partners including government agencies, health facilities, academic entities and philanthropist. These collaborations resulted in knowledge sharing, staff training and improved referral systems. The under listed organizations in Table 6.2.1 below were the major local collaborators during the period.

Table 6.2. 1: List of Local Collaborators

No.	Collaborator/ Partners	Nature of Collaboration	Key Support in 2024
1.	Ministry of Health	Policy alignment and resource support	• Supplied copies each of key national policy documents, including the National Medical Oxygen Policy, Ghana Health Infrastructure Standards and National Surgical, Obstetric and Anaesthesia Plan (NSOAP) • Donated nine (9) industrial laundry equipment to enhance hospital laundry operations; ○ Two (2) Laundry Dryers ○ Two (2) Washing Machines ○ One (1) Centrifugal Hydro Extractor (Spinner) ○ Two (2) Stain Removers ○ One (1) Roller Ironer ○ One (1) Steam Ironers • Provided 97 units of essential clinical equipment including; 40 Ambulatory Vital Sign Monitors with stand, 5 examination couches 2 operating table with lamps and 50 four-fold privacy screens • Supplied five (5) motorbikes with helmets • Donated a 10-seater link chair to improve reception seating capacity

No.	Collaborator/ Partners	Nature of Collaboration	Key Support in 2024
2.	Ghana Health Service (Regional Health Directorate)	Referral coordination and clinical mentorship	- Strengthened referral pathways - Collaborated to provide mentorship support in maternal and newborn health, improving quality and continuity of care.
3.	University of Cape Coast School & School of Medical Science	Clinical training, research support and internship placement	Supported the training of medical, nursing and allied health students, granted ethical approval to researches and conducted collaborative researches
4.	Operation-Smile Ghana	Reconstructive and maxillofacial surgical support	- Sponsored the training of two (2) nurses undergoing training in MSc Speech and Language Therapy to strengthen speech and language service delivery - Funded and coordinated free cleft lip and palate surgical interventions, resulting in 54 beneficiaries receiving life-enhancing reconstructive procedures
5.	Kintampo Health Research Centre (KHRC)	Research partnership and field implementation	Collaborated on the Malaria Vaccine Pilot Evaluation (MVPE) programme, supporting data collection, monitoring and reporting
6.	Noguchi Memorial Institute for Medical Research (NMIMR)	Laboratory and public health research collaboration	Partnered to conduct HINI influenza surveillance, strengthening infectious disease monitoring and laboratory response capacity
7.	Ghana Police Service	Safety, security and emergency response coordination	- Enhanced security measures to safeguard staff, patients and assets - Strengthened emergency response procedures through coordinated communication and rapid support mechanisms
8.	Ghana Prisons Service	Facility supports and community integration engagement	Supported the engagement of selected inmates in supervised facility maintenance and grounds work as part of rehabilitation and community service programming
9.	Ceven Singing Group	Charitable support	Donated 20 mattresses to support patient care
10	Philanthropists	Charitable support, Equipment and consumable donations	Donated the following; wheelchairs, toys, learning materials, as well as essential medical consumables to support patient care

6.3 INTERNATIONAL COLLABORATIONS

The hospital in 2024 also strengthened its partnerships with international institutions and organizations that supported capacity-building, subspecialty development, equipment enhancement and research collaborations. Table 6.3.1 provide a list of internationals that CCTH collaborators with in 2024.

Table 6.3. 1: List of International Collaborators

No.	Collaborator/ Partner	Country	Nature of Collaboration	Key Support in 2024
1.	Korea Federation of International Health (KOFIH)	Republic of South Korea	Health systems strengthening & specialized surgical capacity building	- Supported the establishment of laparoscopic surgical services at CCTH through the training of 17 staff (including surgeons, anaesthetists, biomedical engineers, etc.) and the donation of a laparoscopic tower and accessories - Sponsored the fellowship training of selected staff in Health Economics, etc.
2.	Himalayan Cataract Project/ National Cataract Outreach Programme	United State of America	Cataract surgical campaigns	Supported and funded community-based cataract screening and surgeries. Screened 8,755 people and performed cataract surgeries for 934 people
3.	The Czech Republic Governmental Medical Program (MEDEVAC)	Czech Republic	Surgical missions	Collaborated to perform 51 free orthopaedic surgeries and 105 plastic surgeries
4.	International Healthcare Volunteers.	United State of America	Surgical missions	Collaborated to perform 10 obstetrics and gynaecological surgeries
5.	Phoenix Children's Hospital & Mayo Clinic Medical School, Arizona, USA	Arizona, USA	Paediatric sub-specialty and Surgical missions	Provided paediatric clinical mentorship and collaborated to perform ENT 19 surgeries
6.	Sisters Organizing and Advancing Recycling (SOAR)	United State of America	Environmental protection	Donated recycling bins for waste segregation.

No.	Collaborator/ Partner	Country	Nature of Collaboration	Key Support in 2024
7.	Schritt Furschritt (Step by step)	Germany	Environmental protection	Donated the following; • Recycling bins for waste segregation. • Portable physiotherapy equipment and tools
8.	Philanthropists	Switzerland	Charitable support, Equipment and consumable donations	Donated assorted physiotherapy items.

SECTION 3

CHAPTER SEVEN

OUTPATIENT/FAMILY MEDICINE & POLYCLINIC SUB-BMC

7.1 BACKGROUND

This Sub-BMC serves as the primary entry for patients seeking general healthcare services at the hospital and provides comprehensive primary care including early diagnosis, management of acute and chronic conditions, preventive health services and continuity of care for patients across all ages. The Sub-BMC also ensures appropriate referrals and coordination with specialist departments when advanced or multidisciplinary care is required.

Services are delivered at both the Polyclinic, which manages general outpatient and primary care cases, and the Main Hospital, where Family Medicine specialists provide advanced outpatient and follow-up services. In addition to general outpatient consultations, the Sub-BMC hosts several specialized clinics in collaboration with clinical specialists across the hospital. The Sub-BMC is managed by a five-member team responsible for planning, supervision, and performance monitoring to ensure high-quality service delivery, operational efficiency and continuous improvement in patient care.

7.2 SERVICES RENDERED

General Outpatient Services

- Polyclinic (General Outpatient and Primary Care Services)

Specialised Outpatient Clinics

- Diabetes Clinic
- Hypertension Clinic
- Asthma Clinic
- Adolescent Clinic

Additional Services

- Wound dressing and minor procedures

7.3 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 7.3. 1: Summary of the Family Medicine's Sub-BMC's 2024 Annual Performance under the Strategic Objectives

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2020	2021	2022	2023	2024	Target	Remarks
Total OPD Attendance	17,385	19,046	17,068	16,404	23,274	-	25.8% incr.
OPD cases seen per doctor	-	1:2,381	1:2,845	1:1,823	1:2,909	-	Increased
Number of Doctors	-	8	6	9	8	-	11.1% decr
Total FM specialist OPD Attendance	9,784	9,982	10,135	9,509	9,325	-	1.94% decr
OPD cases seen per Specialists	-	1:3327	1:10135	1:4755	1:4,663	-	Decreased
Number of Specialists	-	3	1	2	2	-	5 Specialists in 2024. However, 3 were on study leave with 2 actively providing service.
The Polyclinic successfully transitioned to providing full 12-hour (7am to 7 pm) daily services despite operational and staffing challenges							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Impact	2020	2021	2022	2023	2024	Target	Remarks
Percentage of clients satisfied	93.4%	84.3%	82.4%	79.2%	80.1%	95%	Improved but target was not met
Clinical effectiveness KPI metrics across multiple conditions were largely unmet due to clinical non-compliance, limited laboratory services during off-hours and patient non-adherence to treatment protocols							
Created a priority desk at the specialist OPD to give urgent attention to clients who need immediate attention							
Enhanced staff-patient communication through;							
- The conduct of daily health talks and address of patients on issues affecting service delivery - Adherence to formal communication channels for clarity and accountability - Sub-BMC Management engagement to discuss and resolve concerns promptly effectively. - The use of multiple communication platforms, including Sub-BMC WhatsApp group to relay information to staff							
The average waiting time at the Polyclinic went up from 79.4 minutes (1.32 hours) in 2023 to 91.51 minutes (1.53 hours) in 2024 despite some monthly variations							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
Procured key equipment, including 5 swivel chairs, 3 refrigerators (for the Laboratory, Pharmacy and Administration), 4 air conditioners, 1 Ultrasound machine, a UPS and a desktop computer							
Commenced ultrasound diagnostic services at the Polyclinic							
Received a donated wheelchair to support mobility							
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM							
4.1: Governance Related Performance							
Organised and conducted one general staff meeting to discuss institutional and Sub-BMC updates and promote team engagement							
Held four management meetings to review operational progress, make informed decisions and coordinate the Sub-BMC's activities							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
4.2: Human Resource Related Performance
The following staff were assigned to the Sub-BMC; one Specialist, one Medical Officer, one Physician Assistant and one Accountant
All staff were validated to ensure accuracy in payroll processing and alignment with attendance records
Appraised all staff
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
Six continuous KPI operational researches were conducted on Malaria test, Urinary Tract Infection (UTI), Pneumonia, Diabetes Mellitus (DM), Hypertension, and Anaemia
Three continuous quantitative studies were conducted on Patient Safety Indicators (PSI), Patient Wait Time and Patient Net Promoter Score (NPS)
One qualitative staff satisfaction survey was conducted
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Three community medical outreaches were conducted to commemorate the World Hypertension and World Diabetes Day in selected schools near CCTH, Moree and Abura Dunkwa with a total of 1,445 people benefiting

7.4 CLINICAL ATTENDANCE

The total Family Medicine OPD attendance went up in 2024 by 25.8% (from 25,913 in 2023 to 32,599 in 2024). The General Outpatient (Polyclinic) recorded a rise in patient number, increasing by 41.88% (from 16,404 in 2023 to 23,274 in 2024). Total attendance at the Family Medicine specialist clinics however declined by 1.9% (from 9,509 in 2023 to 9,325 in 2024). Despite the decline, attendance at the individual specialised clinics showed mixed performance. The diabetes clinic saw a marginal reduction of 0.82% (from 8,156 in 2023 to 8,089 in 2024). Equally, the Hypertension clinic declined by 39.89% (from 509 in 2023 to 306 in 2024). On the other hand, the Adolescent clinic recorded an increase of 46.36% (from 110 in 2023 to 161) while the Asthma clinic recorded a modest increase of 4.8% (from 734 in 2023 to 769 in 2024). Further in 2024, a total of 1,614 cases were referred from the Polyclinic to various Specialists clinic for further management. Figure 7.4.1 and Table 7.4.1 below provide details of the analysis.

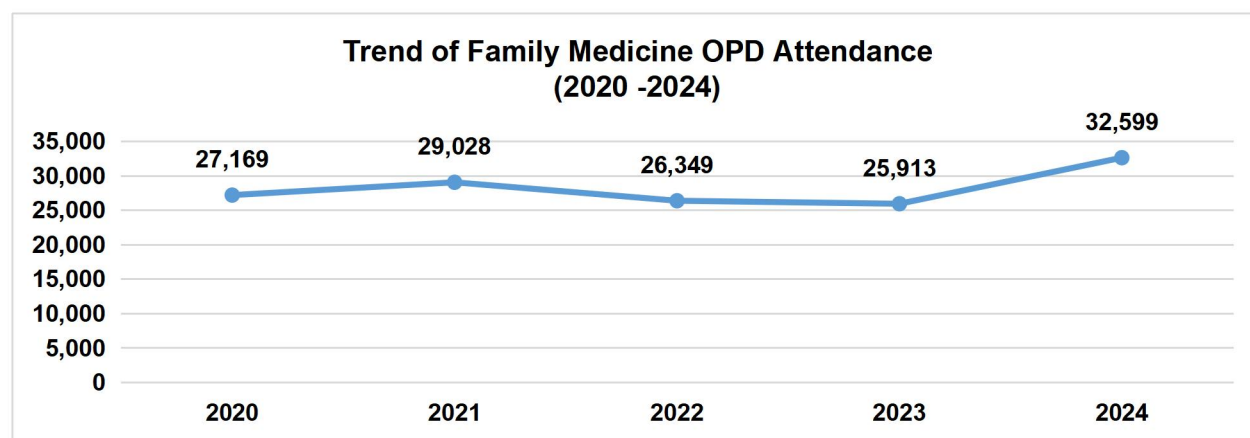


Figure 7.4. 1: A Five-Year Trend of Total Family Medicine OPD Service Utilization (2020 – 2024)

Table 7.4. 1: Yearly Attendance Trends in Family Medicine Service Utilization (2020-2024)

CLINICS	2020	2021	2022	2023	2024	REMARKS
General Outpatient (Polyclinic)	17,385	19,046	17,068	16,404	23,274	41.88% incr
Family Medicine Specialist Clinics						
Diabetes	8,839	9,254	8,428	8,156	8,089	0.82% decr
Asthma	819	626	691	734	769	4.77% incr
Adolescent Clinic	126	102	162	110	161	46.36% incr
Hypertension	-	-	854	509	306	39.89%decr
Total Family Medicine Specialist Clinic Attendance	9,784	9,982	10,135	9,509	9,325	1.9% decr
Total Family Medicine OPD Clinic Attendance	27,169	29,028	27,203	25,913	32,599	25.8% incr

7.5 TOP TEN (10) FAMILY MEDICINE OPD MORBIDITY

Hypertension, a non-communicable disease emerged as the leading cause of morbidity seen at the family medicine OPD with a total of 3712 cases. Gastritis/Peptic Ulcer Disease/Gastro-oesophageal Reflux Disease (GAS/PUD/GERD) was the second recording 1380 cases. infectious diseases such as urinary tract infection (981), respiratory tract infection (771) ranked third and fourth position respectively while tuberculosis recorded the lowest number of cases (16). shown in table 7.5.1 below.

Table 7.5. 1: Top Twenty OPD Morbidities reported at Family Medicine in 2024

Condition	Number of Cases
Hypertension	3712
Gastritis/Peptic Ulcer Disease/Gastro-oesophageal Reflux Disease (GAS/PUD/GERD)	1380
Urinary Tract Infection	981
Respiratory Tract Infection	771
Malaria	480
Diabetes Mellitus	445
Pneumonia	147
Hypertension and CVA	94
Tuberculosis	16

CHAPTER EIGHT

REHABILITATION SERVICES

8.1 BACKGROUND

The hospital's rehabilitation services provide comprehensive and specialised support to patients recovering from injuries, surgical procedures, chronic illnesses and mental health conditions. These services aim to restore or improve physical, psychological and functional capacity, thereby improving patients' overall quality of life. The rehabilitation services offered include Physiotherapy, Clinical Psychology, Community Psychiatry, Speech and Language Therapy as well as Diet & Nutrition Services, all of which work collaboratively to offer holistic, patient centred care across both inpatient and outpatient settings.

8.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

Table 8.2. 1 below provides a summary of the major outputs of the Rehabilitation Services Units during the reporting year aligned with the hospital's six medium-term strategic objectives.

Table 8.2. 1: Summary of the 2024 Annual Performance of Rehabilitation Services Units under the Strategic Objectives

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2020	2021	2022	2023	2024	Target	Remarks
Total rehabilitation services OPD Attendance	7,561	7,647	14,361	12,404	10,673	-	14.0% decr.
Physiotherapy Unit							
Physiotherapy OPD attendance decreased by 17.8% from 9,493 in 2023 to 7,808 in 2024							
Collaborated with Schrtt Furschrtt (Step-by-step) from Germany to manage club foot and the cerebral palsy in children							
A total of 1,192 new clients were attended to at the clinic							
Clinical Psychology Unit							
Provided a total of 717 outpatients with psychological services							
Diet & Nutrition Unit							
A total number of 442 were seen compared to 438 cases in 2023, representing an increase of 0.91%							
Introduced nutrition clinic for paediatric oncology clients in collaboration with the World Childhood Cancer Program, providing specialized nutritional support to 17 Children							
Successfully introduced a monthly nutrition clinic for cleft and lip palate clients in collaboration with Operation Smile, providing targeted nutritional support to an average of 50 clients each session							
A dietitian was assigned to the Antenatal clinic to provide specialised nutritional counselling, where 171 clients received dietary guidance to support maternal and fetal health.							
Conducted continuous follow-up home visits for 30 patients after discharge, to monitor recovery, ensure adherence to treatment plans and provide additional support to enhance outcome.							
Speech & Language Therapy Unit							
The OPD attendance decreased by 19.3% from 556 in 2023 to 449 in 2024							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Clinical Psychology Unit							
Delivered psycho-education and therapy for 717 patients, enhancing mental health support and patient care							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE	
<i>Diet & Nutrition Unit</i>	
Introduced a shift schedule for nutrition officers at the Maternal Health Sub-BMC to strengthen service delivery and coverage	
Organized three (3) presentations across various sub-BMCs to highlight the role of nutrition in patient care on the wards.	
Educated 3,687 clients on breastfeeding and complementary feeding, aimed to improve awareness and practices related to infant and young child nutrition	
Conducted media-based education including; ○ Two (2) educational talks on Television (TV) ○ Seven (7) educational talks on radio	
<i>Speech & Language Therapy Unit</i>	
Developed two (2) protocols to enhance service delivery and standardize care; • Stammering and Treatment protocol • Dysphonia assessment and management protocol)	
Organised Language Stimulation and Awareness Creation on	
5 Autism Awareness with 180 people beneficiaries	
6 Language Stimulation with 193 beneficiaries	
7 Feed baby words with 20 beneficiaries	
Celebrated World Hearing Day with 85 people screened	
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE	
<i>Physiotherapy Unit</i>	
Received a donation of minimum portable physiotherapy equipment and tools from Schrtt Furschrtt (Step-by- step) from Germany	
<i>Speech & Language Therapy Unit</i>	
The Unit received argumentative and alternative communication (AAC) tools, which have enhanced support for clients with limited or non-functional speech.	
Additional therapy materials, including educational toys and learning resources were donated by philanthropic individuals and non-governmental organisations to support patient care and enhance therapeutic interventions	
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM	
<i>Diet & Nutrition Unit</i>	
Appraised all staff	
<i>Speech & Language Therapy Unit</i>	
One staff successfully completed a professional certificate program in Hearing Rehabilitation, enhancing specialised clinical expertise within the unit.	
Two (2) nurses are currently undergoing training in MSc Speech and Language Therapy, sponsored by Operation Smile, which will strengthen the unit's advanced care capabilities.	
One (1) General Nurse was posted to the Unit, expanding the team to support ongoing service delivery	
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING	
<i>5.1 Improve on Research:</i>	
<i>Diet & Nutrition Unit</i>	
Collaborated with tertiary institutions to conduct four (4) researches, contributing to knowledge generation and informed decision-making	
<i>Speech & Language Therapy Unit</i>	
Conducted a study on the knowledge and awareness of autism among health workers at Cape Coast Teaching Hospital	
<i>5.2 Improve on Teaching and Learning:</i>	
<i>Clinical Psychology Unit</i>	

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Supported the training of Twenty-one (21) undergraduate practicum students, six (6) MPhil psychology practicum student from UCC and two (2) licensure-based interns
<i>Diet & Nutrition Unit</i>
Supported the training of 117 students contributing to building their capacity. They include; 97 undergraduates and postgraduates 13 nurses and midwives on rotation 7 technical students
<i>Speech & Language Therapy Unit</i>
Supported the training of eleven (11) ENT students, enhancing their clinical competences and practical skills
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
<i>Diet & Nutrition Unit</i>
Achieved 40% of planned outreach programs
Conducted seven (7) outreaches to communities with 543 people benefitting

8.3 TREND OF REHABILITATION SERVICES UTILIZATION

Utilization of rehabilitation over the five-years (2020-2024) reveals fluctuating trend with a peak of 13,350 in 2022. Total attendance in 2024 marginally declined by 15.6% (from 11,424 in 2023 to 9,639 in 2024). Physiotherapy services remained the highest utilization, accounting for 81.0% (7,808) in 2024. Despite the increase, attendance declined by 17.8% in 2024 (from 9,493 in 2023 to 7,808 in 2024). Diet and nutrition services constituted 4.6% (442), with attendance increasing by 0.91% (from 438 in 2023 to 442 in 2024). Clinical psychology formed 7.41% (717) of the total rehabilitation services utilization, while attendance declined by 1.1% (from 725 in 2023 to 717 in 2024). Speech therapy services accounted for 4.7% (449), with attendance reducing by 19.3% (from 556 in 2023 to 449 in 2024). Community psychiatry services recorded the lowest utilization levels forming 2.3% (223). Attendance went up marginally by 5.2% (from 212 in 2023 to 223 in 2024). Figures 8.3.1, 8.3.2 and Table 8.3.2 below provides details of the analysis.

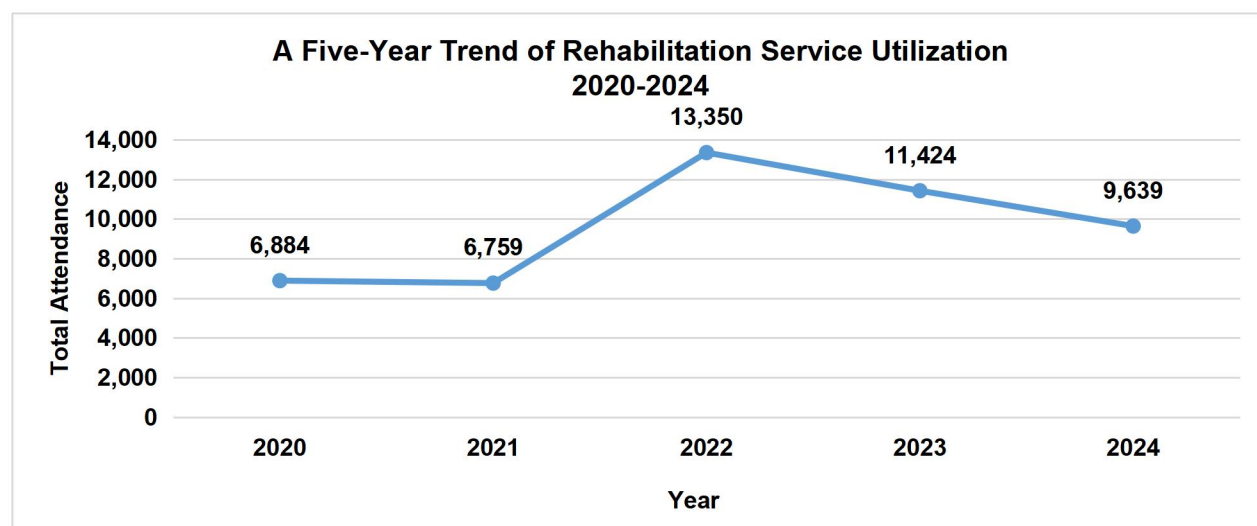


Figure 8.3. 1: A Five-Year Trend of Rehabilitation Service Utilization (2020 – 2024)

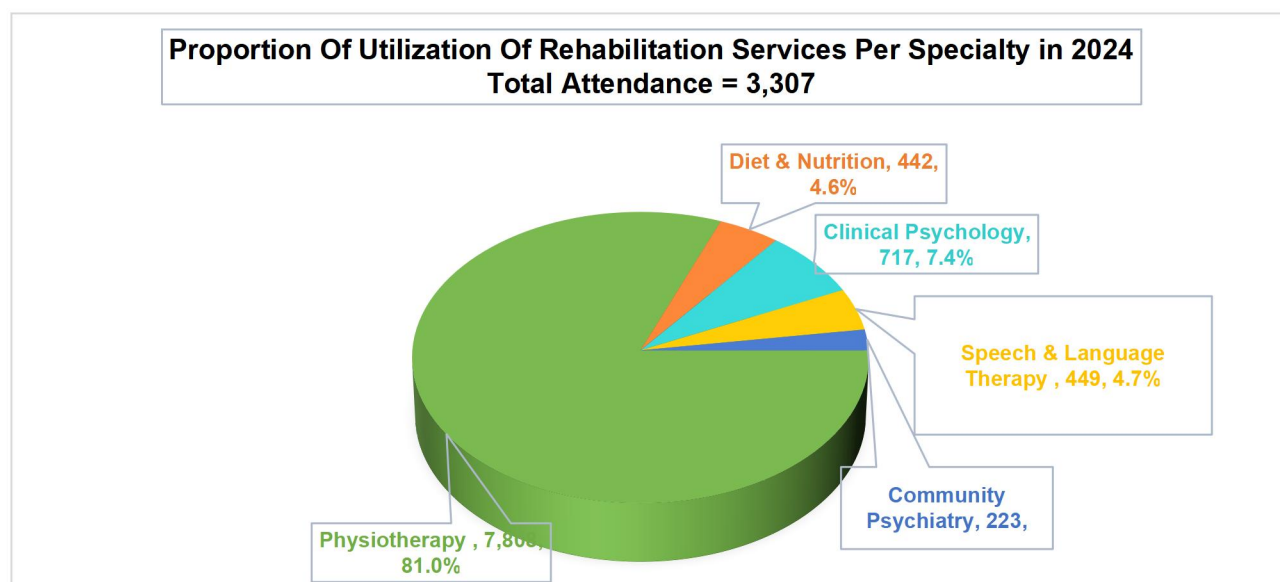


Figure 8.3. 2: Proportion of Utilization of Rehabilitation Services per Specialty in 2024

Table 8.3. 1: Breakdown of Rehabilitation Service Utilization (Attendance) (2020 - 2024)

Rehabilitation Services	2020	2021	2022	2023	2024	Remarks
Diet & Nutrition	393	425	557	438	442	0.91% incr
Clinical Psychology	557	798	428	725	717	1.1% decr
Physiotherapy	5,670	5,055	11,498	9,493	7,808	17.8% decr
Speech & Language Therapy	208	415	642	556	449	19.3% decr
Community Psychiatry	56	66	225	212	223	5.2% incr
Total attendance	6,884	6,759	13,350	11,424	9,639	15.6% decr

8.4 PHYSIOTHERAPY SERVICES UTILIZATION

Physiotherapy attendance over the five-years (2020-2024) showed mixed performance with the highest recorded in 2022 (11,498). Attendance in 2022 decreased by 17.8% from 9,493 in 2023 to 7,808 in 2024). Despite the reduction in 2024, physiotherapy services continue to contribute the largest proportion of rehabilitation services utilization.

Lower back pain accounted for the most frequently treated condition, increasing 26.0% (from 1827 in 2023 to 2,302 in 2024), indicating the growing burden of musculoskeletal conditions. Cerebrovascular Accident (CVA) with hemiplegia, dropped from the first rank in 2022 and 2022 to the second position with 1,795 cases, suggesting the persistent burden of stroke-related disabilities. Paediatric and congenital conditions such as cerebral palsy, erb palsy and club foot improved in utilisation during the period

compared to 2023, suggesting increased awareness of service availability at the institution. Contracture and amputation recorded the least number of cases within the period. Details of the analysis is highlighted in Figure 8.4.1 and table 8.4.1 below.

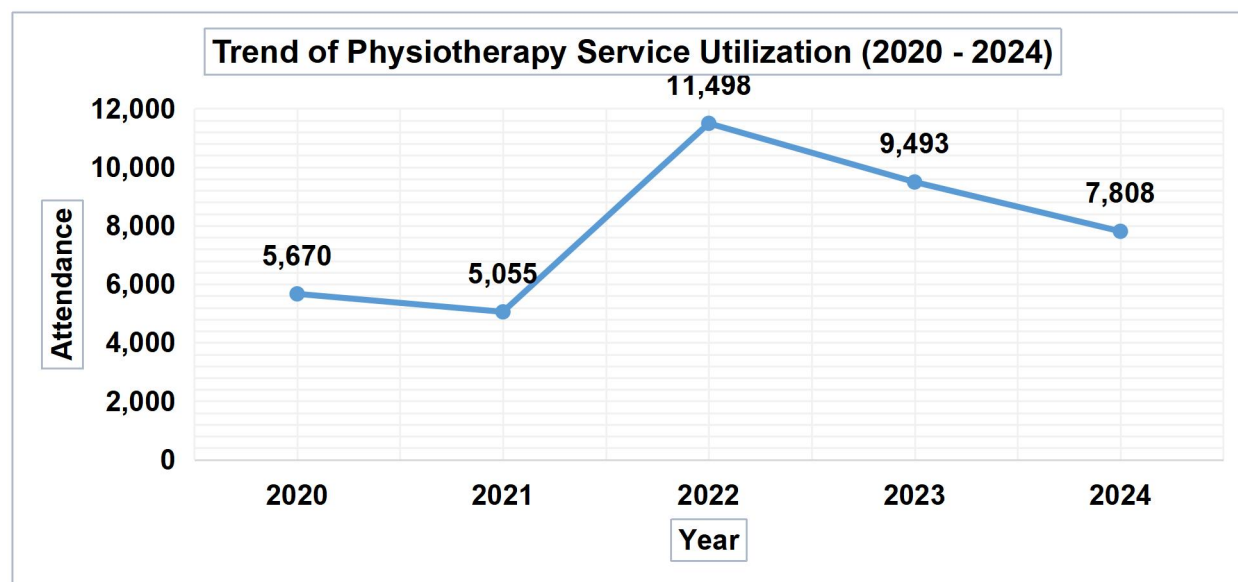


Figure 8.4. 1: Trend of Physiotherapy Service Utilization (2020 - 2024)

Table 8.4. 1: Comparative Analysis of Top Ten Physiotherapy Conditions from 2022 - 2024

2022		2023		2024	
Condition	No.	Condition	No.	Condition	No.
CVA (Hemiplegia)	2,165	CVA (Hemiplegia)	1,858	Low Back	2,302
Spondylosis	1,744	Low Back	1,827	CVA (Hemiplegia)	1,795
Low Back	1,680	Spondylosis	1,453	Spondylosis	1,411
Knee Arthritis	931	Club Foot	866	Club Foot	1,106
Cerebral Palsy	753	Knee Arthritis	630	Cerebral Palsy	901
Club Foot	922	Cerebral Palsy	601	Knee Arthritis	876
Erb's Palsy	243	Erb's Palsy	192	Erb's Palsy	498
Fracture	84	Fracture	100	Fractures	110
Contracture	79	Contracture	76	Contractures	23
Amputation	52	Amputation	41	Amputation	0

8.5 CLINICAL PSYCHOLOGY SERVICES UTILIZATION

The Clinical Psychology Unit provides support to staff, inpatients, and outpatients addressing a range of psychological and emotional concerns. During the review period, attendance decreased marginally by 1.1% (from 725 in 2023 to 717 in 2024). Stress-

related conditions continuously emerged as the most prevalent conditions since 2022, with cases increasing from 99 in 2022 to 134 in 2023, and further to 222 in 2024. This suggests the growing incidence and prevalence of stress related conditions among clients. Anxiety and depression also featured throughout the three years (2022-2024), though their relative rankings fluctuated.

Suicidal ideation and suicidal attempts, appeared consistently among the top ten cases, with a declined number cases observed in 2024. Although relatively lower compared to stress and anxiety, their reappearance in 2024 reveals the critical role of clinical psychology services in early identification, intervention, and risk management.

Detailed analyses are presented in Figures 8.5.1, 8.5.2, and Table 8.5.1.

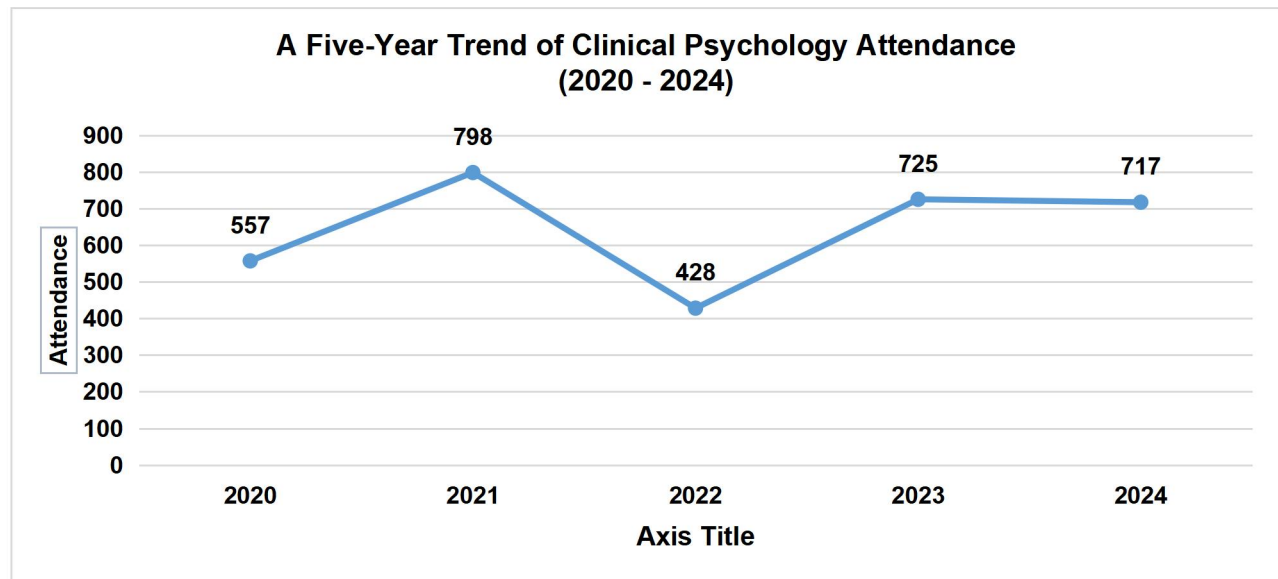


Figure 8.5. 1: A Five-Year Trend of Clinical Psychology Attendance (2020 - 2024)

Table 8.5. 1: Top Clinical Psychology Cases seen (2022-2024)

2022		2023		2024	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Stress	99	Stress	134	Stress	222
Depression	93	Anxiety	117	Anxiety	105
Anxiety	92	Depression	83	Depression	79
Post-traumatic stress disorder	46	Pain management	52	Pain management	24
Addiction	22	Grief	52	Grief	81
Intellectual disability	21	Somatoform disorder	45	Adjustment disorder	24
Pain management	12	Cognitive impairment	28	Non-adherence	18
Low self esteem	9	Suicidal Ideation	18	Suicidal	16

2022		2023		2024	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
				attempt	
Retroviral infections	9	Suicidal attempt	15	Low affect	14
psychosis	7	Alcohol dependency	8	Suicidal ideation	15

8.6 COMMUNITY PSYCHIATRY SERVICES UTILISATION

The trend in the utilization of Community Psychiatry services since the service was introduced in 2020 shows an increasing trend. This trend can be largely attributed to the sustained awareness creation on mental health services hospital through OPD education and regular media engagement (TV and radio) highlighting available services.

Attendance increased from 56 in 2020 and peaked at 225 in 2022, reflecting improved visibility and acceptance of community-based mental health care. Following this peak, attendance declined marginally to 212 in 2023. However, in 2024, attendance went up by 5.2% to 223 in 2024, indicating sustained demand for Community Psychiatry services. Details of the analysis is shown in figure 9.6.1 below.

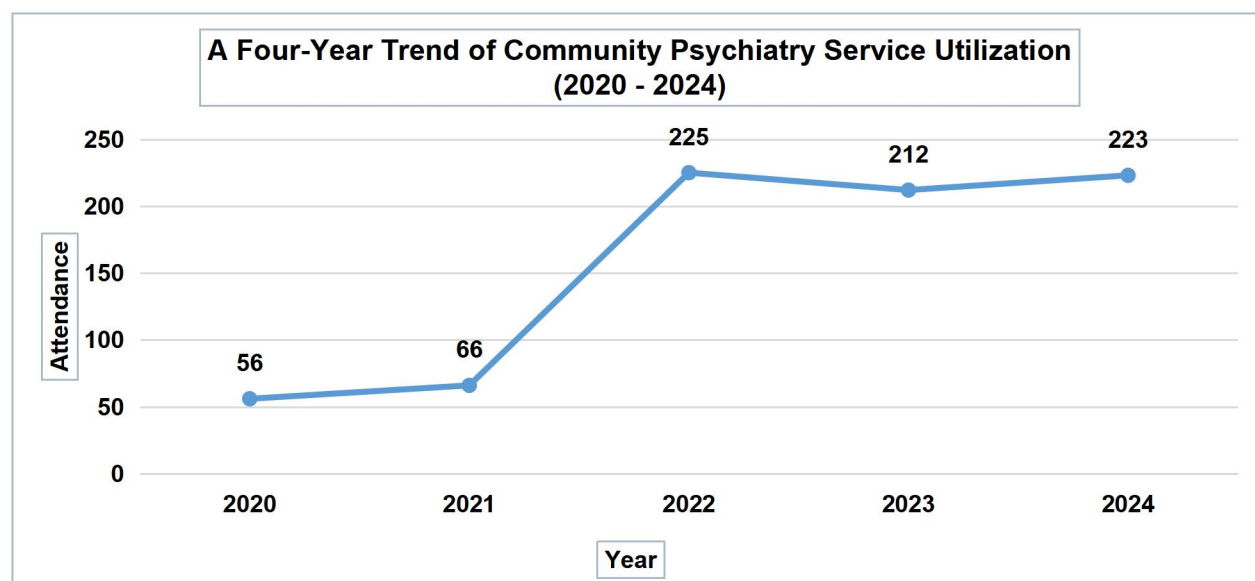


Figure 8.6. 1: A Four-Year Trend of Community Psychiatry Service Utilization (2020 - 2024)

8.7 DIET & NUTRITION SERVICES UTILIZATION

The utilisation of diet and nutrition services over the five-year period (2020-2024) experienced fluctuating trends to a peak of 1568 in 2023, followed by a decline to 1430 in 2023. However, in 2024, total cases managed went up by 3.9% (from 1,420 in 2023 to 1,476 in 2024). Out of the total cases managed in 2024, 66.9% (894) were inpatient

whiles 33.1% (442) were outpatients. Further, the number of OPD cases went up marginally in 2024 by 0.91% (from 438 in 2023 to 442), while inpatient cases managed declined by 8.8% (from 980 in 2023 to 894 in 2024).

Non-communicable diseases (NCDs) continue to be the most predominant condition managed by the Diet and Nutrition Unit. Diabetes mellitus and hypertension remained at the top two accounting for 34.99% and 21.26% cases respectively. Cerebrovascular accidents cases increased from 3.13% in 2023 to 4.91% in 2024. Conditions such as severe acute malnutrition (SAM), underweight, anaemia, and cerebrovascular accidents (CVA) also featured recurrently, indicating a dual burden of malnutrition and chronic disease within the patient population.

Details shown in Figure 8.7.1 to Figure 8.7.4 and Table 8.7.1 below.

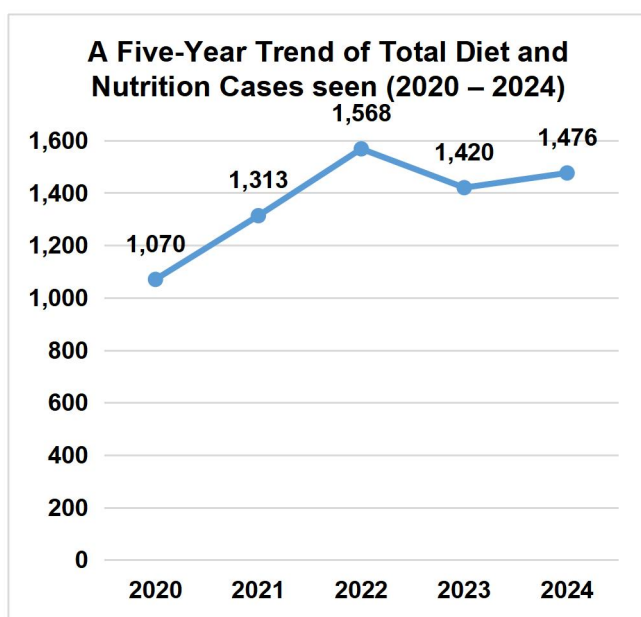


Figure 8.7. 1: A Five-Year Trend of Cases seen at Diet & Nutrition Clinic (2020 – 2024)

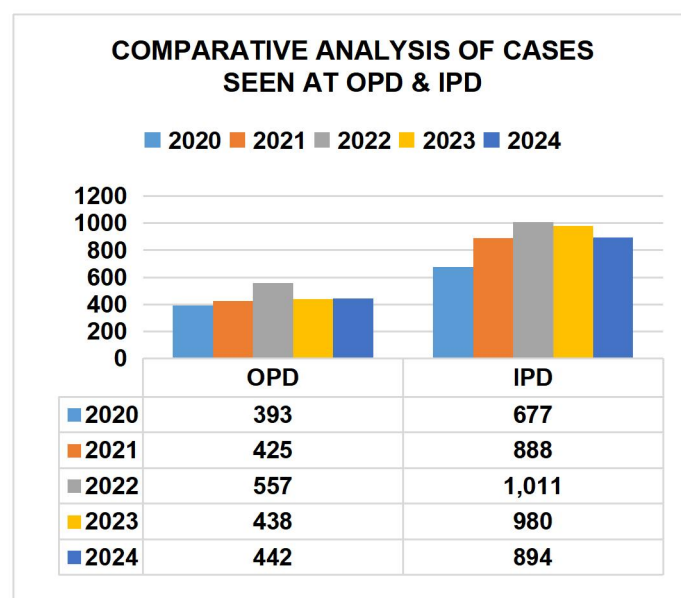


Figure 8.7. 2: Comparative Analysis of Diet & Nutrition Cases Seen at OPD & IPD (2020 – 2024)

Table 8.7. 1: A Five-Year Trend of Diet & Nutrition Cases seen (2020 – 2024)

Indicator	2020	2021	2022	2023	2024	Remarks
Outpatient cases seen	393	425	557	438	442	0.91% incr
Inpatient cases seen	677	888	1,011	980	894	8.8% decr
Total cases seen	1,070	1,313	1,568	1,420	1,476	3.9% incr

Table 8.7. 2: Top Ten Diet & Nutrition Cases (2022 – 2024)

2022		2023		2024	
CONDITION	%	CONDITION	%	CONDITION	%
Diabetes Mellitus	34.98%	Diabetes Mellitus	36.84%	Diabetes Mellitus	34.99%
Hypertension	18.36%	Hypertension	24.84%	Hypertension	21.26%
Obesity	15.18%	Dyslipidaemia	9.45%	Obesity	11.84%
Dyslipidaemia	6.08%	Renal	7.80%	Dyslipidaemia	6.74%
Underweight	4.69%	Underweight	4.25%	Cerebrovascular Accidents	4.91%
Renal	3.50%	Severe Acute Malnutrition	3.45%	Severe Acute Malnutrition (SAM)	4.11%
Anaemia	2.34%	Cerebrovascular Accidents	3.13%	Renal	3.17%
Severe Acute Malnutrition (SAM)	2.34%	Anaemia	2.60%	Underweight	3.12%
Cerebrovascular Accidents (CVA)	1.31%	Liver Diseases	1.80%	Anaemia	3.12%
Surgical	1.23%	HIV	1.38%	Surgical	1.64%

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 7 outreaches from which 543 people benefitted. Details shown in Figure 8.7.1 to Figure 8.7.4 and Table 8.7.1 below.

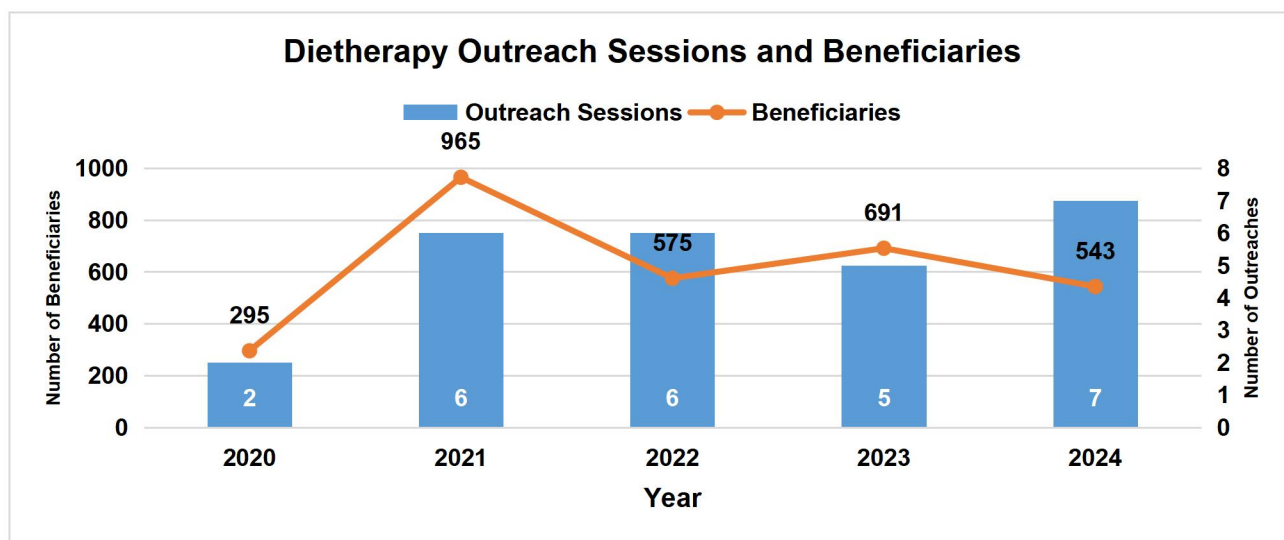


Figure 8.7. 3: Comparative Analysis of Outreaches conducted and Beneficiaries (2020 – 2024)

As one of the strategies 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. The number of beneficiaries went up significantly by 56.2% (from 2,349 in 2023 to 3,669 in 2024), the highest number recorded over the five-year (2020-2024) period, as shown in figure 8.7.4 below.

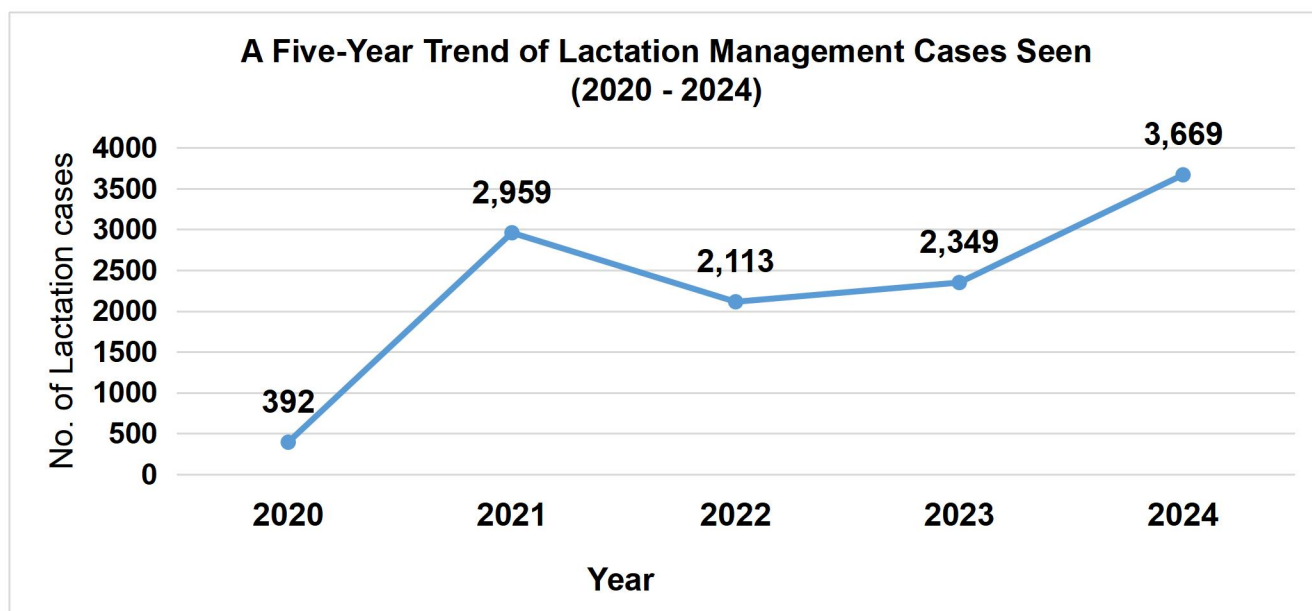


Figure 8.7. 4: A Five-Year Trend of Lactation Management Cases Seen (2020 - 2024)

8.8 SPEECH AND LANGUAGE THERAPY SERVICES UTILISATION

The Speech and Language Therapy (SLT) Unit offers comprehensive treatment, support, and care to paediatric and adult patients experiencing difficulties with communication. Since its introduction in 2018, the hospital has implemented targeted campaigns to promote awareness of the service's availability, utilizing various mass media and social media platforms.

This strategy led to the increase in the utilisation of SLT services over the years. However, in 2024, there was a decline of 19.3% in the utilisation of the service (from 556 in 2023 to 449 in 2024). Further, the number if SLT cases referred to the hospital remained at 19, however, there was a decrease of 7.1% (from 14 in 2023 to 13 in 2024) in the number of SLT cases referred out of the hospital.

The most treated conditions in 2024 were language delay (305), speech delay (61) and aphasia (31), indicating the ongoing demand for services addressing developmental ad acquired communication disorders. Figure 8.8.1, Figure 8.8.2 as well as Table 8.8.1 below illustrate the trend of utilization.

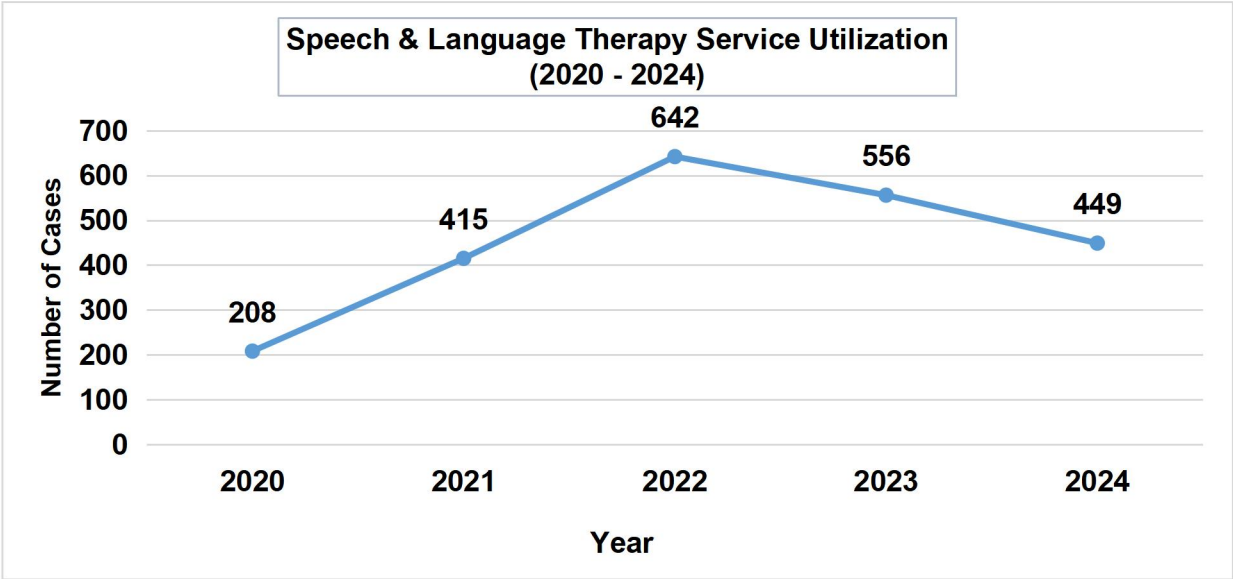


Figure 8.8. 1: A Five-Year Trend of Speech & Language Therapy Service Utilization (2020 - 2024)

Table 8.8. 1: Top Speech & Language Therapy Conditions Seen

2022		2023		2024	
Condition	No.	Condition	No.	Condition	No.
Language Delay / Disorder	373	Language Delay/ Disorder	407	Language Delay/ Disorder	305
Speech Disorder	111	Speech delay	78	Speech Disorder	61

2022		2023		2024	
Condition	No.	Condition	No.	Condition	No.
Autism Spectrum Disorder (ASD)	68	Autism Spectrum Disorder (ASD)	26	Aphasia	31
Aphasia	46	Aphasia	28	Autism Spectrum Disorder (ASD)	17
Dysarthria	21	Stammering	3	Dysarthria	16
Stammering	6	Dysarthria	11	Dysphonia	7
Dysphonia	4	Dysphonia	1	Stammering	7
Dysphagia	2	Others	1	Others	5

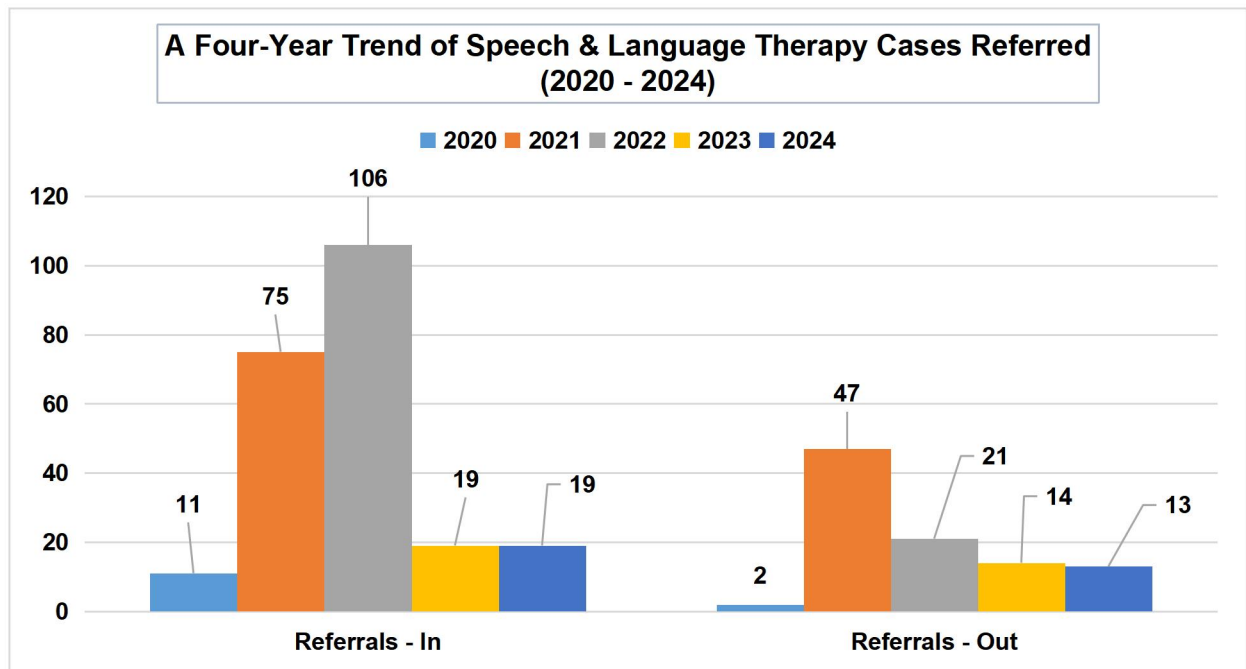


Figure 8.8. 2: A Four-Year Trend of Speech & Language Therapy Cases Referred (2020 - 2024)

Table 8.8. 2: Top Speech & Language Therapy Conditions referred out of the hospital in 2024

Condition	No.
Neuro	6
Occupational Therapy	3
Audiology	3
other	1
Total	13

CHAPTER NINE

ACCIDENT AND EMERGENCY SUB-BMC

9.1 INTRODUCTION

The Accident & Emergency Sub-BMC is one of the integral departments of the hospital, serving as the primary point of contact for patients requiring immediate medical care. As a 24-hour operational unit, the A&E Sub-BMC is responsible for providing comprehensive emergency support through multidisciplinary team of clinicians, nurses and allied health professionals who work collaboratively to ensure prompt, safe and patient-centred care. The Sub-BMC is committed to providing medical training, research, unscheduled care, seeing broad spectrum of conditions,

The scope of services provided by the Sub-BMC are triaging and emergency assessment, acute medical and surgical care, resuscitation, referral and coordination, emergency procedures, observation and short-stay care, etc.

9.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

A summary of the key outputs and outcomes of the A&E sub-BMC in line with the hospital's six medium-term strategic objectives is provided in the table below

Table 9.2. 1: Summary of the 2024 Annual Performance of A&E Sub-BMC under the Strategic Objectives.

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Provided triage and specialist emergency services to 12,290 patients during the reporting period.							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
HOSPITALWIDE LEVEL							
Impact	2020	2021	2022	2023	2024	Target	Remarks
Average length of stay at the Emergency ward (days)	2.0	2.9	1.0	1.1	1.1	THs = 2.0	Sustained and target met
Conducted two IPC training sessions, equipping 69 staff with updated infection prevention practices.							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
Received 57 essential equipment items from Central Management, including: • Critical care equipment: 1 ventilator, 1 defibrillator, 4 cardiac monitors, 2 mobile vitals monitors • Airway and resuscitation tools: 3 laryngoscope sets, 10 laryngeal bougies, 3 laryngeal masks, 4 nasopharyngeal airways, 3 bag–valve masks • Monitoring devices: 3 aneroid sphygmomanometers, 2 digital thermometers, 3 pulse oximeters, 1 digital BP apparatus • Oxygen delivery equipment: 2 mobile oxygen flowmeters, 2 wall flowmeters • Furniture and accessories: 2 patient beds, 4 patient screens, 5 swivel chairs, 2 lab stools							
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM							
4.2: Governance Related Performance							
Organised one CPR training workshop, benefitting 66 staff							
Conducted two triage workshops for 93 A&E staff							
Held four Sub-BMC management meetings							
Hosted one staff durbar							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
4.2: Human Resource Related Performance
Eight staff were sponsored for advanced professional training; • 2 in Emergency Medicine • 1 fellowship in Emergency Point-of-Care Ultrasound • 1 Emergency Nursing membership • 4 enrolled in BSc Emergency Nursing programs
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
Conducted one research study on paraquat poisoning.
5.2 Improve on Teaching and Learning:
Ninety-five (95) Medical students, Physician Assistants and Pharm D students rotated through the department
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Organised four radio education programs to enhance public awareness of emergency health issues.
Facilitated one resuscitation principles workshop for the UCC Hospital Emergency Department, training 63 staff.

9.3 A&E SERVICE UTILISATION

The hospital since 2020 demonstrated varied performance in the utilization of A&E services. The total A&E cases increased from 13,146 in 2023 to 16,503 in 2021, but subsequently decreased over the subsequent years. In 2024, the total A&E cases seen increased by 11.9% (from 10,979 in 2023 to 12,290 in 2024). Monthly attendance peaked in July (1,182 cases, 9.6%), followed closely by August (1,135, 9.2%) while February reported the lowest attendance with 896 (7.3%) cases.

Detention fluctuated over the period, recording a rise of 4.6% in 2024 (from 7,164 in 2023 to 7,493 in 2024). Discharges significantly increased by 208.8% (from 1,131 in 2023 to 3,493 in 2024), suggesting improved care pathways. In addition, the department observed a substantial rise in the number of procedures performed, from 3,457 in 2023 to 12,583 in 2024, representing an increase of 264%. Patients trans-out went up by 10.2% (from 3,348 in 2023 to 3,690 in 2024) whereas the number of deaths increased by 1.6% (from 305 in 2023 to 310 in 2024). Figure 9.3.1 and Table 9.3.1 provide details of the analysis.

Table 9.3. 1: Comparative Performance Trend at A&E (2020 – 2024)

PARAMETER	2020	2021	2022	2023	2024	REMARKS
Total A&E Cases	13,146	16,503	13,485	10,979	12,290	11.9% incr
Detention	4,877	5183	4,861	7,164	7,493	4.6% incr
Discharges	974	908	1,146	1,131	3,493	208.8% incr
Procedures	351	1247	2,000	3,457	12,583	264% incr
Trans-out	3,504	3,567	3,269	3,348	3,690	10.2% incr
Deaths	365	436	330	305	310	1.6% incr

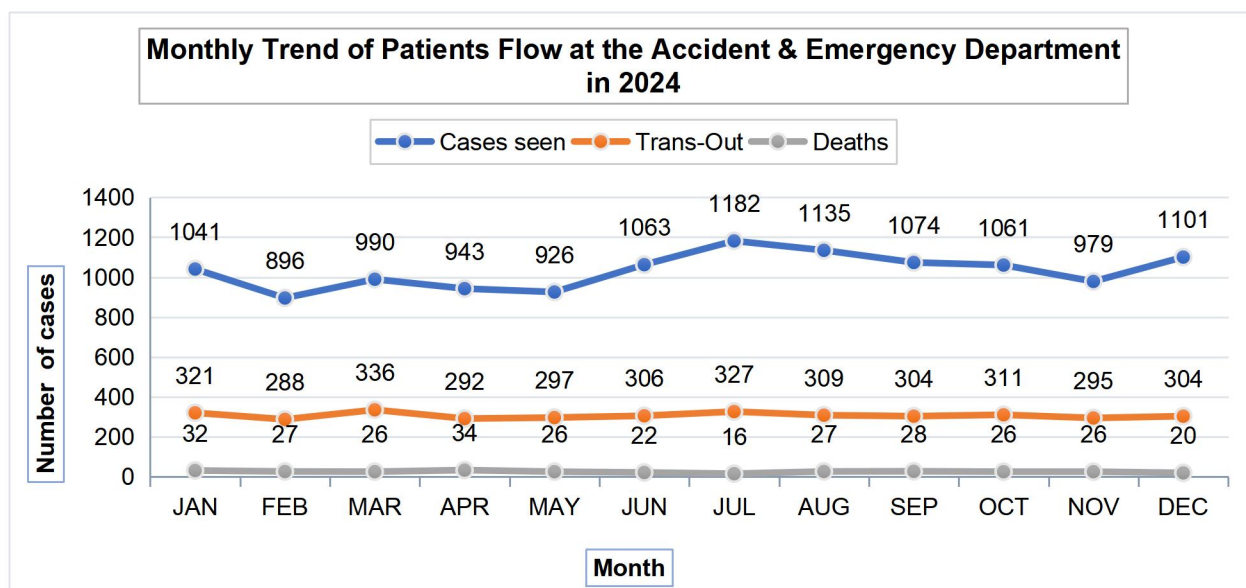


Figure 9.3. 1: Trend of Patients Flow at the Accident & Emergency Department in 2024

9.4 EMERGENCY CASES SEEN ACCORDING TO THE ACUITY

The Accident and Emergency Sub-BMC since 2015 continue to utilize the South African Triage Scale (SATS), to guide timely and appropriate emergency care based on the severity of condition – Red (immediate) for life-threatening cases requiring prompt intervention, Orange (very urgent) for high-risk presentations, Yellow (urgent) for stable but serious conditions, Green (Routine) for non-urgent cases and Blue (Deceased) for cases with low survivability. The unit ensured that patients were attended to base on clinical priority, improving overall response times and care outcomes.

In 2024, a total of 12,391 cases were seen at the accident and emergency department, distributed across the SATS categories as follows: Red - 7% (886), Orange - 25% (3,066), Yellow - 28% (3,477), Green - 40% (4,898) and Blue -1% (64). A year-on-year analysis revealed key fluctuations in acuity pattern. Higher-acuity (red and orange) cases continue to rise, reinforcing the increasing demand for the completion of accident and emergency expansion project and the recruitment and training of additional emergency specialist. Red-coded cases went up by 12.4% (from 788 in 2023 to 886 in 2024), whereas orange-coded cases rose by 14.1% (from 2,687 in 2023 to 3,066 in 2024), continuing a five-year upward trend. On the other hand, yellow-coded cases recorded a reduction of 13.6% (from 3,594 in 2023 to 3,477 in 2024). This reduction may indicate improved alternative pathways for managing stable patients instead of managing them at the A&E department.

Furthermore, despite the ongoing efforts to redirect non-critical cases to the hospital's Polyclinic, green-coded cases increased significantly by 27.8% (from 3,834 in 2023 to 4,898 in 2024). This occurred alongside the Polyclinic's 12-hour operational schedule,

suggesting that extending its service hours could help reduce inappropriate A&E visits and ease pressure on emergency clinicians.

This rise indicates increased walk-in demand by non-critical cases, especially when the Polyclinic operates on 12 hours instead of 24. This indicates the need to strengthen the Polyclinic to increase its hours of operation in order to manage the green (routine) cases to reduce pressure on emergency services. Meanwhile, Blue-coded cases continuously declined within the period, reducing by 15.8% (from 76 in 2023 to 64 in 2024).

Further, cases volume varied monthly throughout the review year, with July (1,182 cases) and August (1,135 cases) recording the highest number while February (896) had the least number of cases. Figure 9.4.1 and Tables 9.4.1, 9.4.2 provide further graphical and tabulated details on these patterns.

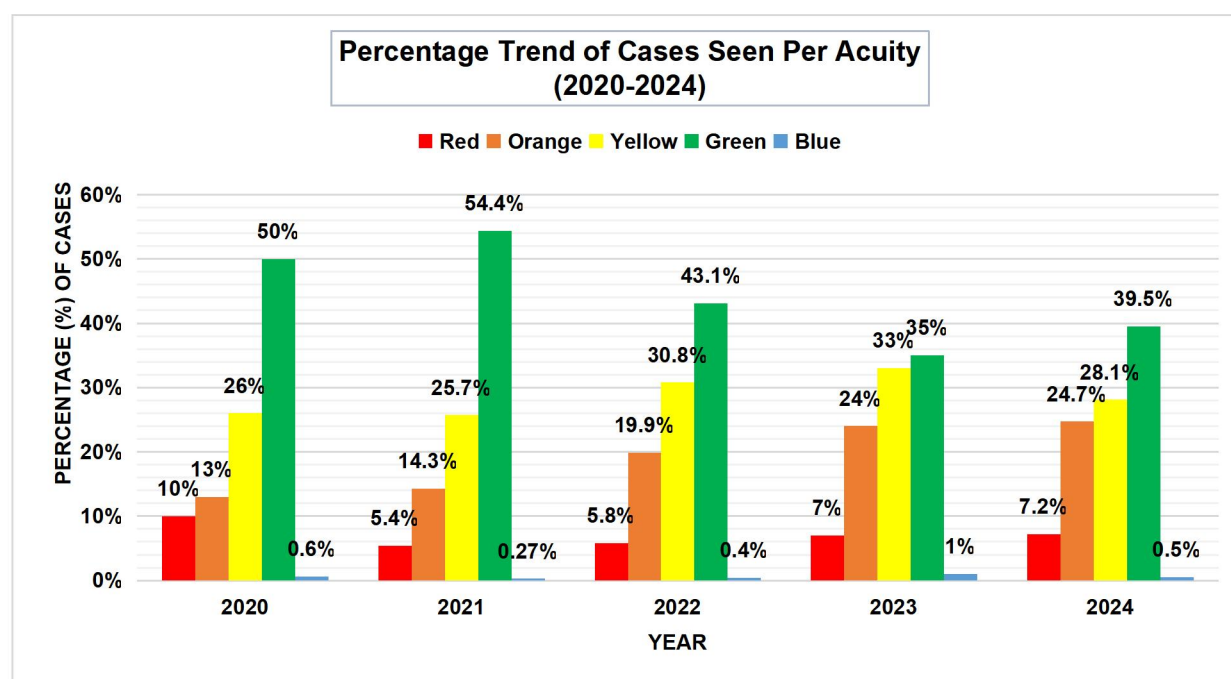


Figure 9.4. 1: Percentage Trend of Cases Seen Per Acuity (2020-2024)

Table 9.4. 1: Yearly Breakdown of Emergency Cases Triage Per Acuity (2020-2024)

COLOR CODES	2020	2021	2022	2023	2024	REMARKS
Red	1,360	885	779	788	886	12.4% incr
Orange	1,736	2359	2,679	2,687	3,066	14.1% incr
Yellow	3,381	4234	4,158	3,594	3,477	13.6% decr
Green	6,595	8981	5,812	3,834	4,898	27.8% incr
Blue	74	44	57	76	64	15.8% decr
Total	13,146	16,503	13,485	10,979	12,391	12.9% incr

Table 9.4. 2: Monthly Trend of Emergency Cases According to Acuity in 2024

MONTH	COLOUR CODES					
	Red	Orange	Yellow	Green	Blue	Total
January	58	228	329	425	1	1041
February	57	232	258	345	4	896
March	65	243	281	396	5	990
April	66	221	249	401	6	943
May	77	255	252	335	7	926
June	97	284	300	377	5	1063
July	89	291	357	440	5	1182
August	92	291	326	416	10	1135
September	72	283	254	460	5	1074
October	67	256	300	432	6	1061
November	75	220	259	420	5	979
December	71	262	312	451	5	1,101
Total	886	3066	3477	4898	64	12,391

9.5 A&E DETENTION

In 2024, the number of detentions at the hospital's Accident and Emergency Department recorded an increase of 4.6% (from 7,164 in 2023 to 7,493 in 2024). Out of the 12,290 patients seen at the department, 30% (3,690) were transferred-out to specialized wards for further treatment, compared to 3,348 in 2023, representing an increase of 10.2%. Within the same time period, the average length of stay at the A&E ward remained stable at 1.1 days and below the Teaching Hospital's target of 2.0 days. Table 9.5.1 provides a detailed illustration of the analysis.

Table 9.5. 1: Comparative Performance Trend at A&E

PARAMETER	2020	2021	2022	2023	2024	REMARKS
Detention (Admissions)	4,877	5,183	4,861	7,164	7,493	4.6% incr
Discharges	974	908	1,146	1,131	3,493	208.8% incr
Trans-Out	3,504	3,567	3,269	3,348	3,690	10.2% incr
Average Length of Stay	2.0	2.9	1.0	1.1	1.1	No change

9.5.1 TOP TEN CAUSES OF A&E DETENTION

A review of the top ten causes of detention shows that, Pneumonia and Gastroenteritis continue to remain the top leading causes of detention at the hospital's accident and emergency department with 664 (18.81%) and 589 (16.69%) respectively. Trauma (516, 14.62%) and Cardiovascular Accident (CVA) (442, 12.52%) ranked third and fourth

whiles Malaria accounted for the lowest of detentions with 88 (2.49%) cases. Other conditions collectively accounted for 71% of detention as shown in Table 9.5.1.1 below.

Table 9.5.1. 1: Top Ten Causes of A&E Detention

2022		2023		2024	
Diagnosis	No. Of Cases (%)	Diagnosis	No. Of Cases (%)	Diagnosis	No. Of Cases (%)
Gastroenteritis	569 (11.7%)	Gastroenteritis	533 (19.56%)	Pneumonia	664 (18.81%)
Pneumonia	520 (10.7%)	Pneumonia	498 (18.28%)	Gastroenteritis	589 (16.69%)
Trauma	354 (7.3%)	Trauma	408 (14.97%)	Trauma	516 (14.62%)
Heart Failure	345 (7.1%)	Chronic Kidney Disease & Hypertension Emergencies	380 (13.95%)	CVA	442 (12.52%)
CVA	322 (6.6%)	Chronic Lung Disease & Complications	225 (8.26%)	Diabetic Emergencies	368 (10.42%)
Sepsis	261 (5.4%)	Diabetic Emergencies	219 (8.04%)	Heart Failure	294 (8.33%)
Chronic Kidney Disease & Hypertensive Emergencies	236 (4.9%)	Malaria	188 (6.90%)	Chronic Lung Disease & Emergencies	221 (6.26%)
Chronic Lung Disease	233 (4.8%)	Asthma	108 (3.96%)	Chronic Kidney Disease & Hypertension Emergencies	201 (5.69%)
Diabetic Emergencies	168 (3.5%)	CVA	99 (3.63%)	Acute Abdomen	147 (4.16%)
Malignancies	99 (2%)	Acute Abdomen	67 (2.46%)	Malaria	88 (2.49%)
Other Conditions	3,107 (64%)	Other Conditions	4,439 (62%)	Other Conditions	8,760 (71%)
Total	4,861	Total	7,164	Total	12,290

9.6 ACCIDENT & EMERGENCY MORTALITY

A&E mortality indicators over five-years (2020-2024) showed mixed performances. Total A&E deaths increased from 365 in 2020 to a peak of 436 in 2021, after which a consistent reduction was recorded in 2020(330) and 2023 (305). However, in 2024, deaths increased marginally by 1.6% (from 305 in 2023 to 310 in 2024).

Mortality rate on the other hand showed significant reduction over the same period. Despite a peak of 8.9% recorded in 2021, the mortality rate decreased to 2.4% but went

up to 2.8% in 2023. However, in 2024, the mortality declined, suggesting improved survival outcomes of A&E cases at the hospital. Brought-in dead (BID) cases fluctuated over the period. Cases brought in dead peaked at 76 in 2023 but reduced by 15.8% (from 76 in 2023 to 64 in 2024).

A review of monthly intra-triage mortality revealed that, red-coded patients – representing most critically ill – contributed the highest proportion of deaths in 2024, with April accounting the for the highest proportion with 34.85% and July the lowest (11.24%). Mortality among orange-coded cases remained consistently low across months, while yellow-coded mortality was minimal, with no deaths in March, September, October, November and December.

Detailed analysis is provided in Figures 9.6.1, 9.6.2, and Tables 9.6.1 and 9.6.2 below. decreased by 13.6% (from 3,594 in 2023 to 3,477 in 2024

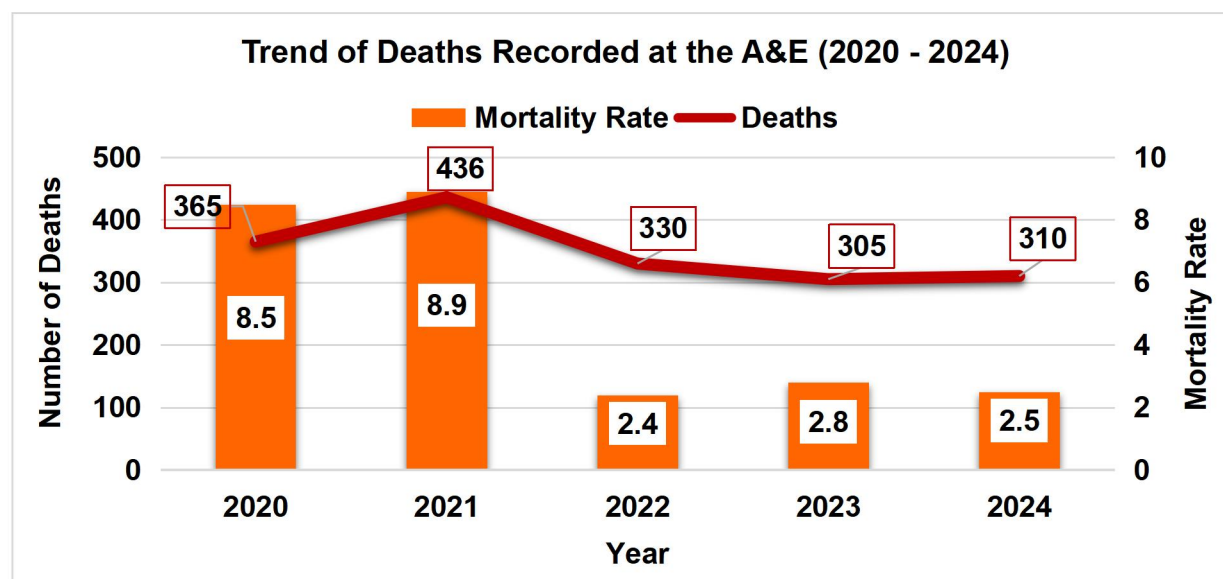


Figure 9.6. 1: Trend of Deaths Recorded at the A&E (2020 - 2024)

Table 9.6. 1: Trend Analysis of Deaths Recorded at the A&E (2020 – 2024)

PARAMETER	2020	2021	2022	2023	2024	REMARKS
Number of A&E Deaths	365	436	330	305	310	1.6% incr
Mortality Rate	8.5	8.9	2.4	2.8	2.5	Decr
Brought in Dead (BID)	74	44	57	76	64	15.8% decr

Table 9.6. 2: Analysis of Monthly Mortality (True Mortality) Rate (%) intra-triage in2023

Month	Red/Tot al deaths	Red/A ll Red	Orange/Tot al deaths	Orange/A ll Orange	Yellow/Tot al deaths	Yellow/A ll Yellow	Green / Total death s	Green/A ll Green
January	1.34	24.14	1.44	6.58	0.19	0.61	0.10	0.24
February	1.67	26.32	1.12	4.31	0.22	0.78	0.00	0.00
March	1.01	15.38	1.62	6.58	0.00	0.00	0.00	0.00
April	2.44	34.85	0.95	4.07	0.21	0.80	0.00	0.00
May	1.40	16.88	1.30	4.71	0.11	0.40	0.00	0.00
June	1.51	16.49	0.47	1.76	0.09	0.33	0.00	0.00
July	0.85	11.24	0.42	1.72	0.08	0.28	0.00	0.00
August	0.97	11.96	1.32	5.15	0.09	0.31	0.00	0.00
Septemb er	1.86	27.78	0.74	2.83	0.00	0.00	0.00	0.00
October	1.41	22.39	1.04	4.30	0.00	0.00	0.00	0.00
Novembe r	1.84	24.00	0.82	3.64	0.00	0.00	0.00	0.00
Decembe r	1.27	19.72	0.54	2.29	0.00	0.00	0.00	0.00

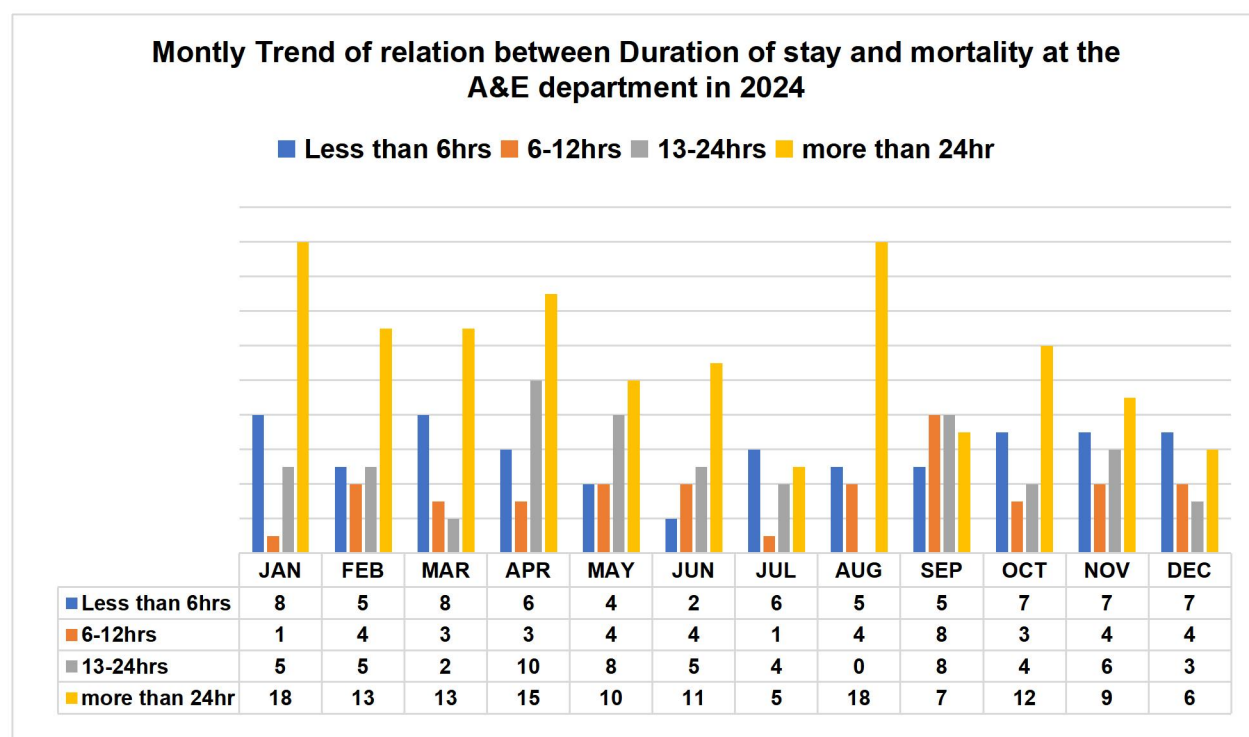


Figure 9.6. 2: Monthly Trend of Relation between Duration of stay and mortality at the A&E Department in 2024

9.6.1 TOP CAUSES OF DEATH AT A&E IN 2024

Cerebrovascular Accident (CVA) continue to be the leading cause of A&E mortality constituting 11.3%, although the number of cases declined from 63 in 2023 to 35 in 2024. Pneumonia rose to the second rank in 2024 despite reducing from 27 cases in 2023 to 21 cases in 2024. This was followed by heart failure (12), end stage kidney disease (11) and breast cancer (10). Other notable contributors included with Head Injury, chronic liver disease and acute abdomen each accounting for 8 of total deaths whereas 7 of the deaths were recorded from Prostate cancer. Table 9.6.1.1 below provides the top causes of death at the hospital's emergency room from 2022 to 2024.

Table 9.6.1. 1: Top Causes of Death at A&E from 2022 to 2024

2022		2023		2024	
DIAGNOSIS	NO	DIAGNOSIS	NO	DIAGNOSIS	NO
Acute Respiratory Distress syndrome	25	Cerebrovascular Accident (CVA)	63	Cerebrovascular Accident (CVA) (infarctive/haemorrhagic)	35
Cerebrovascular Accident (CVA)	18	Heart Failure	36	Pneumonia	21
Pneumonia	15	Malignancies	30	Heart Failure	12
Chronic Liver Disease	13	Sepsis	30	End Stage Kidney Disease	11
End Stage Kidney Disease	12	Chronic Liver Disease	27	Breast Cancer	10
Malignancies	12	Pneumonia	27	Head Injury	8
Congestive Heart Failure	13	Severe Head Injure	18	Chronic Liver Disease	8
Septic Shock	8	End Stage Kidney Disease	12	Acute Abdomen	8
Acute Abdomen	5	Acute Abdomen	9	Prostate Cancer	7

9.7 A&E REFERRALS

In 2024, the A&E department recorded a significant increase of 37.6% (from 866 in 2023 to 1,192 in 2024) in the number of referred cases to the department. The highest proportion of these referrals were from the St. Francis Xavier Hospital, which accounted 96 (8.1%). This was followed by Twifo Attimorkwa Hospital and UCC hospital, each contributing 78 cases (6.5%). Ewim Policlinic referred 74 (6.2%) cases, placing third among the major referral sources.

Additionally, CCTH Polyclinic accounted for 59 (5%), while Mercy Women Hospital and Cape Coast Metro Hospital each contributed 51 cases (4.3%). On the hand, Moree Health Centre, Saltpond Municipal Hospital and Efia Nkwanta Hospital referred 44 (3.7%), 39 (3.3%) and 38 (3.2%) cases respectively. Details of the referral patterns and facility contributions are shown in Figure 9.7.1, Figure 9.7.2, and Tables 9.7.1 through 9.7.2.

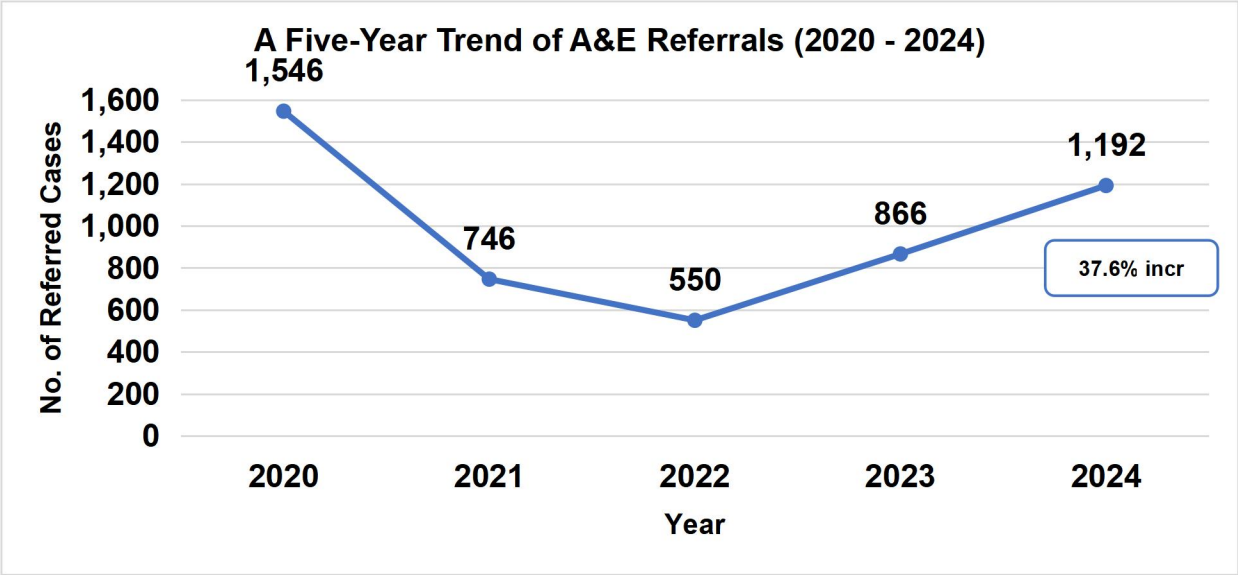


Figure 9.7. 1: Trend of Total A&E Referrals (2020 - 2024)

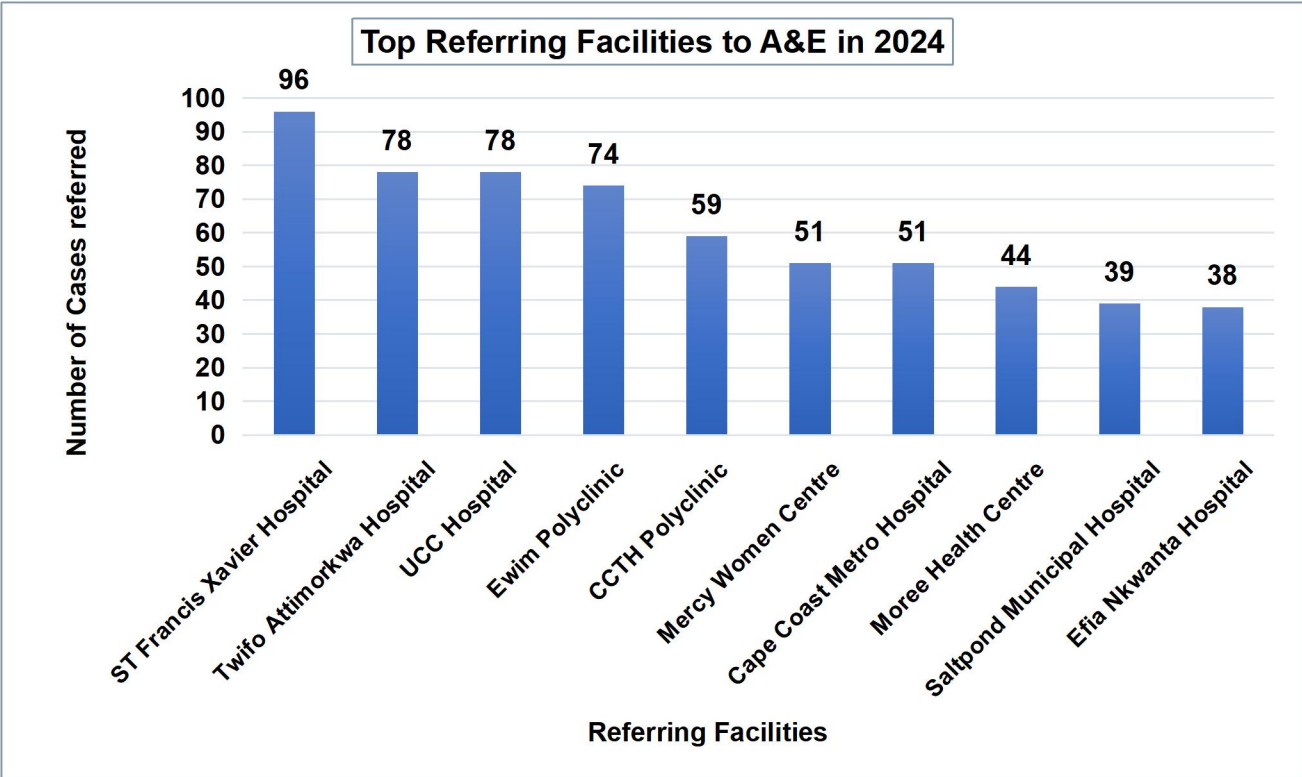


Figure 9.7. 2: Top Referring Facilities to A&E in 2024

Table 9.7. 1: Top Referring Facilities to A&E in 2024

2021		2022		2024	
Facility	No.	Facility	No.	Facility	No.
St. Francis Xavier hospital	49	Ewim Polyclinic	68	ST Francis Xavier Hospital	96
Ewim Polyclinic	32	Mercy Women Center	58	Twifo Attimorkwa Hospital	78
Abura Dunkwa Hospital	31	Twifo Atti-Morkwa Hospital	55	UCC Hospital	78
UCC hospital	31	Elmina Polyclinic	54	Ewim Polyclinic	74
Moree	30	Abura Dunkwa Hospital	54	CCTH Polyclinic	59
Elmina Polyclinic	28	Saltpond Hospital	51	Mercy Women Centre	51
Winneba Trauma Center	27	UCC hospital	49	Cape Coast Metro Hospital	51
Mercy Women Center	24	Tarkwa Municipal	46	Moree Health Centre	44
Baiden Ghartey Clinic	18	Twifo Praso	40	Saltpond Municipal Hospital	39
Cape Coast Metro Hospital	18			Efia Nkwanta Hospital	38

CHAPTER TEN

DIAGNOSTIC SERVICES

10.1 INTRODUCTION

The hospital's diagnostic services are rendered through the Imaging Sub- BMC, Laboratory, Pathology and the Transfusion Medicine Units. Together, these units ensure the availability of comprehensive diagnostic investigations for both inpatients and outpatients. The Laboratory services offered include a broad range of investigations covering biochemistry, bacteriology, parasitology, and serology. Imaging modalities provided include X-radiation (X-ray), computed tomography (CT scan), ultrasound, mammography, echocardiogram and fluoroscopy. The pathology services include autopsies, body storage and embalmment. The transfusion medicine unit provides blood safety services as well as transfusion services.

10.2 PERFORMANCE UNDER CCTH STRATEGIC OBJECTIVES

In line with the hospital's six medium-term strategic objectives, the table below summarizes the key outputs and outcomes of the Diagnostic Services.

Table 10.2. 1: Summary of the 2024 Annual Performance of Diagnostics Services Units under the Strategic Objectives.

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2020	2021	2022	2023	2024	Target	Remarks
Utilisation of laboratory services	260.3%	221.3%	524%	505.1%	555.55%	TH = 60%	Incr (Target met)
Total laboratory Investigation	241,858	180,415	558,298	519,363	393,955	CCTH = 10% ↑	24.5% Decr (Target not met)
Utilisation of radiological services	530.7%	87%	123.3%	114.41%	102.11%	TH = 60%	Decr Target met
Radiology investigation	23,697	20,587	20,787	22,758	24,506	CCTH = 10% ↑	7.7% incr (Target not met)
Number of autopsies conducted	166	227	250	232	247	-	6.4% incr
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
<i>Laboratory Unit</i>							
Participated in External Quality Assessment (EQA) training for tuberculosis (TB), Malaria and Human Immunodeficiency Virus (HIV)							
Conducted training on IPC, QMS, TB and Malaria for staff							
Conducted customer satisfaction survey.							
Conducted Risk Assessment, Management Review, Internal Audit, Revision/Review of policies and procedures for the unit.							
Awarded the overall winner of the CCTH 2024 annual peer review.							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Imaging Sub-BMC
Conducted in-service training on customer care, staff appraisal and various leaves.
Haematology Unit
Conducted education for patients on nutrition/hydration and preventive measures for non-communicable diseases
Transfusion Medicine Unit
Two (2) staff attended CPD training at the National Blood Service
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Laboratory Unit
Received the following equipment and supplies; • Bacteriology consumables through AMS Program (Fleming Fund) • 1 Hb electrophoretic apparatus from VM foundation • 1 HbA1c analyzer
Pathology Unit
Refurbished four (4) trollies.
Conducted maintenance on cold room 1 and 2, reducing frequent breakdown.
Painted general offices and mortuary area.
Imaging Sub-BMC
Renovated the CT scan, X-Room 21, Head, SUB-BMC and Radiographer's offices.
Held discussions with Central Management on acquiring MRI and OPG machines.
Transfusion Medicine Unit
Submitted expansion plan of the unit to Management for review and consideration.
Acquired two (2) swivel chairs.
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Laboratory Unit
Conducted regular laboratory meetings, presentations and continuous professional education.
Facilitated seminars/workshops to support staff development
Transfusion Medicine Unit
One (1) staff durbar was organized.
One (1) departmental meeting was organized
Pathology Unit
Organized two (2) management and staff durbars.
Imaging Sub-BMC
All Radiologists, Radiographers and Sonographers participated in their professional AGMs
Conducted tutorial sessions for clinical staff
Four (4) Sub-BMC management meetings and two (2) staff durbars were organized.
Haematology Unit
Continued to supervise house and medical officer as well as other staff at various levels.
4.2: Human Resource Related Performance
Transfusion Medicine Unit
One (1) nurse was posted to the Unit.
One (1) donor organizer was posted to the Unit
Haematology Unit
One (1) temporary medical officer was posted to the department
One (1) specialist was assigned to the department
4.3 Finance related performance
-
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
Laboratory Unit

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
One (1) research was published.
Partnered with KHRC and NMIMR in undertaking the MVPE program and Influenza surveillance respectively.
Pathology Unit
Conducted and published two (2) research papers;
Distribution of hrHPV genotype among cervical cancer cases diagnosed across Ghana. Central Neurocytoma in a teenager, a rare case of hemiplegia, & a Diagnostic Dilemma in a resource poor setting.
Haematology Unit
Improved documentation and data collection of the research paper in the area of;
Prevalence, clinical features and survival outcomes of patients with haematological malignancies at Cape Coast Teaching Hospital, Ghana - A Retrospective Study
5.2 Improve on Teaching and Learning:
Pathology Unit
The following students had their rotation in the Sub-BMC;
100 Medical students 8 postgraduate doctors 2 Forensic Sciences
Imaging Sub-BMC
The following students had their rotation in the Sub-BMC;
156 Sonography and radiography students 1 Medical Students 3 OBGYN residents
Haematology Unit
Continued teaching sessions during daily ward rounds and in the laboratory.
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Laboratory Unit
Provided diagnostic support to lower facilities, such as TB GeneXpert services
Staff facilitated key training programs and also served as Regional OTSS and EQA supervisors

10.3 LABORATORY SERVICES UTILISATION

Laboratory service utilization has fluctuated over the past five years with 2022 recording a substantial rise of 209.4% (180,422 in 2021 to 558,298 in 2022) following the introduction of ten new laboratory tests. However, the upward trend was not sustained. In 2024, the total number of tests conducted declined by 24.1% (from 519,363 in 2023 to 393,955 in 2024). This downward trend may be attributed to the decline in OPD attendance and inpatient admissions, breakdown of equipment and the periodic shortages of reagents due to supply chain challenges. The reduction in the laboratory investigations affected multiple diagnostic categories.

Biochemistry continued to be the highest contributor to the overall laboratory investigations in 2024, although total investigations declined by 33.5% (from 388,991 in 2023 to 258,518 in 2024). While routine panels such as Kidney Function Test (KFT), Liver Function Tests (LFT) and Lipid Profile declined, specialised investigations saw significant increases. Thyroid profile went up by 241.5% (from 207 in 2023 to 708 in 2024), fertility markers by 46.8% (from 186 in 2023 to 273 in 2024) and tumour markers

by 9.8% (From 274 in 2023 to 301 in 2024), indicating the increasing demand of advanced biochemistry assessment.

Total microbiology tests recorded a reduction of 36.5% (from 22,802 in 2023 to 14,408 in 2024). Similarly, all the various sub-units such as parasitology, bacteriology and mycobacteriology recorded lower test volumes in 2024. Haematology investigations conducted in 2024 summed up to 65,230, representing a 5.1% decrease from the 68,743 tests in 2023. On the other hand, serology investigations went up by 27.4% (from 38,179 in 2023 to 48,646 in 2024). This was driven by increased screening for infectious disease markers such as Widal/Typhidot, Hepatitis C screening, HBsAg screening, etc and blood donor ELISA assays.

The laboratory unit conducted a total of 1,175 HIV viral load tests in 2024, representing a 23.8% decline from 1,542 in 2023. Viral suppression rate increased from 74.9% in 2023 to 88.9% in 2024, whereas the number of virologic failure declined from 25.1% in 2023 to 11.1% in 2024. COVID-19 testing reduced significantly in 2024. The number of COVID-19 test conducted declined by 89.5% (from 1,473 in 2023 to 155 in 2024) whereas the number of confirmed cases decreased by 98.5% (from 201 in 2023 to 3 in 2024). Also, COVID-19 test positivity rate dropped to 1.94% from 13.6% in 2023, aligning with the national trend in COVID-19 cases recorded during the period.

Further, during the reporting year, 58,153 clients were attended to by the laboratory unit, consisting of 56% (32,543) out-patients and 44% (25,610) in-patients. Further details are presented Figures 10.3.1 to 10.3.9 and Tables 10.3.1 to 10.3.5 below.

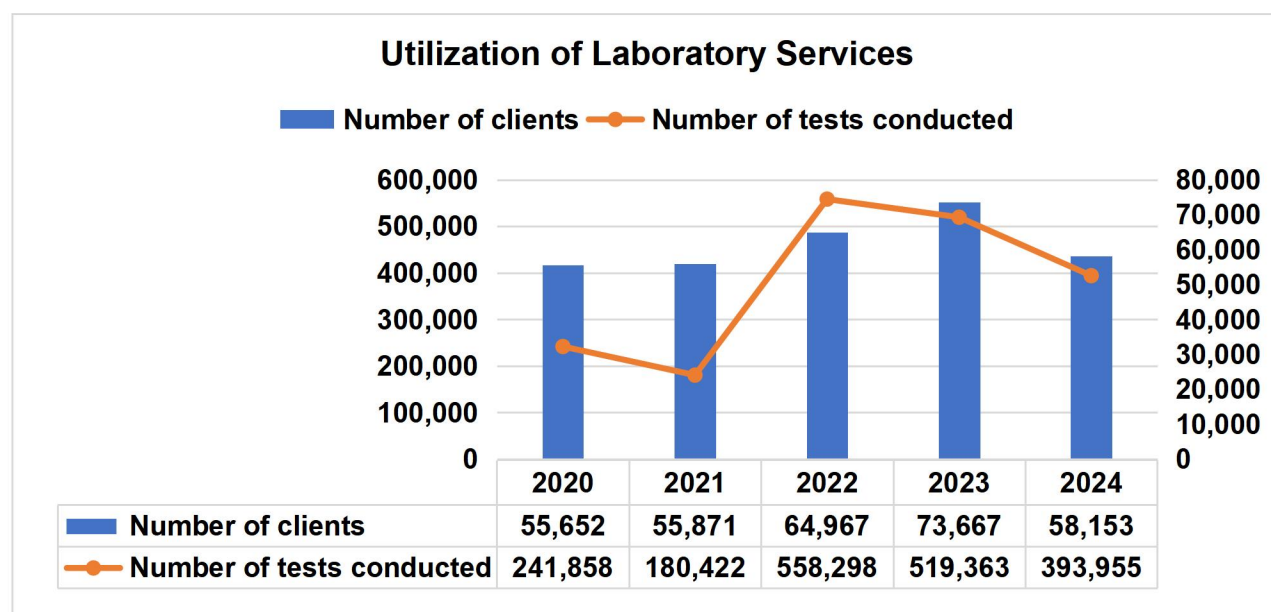


Figure 10.3. 1: Utilization of Laboratory (2020 -2024)

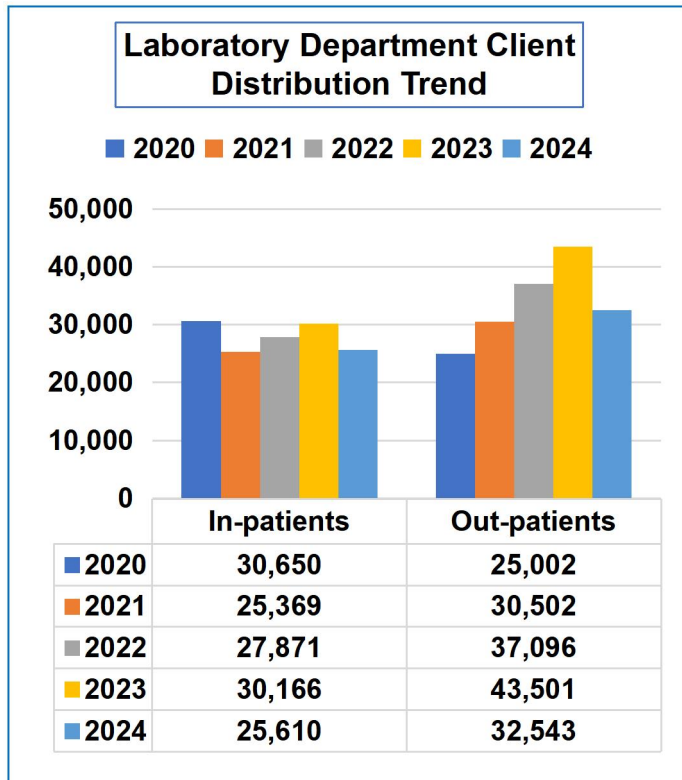


Figure 10.3. 2: Laboratory Department Client Distribution Trend (2020 -2024)

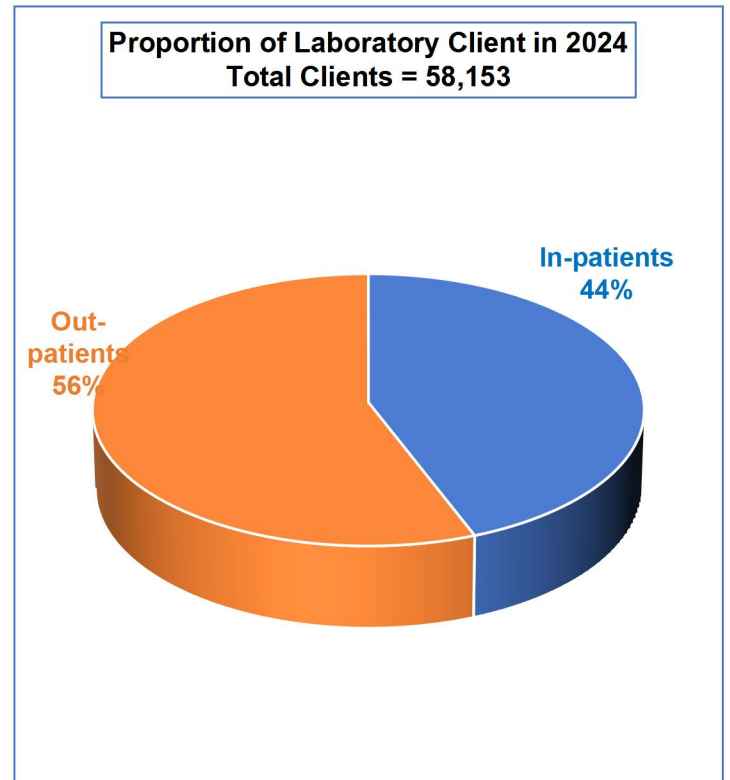


Figure 10.3. 3: Proportion of Laboratory Clients in 2024

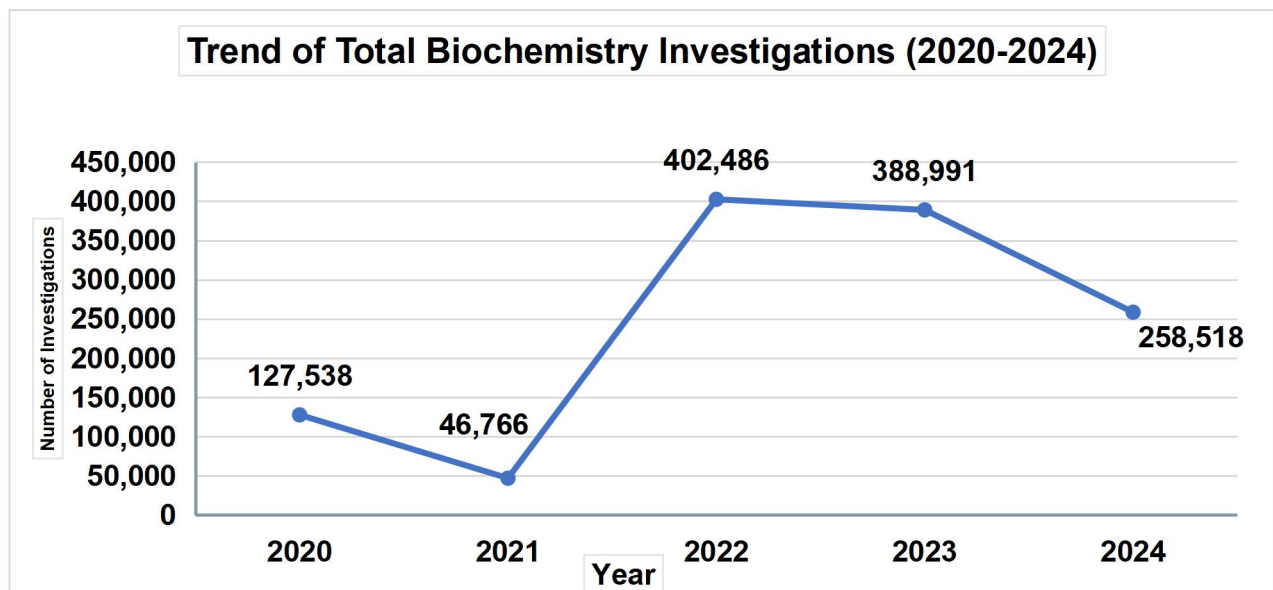


Figure 10.3. 4: Trend of Biochemistry Investigations (2020 - 2024)

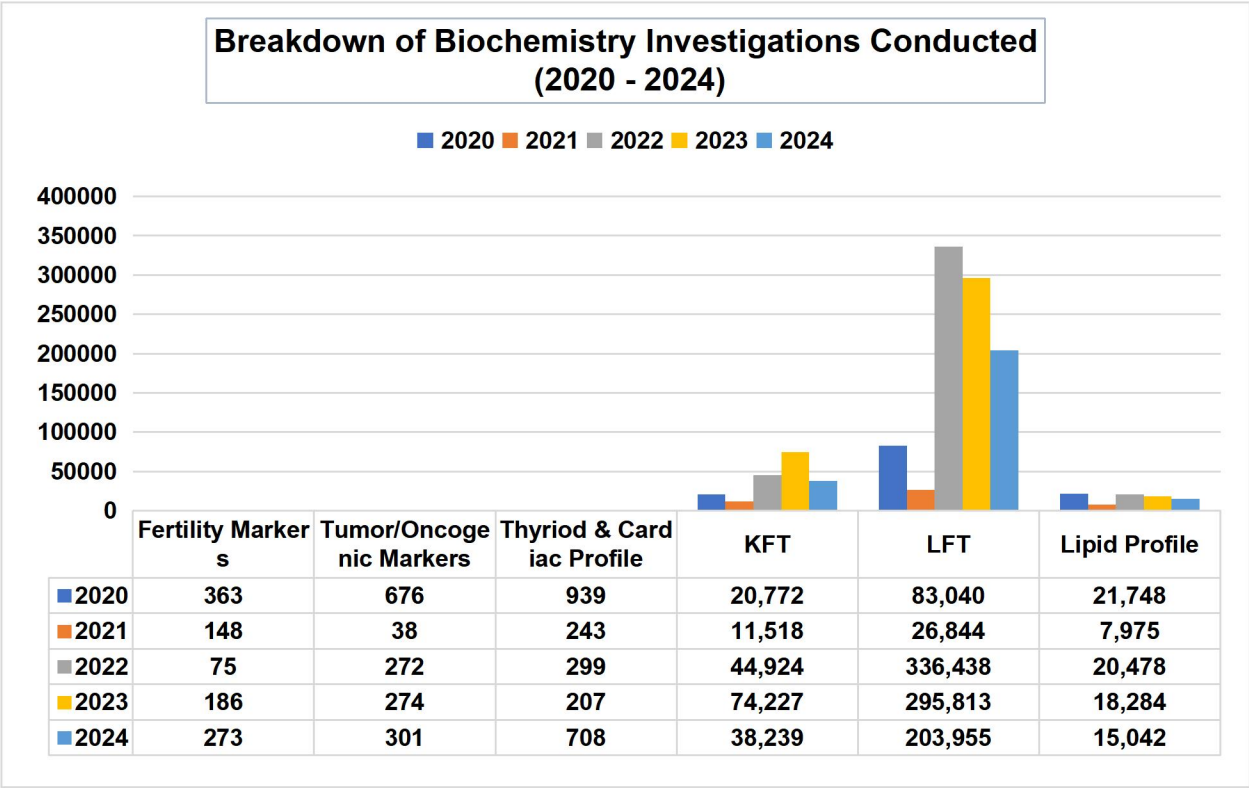


Figure 10.3. 5: Breakdown of Biochemistry Investigations (2020-2024)

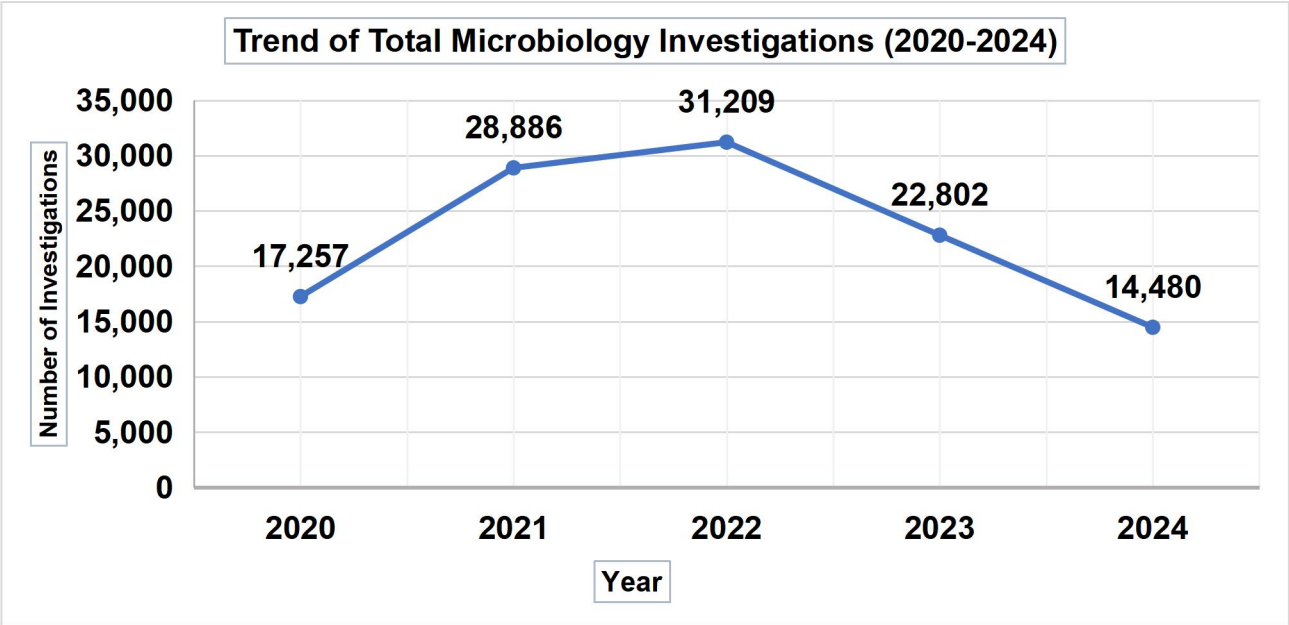


Figure 10.3. 6: Trend of Microbiology Investigations (2020 - 2024)

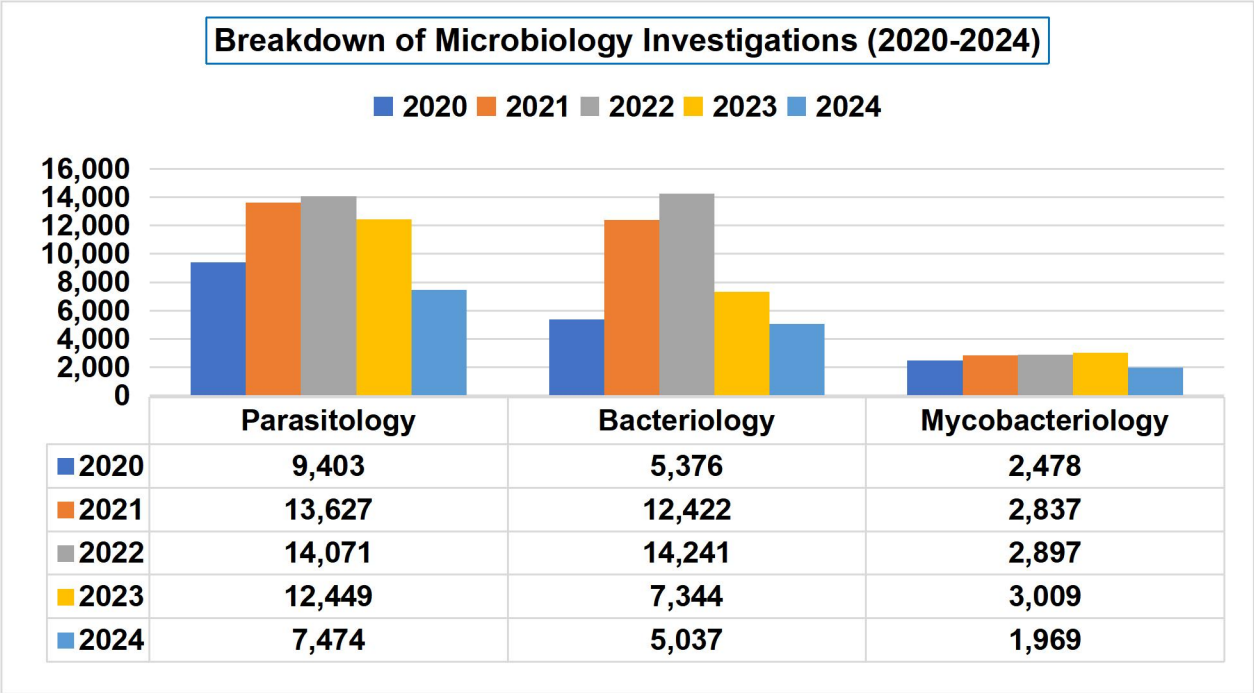


Figure 10.3. 7: Breakdown of Microbiology Investigations (2020 - 2024)

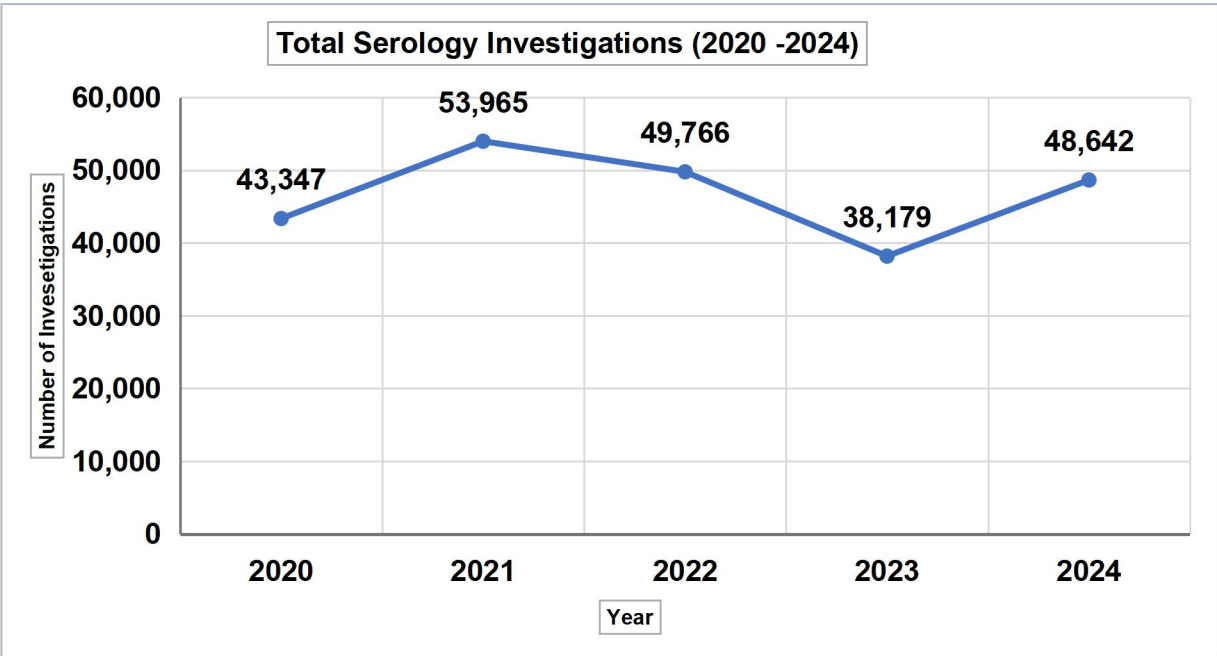


Figure 10.3. 8: Total Trend of Serology Investigations (2020-2024)

Table 10.3. 1: Breakdown of Serology Investigations (2020-2024)

SEROLOGY COMPONENT	2020	2021	2022	2023	2024	REMARKS
Infectious Disease Serology						
Bacterial Infection Markers						
Widal/Typhidot	1540	3,518	2,414	1,243	3,017	142.7% incr
VDRL	6234	6,079	6,425	4,670	6,780	45.2% incr
Syphilis (Confirmatory);	-	24	0	0	0	-
Antistreptolysin O (ASO);	-	0	0	0	0	-
Viral Infection Markers						
HBsAg (Screening)	8528	8,716	7,702	5,159	7,887	52.9% incr
Hepatitis B Profile (Combo);	117	93	167	127	151	0.94% decr
HBsAg (Confirmatory);	0	14	0	0	3	Incr
HBsAg (Quantification);	1	0	0	0	0	-
Hepatitis C Antibody/ Hepatitis C (Screening)	7229	7,337	7,497	4,943	7,760	57.0% incr
HCV (Confirmatory);	0	8	0	0	2	Incr
Hepatitis A (IgM/IgG);	-	0	0	0	0	-
Hepatitis E (IgM/IgG)	-	0	0	0	0	-
HIV (Screening);	8,005	8,762	7,803	7,844	7,884	0.51% incr
HIV (Confirmatory)	0	17	4	0	6	Incr
HSV 1	-	-	-	-	2	
HSV 2	-	-	-	-	2	
Other Bacterial/Viral Markers						
Helicobacter pylori (Antigen & Antibody)	826	2,031	1,096	1,261	1,187	5.9% decr
HIV Immunology & Molecular Serology						
CD4 Count	-	-	-	-	-	-
DBS/EID	-	633	623	384	41	89.3% decr
HIV Viral Load	-	2807	4,045	1,542	1,175	23.8% decr
Autoimmune / Inflammatory Serology						
Rheumatoid Factor (RF);	36	51	60	38	36	5.3% decr
C-Reactive Protein (CRP)	79	63	150	88	320	Decr
Reproductive / Hormonal Serology						
Pregnancy Test (hCG)	-	-	-	-	-	-
ELISA Test (Blood Donor Serology)						
HBsAg (Donor);	2,688	3,453	3,089	2,828	3,107	9.9% incr
HCV Antibody (Donor);	2,688	3,453	3,049	2,808	3,087	9.9% incr
HIV Antigen/Antibody (Donor);	2,688	3,453	2,554	2,763	3,092	11.9% incr
Syphilis Antibody (Donor)	2,688	3,453	3,088	2,481	3,107	25.2% incr
Total	43347	53,965	49,766	38,179	48,646	27.4% incr

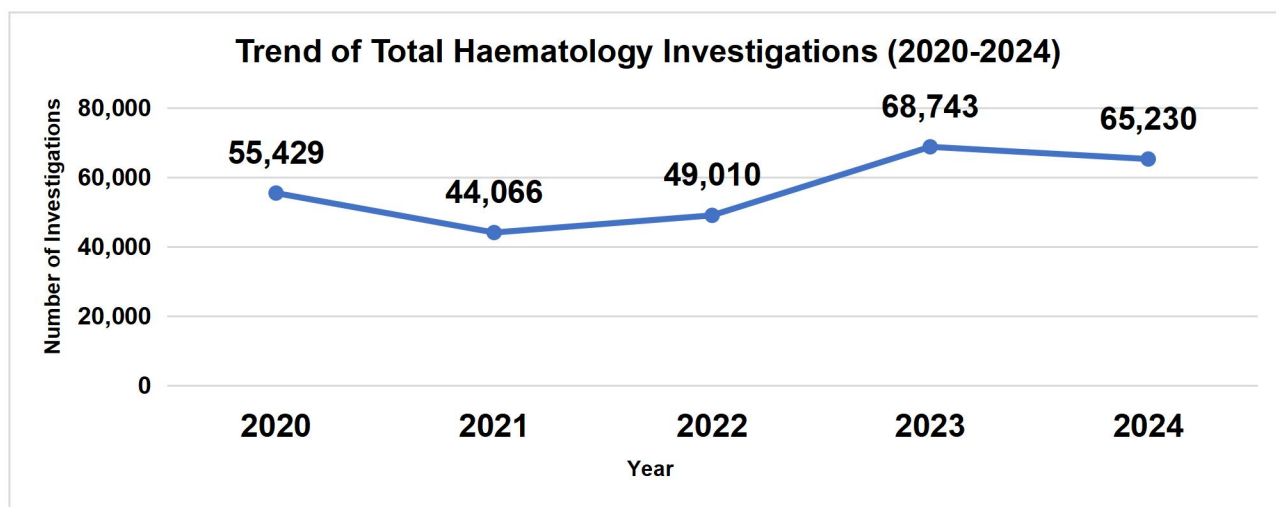


Figure 10.3. 9: Trend of Total Haematology Investigations (2020-2024)

Table 10.3. 2: Haematology Investigation Trend (2020-2024)

TEST	2020	2021	2022	2023	2024	Remarks
FBC	20,616	23,106	34,510	26,597	24,110	9.4% decr
Rectics Count	-	-	15	-	423	Incr
Sickling	1,386	1,697	1,645	1,448	1,756	21.3% incr
ESR	856	1,250	1,951	2,776	2,523	9.1% decr
BF-MPs	4,550	4,966	6,863	6,301	6,861	8.9% decr
G6PD	996	1,030	1,826	1,826	1,602	12.3% decr
Blood Group	14,642	16,122	21,248	23,059	27,433	19% incr
Bleeding & Clotting Time	-	-	-	-	-	-
Clotting Profile (PT, INR, APTT)	331	346	443	447	215	51.9% decr
D-Dimer	-	-	15	110	16	85.5% decr
Coomb's Test	26	42	113	65	0	decr
Film Comment	-	187	104	225	291	29.3% incr
Hb Electrophoresis	663	264	0	0	-	-
Total	55,429	44,066	49,010	68,743	65,230	5.1% decr

Table 10.3. 3: COVID-19 (SARS-CoV-2) Investigations (2020-2024)

Indicator	2021	2022	2023	2024	Remarks
Total number of Cases	3,468	1,471	1,473	155	89.5% decr
Total number of Positives	1,198	277	201	3	98.5% decr
Total number of Negatives	2,270	1,194	1,272	152	88.1% decr
Test Positivity Rate (%)	34.544%	18.831%	13.646%	1.936%	Decr

Table 10.3. 4: Viral Load (HIV) Investigations (2021-2024)

HIV LOAD	2021	2022	2023	2024	REMARKS
Total Patients Tested	2,807	4,045	1,542	1,104	28.4% decr
HIV Viral Load	2807	4,045	1,542	1,175	23.8% decr
Viral Suppression	1,880 (75.02%)	2,701 (74.5%)	799 (74.9%)	840 (88.9%)	Incr
Virologic Failure	626 (24.98%)	924 (25.5%)	267 (25.1%)	104 (11.1%)	Decr
Invalid	301	420	467	160	65.7% Incr

Table 10.3. 5: Trend of Early Infant Diagnosis of HIV (2021-2024)

EID	2021	2022	2023	2024	REMARKS
Total Infants Tested	633	623	384	53	86.2% decr
Positives	36 (5.75%)	30 (4.82%)	14 (3.65%)	0	Decr
Negatives	590 (94.25%)	593 (95.18%)	370 (96.35%)	53	85.7% decr
Invalid	7	0	0	0	No change

10.4 TRANSFUSION MEDICINE MANAGEMENT SERVICES

Blood and blood product transfusions are crucial to patient survival. Globally, health facilities rely on a consistent and adequate supply of these products to improve the survival of patients in critical condition. In 2024, the hospital recorded substantial improvements in both the availability of blood and blood products as well as their utilization.

The total units of blood mobilized in 2024 increased by 7.6% (from 7,169 in 2023 to 7,715 in 2024). This rise was primarily driven by the increase in blood replacement/pre-deposited and walk-in donations. Blood replacement/pre-deposit went up by 32.7% (from 2,567 in 2023 to 3,407 in 2024) and was the largest contributor (44.2%) to the total blood mobilized, whereas walk-in donations increased by 76.8% (99 in 2023 to 175 in 2024), while also contributing to 2.3% of the blood mobilized within the period. On the other hand, blood mobilized through voluntary donations and mobile sessions collection decreased by 6.2% and 10% respectively whereas ANC-related replacement donations also declined by 16.2% (from 74 in 2023 to 62 in 2024).

Further, the blood discard rate in 2024 declined from 5.18% (371 out of 7,169) in 2023 to 2.86% (221 out of 7,715) in 2024, suggesting improvements in institutional blood safety. This reduction was significantly attributed to the decline in transfusion-transmitted infections (TTIs), which reduced from 293 in 2023 to 181 in 2024. Other factors contributing to the discard in 2024 were unsuccessful bleeding (30), expiration (8) and haemolysis (2).

Figure 10.4.1 details the proportion of blood mobilized from the various sources while Table 10.4.1 to Table 10.4.3 below present the comparative performance trends of the sources of blood donation, trends of units of blood discarded and reasons for discarding blood.

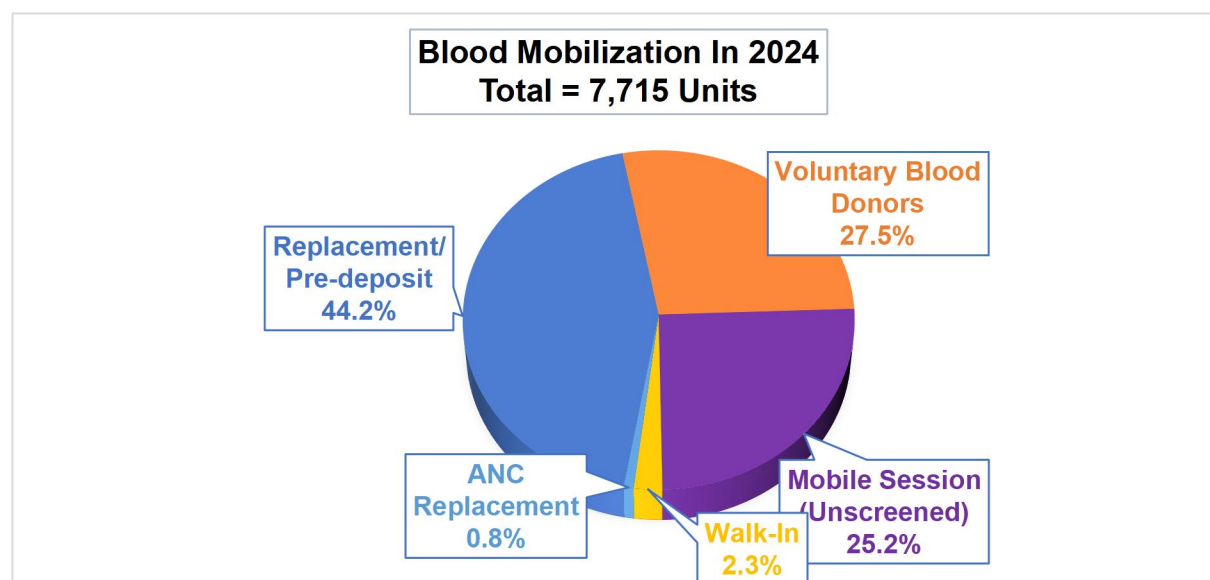


Figure 10.4. 1: Blood Mobilization In 2024

Table 10.4. 1: Source of Blood Donation (2020-2024)

GROUPS	2020	2021	2022	2024	2024	REMARKS
Voluntary Blood Donors	812	674	1,752	2,264	2,123	6.2% decr
Replacement/ Pre-deposit	3,449	2,925	2,541	2,567	3,407	32.7% incr
Walk-In	110	130	88	99	175	76.8% incr
Mobile Session (Unscreened)	702	584	1,607	2,165	1,948	10% decr
ANC Replacement	78	36	51	74	62	16.2% decr
Total	5,151	4,349	6,039	7,169	7,715	7.6% incr

Table 10.4. 2: Trend of Units of Blood Discarded (2020-2024)

GROUPS	2020	2021	2022	2023	2024	REMARKS
Unsafe Blood /Discarded	516	242	107	371	268	27.8% decr

Table 10.4. 3: Reasons for Discarding Blood (2022-2024)

REASON	NUMBER			REMARKS
	2022	2023	2024	
Transfusion-Transmitted Infections (TTIs)	62	293	181	38.2% decr
Clotted	0	1	0	100% decr
Expired	5	1	8	Incr
Haemolysis	0	3	2	33.3% decr
Unsuccessful	25	38	30	21.1% decr
Unaccounted	0	35	-	-
Total Blood Discarded	92	371	221	40.3% decr

With regards to blood utilization, the number of units of whole blood crossmatched increased by 7.7% (from 4,703 in 2023 to 5,064 in 2024), whereas the whole blood transfused went up by 8.7% (from 4,251 in 2023 to 4,620 in 2024). Departments across the hospital collectively received 4,885 units compared to 4,798 in 2023, representing a 1.8% increase. The internal medicine, surgery and maternal health recorded substantial increase of 29.3%, 20.1% and 4.3% respectively in the units of whole blood transfused compared to 2023.

Conversely, the total units of fresh frozen plasma (FFP) transfused in 2024 dropped by 29.1% from 1,112 in 2023 to 788 in 2024. Maternal Health Sub-BMC received the highest proportion of 53.7% (423) and was followed by Anaesthesia & Critical Care Sub-BMC – 18.1% (143) and Accident & Emergency Sub-BMC – 10.5% (83) while 3.85% (30) were received by peripheral facilities (outstations). Further analysis is provided in Figures 10.4.2 to 10.4.4 and Table 10.4.4 to 10.4.5 below.

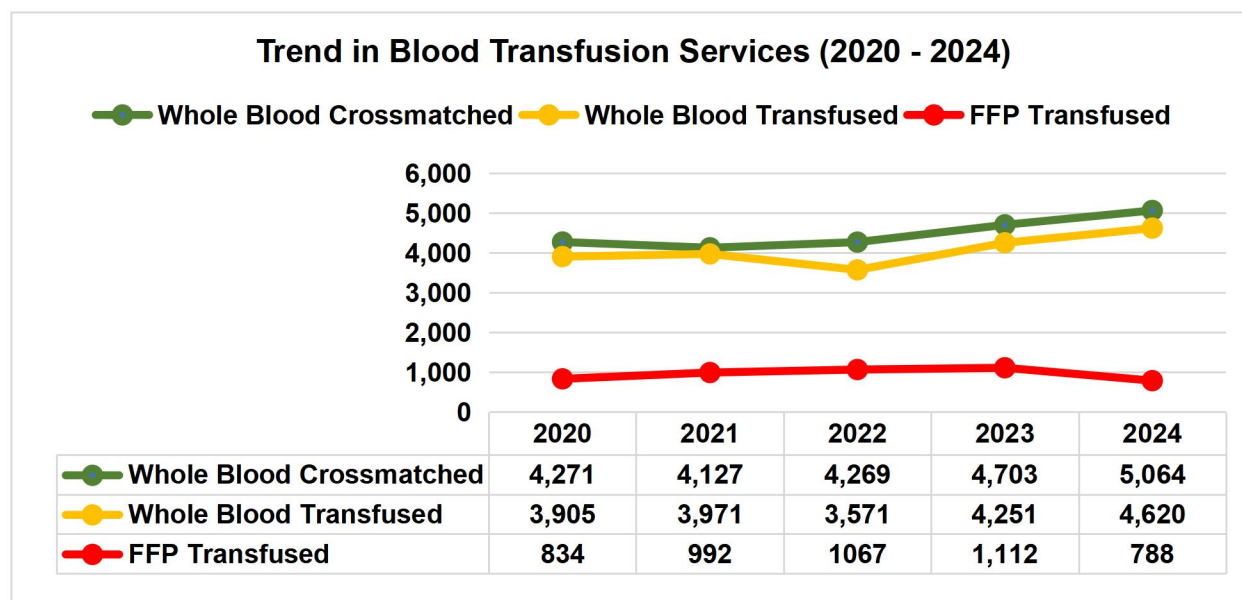


Figure 10.4. 2: Blood Transfusion Services (2020-2024)

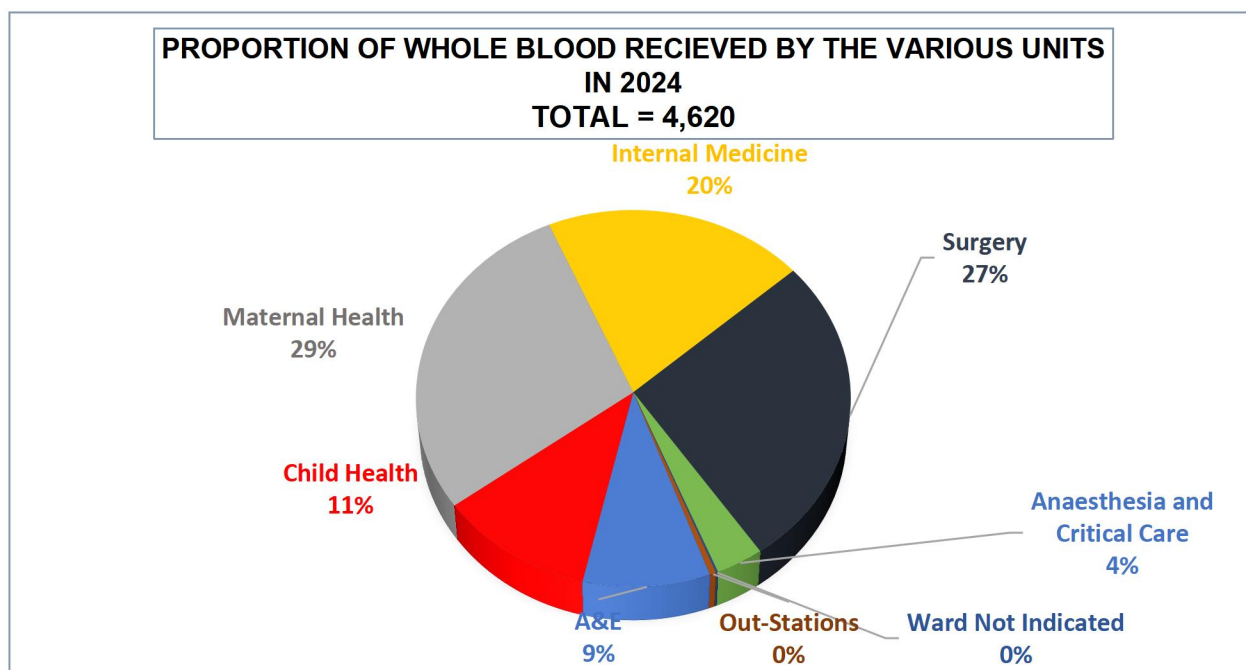


Figure 10.4. 3: Proportion of Whole Blood received by the various Units in 2024

Table 10.4. 4: Whole Blood received by the various Units from 2020 to 2024

Department	2020	2021	2022	2023	2024	Remarks
A&E	282	379	355	470	449	4.5% decr
Child Health	419	465	504	748	553	26.1% decr
Maternal Health	1,002	987	1,176	1,336	1,393	4.3% incr
Internal Medicine	842	721	736	757	980	29.5% incr
Surgery	914	1,132	1,070	1,092	1,311	20.1% incr
Anaesthesia and Critical Care	143	97	126	291	169	41.9% decr
Ward Not Indicated	185	61	21	23	8	65.2% decr
Out-Stations	92	67	197	82	22	73.2% decr
COVID-19 Treatment Centre	26	17	-	-	0	-
Total	3,905	3,926	4,201	4,798	4,885	1.8% incr

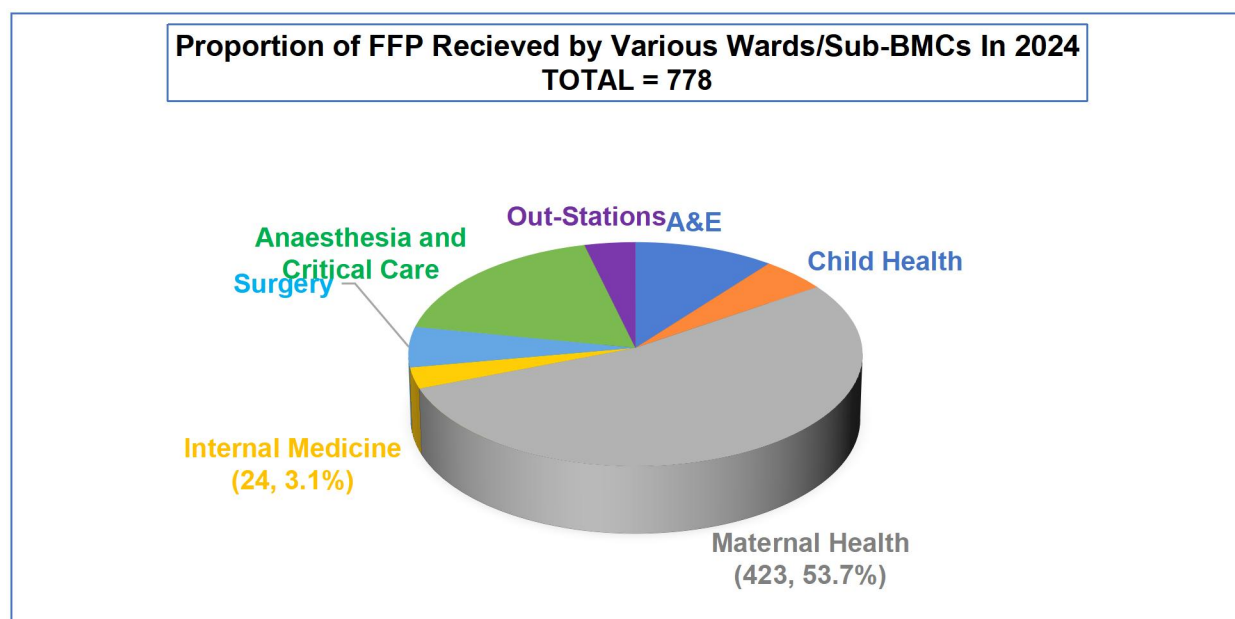


Figure 10.4. 4: Proportion of FFP received by the various Units in 2024

Table 10.4. 5: Trend of FFP Received by Various Wards/Sub-BMCs 2020 to 2024

Department	2020	2021	2022	2023	2024	Remarks
A&E	15	47	41	12	83	591.7% incr
Child Health	29	378	435	73	39	46.6% decr
Maternal Health	508	581	614	805	423	47.5% decr
Internal Medicine	29	77	347	14	24	71.4% incr
Surgery	76	108	115	27	46	70.4% incr
Anaesthesia and Critical Care	61	62	70	129	143	10.9% incr
Ward Not Indicated	77	17	12	0	0	No change
Out-Stations	39	29	31	52	30	42.3% decr
COVID-19 Treatment Centre	116	0	0	0	0	-
Total	834	992	1,665	1,112	788	29.1% decr

10.5. HAEMATOLOGY SERVICES UTILISATION

In general, Haematology service utilization increased by 66.3% (from 415 in 2023 to 690 in 2024) in 2024. The number of sickle cell cases seen went up by 33.8% (from 317 in 2023 to 424 in 2024).

In the same period, the total number of relapse cases rose by 133.3% (from 3 in 2023 to 7 in 2024), suggesting the need to strengthen long-term follow-up and disease monitoring. Admissions related to haematological conditions increased by 20% (from 40 in 2023 to 48 in 2024). Out of these admissions, 13 died representing a case fatality rate of 27.1%.

Non-Hodgkin lymphoma and Chronic Lymphocytic Leukaemia were the commonly haematological conditions managed in 2024, accounting for 29 and 12 cases respectively, in 2024. This was followed by Hodgkin Lymphoma with 11 cases and Multiple Myeloma and Chronic Myeloid Leukaemia with 6 cases each. The least recorded among the most common haematology cases was Polycythaemia Vera with 5 cases. Details of the analysis can be seen in Figure 11.5.1 and Tables 11.5.1 to 11.5.2 below.

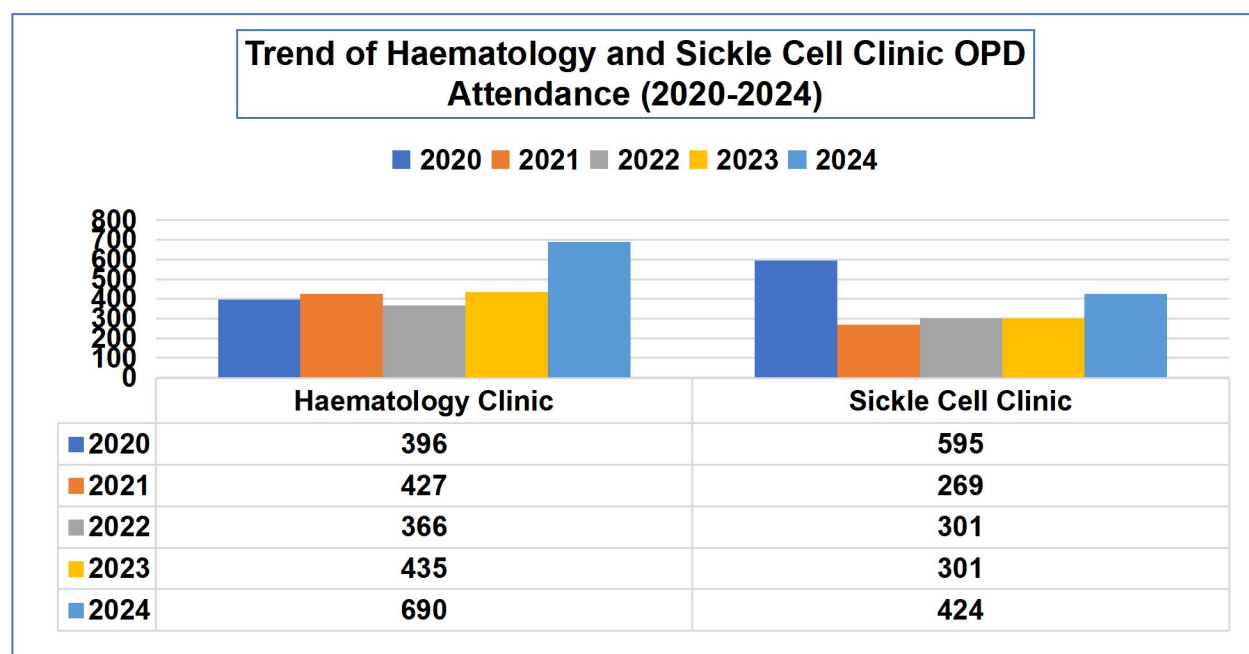


Figure 10.5. 1: Trend of Hematology and Sickle Cell Clinic OPD Attendance (2020-2024)

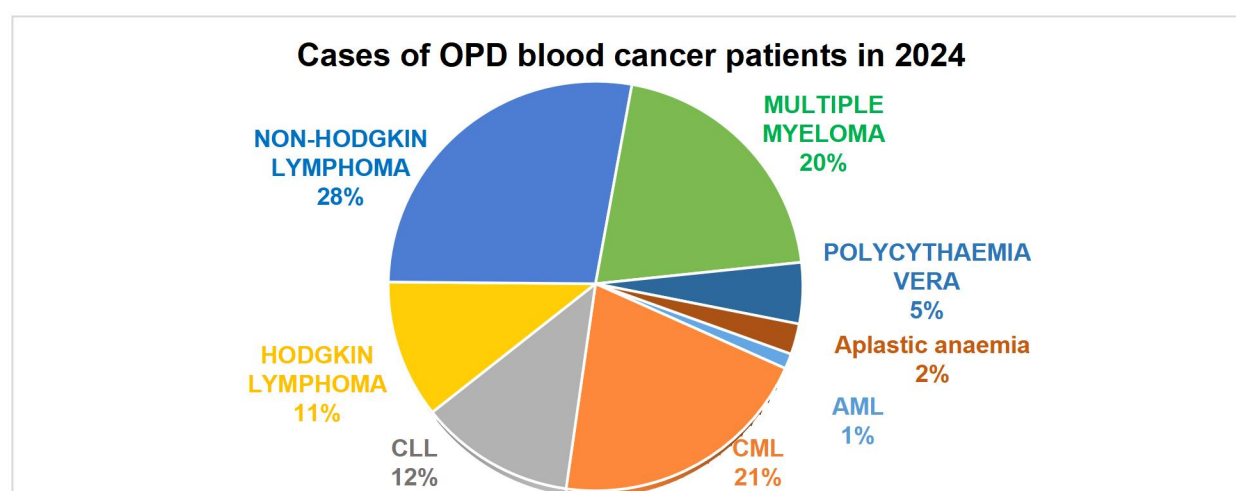


Figure 10.5. 2: Proportion of Blood Cancer Cases Seen at OPD in 2024

Table 10.5. 1: Trend of Haematology Service Utilization (2020-2024)

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Number of Bone marrow Aspirates	31	5	17	24	-	
Number of remissions	6	2	1	12	10	16.7% incr
Sickle cell	46	87	298	317	424	33.8% incr
Number of relapse Patients	3	1	1	3	7	133.3% decr
Number of Admissions	17	10	46	40	48	20% incr
Number of mortalities	10	5	6	5	13	160% incr

Table 10.5. 2: Top 6 Common Haematology Cases Managed (2020-2024)

2022		2023		2024	
CONDITION	NO	CONDITION	NO	CONDITION	NO.
Chronic Lymphocytic Leukaemia (CLL)	16	Chronic Myeloid Leukaemia	14	Non-Hodgkin Lymphoma (NHL)	29
Hodgkin lymphoma	6	Chronic Lymphocytic Leukaemia	13	Chronic Lymphocytic Leukaemia	12
Chronic Myeloid Leukaemia	8	Non-Hodgkin Lymphoma (NHL)	11	Hodgkin lymphoma	11
Multiple Myeloma	6	Multiple Myeloma	10	Multiple Myeloma	6
Non-Hodgkin Lymphoma (NHL)	3	Hodgkin lymphoma	9	Chronic Myeloid Leukaemia	6
Polycythaemia Vera	7	Polycythaemia Vera	5	Polycythaemia Vera	5

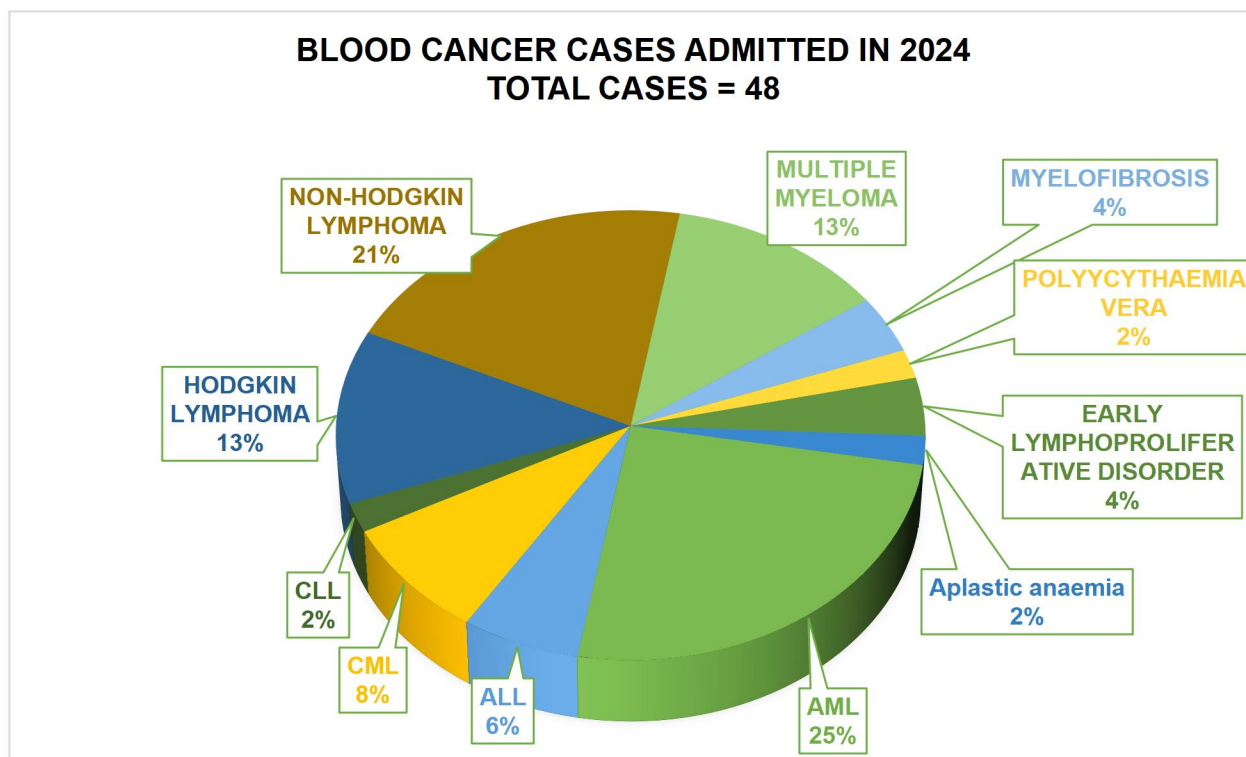


Figure 10.5. 3: Blood cancer cases admitted in 2024

10.6 RADIOLOGICAL SERVICES UTILISATION

The Imaging Sub-BMC provides a wide-range of radiological services, such as ultrasound, X-ray, CT-Scan, echocardiogram, fluoroscopy and other specialised imaging investigations. Since 2020, radiology service utilization demonstrated an initial decline followed by gradual recovery and strong growth in 2024. A total number of radiology investigations increase by 7.7% (from 22,758 in 2023 to 24,506 in 2024). Similarly, the number of clients served also went up by 7.2% (from 19,940 in 2023 to 21,371 in 2024).

Further, the individual investigations showed varied performance. Fluoroscopy investigations increased by 70.1% (from 197 in 2023 to 335 in 2024), CT scan investigations went up by 20.8% (from 3,142 in 2023 to 3,795 in 2024), ultrasound scan investigations rose by 7.2% (from 8,818 in 2023 to 9,454 in 2024), while x-ray investigations went up slightly by 0.8% (from 10,687 in 2023 to 10,769 in 2024). Also in 2024, a total of 913 other special radiological investigations (Hsg, Mcug Rug, Dental, Ba. studies) were conducted, representing a 383.1% increase over 183 investigations performed in 2023. In addition, 944 echocardiogram tests were conducted in 2024, indicating strengthened cardiac diagnostic capacity. In contrast, no mammogram investigations were performed in 2024 as a result of the breakdown of the mammogram machine.

Figure 11.6.1 and Table 11.6.1 provides details of the analysis above.

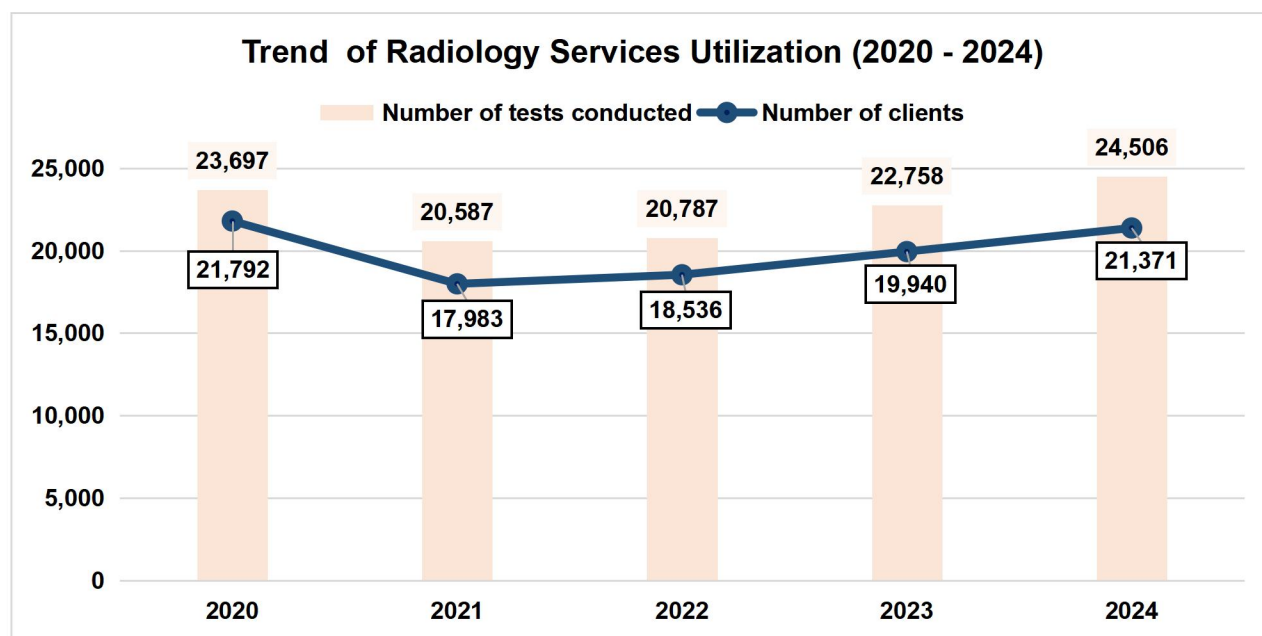


Figure 10.6. 1: Trend of Radiology Service Utilization (2020 - 2024)

Table 10.6. 1: Trend of Radiology Investigations

Investigation	2020	2021	2022	2023	2024	Remarks
CT scan	2232	471	0	1928	3141	62.9% incr
Ultrasound Scan	8,485	7,033	7,470	8,818	9,454	7.2% incr
X-Ray	11,492	12,363	12,001	10,687	10,769	0.8% incr
Echocardiogram	496	-	-	-	944	-
Interventional Radiology	4	9	1	-	-	-
Fluoroscopy	182	413	288	197	335	70.1% incr
Mammogram	123	206	359	67	0	decr
Other Specials (Hsg, Mcug Rug, Dental, Ba. studies)	-	515	956	189	913	383.1% incr

10.7 PATHOLOGY SERVICE UTILISATION

Generally, a total of 1,185 bodies were received at the Pathology Unit in 2024, representing a 6.8% decrease from 1,271 in 2023. Out of the total received in 2024, 77% (917) were received from Wards, 21% (267) were brought-in-dead whiles 2% (21) were received from other sources. The total bodies received from the wards decreased by 16.9% (from 1,103 in 2023 to 917 in 2024). This decline is influenced by the decreases from Child Health (by 37.4% from 230 in 2023 to 144 in 2024), A&E (by

11.7% from 410 in 2023 to 362 in 2024) and Internal Medicine (by 8.3% from 278 in 2023 to 255 in 2024). On the other hand, bodies received from Maternal Health and Surgical Sub-BMCs went up by 35% (from 20 in 2023 to 27 in 2024) and 2.4% (from 126 in 2023 to 129 in 2024) respectively. Brought-in-dead cases increased by 47% (from 168 in 2023 to 247 in 2024).

Further, procedure volumes generally went up in 2024. The total number of autopsies performed increased by 6.5% (from 232 in 2023 to 247 in 2024), suggesting the sustaining demand for post-mortem examinations. Embalmmment and general handling recorded marginal rise of 3.7% (from 485 in 2023 to 503 in 2024) and 0.9% (from 789 in 2023 to 796 in 2024) respectively, while the number of bodies bathed decreased by 17.5% (From 619 in 2023 to 511 in 2024). The number of bodies stored went up by 7.5% (from 1,019 in 2023 to 1,102 in 2024), which may be attributed to longer storage durations linked to delayed burials, administrative processes, or family-related factors. Below in Figure 11.7.2 to 11.7.3 and tables 11.7.1 to 11.7.2 provides detailed trend analysis

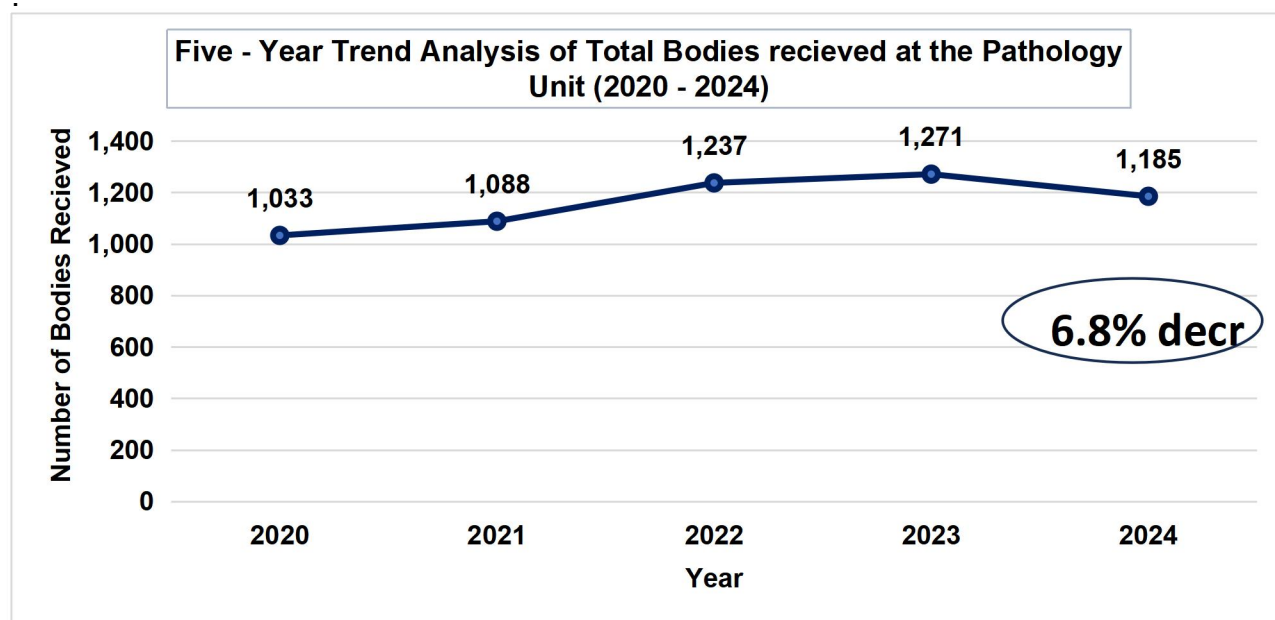


Figure 10.7. 1: Five-Year Trend Analysis of Total Bodies received at the Pathology Unit (2020-2024)

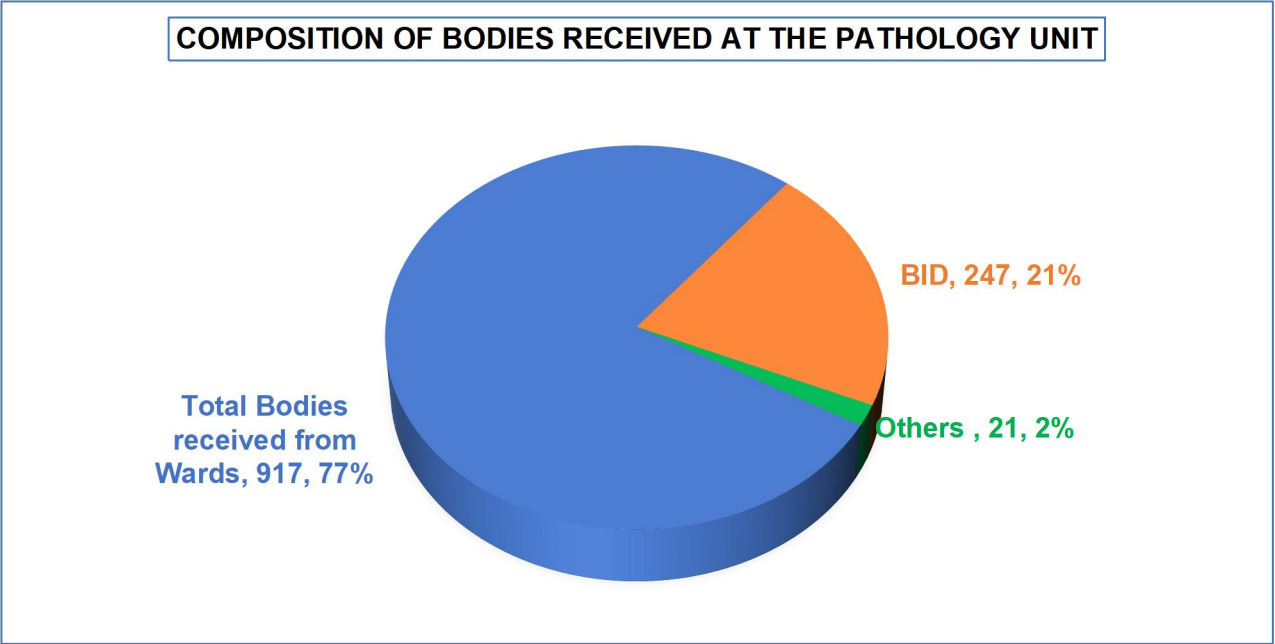


Figure 10.7. 2: Composition of Bodies received at the Pathology Unit in 2024

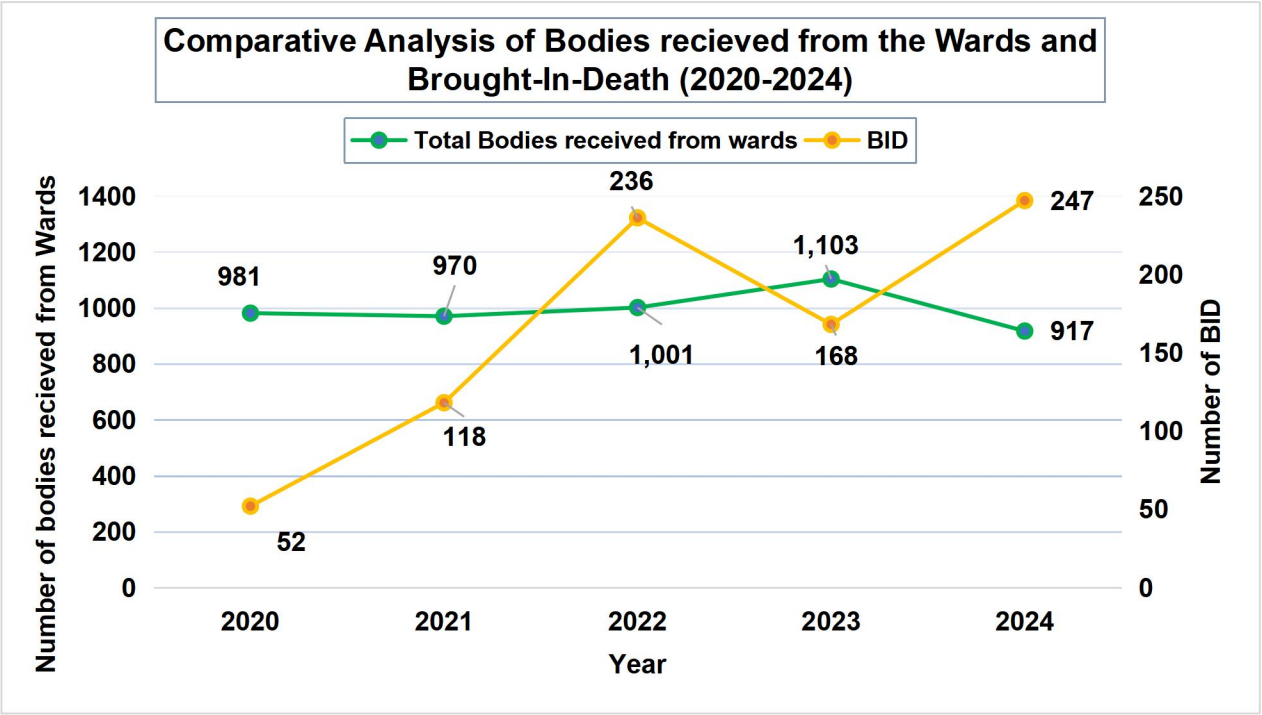


Figure 10.7. 3: Comparative Analysis of Bodies received from the wards and Brought-In-Death (2020-2024)

Table 10.7. 1: Sources of Bodies Received at the Pathology Unit (2020-2024)

SOURCE	2020	2021	2022	2023	2024	REMARKS
Bodies Received from the Wards						
A&E Sub-BMC	406	468	330	410	362	11.7% decr
Child Heath Sub-BMC	28	41	286	230	144	37.4% decr
Maternal Health Sub-BMC	25	37	39	20	27	35% incr
Internal Medicine Sub-BMC	388	296	250	278	255	8.3% decr
Surgery Sub-BMC	134	128	96	126	129	2.4% incr
ICU	-	-	-	39	-	-
Total Bodies received from Wards	981	970	1,001	1,103	917	16.9% decr
BID	52	118	236	168	247	47% incr
Others	-	-	-	19	21	10.5% incr
Total bodies received	1,033	1,088	1,237	1,271	1,185	6.8% decr

Table 10.7. 2: Procedures performed at Pathology Unit (2020-2024)

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Number of Autopsy conducted	166	227	250	232	247	6.5% incr
Number of General Handling	773	929	724	789	796	0.9% incr
Number of Embalment	561	540	380	485	503	3.7% incr
Number of bodies Bath	561	550	397	619	511	17.5% decr
Number of Bodies stored	954	993	757	1,019	1,102	7.5% incr

CHAPTER ELEVEN

MATERNAL HEALTH SUB-BMC

11.1 INTRODUCTION

The Maternal Health Sub-BMC is committed to providing comprehensive care for women across all stages of pregnancy, childbirth and postnatal periods, while also offering specialized gynaecological services. Key services provided include reproductive endocrinology and fertility services, gynaecology oncology, feto-maternal medicine, antenatal and postnatal care, childbirth and emergency obstetric care.

Managed by a six-member team, the Sub-BMC comprises several functional units; the obstetric and gynaecological ward, delivery suite, delivery suite theatre and recovery wards, antenatal & postnatal clinics (ANC & PNC), gynaecological clinic and emergency triage assessment & treatment (ETAT) centre. Together, these units ensure coordinated, patient-centred maternal and gynaecological care.

11.2 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 11.2. 1: Summary of the 2024 Annual Performance of Maternal Health Sub-BMC under the Strategic Objectives.

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
HOSPITALWIDE LEVEL							
Access	2020	2021	2022	2023	2024	Target	Remarks
Total OPD Attendance	12,136	15,468	18,860	21,237	20,798	-	2.1% decr
Total Patients admission	2,000	2,058	5,706 (Admission included ETAT)	5,305 (Admission included ETAT)	5,236 (Admission included ETAT)	-	1.3% decr
Percentage of maternal admissions due to external referrals	21.2%	23%	26.71%	72.74%	48.7%	THs = 60%	Decr (Target not met)
Percentage bed occupancy	55.5%	52.20%	54.0%	57.5%	71.9%	THs = 75%	Incr (Target not met)
Total surgical operations	1,717	1,728	1,917	1,786	1,887	-	5.7% incr
Total surgical operations	1,717	1,728	1,913	1,862	1,951	-	4.8% incr
Total deliveries	2,883	3055	3,269	2,877	2,750	CCTH = 5% ↑	4.4% decr (Target not

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
						met)	
Delivery to midwife ratio (all midwives at the institution)	18:1	15:1	14:1	15:1	15:1	THs = 20:1	No change
Couple year protection	1,891.2	1196.7	831.7	1,343.9	2,013.8	TH = 2,500	incr
Caesarean section rate	53.3%	51.4%	50.4%	52.69%	57.4%	TH = 40%	Incr (Target not met)
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Impact	2020	2021	2022	2023	2024	Target	Remarks
Live births	2,793	3,048	3,288	2,937	2,782	-	5.3% decr
Low birth rate	16.8%	19.4%	20.5%	23.2%	21.0%	THs = 12%	Decr
Stillbirth rate (/1000LB)	31	42	35	37	32	THs = 15	13.5% decr (Target not met)
Total Fresh Still birth	38	43	54	42	36	-	14.3% decr
Total Macerated Still Birth	52	85	86	63	52	-	17.5% decr
Institutional Maternal mortality ratio (/100,000LB)	931	1,050	1,186	681	862	THs = 300	26.6% incr (Target not met)
Number of institutional maternal deaths	26	32	39	20	24	CCTH = 50% ↓	20% incr
% of maternal mortalities audited	100%	100%	100%	100%	100%	THs = 100%	Sustained
Partograph use rate	48.7%	48.5%	47.6%	62.01%	63%	THs = 60%	Incr Target met
Successfully organised and conducted seven (7) capacity-building trainings for staff comprising; • One (1) training on Infection Prevention and Control (IPC) • Two (2) trainings on Life-Support Systems • Two (2) trainings on Emergency Readiness • One (1) training on Quality Improvement • One (1) training on Helping Babies Breathe							
Sixty-five percent (65%) of perinatal mortality cases were audited to inform quality improvement actions							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
Acquired essential clinical equipment to enhance patient care and operational efficiency. These were; • Four (4) wheelchairs • Three (3) blood pressure apparatus • Five (5) patients' beds • One (1) medicine trolley							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE	
Two (2) water heater	
Renovated Side Ward 3 (OGY 03) and Isolation Room 5 (OGY 05) to improve their safety and functionality	
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM	
4.1: Governance Related Performance	
Organised two (2) Leadership trainings focusing on the art of leadership and Emotional Intelligence	
Conducted orientation for all newly posted staff to ensure smooth integration into the Sub-BMC.	
Held six (6) Sub-BMC meetings	
4.2: Human Resource Related Performance	
90% of eligible staff were successfully promoted and/or upgraded	
4.3 Finance related performance	
-	
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING	
5.1 Improve on Research:	
Five (5) Midwives were recommended for specialist training in Advance Midwifery to enhance skilled maternal care delivery	
Sixty (60) 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 provide structured mentorship support for thirty-eight (38) peripheral facilities in Central Region, geared towards strengthening maternal service delivery and clinical capacity	
Successfully organized and conducted clinical outreach programmes aimed at building capacity at lower-level and peripheral health facilities. These included; - Implemented surgical obstetric and gynaecological outreaches in ten (10) lower-level facilities aimed at teaching, monitoring and reinforcing safe and standard surgical practices - Carried out two (2) nursing-led outreach programmes to peripheral facilities, geared towards strengthening nursing practice and service delivery	

11.3 MATERNAL HEALTH SERVICES OPD UTILIZATION

The overall maternal health OPD attendance demonstrated a consistent rise from 12,136 in 2020 to a peak of 21,327 in 2023. However, in 2024, a marginal decrease of 2.1% was recorded in the overall attendance (from 21,237 in 2023 to 20,798 in 2024). In spite of the decline, the performance at the individual clinics varied during the period. Antenatal care remained the service with the highest utilization in 2024 despite the 6.1% reduction (from 9,400 in 2023 to 8,831 in 2024) recorded. Post-natal services showed a consistent increase since 2020 but saw a decline of 7% (from 4,471 in 2023 to 4,157 in 2024) in attendance. Attendance at the gynaecology clinic however went up by 21.3% (from 3,826 in 2023 to 4,641 in 2024).

Further, among the specialised services, some clinics experienced substantial increase. The feto-maternal clinics recorded an increase of 50.6% in attendance (from 1,256 in 2023 to 1,891 in 2024). Gynaecology oncology clinic recorded a 13% rise (from 255 in 2023 to 264 in 2024). Similarly, uro-gynaecology clinic attendance went up by 3.5% (from 255 in 2023 to 264 in 2024). However, the reproductive endocrinology and fertility

clinic attendance declined by 15% (from 526 in 2023 to 447 in 2024). Details of the analysis is illustrated in figure 11.3.1 and table 11.3.1 below.

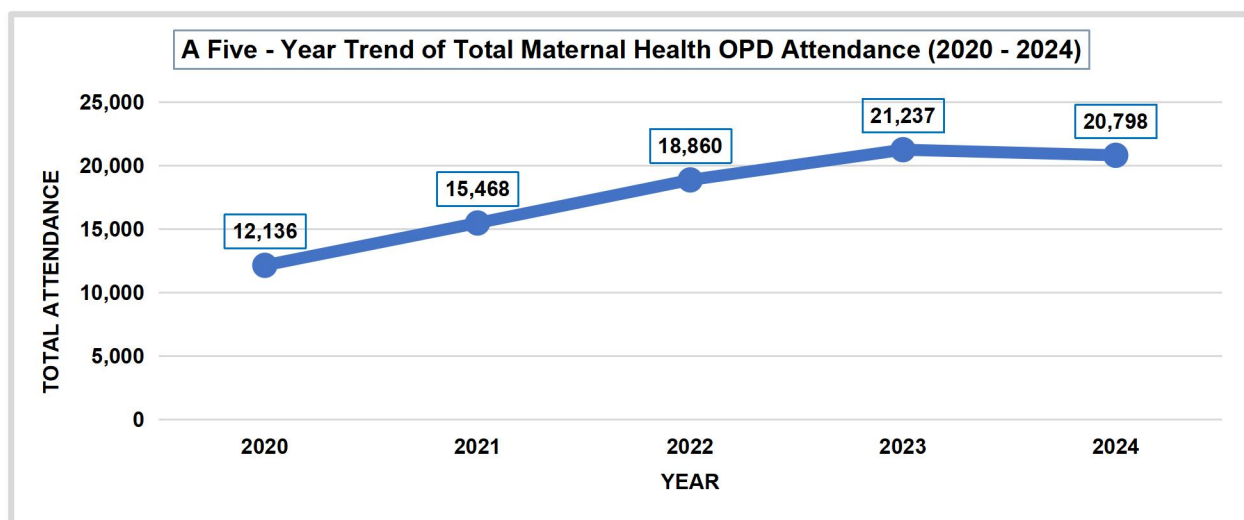


Figure 11.3. 1: Trend of Total Maternal Health OPD Attendance (2020 - 2024)

Table 11.3. 1: OPD Attendant for Maternal Health

Clinic	2020	2021	2022	2023	2024	Remarks
ANC	7,717	9,298	10,449	9,400	8,831	6.1% decr
PNC	1,866	2,520	3,027	4,471	4,157	7% decr
Gynae	2,553	3,368	3,904	3,826	4,641	21.3% incr
Specialized Services						
Reproductive Endocrinology and Fertility clinic	-	271	357	526	447	15% decr
Gynae. Oncology	-	11	77	502	567	13% incr
Uro-gynae	-	-	134	255	264	3.5% incr
Feto-Maternal	-	-	912	1,256	1,891	50.6% incr
Total Attendance	12,136	15,468	18,860	21,237	20,798	2.1% decr

11.4 MATERNAL HEALTH EMERGENCY SERVICE UTILIZATION

The hospital since 2018 has strengthened maternal health emergency care through the construction and operationalization of the maternal health Emergency Triage, Assessment and Treatment (ETAT) centre. Following this intervention, maternal emergency case volumes increased steadily till it peaked in 2022. However, utilization dropped, falling to 5,346 cases in 2023 and slightly further to 5,231 in 2024, representing a 2.2% decrease.

Despite the decline in emergency cases seen, the number of emergency cases admitted went up by 12.4% (From 1,632 in 2023 to 1,834 in 2024). Similarly, the number of emergency cases discharged increased by 45.6% (from 270 in 2023 to 393

in 2024). The hospital also experienced a 5.7% increase in referred obstetrics and gynaecology cases (from 1,632 in 2023 to 1,725 in 2024).

The number of emergency maternal deaths slightly went up by 12.5% (from 8 in 2023 to 9 in 2024). Details illustrated in Figure 11.4.1 below.

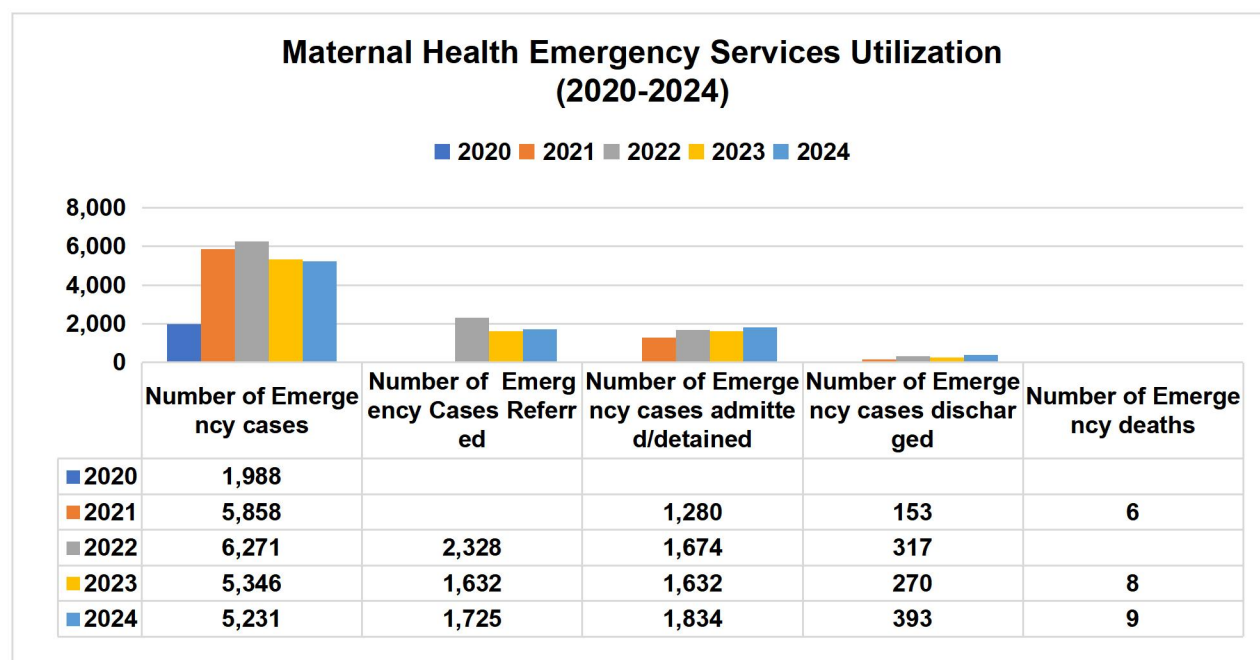


Figure 11.4. 1: Maternal Health Emergency Services Utilization (2020-2024)

11.5 MATERNAL HEALTH SERVICES IN-PATIENT UTILIZATION

Generally, the number of maternal health admissions recorded in 2024 declined marginal by 1.3% (from 5,305 in 2023 to 5,236 in 2024). The percentage of maternal admissions due to external referrals decreased to 48.7% from 79.6% in 2023, below the Teaching Hospital's target of 60%. The overall bed occupancy rate decreased from 77.1% in 2023 to 71.9% in 2024 while the average length of stay reduced slightly from 4.5 days in 2023 to 4.3 days in 2024. Total deaths were 36 compared to 20 in 2023, representing an increase of 80%.

Ward-level analysis showed varied performances in the admission pattern. The O&G recorded a decline of 6.1 (from 1,870 in 2023 to 1,755 in 2024), Delivery Suite saw an 8.7% decrement (from 1,632 in 2023 to 1,647 in 2024) while ETAT admissions went up from 1,632 in 2023 to 1,834 in 2024, indicating a 12.4% increase. Average length of stay (ALS) at the O&G ward increased from 4.5 days in 2023 to 5.0 days in 2024, while recording a bed occupancy rate of 197.7%, suggesting significant pressure on the ward and increased workload for staff. ETAT recorded a decline in the ALS from 4.5 days in 2023 to 3.9 days in 2024 and also increased its bed occupancy rate from 86.6% in 2023 to 107.2% in 2024.

Further, while mortality declined at the delivery suite (from 2 in 2023 to 1 in 2024), mortality at the O&G ward and ETAT went up by 160% (from 10 in 2023 to 26 in 2024) and 12.5% (from 8 in 2023 to 9 in 2024) respectively. These trends are further detailed in Figure 11.5.1, 11.5.2 and Tables 11.5. 1, 11.5.2 below.

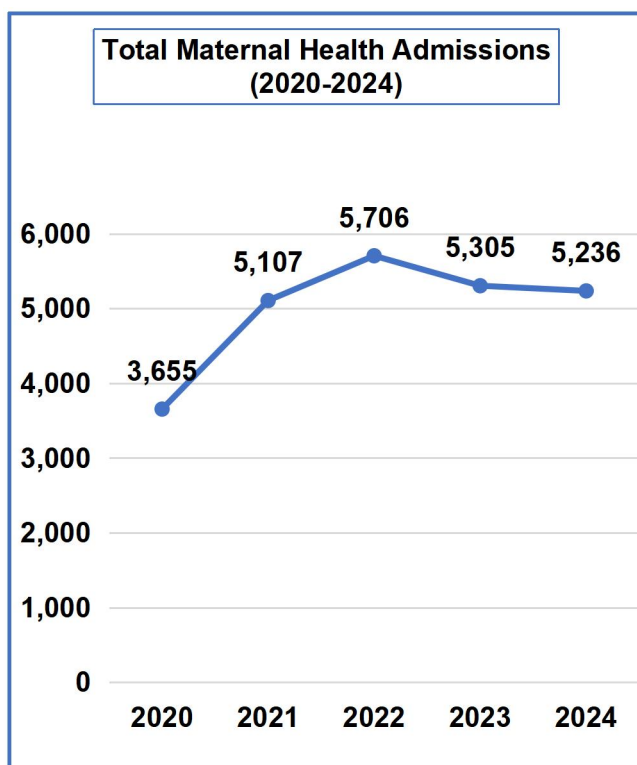


Figure 11.5. 1: Total Maternal Health Admissions (2020-2024)

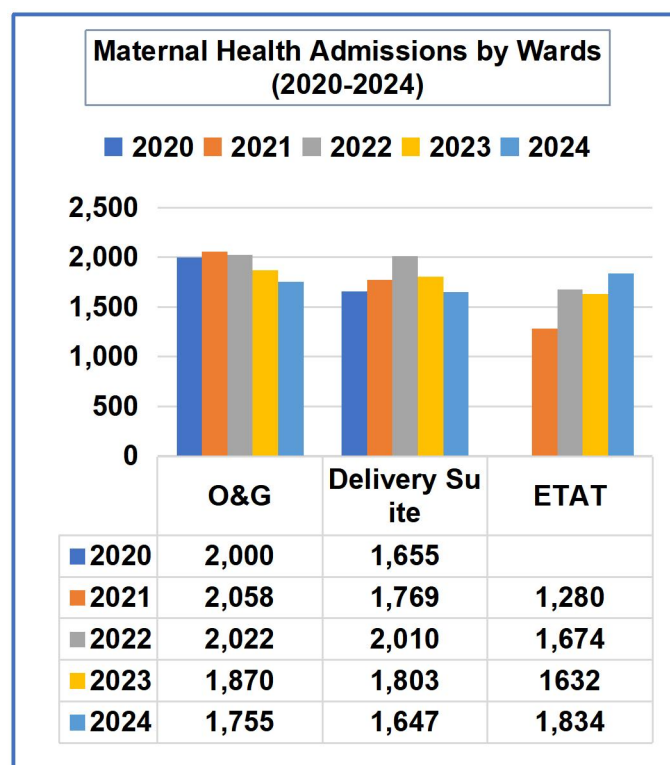


Figure 11.5. 2: Maternal Health Admissions by Wards (2020-2024)

Table 11.5. 1: at Maternal Sub-BMCs in-patient statistics per Ward (2020 – 2024)

INDICATOR	O&G Ward					Delivery Suite					ETAT				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Admissions	2000	2058	2022	1870	1755	1655	1769	2010	1803	1647	-	1280	1674	1632	1834
Discharges	2554	2730	2820	2583	2558	1293	1412	1573	1409	1192	-	153	317	270	393
Average Length of Stay (days)	4	4.2	4.3	4.5	5.0	1.1	1	1.7	4.7	2.9	-	1	4.2	4.5	3.9
Average Daily Bed Occupancy	32.4	32	33.7	33.6	35.1	5.8	8	7.5	11.7	9.5	-	8	7.5	11.7	4.8
% Bed Occupancy	71.8	70.3	71.8	73.8	197.7	30.3	27.7	30.3	61.8	49.7	-	63	82.6	86.6	107.2

INDICATOR	O&G Ward					Delivery Suite					ETAT				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
ncy															
Number of Deaths	13	16	21	10	26	1	0	1	2	1	-	6	-	8	9
Death Rate (%)	0.40	0.50	0.70	0.53	1.0	0.10	0.0	0.10	0.11	0.1	-	-	-	0.49	2.2

Table 11.5. 2: Maternal In-Patient Statistics

Indicator	2020	2021	2022	2023	2024	Remarks	Target	Measurement
Total Admission	3,655	5,107 (Admission included ETAT)	5,706 (Admission included ETAT)	5,305 (Admission included ETAT)	5,236 (Admission included ETAT)	1.3% decr	-	-
Number of maternal admissions due to external referrals	776	556	1,077	2,672	2,550	4.6% decr		
Percentage of maternal admissions due to external referrals	21.2%	23%	26.71%	79.6%	48.7%	Decr	60%	No. of Maternal admissions due to referrals / Total Maternal admissions
Total Discharges	3,847	4,295	4,710	4,262	4,143	2.8% decr	-	
Trans-In	983	1,157	1,455	1,130	1,164	3% incr	-	
Trans-Out	389	460	2,404	2,064	2,220	7.6% incr	-	
Average Daily Occupancy	32.4	32	45	52.4	48.9	6.7% decr	-	
% Bed Occupancy	71.8%	71%	66.0%	77.1%	71.9%	Incr	-	
Average Length of Stay	4.0 days	4.2 days	3.5 days	4.5 days	4.3 days	Decr	-	
Total Death	26	32	39	20	24	20% incr	-	

11.5.1 CAUSES OF MATERNAL HEALTH ADMISSIONS

11.5.1.1 TOP 10 OBSTETRIC CONDITIONS

Gestational hypertension was recorded as the most predominant obstetric condition seen in 2024, with 21% (420) cases. This was closely followed by genitourinary infections which recorded 20.5% (409). Eclampsia remained a major concern, accounting for 15.9% (318) cases. Haemorrhage ranked fourth with 9.6% (192) cases. Anaemia in pregnancy (5.6%), malaria in pregnancy (7.0%), and gestational diabetes/diabetes mellitus in pregnancy (6.9%) persisted as important contributors to obstetric morbidity. Abortion cases declined to 130 (6.5%) from 11.09% (180) in 2023, while ectopic pregnancy (2.8%) and obstetric lacerations (1.3%) represented the least reported conditions among the top ten. Table 11.5.1.1 below provides a three-year trend of the top ten obstetric conditions from 2022 to 2024.

Table 11.5.1. 1: Top 10 Obstetric Conditions

2022		2023		2024	
CONDITION	No (%)	CONDITION	No (%)	CONDITION	No (%)
Hypertensive disease in pregnancy (Eclampsia-332)	471 (39.71%)	Eclampsia	402 (24.77%)	Gestational hypertension	420 (21%)
Abortion	156 (13.15%)	Other hypertensive disorders of Pregnancy	262 (16.14%)	Genitourinary infections	409 (20.5%)
Urinary tract infection	145 (12.23%)	UTI in Pregnancy	214 (13.19%)	Eclampsia	318 (15.92%)
Anaemia in pregnancy	110 (9.27%)	Abortion	180 (11.09%)	Haemorrhage	192 (9.61%)
Diabetes mellitus in pregnancy	80 (6.75%)	Malaria in Pregnancy	116 (7.15%)	Anaemia in Pregnancy	171 (5.6%)
Malaria in pregnancy	79 (6.66%)	Gestation diabetes mellitus/ Diabetes Mellitus in pregnancy	103 (6.36%)	Malaria in pregnancy	139 (7%)
Ectopic	66 (5.56%)	Hyperemesis gravidarum	88 (5.42%)	Gestation diabetes mellitus/ Diabetes Mellitus in pregnancy	137 (6.86%)
Premature rupture of membrane	44 (3.71%)	Haemorrhage /bleeding	87 (5.18%)	Abortion	130 (6.51%)
Preterm Labor	2.95% (35)	Anaemia in Pregnancy	87 (5.18%)	Ectopic pregnancy	55 (2.75%)

2022		2023		2024	
CONDITION	No (%)	CONDITION	No (%)	CONDITION	No (%)
		Ectopic	84 (5.18%)	Obstetric laceration	26 (1.30%)

11.5.2.1 TOP 10 GYNAECOLOGY CONDITIONS

Leiomyoma continue to be the leading gynaecological condition in 2024, accounting for 30.45% (638) of the total cases seen, although its proportional contribution decreased in comparison with previous years. This was followed by female Infertility with 15.23% (319) cases, pelvic inflammatory disease 10.60% (222) and abnormal uterine bleeding (excluding leiomyomas) 9.31% (195). On the other hand, acute vaginitis accounted for the least among the top ten gynaecological conditions with 2.43% (51). Table 11.5.2.1 below provides a three-year trend of the above.

Table 11.5.2. 1: Top 10 Gynaecology Conditions from 2020 to 2024

2021		2022		2024	
CONDITIONS	NO. OF CASES	CONDITIONS	NO. OF CASES	CONDITIONS	NO. OF CASES
Leiomyoma (Abnormal uterine bleeding)	50.61% (124)	Leiomyoma	33.33% (135)	Leiomyoma	30.45% (638)
Pelvic inflammatory Disease	24.08% (59)	Abnormal uterine bleeding	20.49% (83)	Female Infertility	15.23% (319)
Malignant neoplasm/ cancers of the female reproductive system	8.57% (21)	Pelvic Inflammatory disease	15.06% (61)	Pelvic Inflammatory disease	10.60% (222)
Ovarian cyst	5.71% (14)	Endometritis	11.11% (45)	Abnormal uterine bleeding (aside leiomyomas)	9.31% (195)
Uterine prolapse	4.49% (11)	Malignant neoplasm/ cancers of the female reproductive system	7.41% (30)	Candidiasis	8.64% (181)
Cervical polyps	4.08% (10)	Ovarian cyst	3.7% (15)	Malignant neoplasm	6.97% (146)
Vaginal prolapse	2.04% (5)	Cervical Polyps	3.21% (13)	Ovarian cyst	6.73% (141)
Female infertility	0.41% (1)	Endometriosis	3.21% (13)	Uterine Vaginal prolapse	5.92% (124)
		Dysmenorrhea	1.48% (6)	Polycystic Ovarian Syndrome	3.72% (78)

2021		2022		2024	
CONDITIONS	NO. OF CASES	CONDITIONS	NO. OF CASES	CONDITIONS	NO. OF CASES
		Acute Vaginitis	0.99% (4)	Acute Vaginitis	2.43% (51)

11.6 OBSTETRIC SERVICES UTILISATION

Analysis of the obstetric services indicators over the five-years (2020-2024) revealed mixed performances. ANC registrants fluctuated over the period with the peak of 808 recorded in 2022. Despite the decline in 2023, the registrants went up by 11.1% to 774 in 2024, exceeding the institutional target of 10% increase. Similarly, ANC attendance consistently increased from 2020 to 2022, but declined thereafter, recording a 6.1% reduction in 2024 (from 9,400 in 2023 to 8,831 in 2024).

Total deliveries also fluctuated, recording the highest of 3,269 in 2022. In 2024, total deliveries declined by 4.4% (from 2,877 in 2023 to 2,750 in 2024), falling short of the institutional target of 5% increase. This decrease reflected in the number of babies delivered and livebirths, which declined by 5.6% (from 3,042 in 2023 to 2,872 in 2024) and 5.3% (from 2,937 in 2023 to 2,782 in 2024) respectively. Despite this, the hospital sustained a 100% rate of supervised delivery. The low birth rate demonstrated an upward trend over the years, increasing to 21.0%, far above the Teaching Hospital's target of 12%. Details illustrated in Table 11.6.1 and Figure 11.6.1 below.

Table 11.6. 1: Performance Trends in Antenatal and Delivery Services

Indicators	2020	2021	2022	2023	2024	Remarks	Target	Measurement
ANC Registrants	761	768	808	697	774	11.1% incr	CCTH = 10% Incr	-
ANC Attendance	7,717	9,298	10,449	9,400	8,831	6.1% decr	-	-
Deliveries	2,883	3,055	3,269	2,877	2,750	4.4% decr	CCTH = 5% Incr	Total No. of Deliveries undertaken
% Supervised Deliveries	100	100	100	100	100	Sustained	-	-
Number of Babies	2,979	3,176	3,408	3,042	2,872	5.6% decr	-	-
Live births	2,793	3,048	3,288	2,937	2,782	5.3% decr	CCTH = 5% Incr	-
Low birth Weight Rate (%)	16.80	19.40	20.50	20.00	21.0%	Decr	THs = 12%	Total no. of babies < 2.5kg/ Total live births *100

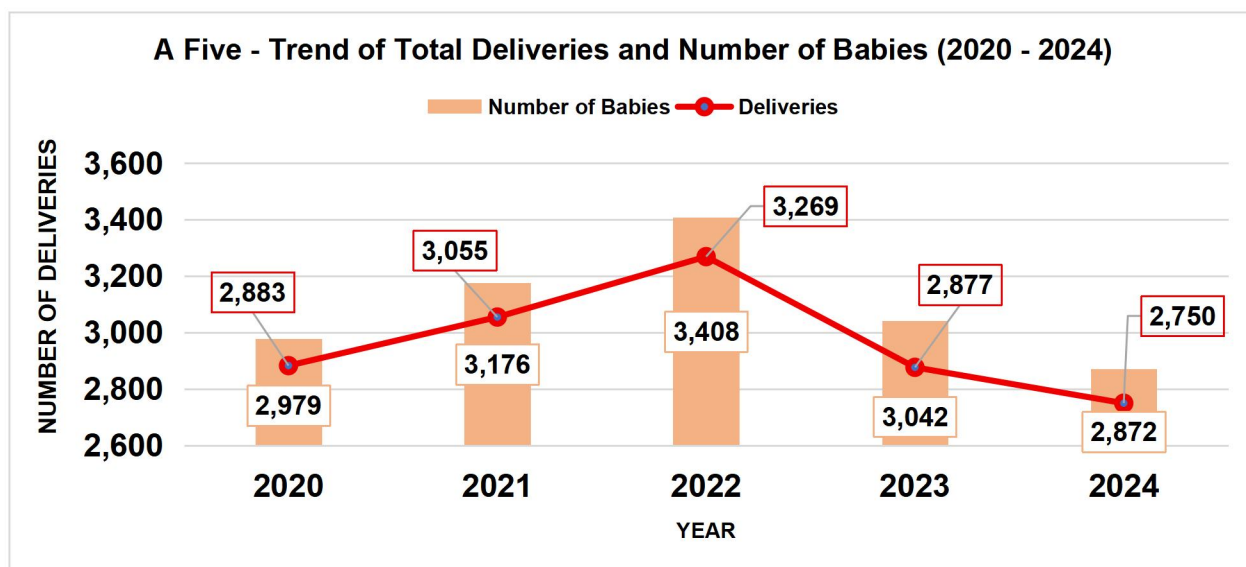


Figure 11.6. 1: Trend of Total Deliveries and Number of Babies (2020-2024)

Further, the partograph use rate marginally improved from 62% in 2023 to 63% in 2024. The caesarean section rate fluctuated over the period with a peak of 57.3% recorded in 2024. This is above the Teaching Hospital's target of 40%, reflecting either increased obstetric complications or increasing preference for the caesarean sections. Also, assisted vaginal delivery (AVD) went up from 0.3% in 2023 to 0.5% in 2024. However, spontaneous vaginal delivery (SVD) decreased (from 47% in 2023 to 42% in 2024). Further details are provided in Figure 11.6.2 and Table 11.6.2.

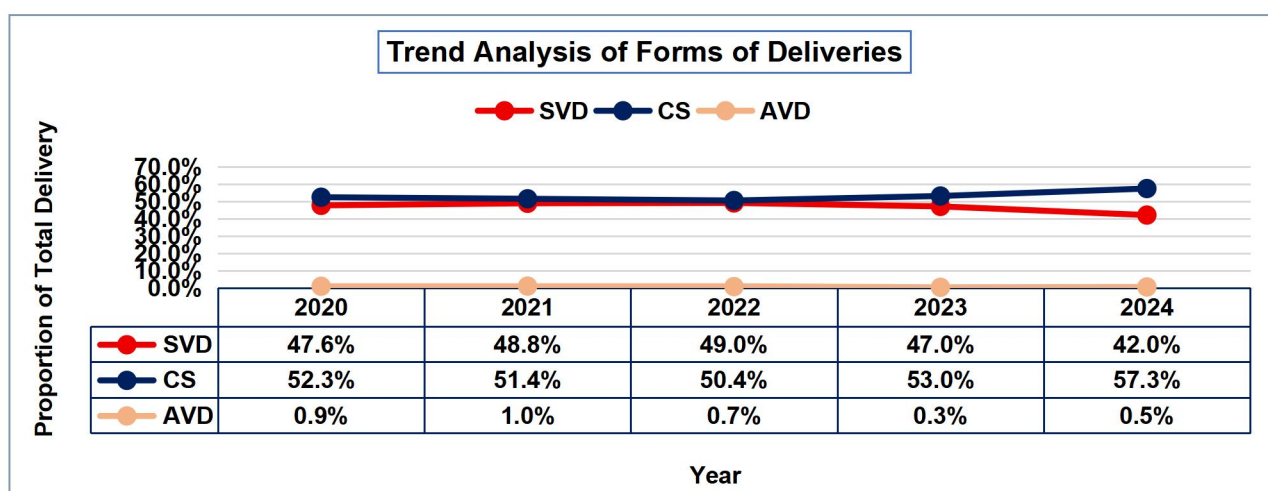


Figure 11.6. 2: Trend Analysis of Forms of Deliveries (2020 - 2024)

Table 11.6. 2: Performance Trends in Labour Management and Mode of Delivery (2020–2024)

Indicators	2020	2021	2022	2023	2024	Remarks	Target	Measurements
Partograph use rate	48.70 %	48.50 %	47.60 %	62.01 %	63%	Incr	THs = 60%	Deliveries done with use or support of Partograph / Total deliveries * 100
Assisted vaginal delivery rate (AVD)	0.9%	1.0%	0.7%	0.3%	0.5%	Incr	-	-
Spontaneous vaginal delivery (SVD)	47.6%	48.8%	49.0%	47.0	42.0 %	decr	-	
Caesarean Section rate	53.30 %	51.40 %	50.35 %	52.69 %	57.3 %	Incr	THs = 40%	No. of women delivered by CS in a specified time period / Total no. Delivery within a specified time period *100
Number of Caesarean Section	1,520	1,573	1,646	1,516	1,578	4.1% incr	-	

Analysis of the workload on midwives at both the institutional level and delivery suite showed mixed performance. The delivery-to-midwife ratio at the facility improved over the years, reducing from 18:1 in 2020 to 15:1 in 2024. Similarly, the delivery-to-midwife ratio at the delivery suite declined from 70:1 in 2020 to 46:1 in 2021, but continued to increase reaching 60:1 in 2024.

Couple year protection (CYP) experienced a declining trend, from a peak of 2,626 in 2022 to 2,013.8 in 2024, falling below the teaching hospital's target of 2,500

Details of the analysis is presented in figures 11.6. 3 through 11.6. 4 and table 11.6. 3 below.

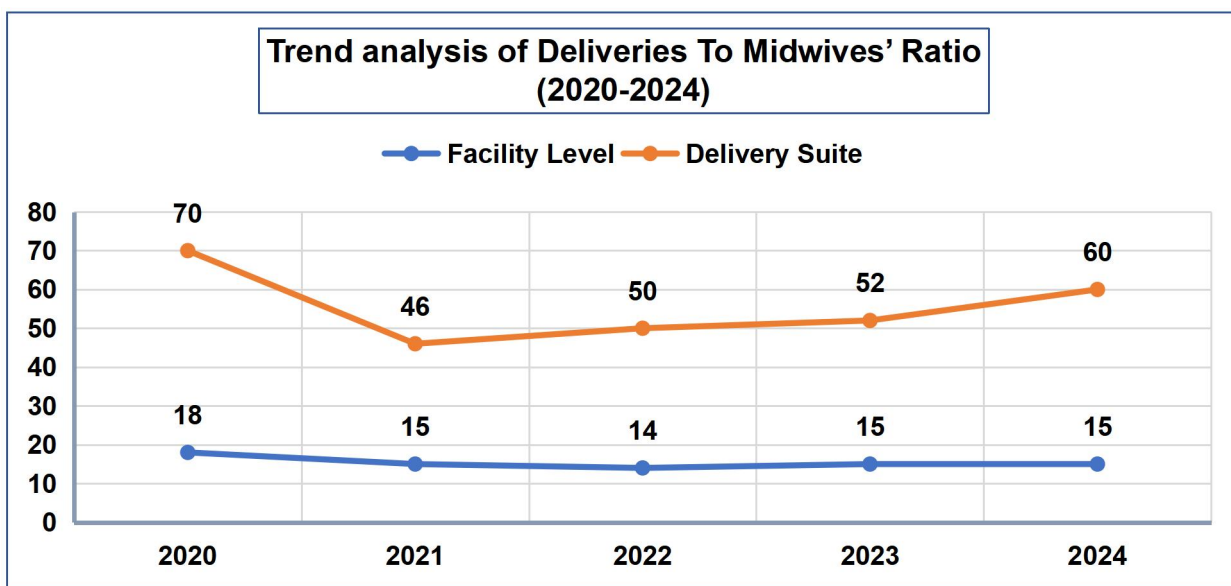


Figure 11.6. 3: Comparative Analysis of Deliveries to Midwives' Ratio at the Facility Level and Delivery Suite (2020-2024)

Table 11.6. 3: trends in Midwife Workload and Couple Year Protection, (2020–2024)

Indicators	2020	2021	2022	2023	2024	Remarks	Target	Measurement
Delivery to midwife's ratio at the facility	18:1	15:1	14:1	15:1	15:1	No change	-	Total Number of deliveries / Total No. of midwives at the hospital
Delivery midwife's ratio at the Delivery suite	70:1	46:1	50:1	52:1	60:1	incr	-	Total Number of deliveries / Total No. of midwives at the delivery suite
Couple year protection	1,891	2,233	2,626	2,075	2,013.8	Decr	THs = 2,500	Total No. of Commodities dispensed / CYP factor

Generally, stillbirth improved between 2020 and 2024 despite year-on-year fluctuations. Total stillbirths increased from 90 in 2020 to 140 in 2022, before further declining. In 2024, total stillbirth decreased by 16.2% (from 105 in 2023 to 88 in 2024). This indicates improvement in intrapartum and immediate perinatal care during the review year. Both fresh and macerated still birth also saw improvement within the same period. The

number of fresh still birth recorded a 14.3% reduction (from 42 in 2023 to 36 in 2024), while macerated still birth declined by 17.5% (from 63 in 2023 to 52 in 2024)

Further, the stillbirth rate fluctuated across the period, rising from 31 per 1000 livebirth in 2020 to 42 per 1000 livebirth in 2022, the highest over the five-year period. In 2024, the stillbirth rate reduced from 36 per 1000 live births in 2023 to 32 per 1000 live births, although failed to meet the set target (THs = 15/1000LB). This indicates that while progress has been made, strengthening of interventions are required to meet the target and further reduce preventable stillbirths. Details of the analysis is provided in Table 11.6.1 and Figure 11.6.1 below.

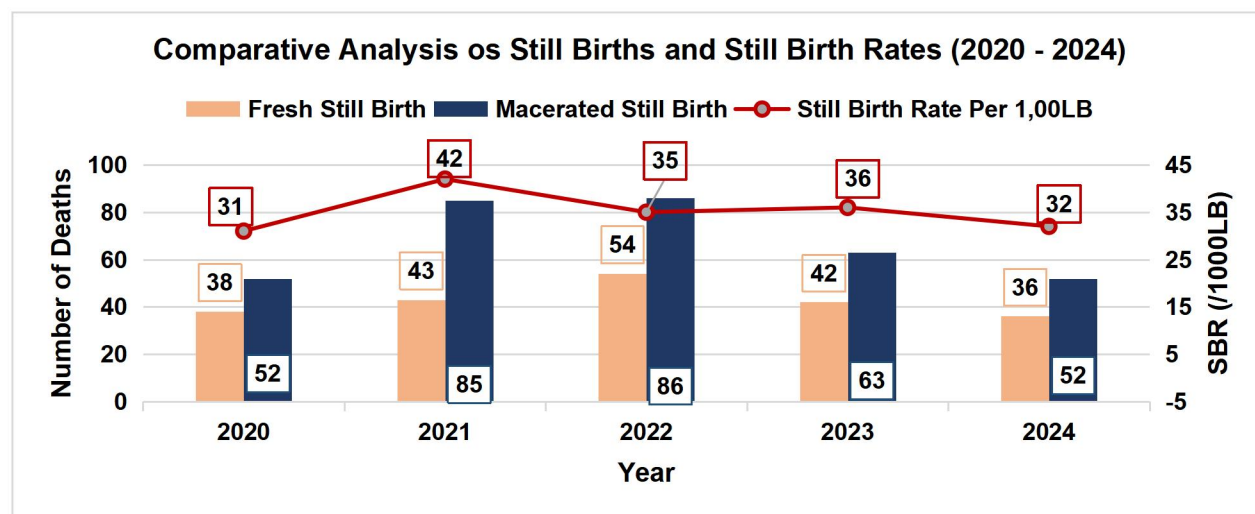


Figure 11.6. 4: Trends in Still births and Still Birth Rates (2020 - 2024)

Table 11.6. 4: Trends in Still births and Still Birth Rates (2020 - 2024)

Indicators	2020	2021	2022	2023	2024	Remarks	Target	Measurement
Total Still Birth	90	128	140	105	88	16.2% decr	-	Number of stillbirths (count of babies born with no signs of life at ≥28 weeks of gestation)
Number of Fresh Still Birth	38	43	54	42	36	14.3% decr	-	Count of fresh stillbirths
Number of Macerated Still Birth	52	85	86	63	52	17.5% decr	-	Count of macerated stillbirths
Still Birth Rate Per 1,000 Livebirth	31	42	35	36	32	decr	THs = 15/1000LB	No. of babies born with no signs of life / Total no. of deliveries.

11.7 MATERNAL-RELATED SURGERIES

The hospital over the past five years (2020-2024) has steadily recorded an increase in the maternal-related surgeries. In 2024, total maternal surgeries went up by 4.8% (from 1,862 in 2023 to 1,951 in 2024). Obstetric surgeries remain the highest proportion of maternal surgeries in the hospital, accounting for 90% (1,753) of the total surgical procedures while gynaecological procedures represented 10% (198).

Major obstetric surgeries accounted for the largest proportion of obstetric surgeries in 2024. Caesarean section formed the majority, increasing by 4.1% (from 1,516 in 2023 to 1,578 in 2024). Laparotomy for ectopic pregnancy reduced by 17.2% (from 64 in 2023 to 53 in 2024). However, laparotomies for ovarian cysts and exploratory laparotomies significantly went up by 266.7% (from 3 in 2023 to 11 in 2024) and 346.7% (from 15 in 2023 to 67 in 2024) respectively.

A major institutional achievement in 2024 was the successful conduct of an Ex-Utero Intrapartum Treatment (EXIT) procedure – the first undertaken by the hospital and the first reported in West Africa. This milestone demonstrates the hospital's advanced surgical capacity and strong multidisciplinary collaboration in the management of highly complex foetal-maternal conditions. In the same period, the number of minor obstetric procedures decreased by 38.7% from 62 in 2023 to 38 in 2024.

Further, the total gynaecological surgeries performed in 2024 marginally rose by 0.51% (from 197 in 2023 to 198 in 2024). In spite of the increase, the various gynaecological procedures recorded mixed performance in 2024. Vaginal Hysterectomy went up substantially by 200%, (rising from 5 in 2023 to 15 in 2024), while Caesarean sections performed for gynaecological indications increased by 180% (from 10 in 2023 to 28 in 2024). Also, total abdominal hysterectomy (TAH) went up by 34.4% (from 32 in 2023 to 43 in 2024). On the other hand, cervical cerclage procedures declined from 68 in 2023 to 35 in 2024, representing a 48.5% decrease. Myomectomy cases reduced by 3.8% (from 79 in 2023 to 76 in 2024). Fistula/Vesico-Vaginal Fistula repair remained low, with one procedure performed in 2024. Detailed trends are illustrated in Figures 11.7.1, 11.7.2 and summarised in Tables 11.7.1 to 11.7.3 below.

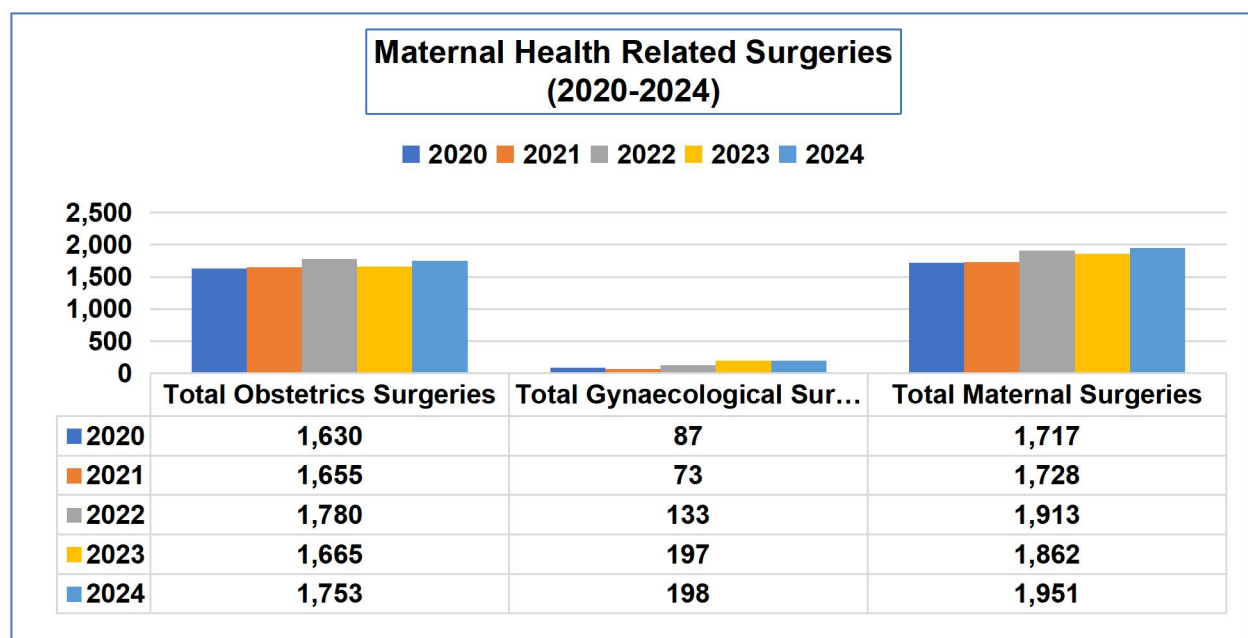


Figure 11.7. 1: Maternal Health Related Surgeries Performed (2020-2024)

Table 11.7. 1: Maternal Health Related Surgeries Performed (2020-2024)

Indicator	2020	2021	2022	2023	2024	Remarks
Total Obstetrics Surgeries	1,630	1,655	1,780	1,665	1,753	5.3% incr
Total Gynaecological Surgeries	87	73	133	197	198	0.51% incr
Total Maternal Surgeries	1,717	1,728	1,913	1,862	1,951	4.8% incr

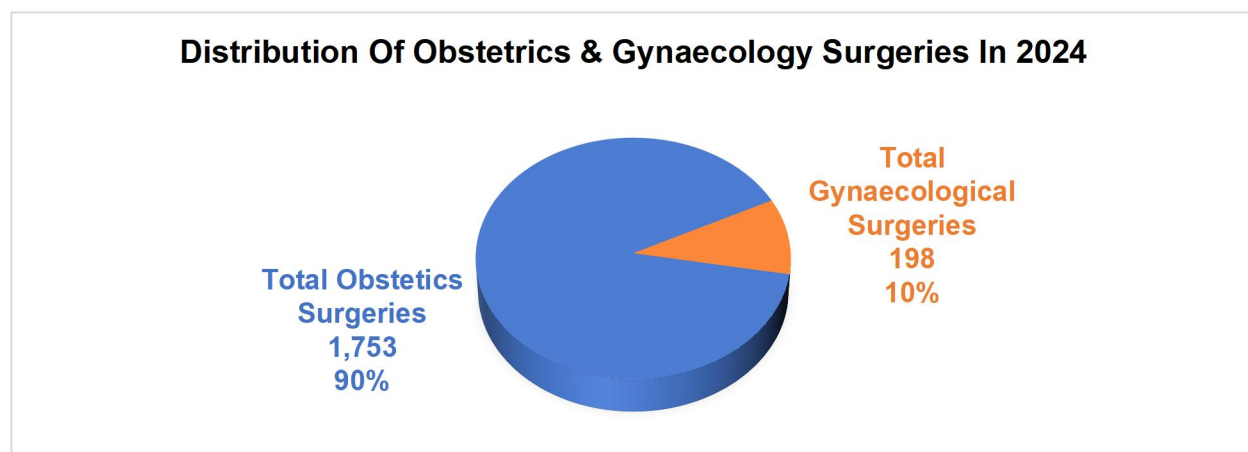


Figure 11.7. 2: Distribution of obstetrics & gynaecology surgeries in 2024

Table 11.7. 2: Obstetric Related Surgeries from 2020 to 2024

Procedure	2020	2021	2022	2023	2024	Remarks
Major Obstetric Surgeries						
Caesarean Section	1,520	1,462	1,646	1,516	1,578	4.1% incr
Hysterectomy	3	7	-	-	-	-
Sterilization	-	0	-	-	-	-
Laparotomy for,						
• Ectopic	76	58	89	64	53	17.2% decr
• Ovarian Cyst	10	17	17	3	11	266.7% Incr
• Exploratory	21	27	28	15	67	346.7% Incr
Ex Utero Intrapartum Treatment (EXIT) Procedure	-	-	-	-	1	<i>1st of its kind performed in West Africa</i>
Minor Obstetric Operations	-	-	-	62	38	38.7% decr
Others (e.g. EUA, biopsy, perineal tear)	-	84	-	5	5	No change
Total	1,630	1,655	1,780	1,665	1,753	5.3% incr

Table 11.7. 3: Gynaecology Related Surgeries from 2020 to 2024

Procedure	2020	2021	2022	2023	2024	Remarks
Myomectomy	44	48	69	79	76	3.8% decr
C/S	-	-	-	10	28	180% incr
Total Abdominal Hysterectomy (TAH)	29	20	50	32	43	34.4% incr
Vaginal Hysterectomy	6	0	8	5	15	200% incr
Cervical cerclage	5	5	5	68	35	48.5% decr
Fistula/VVF repair	3	-	1	3	1	66.7% decr
Total	87	73	133	197	198	0.51% incr

11.8 MATERNAL MORTALITY

Maternal mortality remains a major public health concern. In response, the hospital in collaboration with the Regional Health Directorate continued to strengthen its targeted mentorships and capacity-building initiatives for peripheral health facilities geared towards improving the management of maternal complications and survival outcomes for mothers and newborns. These system-strengthening initiatives significantly contributed to the improvement in maternal outcomes in 2023 as the mortalities

declined by 48.7% (from 39 in 2022 to 20 in 2023). However, this gain was not sustained in 2024, as maternal deaths went up by 20% (from 20 in 2023 to 24 in 2024). Maternal deaths among referred cases remained high in 2024 accounting for 87.5% (21) of the total deaths. On the other hand, hospital-generated (CCTH) cases were relatively low at 12.5% (3). Further, all maternal deaths recorded during the period were audited, maintaining a 100% audit rate, in line with national quality assurance standards.

The institutional maternal mortality rate (MMR) also reflected the absolute maternal deaths. The MMR decreased substantially from 1186 per 100,000 livebirths in 2022 to 681 per 100,000 livebirths in 2023, but went up again to 862 per 100,000 livebirths in 2024. However, despite being one of the lowest observed with the five-year period (2020-2025), the 2024 MMR remains significantly above the Teaching Hospital's target of 300 per 100,000 livebirths, indicating the need for sustained and coordinated interventions in the hospital and across referral facilities. Further details on maternal mortality trends are presented in Figures 11.8.1 and Tables 11.8.1 below.

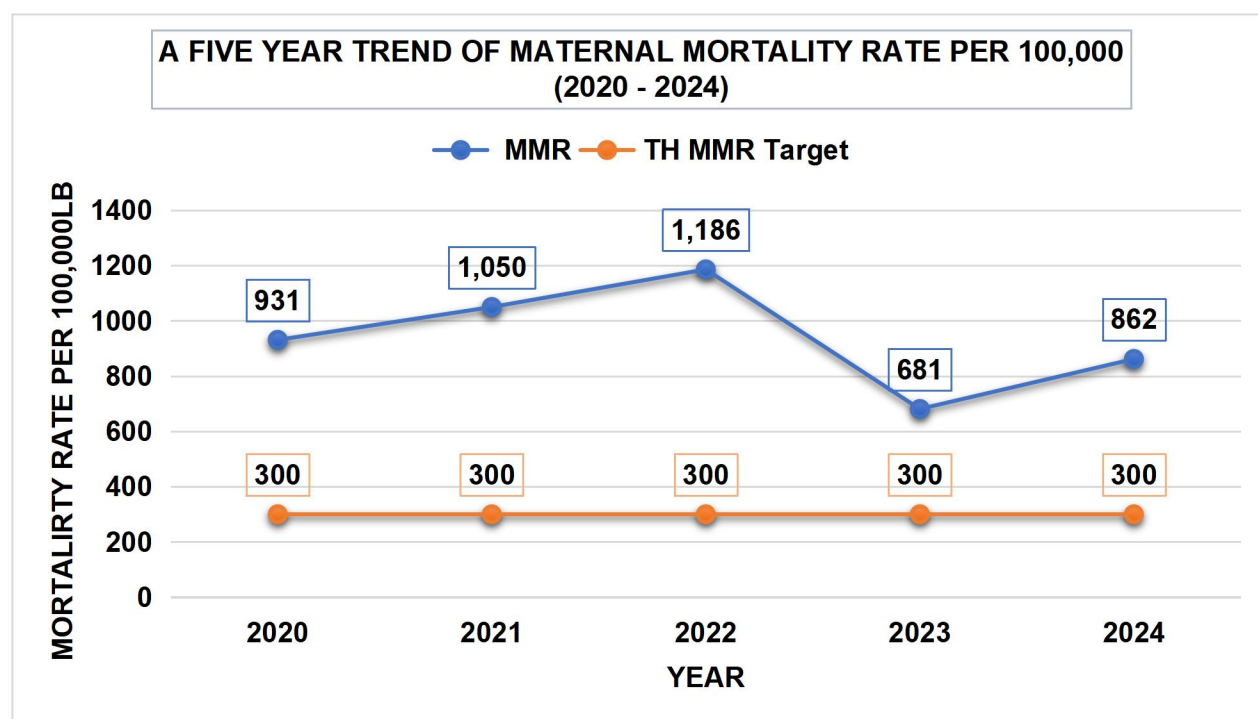


Figure 11.8. 1: A Five-Year Trend of Maternal Mortality Rate (2020 – 2024)

Table 11.8. 1: Breakdown of Maternal Mortality

INDICATORS	2020	2021	2022	2023	2024	REMARKS	TARGET	MEASUREMENT
Maternal Death	26	32	39	20	24	20% incr	50% ↓	-
Referred cases	92.3% (24)	75.0% (24)	82.1% (32)	85% (17)	87.5% (21)	Incr	-	
CCTH cases	3.8%	25.0%	17.9%	15%	12.5%	Decr	-	

INDICATORS	2020	2021	2022	2023	2024	REMARKS	TARGET	MEASUREMENT
	(2)	(8)	(7)	(3)	(3)			
Maternal Mortality Ratio Per 100,000 Live Births	931	1,050	1,186	681	862	Incr	THs = 300	Number of maternal deaths / total live births * 100 000
% of maternal mortalities audited	100	100	100	100	100	No change	100	No. of reported maternal deaths audited according to established guidelines. / Total no. of reported maternal deaths within a specified period * 100

11.8.1 TOP CAUSES OF MATERNAL MORTALITY

Obstetric haemorrhage was the leading cause of maternal mortality in 2024, accounting for 33.3% (8), followed by hypertensive disorders in pregnancy (eclampsia and severe pre-eclampsia) with 29.2% (7). Sepsis declined to 4 in 2024, accounting for 16.7% deaths. Other conditions such as Hyperemesis gravidarum complicated by severe hypokalemia (8.3%) and severe anaemia (4.2%) also contributed to maternal deaths in 2024. Details provided in Table 11.8.1.1 below.

Table 11.8.1. 1: Top Causes of Maternal Mortality

2022		2023		2024	
Condition	%	Condition	%	Condition	%
Sepsis	12 (30.8%)	Hypertensive Disorders in Pregnancy (Eclampsia)	7 (35%)	Obstetric Haemorrhage	8 (33.3%)
Obstetric Haemorrhage	11(28.2%)	Sepsis	5 (25%)	Hypertensive Disorders in Pregnancy (Eclampsia + Pre-eclampsia with severe features)	7 (29.2%)
Hypertensive Disorders in Pregnancy	9 (23.1%)	Obstetric Haemorrhage (PPH=2) (APH=2)	4 (20%)	Sepsis	4 (16.7%)

2022		2023		2024	
Condition	%	Condition	%	Condition	%
Embolism	2 (5.1%)	Acute Kidney Injury	1 (5%)	Hyperemesis gravidarum (complicated by severe hypokalemia)	2 (8.33%)
Metastatic Gall Bladder Cancer	1 (2.56%)	Empyema Thoracis	1 (5%)	Severe Anemia	1 (4.17%)
		Pulmonary Embolism	1 (5%)		
Total Maternal Death = 39		Total Maternal Death = 20		Total Maternal Death = 24	

11.8.2 MATERNAL DEATHS BY REFERRAL FACILITIES RECORDED

As part of efforts to improve the survival chance of expectant mothers, the hospital in collaboration with the Regional Health Directorate continued to provide mentorship and capacity-building training support to peripheral facilities, focusing on Emergency Obstetric and Newborn Care (EmONC). These interventions are geared towards strengthening early case detection, initial stabilisation and appropriate referral of obstetric emergencies to the hospital for specialized care.

In spite of these efforts, referral-related maternal mortalities remained high. Out of the 24 maternal deaths recorded in 2024, 21 cases representing 87.5% of the deaths were from referral facilities. Adisadel Urban Health Center, Twifo-Attimorkwaa District Hospital (TAMDH) and Effia Nkwanta Regional Hospital accounted for majority of the referral-related maternal deaths with two (2) cases reported from each facility. The above is in table 12.9.2.1 below.

Table 11.8.2. 1: Referral Facilities of The Maternal Deaths from 2020 - 2024

2022		2023		2024	
Institution	No.	Institution	No.	Institution	No.
Abrem Agona Health Centre	3	Twifo-Attimorkwaa District Hospital (TAMDH)	3	Cape Coast Teaching Hospital	3
Twifo Praso	2	Swedru Municipal Hospital	2	Adisadel Urban Health	2
Komenda Health Centre	2	self-Referred	2	Twifo-Attimorkwaa District Hospital (TAMDH)	2
St. Francis Xavier	2	Biriwa Polyclinic	2	Effia Nkwanta	2

2022		2023		2024	
Institution	No.	Institution	No.	Institution	No.
Hospital				Regional Hospital	
Swedru Government Hospital	2	Mercy Women's Hospital	1	Mercy Women's Hospital	1
TAMDH	2	Nkwantanan CHPS	1	Anomabo Health Centre	1
Cape Coast Metro Hospital	1	Ankaful Psychiatry Hospital	1	Kissi Health Centre	1
Mercy Women's Hospital	1	Ankaful Lep/Gen Hospital	1	Our Lady of Grace Hospital	1
Moree District Hospital	1	Komenda Health Centre	1	St. Francis Xavier Hospital	1
UCC Hospital	1	Elmina Polyclinic	1	Salt pond Municipal Hospital	1
Akatakyiwa CHPS	1	Ajumako District Hospital	1	UCC Hospital	1
Tarkwa Municipal Government	1	Premier District Hospital	1	St. Luke Catholic Hospital, Apam	1
Ankaful Leprosy and General Hospital	1	Moree Health Centre	1	Narkwa Polyclinic	1
Bisease Polyclinic	1	St. Francis Xavier Hospital, Assin Fosu	1	Premier Specialist Hospital (Tarkwa)	1
Amosima CHPS	1	Cape Coast Teaching Hospital	1	VRA Health Centre (Aboadze)	1
Breman Asikuma	1			Kwesimintsim Hospital	1
Elmina polyclinic	1			Ajumako Besease Health Centre	1
Sanford Clinic	1			Agona Swedru Municipal Hospital	
				Asomdwe CHPS compound	1
CCTH	7	Total (Referrals)	17	Total (Referrals)	21
Total	39	CCTH cases	3	CCTH cases	3
		Grand Total	20	Grand Total	24

CHAPTER TWELVE

CHILD HEALTH SUB-BMC

12.1 BACKGROUND

The Child Health Sub-BMC is managed by a six-member management team and is in charge of managing medical and surgical disorders of patients between the ages of zero (0) and sixteen (16) years. The Sub-BMC also has a Special Care Baby Unit (NICU) which oversees infants with life-threatening illnesses.

12.2 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 12.2. 1: Summary of the 2024 Annual Performance of Child Health Sub-BMC under the Strategic Objectives.

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2020	2021	2022	2023	2024	Target	Remarks
Total OPD Attendance	7,172	11,027	10,444	10,591	9,907	-	6.41% decr
Percentage of neonatal admissions due to external referrals	25.5%	15%	13.80%	11.24%	5.95%	THs = 30%	Decr Target not met
Recorded a 2.7% in total specialist paediatric OPD attendance, rising from 2,120 in 2023 to 2,178 in 2024							
Expanded specialist human resource capacity in 2024 as follows;							
- Number of Paediatricians increased from three (3) to six (6) - Number of Nurse Specialists increased from seven (7) to eight (8)							
Strengthened the delivery of specialized paediatric services through;							
Continued operation of the Paediatric Osteogenesis Imperfecta (OI) Clinic, which managed ten (10) patients in 2024. The hospital remains the only facility in Ghana providing coordinated multidisciplinary paediatric OI care.							
Improved availability of specialised pharmaceuticals for neonatal and paediatric care;							
Surfactant and intravenous caffeine citrate stocked at the hospital pharmacy for the management of premature infants							
Expanded respiratory support services for neonates and infants by;							
- Increasing access to Continuous Positive Airway Pressure (CPAP) therapy for premature babies and infants with respiratory distress - Acquiring three (3) new VAYU CPAP machines to augment existing respiratory care capacity							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Impact	2020	2021	2022	2023	2024	Target	Remarks
Low birth rate	16.8%	19.4%	20.5%	23.2%	12%	THs = 12%	Decr Target met
Institutional infant mortality rate (/1000LB)	89	88	77	67	50	THs = 15	Decr but was not Target met

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
Number of Infant deaths	284	267	252	197	138	-	30%↓
Institutional neonatal mortality rate (/1000)	81	78	67	58	40	TH = 25	31%↓
Number of institutional neonatal deaths	233	239	219	170	112	CCTH = 5% ↓	152
Under-five mortality rate (/1000LB)	106	95	80	72	55	-	Decr
Number of Institutional under-five mortality	307	290	264	213	152	CCTH = 5% ↓	28.6%↓ and target met
Intensified public awareness on neonatal campaigns on neonatal jaundice, prematurity, and childhood cancers through radio and television platforms within Cape Coast Metropolis							
Collaborated with the Dental, Eye, ENT (DEENT) Sub-BMC and Public health Unit during the Jaundice Awareness Campaign to conduct community health screening at the Abura Community Centre							
Organized nurse-led weekly educational health talks at the paediatric OPD and on Radio Central							
Conducted the following in-service trainings for staff:							
- Two (2) Emergency, Triage and Treatment (ETAT) trainings - Two (2) neonatal resuscitation trainings - One (1) customer service training and - Two (2) Infection Prevention Control (IPC) trainings							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
Procured key medical and support equipment to strengthen paediatric and neonatal care, including:							
- Three (3) new VAYU CPAP machines - One (1) infusion pump - One (1) radiant warmer - Two (2) perfusers - One (1) cardiac monitor - One (1) double-door fridge - One (1) paediatric mannequin - One (1) projector - Four (4) wheelchairs							
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM							
4.1: Governance Related Performance							
Organised Sub-BMC meetings and a general staff durbar to enhance internal communication and accountability							
4.2: Human Resource Related Performance							
Strengthened staff capacity through professional development;							
- Two (2) Medical Officers commenced paediatric residency training - Two (2) Nurses commenced neonatal associate membership training							
4.3 Finance related performance							
Recorded an increased revenue in internally generated revenue from all sources, including NHIS, out-of-pocket payment (cash & carry) and corporate insurance.							
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING							
5.1 Improve on Research:							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Conducted research activities in Paediatric and Neonatal care, including: - Completed nurse-led research on “Care of the Oxygen Humidifier bottle and its effects on Hospital Acquired Infections” - Ongoing collaborative research with KNUST on “Rotavirus Surveillance” - Publication of one (1) study on the “The Feasibility of the use of Kangaroo Mother Care (KMC) in the transfer of preterm and low birth weight infants in Cape Coast”. Authors: Emmanuel Okai, Frankie Fair, Hilda Danquah Konadu, Eugene KM Darteh, Hora Soltani https://doi.org/10.1186/s12887-024-05340-7
5.2 Improve on Teaching and Learning:
Provided clinical training for medical, physician assistant, pharmacy, and nursing students in paediatrics’
Facilitated paediatric clinical rotation for thirty-eight (38) House Officers
Provided clinical training to six Medical Officers in Paediatrics
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Initiated specialist-led clinical mentorship programmes, visiting sixteen (16) peripheral health facilities and benefiting over seventy (70) healthcare workers
Provided technical and clinical support to peripheral health facilities by; - Organising one (1) Infection Prevention Control (IPC) symposium for peripheral healthcare professionals at the CCTH Neonatal Intensive Care Unit (NICU) - Training two (2) staff from Elmina Polyclinic in NIVU care and procedures through a one-month clinical attachment

12.3 CHILD HEALTH OPD SERVICES UTILIZATION

Generally, the overall paediatric OPD attendance since the past five-years (2020-2024) has seen fluctuations, with 2021 and 2023 recording the highest utilisation of 11,027 and 10,591 attendances respectively. In 2024, overall OPD attendance fell to 9,877, representing an overall decline of 6.7% from 2023. General paediatric clinic attendance went up appreciably by 54% between 2020 and 2021, (i.e.; from 6,003 in 2020 to 9,244 in 2021), before declining and stabilising in 2022 and 2023. On the other hand, the attendance in 2024 dropped to 7,678 from 8,408 visits, representing then a decrease of 8.7%.

Total paediatric specialist clinics attendance on the hand showed has seen consistent rise since 2020, and recording a slight increase of 0.7% in 2024 (From 2,183 in 2023 to 2,199 in 2024). Despite the relative increase in the total specialist OPD attendance, the individual paediatric sub-specialty clinics showed mixed performance in their utilization. Paediatric renal clinic attendance went up sharply by 127.6% (from 98 in 2023 to 223 in 2024). Paediatric- sickle cell clinic equally recorded an increase of 29.4% (from 619 in 2023 to 801 in 2024). Other hand, the NICU follow-up attendance declined by 25.6% (from 888 in 2023 to 661 in 2023), while paediatric cardiology and paediatric endocrinology clinics attendance decreased by 22.1% (from 77 in 2023 to 60 in 2024) and 11.4% (from 44 in 2023 to 39 in 2024) respectively. Paediatric asthma, neurology, sickle cell, oncology and Osteogenesis Imperfecta clinics attendance also declined, with decreases ranging from 3.4% to 11.4%. further details of the analysis are presented in Figure 12.3.1 and Table 12.3.1 below.

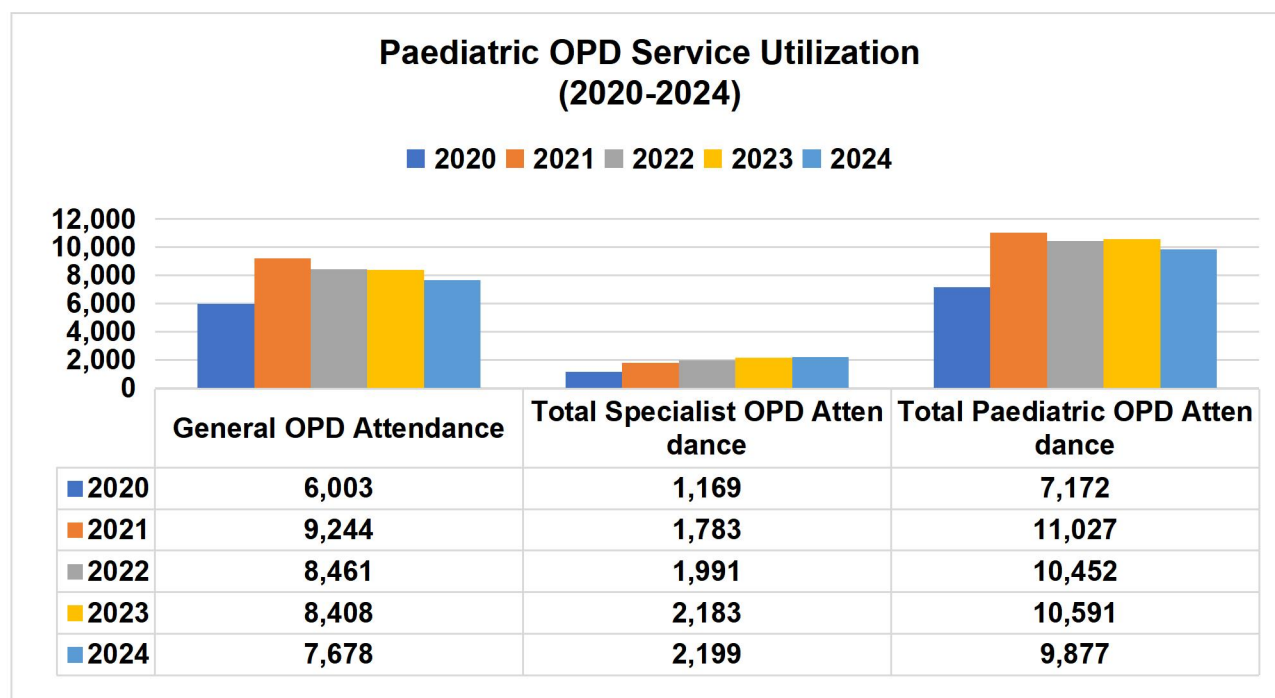


Figure 12.3. 1: A Five-Year Trend of Paediatric OPD Service Utilization (2020 – 2024)

Table 12.3. 1: Yearly Breakdown of Child health OPD Clinic Attendance (2020 – 2024)

CLINICS	2020	2021	2022	2023	2024	REMARKS
General Paediatrics Clinic	6,003	9,244	8,461	8,408	7,678	8.7% decr
Paediatric Specialist Clinic						
Total Paediatric Specialist Clinic Attendance	1,169	1,783	1,991	2,183	2199	0.7% incr
• NICU Follow-Up	247	890	958	888	661	25.6% decr
• Paediatric Asthma	57	102	111	118	114	3.4% decr
• Paediatric Neurology	213	245	294	276	250	9.42% decr
• Paediatric Renal	216	115	79	98	223	127.6% incr
• Paediatric Cardiology	60	58	38	77	60	22.1% decr
• Paediatric Sickie Cell	328	351	463	619	801	29.4% incr
• Paediatric Oncology	48	22	23	30	27	10.0%% decr
• Paediatric Endocrine	-	-	17	44	39	11.4% decr
• Osteogenesis Imperfecta	-	-	8	33	24	27.3% decr

CLINICS	2020	2021	2022	2023	2024	REMARKS
Overall Paediatric OPD Attendance	7,172	11,027	10,452	10,591	9,877	6.7% decr

12.4 CHILD HEALTH IN-PATIENT SERVICES UTILIZATION

12.4.1 PAEDIATRIC WARD PERFORMANCE

The hospital over the five-year period (2020-2024) has experienced fluctuations in inpatient service utilization. The number of admissions peaked in 2021 with 1,968 admissions but declined over the years. In 2024, the total paediatrics admissions declined by 5.2% (from 1,920 in 2023 to 1,820 in 2024). Similarly, infants' admissions decreased by 22.7% (from 1,933 in 2023 to 1,494 in 2024). Also, the number of discharges in 2024 reduced by 5.9% (from 1,943 in 2023 to 1,829 in 2024). Average daily occupancy on the other hand remained relatively stable in 2024, recording 32.9% compared to 33.7 in 2023, while the bed occupancy rate remained at 68.9% in 2024. Average length of stay went up from 5.9 days in 2023 to 6.3 days in 2024. Generally, mortality outcomes improved on the paediatric ward in 2024. The number of deaths declined by 13.5% (from 89 in 2023 to 77 in 2024). Equally, the mortality rate decreased from 4.4% in 2023 to 4.0% in 2024 as shown in Figures 12.4.1.1, 12.4.1.2 and Table 12.4.1.1 below.

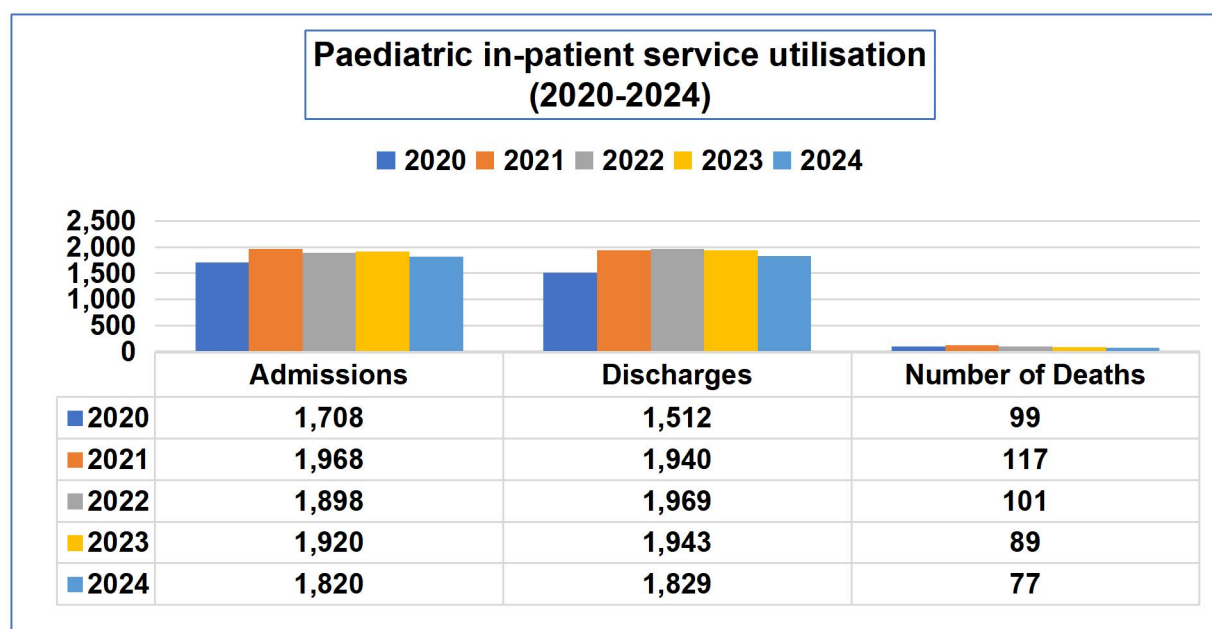


Figure 12.4.1. 1: Paediatric in-patient service utilisation (2020-2024)

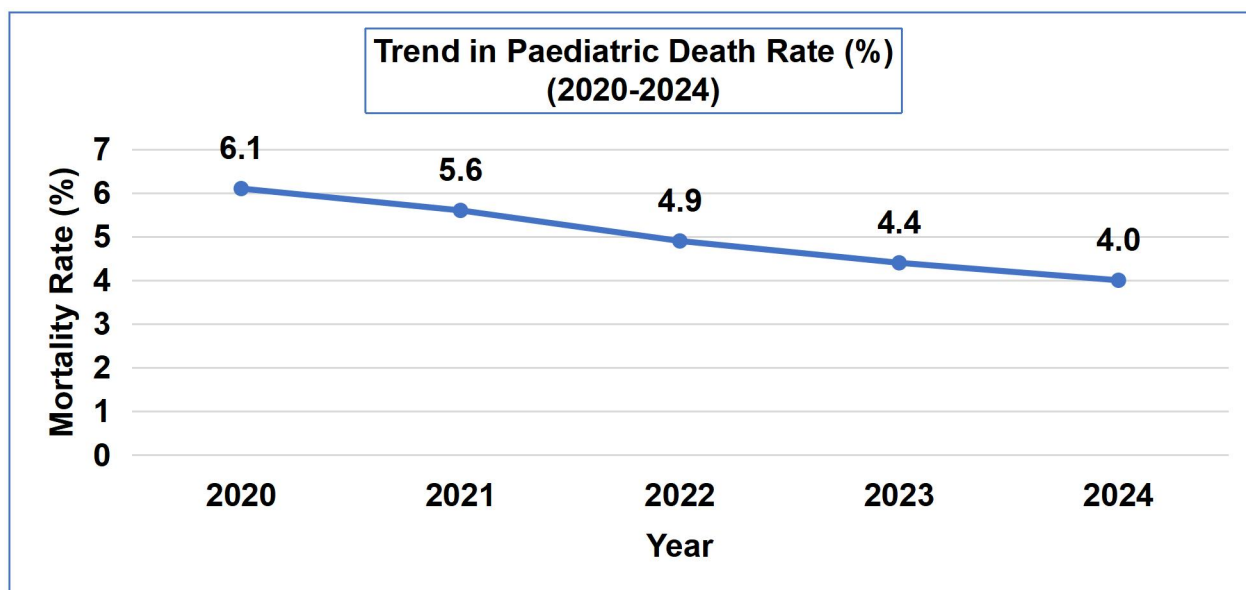


Figure 12.4.1. 2: Trend in Paediatric Death Rate (%) (2020-2024)

Table 12.4.1. 1: Paediatric Ward Performance (2020 - 2024)

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Total Paediatric Admissions	1,708	1,968	1,898	1,920	1,820	5.2% decr
Infants Admissions-Institutional	1,357	1,734	1,975	1,933	1,494	22.7% decr
Discharges	1,512	1,940	1,969	1,943	1,829	5.9% decr
Average Daily Occupancy	30.4	33	33.7	33	32.9	1% decr
% Bed Occupancy	63.1	69	63.1	68.6	68.6	No change
Average Length of Stay (Days)	6.1	5.9	5.4	5.9	6.3	Incr
Number of Deaths	99	117	101	89	77	13.5% decr
Death Rate (%)	6.1	5.6	4.9	4.4	4.0%	Decr

12.4.2 NICU WARD PERFORMANCE

Generally, the NICU ward recorded the lowest number of admissions over the five-year period (2020 – 2024). Total neonatal admissions decreased by 24.7% (from 1,049 in 2023 to 790 in 2024). Neonatal admissions due to external referrals declined significantly by 60.2% (from 118 in 2023 to 47 in 2024). This reflected on the percentage of neonatal admissions due to external referrals as it reduced from 11.24% in 2023 to 5.95% in 2024, falling below the teaching hospitals 30% target. Further, the number of discharges reduced by 18% (from 796 in 2023 to 653 in 2024). Also, the

average daily occupancy rate dropped to 17.7% from 21.0% in 2023 whereas the bed occupancy rate decreased from 85.7% in 2023 to 73.9% in 2024.

However, the average length of stay went up from 8.0 days in 2023 to 8.7 days in 2024. Notwithstanding this, neonatal mortality generally improved in 2024, with a 34.1% reduction in the number of deaths (from 170 in 2023 to 112 in 2024). Similarly, the neonatal mortality rate decreased from 58 per 1000 livebirths to 40 per 1000 livebirths. Detailed trend analysis is provided in Figure 12.4.2.1 to Figure 12.4.2.3 and Table 12.4.2.1 below.

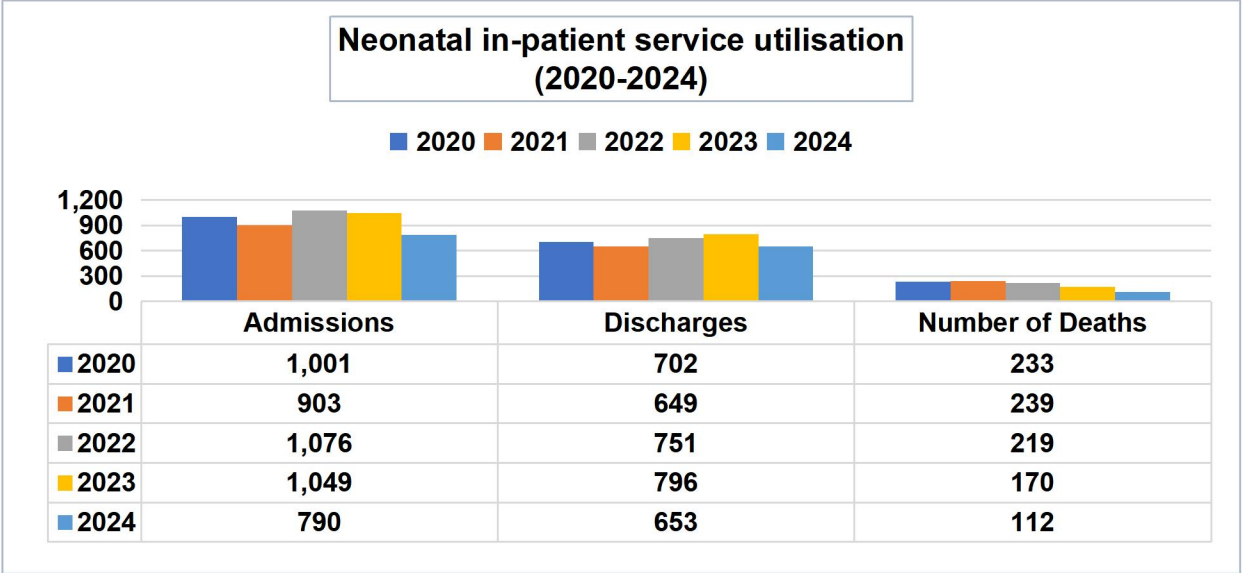


Figure 12.4.2. 1: Neonatal in-patient service utilisation (2020-2024)

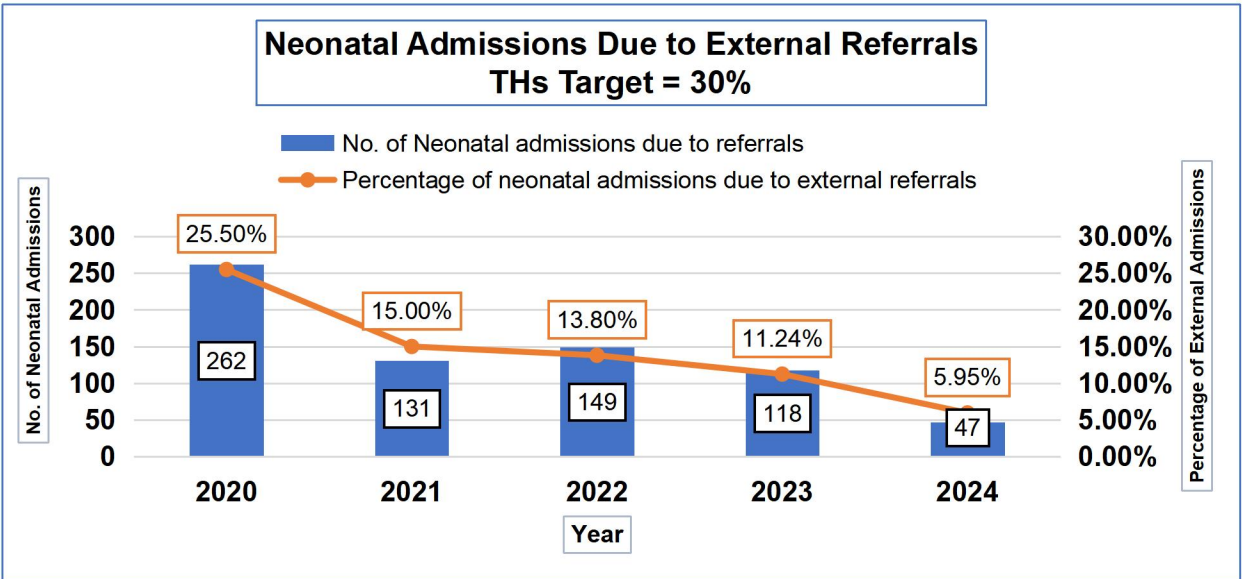


Figure 12.4.2. 2: Trend of Neonatal Admissions Due to External Referrals (2020-2024)

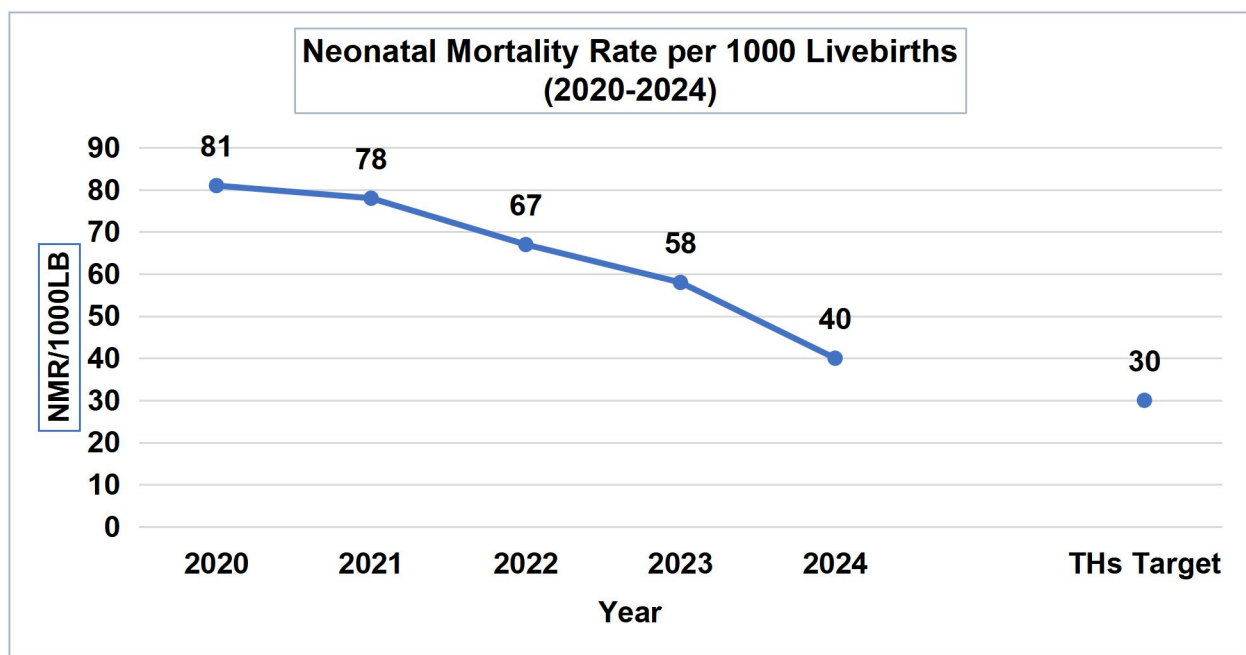


Figure 12.4.2. 3: Neonatal Mortality Rate per 1000 Livebirths (2020-2024)

Table 12.4.2. 1: NICU Ward Performance (2020 – 2024)

Indicator	2020	2021	2022	2023	2024	Remarks	Target	Measurement
Total neonatal Admissions	1,001	903	1,076	1,049	790	24.7% decr	-	-
No. of Neonatal admissions due to referrals	262	131	149	118	47	60.2% decr	-	-
Percentage of neonatal admissions due to external referrals	25.5%	15%	13.8%	11.24%	5.95%	Decr	30%	No. of Neonatal admissions due to referrals / Total neonatal admissions
Discharges	702	649	751	796	653	18% decr	-	-
Average Daily	18.1	19	18.8	21	17.7	Decr	-	-
% Bed Occupancy	75.3	80.6	63.0	85.7	73.9	Decr	-	-
Average Length of	7.2	7.8	7.3	8.0	8.7	Incr	-	-

Indicator	2020	2021	2022	2023	2024	Remarks	Target	Measurement
Stay								
Number of Deaths	233	239	219	170	112	34.1% decr	-	-
Neonatal Mortality Rate (/1000LB)	81	78	67	58	40	Decr	THs = 25/100 0LB	-
Death Rate (%)	24.2	23.6	22.2	15.0	12.6	Decr	-	-

12.5 CAUSES OF CHILD HEALTH ADMISSION

12.5.1 TOP TEN (10) CAUSES OF CHILD HEALTH ADMISSION

Jaundice and sepsis continue to be the leading causes of paediatric admissions in 2024 with 425 (28.30%) and 404 (26.80%) cases respectively. Pneumonia, Prematurity and Asphyxia followed with 122 (8.10%), 115 (7.60%) and 107 (7.10%) respectively. Sickle cell on the other hand recorded the least case count of 53 (3.50%) among the ten predominant causes of paediatric admissions in 2024. Details are provided in Figure 12.5.1.1 and Table 12.5.1.1 below.

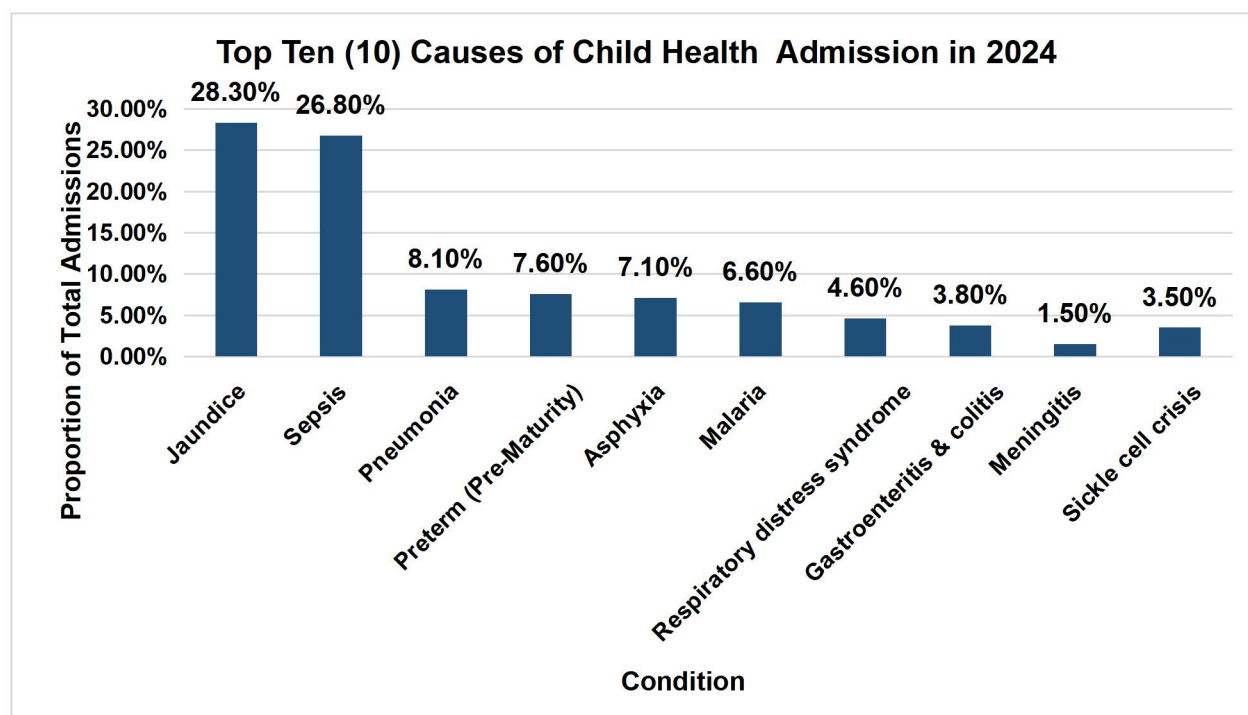


Figure 12.5.1. 1: Top Ten Causes of Child Health Admission in 2024

Table 12.5.1. 1: Top ten Causes of Child Admission (2022 - 2024)

2022		2023		2024	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Jaundice	567 (14.4%)	Jaundice	480 (23.80%)	Jaundice	425 (28.30%)
Sepsis	348 (8.9%)	Sepsis	348 (17.30%)	Sepsis	404 (26.80%)
Asphyxia	304 (7.7%)	Pre-Maturity	253 (12.60%)	Pneumonia	122 (8.10%)
Prematurity	245 (6.2%)	Asphyxia	240 (11.90%)	Preterm (Pre Maturity)	115 (7.60%)
Malaria	142 (3.6%)	Malaria	188 (9.30%)	Asphyxia	107 (7.10%)
Respiratory distress syndrome	142 (3.6%)	Pneumonia	115 (5.70%)	Malaria	99 (6.60%)
Malnutrition	131 (3.3%)	Sickle Cell Crisis	102 (5.10%)	Respiratory distress syndrome	69 (4.60%)
Low birth weight	108 (2.7%)	Respiratory distress syndrome	99 (4.90%)	Gastroenteritis & colitis	57 (3.80%)
Gastroenteritis & colitis	90 (2.3%)	Transient Tachypnoea	95 (4.70%)	Meningitis	54 (1.50%)
Sickle cell anaemia	88 (2.2%)	Gastroenteritis & colitis	94 (4.70%)	Sickle cell crisis	53 (3.50%)

12.5.2 TOP TEN CAUSES OF UNDER FIVE ADMISSIONS

The hospital since 2022 recorded jaundice, sepsis and pre-maturity (pre-term) as the most commonly causes of under-five admissions. In 2024, these conditions accounted for 425 (30.8%), 319 (28.4%) and 115 (8%) cases respectively. Jaundice admissions declined by 2.3% (from 440 in 2023 to 425 in 2024), while prematurity admissions significantly decreased by 49.6% (from 228 in 2023 to 115 in 2024). However, sepsis admissions recorded a sharp increase of 58.3% (from 247 in 2023 to 391 in 2024). Admissions due to asphyxia declined from 211 in 2023 to 107 in 2024, representing an 8.4% reduction, and respiratory conditions such as respiratory distress syndrome and transient tachypnoea also decreased over the period. On the other hand, gastroenteritis and colitis, and meningitis were the least cases among the leading causes of under-five admissions recording 43 (3.1%) and 40 (2.9%) respectively. Details of the analysis is presented in table 12.5.2.1 below.

Table 12.5.2. 1: Top Causes of Under Five Admissions from 2022 to 2024

2022		2023		2024	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Jaundice	567 (18.0%)	Jaundice	440 (30.5%)	Jaundice	425 (30.8%)
Sepsis	341 (10.8%)	Sepsis	247 (17.1%)	Sepsis	391 (28.4%)
Asphyxia	304 (9.7%)	Prematurity	228 (15.8%)	Prematurity	115 (8%)
Prematurity	245 (7.8%)	Asphyxia	211 (14.6%)	Asphyxia	107 (8.4%)
Respiratory distress syndrome	141 (4.5%)	Respiratory distress syndrome	88 (6.1%)	Pneumonia	91 (6.6%)
Low birth weight	108 (3.4%)	Transient Tachypnoea	87 (6.0%)	Respiratory distress syndrome	69 (5.0%)
Malaria	80 (2.5%)	Low Birth Weight	81 (5.6%)	Transient Tachypnoea	51 (3.7%)
Malnutrition	78 (2.3%)	Meconium Aspiration	28 (1.9%)	Malaria	46 (3.3%)
Gastroenteritis & colitis	74 (2.3%)	Syphilis	1.9 (1.3%)	Gastroenteritis & colitis	43 (3.1%)
Broncho pneumonia	59 (1.9%)	Anaemia	12 (0.8%)	Meningitis	40 (2.9%)

12.5.3 TOP TEN CAUSES OF NEONATAL ADMISSIONS

Jaundice, sepsis and pre-maturity (pre-term) were the leading causes of neonatal admissions with 373 (35.5%), 293 (27.9%) and 114 (27.9%) cases respectively in 2024. Other conditions contributed moderately to the neonatal admissions. Asphyxia fluctuated over the period, with 106 (10.4) cases 268 cases while respiratory distress syndrome and transient tachypnoea accounted for 6.3% (66) of the total cases. interestingly, while pneumonia was recorded as the third leading cause of paediatrics admissions, it accounted for the least among the top causes of neonatal admissions with 1.1% (12) cases. Details presented in Table 12.5.3.1 below.

Table 12.5.3. 1: Top Causes of Neonatal Admissions (2022 - 2024)

2022		2023		2024	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Jaundice	489 (25.2%)	Jaundice	474 (28.5%)	Jaundice	373 (35.5%)
Sepsis	285 (14.7%)	Sepsis	313 (18.8%)	Sepsis	293 (27.9%)
Asphyxia	268	Pre-Maturity	253	Pre-Maturity	114

2022		2023		2024	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
	(13.8%)		(15.2%)		(27.9%)
Pre-Maturity	206 (10.6%)	Asphyxia	240 (14.4%)	Asphyxia	106 (10.4%)
Respiratory distress syndrome	122 (6.3%)	Respiratory distress syndrome	98 (5.9%)	Respiratory distress syndrome	66 (6.3%)
Low Birth Weight	85 (4.4%)	Transient Tachypnoea	95 (5.7%)	Transient Tachypnoea	42 (4.0%)
Transient tachypnoea	50 (2.6%)	Low Birth Weight	91 (5.5%)	Meningitis	16 (1.5%)
Meconium aspiration	29 (1.5%)	Pneumonia	35 (2.1%)	Necrotizing Enterocolitis	14 (1.3%)
Haemorrhage	17 (0.9%)	Meconium Aspiration	33 (2.0%)	Haemorrhage	14 (1.3%)
Syphilis	17 (0.9%)	Anaemia	32 (1.9%)	Pneumonia	12 (1.1%)

12.6 CHILD HEALTH MORTALITIES

12.6.1 PAEDIATRIC AND INFANT MORTALITIES

The hospital since 2020 has recorded continuous improvements in the paediatric and infant mortalities. The number of paediatric deaths declined steadily by 13.5% (from 99 in 2020 to 77 in 2024). Equally, the paediatric death rate decreased from 6.1% to 4.0% within the same period, indicating sustained improvements in the quality of paediatric inpatient care and case management.

In the same way, infant deaths showed a significant performance, declining consistently from 284 in 2020 to 138 in 2024, and with a 30% reduction from 2023 (from 197 in 2023 to 138 in 2024). The institutional infant mortality rate also improved, decreasing from 89 per 1000 livebirths in 2020 to 50 per 1000 livebirths in 2024, but remain above the teaching hospitals target of 15 per 1000 livebirth as shown in Table 12.6. 1.1 below.

Table 12.6.1. 1: Paediatric and Infant Mortality (2020 – 2024)

INDICATORS	2020	2021	2022	2023	2024	REMARKS	TARGET
Number of Paediatric Deaths	99	117	101	89	77	13.5% decr	-
Paediatric Death Rate (%)	6.1	5.6	4.9	4.4	4.0%	Decr	-
Infant Deaths	284	267	252	197	138	30% decr	-
Institutional Infant mortality rate (/1000LB)	89	88	77	67	50	Decr	THs = 15/1000LB

12.6.1.1 TOP TEN CAUSES OF CHILD MORTALITY

Comparative three-year (from 2022 to 2024) analysis of the most common causes of child mortality indicates that, respiratory distress syndrome continues to be the leading cause of child mortality, although this condition decreased by 22.5% (from 49 in 2023 to 38 in 2024). This was followed by sepsis with 37 cases but with a marginal increase of 12.1% (from 33 in 2023 to 37 in 2024). Acute Fulminant Hepatitis and meningitis were the least causes of child mortality in 2024 with 5(3.6%) and 2(1.4%) case respectively. Further representation of the above is shown in Figure 12.6.1.1.1 and Table 12.6.1.1.1 below.

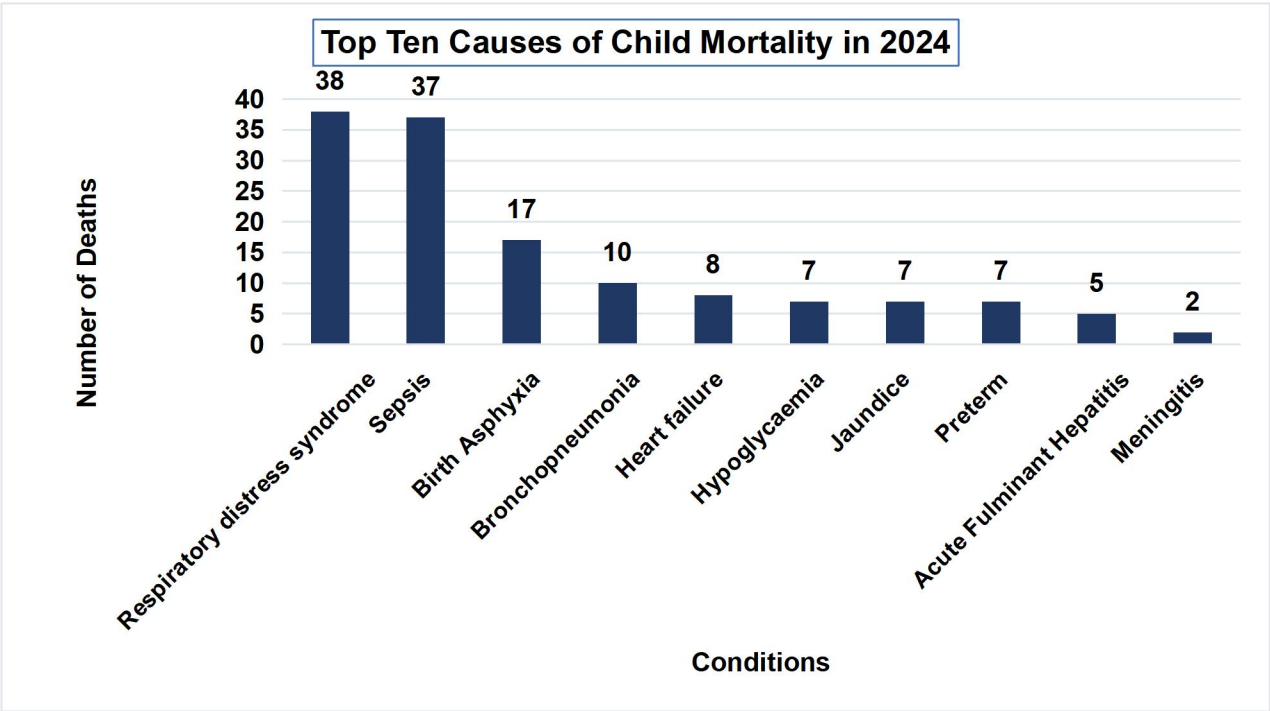


Figure 12.6.1.1. 1: Top Ten Causes of Child Mortality In 2024

Table 12.6.1.1. 1: Top Ten Causes of Child Mortality (2022 - 2024)

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Respiratory distress syndrome	64 (22.45%)	Respiratory distress syndrome	49 (29.0%)	Respiratory distress syndrome	38 (27.5%)
Asphyxia	43 (15.0%)	Birth Asphyxia	33 (19.5%)	Sepsis	37 (26.8%)
Sepsis	33 (11.5%)	Preterm	19 (11.2%)	Birth Asphyxia	17 (12.3%)
NEC	12 (4.2%)	Sepsis	16 (9.5%)	Bronchopneumonia	10 (7.2%)

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Respiratory Failure	9 (3.1%)	BIND	13 (7.7%)	Heart failure	8 (5.8%)
BIND	8 (2.8%)	Jaundice	10 (5.9%)	Hypoglycaemia	7 (5.1%)
Meconium aspiration	8 (2.8%)	Pneumonia	9 (5.3%)	Jaundice	7 (5.1%)
Prematurity	7 (2.4%)	Congenital Heart Disease	8 (4.7%)	Preterm	7 (5.1%)
Aspiration pneumonia	3 (1.0%)	Severe Acute Malnutrition	7 (4.1%)	Acute Fulminant Hepatitis	5 (3.6%)
Pulmonary oedema	3 (1.0%)	Meningitis	5 (3.0%)	Meningitis	2 (1.4%)

12.6.2 NEONATAL MORTALITY

Neonatal mortality in the hospital has consistently improved since 2020. The number of neonatal deaths decreased by 34.1% (from 170 in 2023 to 112 in 2024). Similarly, the neonatal mortality rate declined significantly from 58 per 1000 livebirths in 2023 to 40 per 1000 livebirths in 2024. In spite of the gains made, the hospital did not meet the Teaching Hospital's target of 25 per 1000 livebirths, indicating persistent gaps in neonatal survival outcomes.

Death auditing remains a crucial process for identifying the underlying cause of deaths and informing the development of targeted interventions. As a result, the hospital strengthened measures to ensure that every deaths—especially neonatal deaths, undergo a comprehensive review. Consequently, all neonatal deaths recorded in 2024 were audited, and the recommendations arising from these audits were successfully implemented within the year.

Figure 12.6.2.1, Table 12.6.2.1 and Table 12.6.2.2 below provides provide details of the analysis.

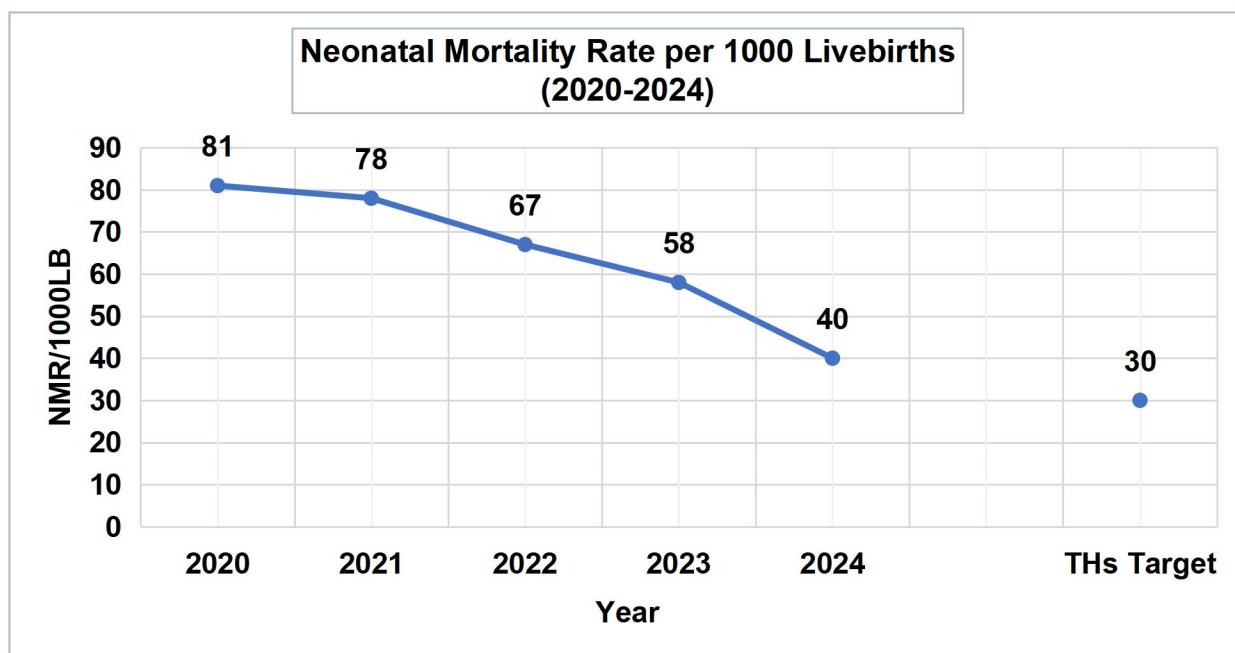


Figure 12.6.2. 1: Neonatal Mortality Rate per 1000 Livebirths (2020-2024)

Table 12.6.2. 1: Trend of Neonatal Mortality Indicators

INDICATORS	2020	2021	2022	2023	2024	REMARKS	TARGET
Number of neonatal Deaths	233	239	219	170	112	34.1% decr	5% ↓
Neonatal Mortality Rate (/1000LB)	81	78	67	58	40	Improved but target not met	THs = 25/1000LB
Percentage to neonatal deaths audited	88%	100%	100%	100%	100%	Sustained	

12.6.2.1 TOP TEN CAUSES OF NEONATAL MORTALITY

Respiratory distress syndrome was the leading cause of neonatal mortality in 2024, accounting for 36.2% (38) of the neonatal deaths. Sepsis and birth asphyxia also continue to be among the three top causes of neonatal mortality, despite their fluctuations over the years. Sepsis ranked second, forming 19% (20) while birth asphyxia was third with 16.2% (17) of the total cases recorded. On the other hand, apnea of prematurity and meningitis were the least among the top ten causes of neonatal deaths with 1.9% (2) and 1% (1) cases respectively in 2024. Figure 12.6.2.1.1 and Table 12.6.2.1.1 below provides details of the analysis.

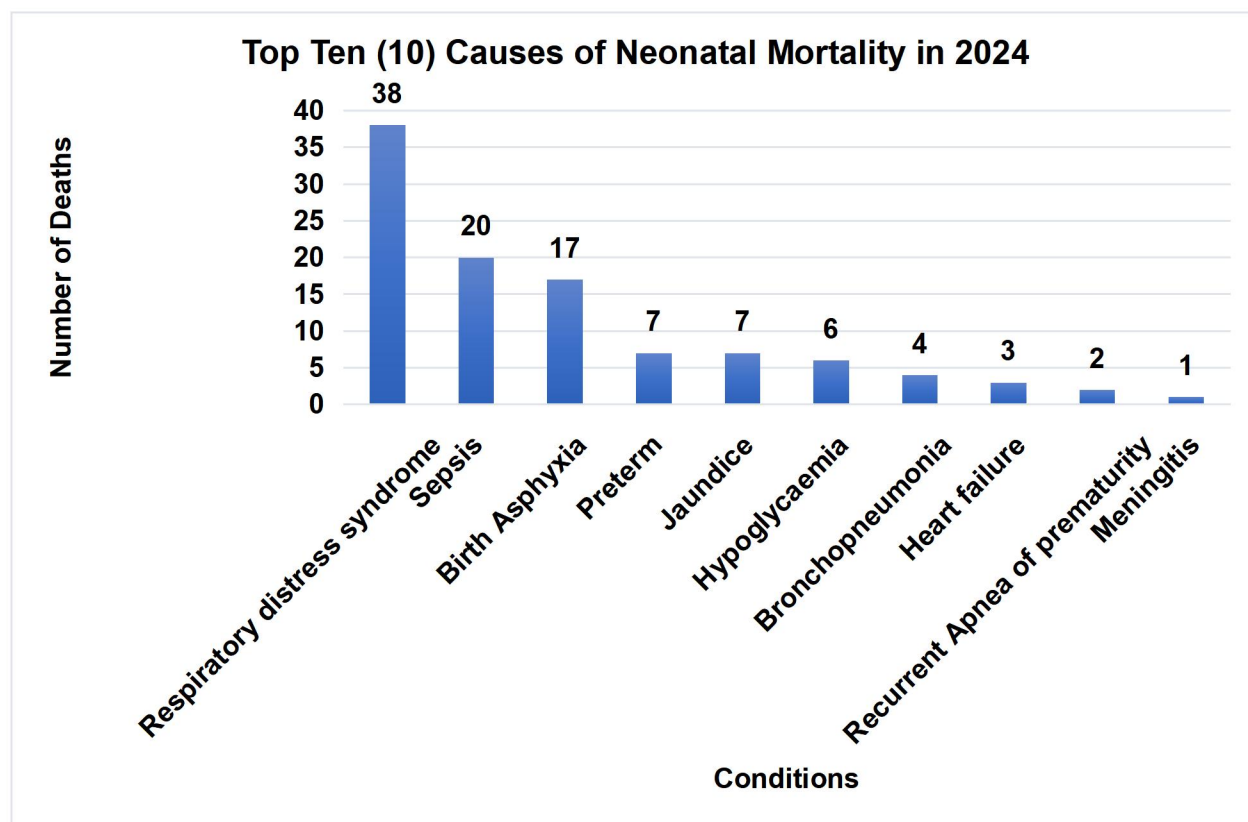


Figure 12.6.2.1. 1: Top Ten Causes of Neonatal Mortality in 2024

Table 12.6.2.1. 1: Top Ten Causes of Neonatal Mortality (2022 – 2024)

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Respiratory distress syndrome	63 (28.8%)	Respiratory distress syndrome	48 (31.6%)	Respiratory distress syndrome	38 (36.2%)
Asphyxia	42 (19.2%)	Birth Asphyxia	33 (21.7%)	Sepsis	20 (19%)
Sepsis	25 (11.4%)	Preterm	19 (12.5%)	Birth Asphyxia	17 (16.2%)
NEC	12 (5.5%)	Sepsis	14 (9.2%)	Preterm	7 (6.7%)
Respiratory Failure	9 (4.1%)	BIND	13 (8.6%)	Jaundice	7 (6.7%)
BIND	8 (3.7%)	Jaundice	10 (6.6%)	Hypoglycaemia	6 (5.7%)
Meconium aspiration	8 (3.7%)	Congenital Heart Disease	5 (3.3%)	Bronchopneumonia	4 (3.8%)
Prematurity	7 (3.2%)	Meningitis	4 (2.6%)	Heart failure	3 (2.9%)

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Cardiogenic shock	3 (1.4%)	Hypoglycemia	3 (2.0%)	Recurrent Apnea of prematurity	2 (1.9%)
Jaundice	3 (1.4%)	NEC	3 (2.0%)	Meningitis	1 (1%)

12.6.3 CHILDREN UNDER-FIVE MORTALITIES

The hospital since 2020 has steadily shown a downward trend in the under-five mortality indicators, indicating a positive impact of sustained and strengthened interventions in the improvement of child survival outcomes. The number of under-five deaths declined from 307 in 2020 to 152 in 2024, and recording 28.6% reduction from 2023 (i.e.; from 213 in 2023 to 152 in 2024). Equally, the under-five mortality rate recorded decreased from 72 per 1000 livebirths in 2023 to 55 per 1000 livebirth in 2024) as represented in Figure 12.6.3.1 and Table 12.6.3.1 below.

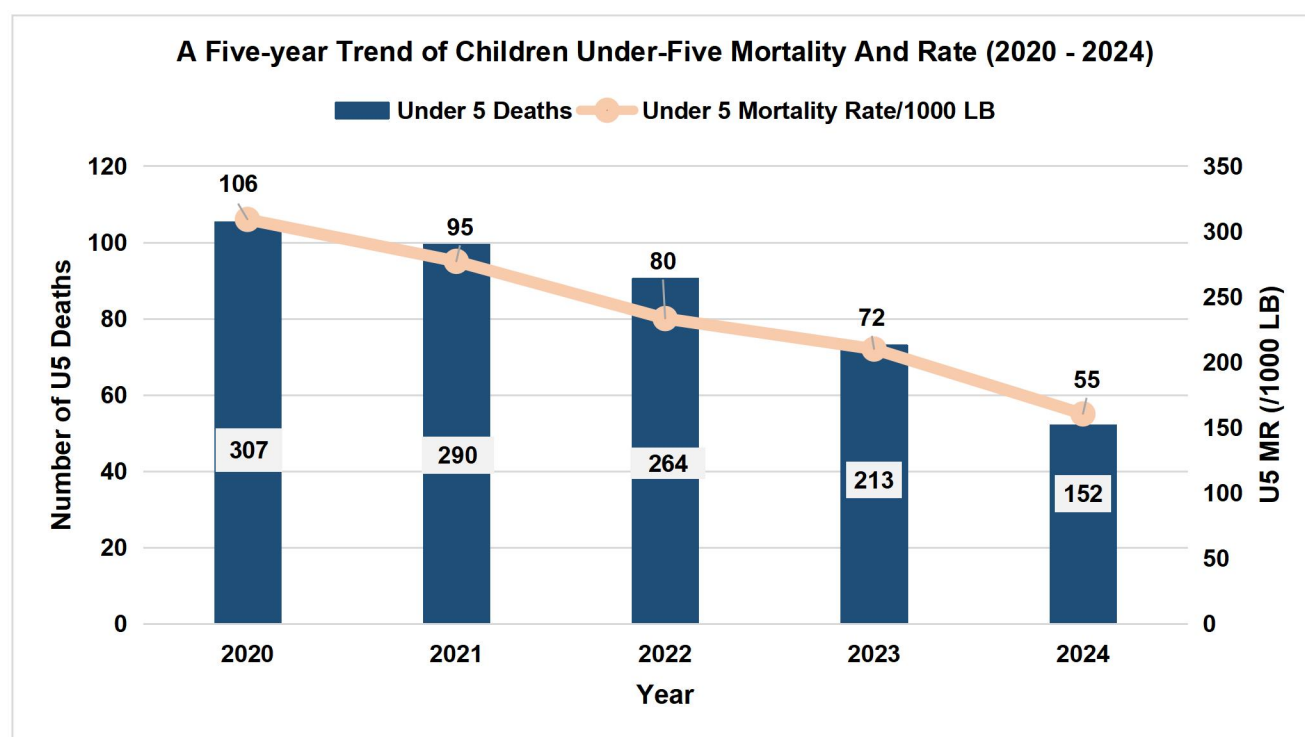


Figure 12.6.3. 1: A Five-year Trend of Children Under-Five Mortality and Rate (2020 - 2024)

Table 12.6.3. 1: Trend of Under-Five Mortality from 2020 to 2024

INDICATORS	2020	2021	2022	2023	2024	REMARKS
Number of under-five Deaths	307	290	264	213	152	28.6% decr
Under-five Mortality Rate (/1000 LB)	106	95	80	72	55	Decr

12.6.3.1 TOP TEN CAUSES OF UNDER-FIVE MORTALITIES

The hospital over the last three years (2022 to 2024) continue to record respiratory distress syndrome as the leading cause of under-five mortality. In 2024, it accounted for 29% (38) of the total deaths. Sepsis ranked second recording 26% (34) whiles birth asphyxia and bronchopneumonia contributed 13% (17) and 7.6% (10) of the deaths respectively. Other causes in 2024 were heart failure, preterm, jaundice, hypoglycaemia, Meningitis and recurrent apnea of prematurity as illustrated in Figure 12.6.3.1.1 and Table 12.6.3.1.1 below.

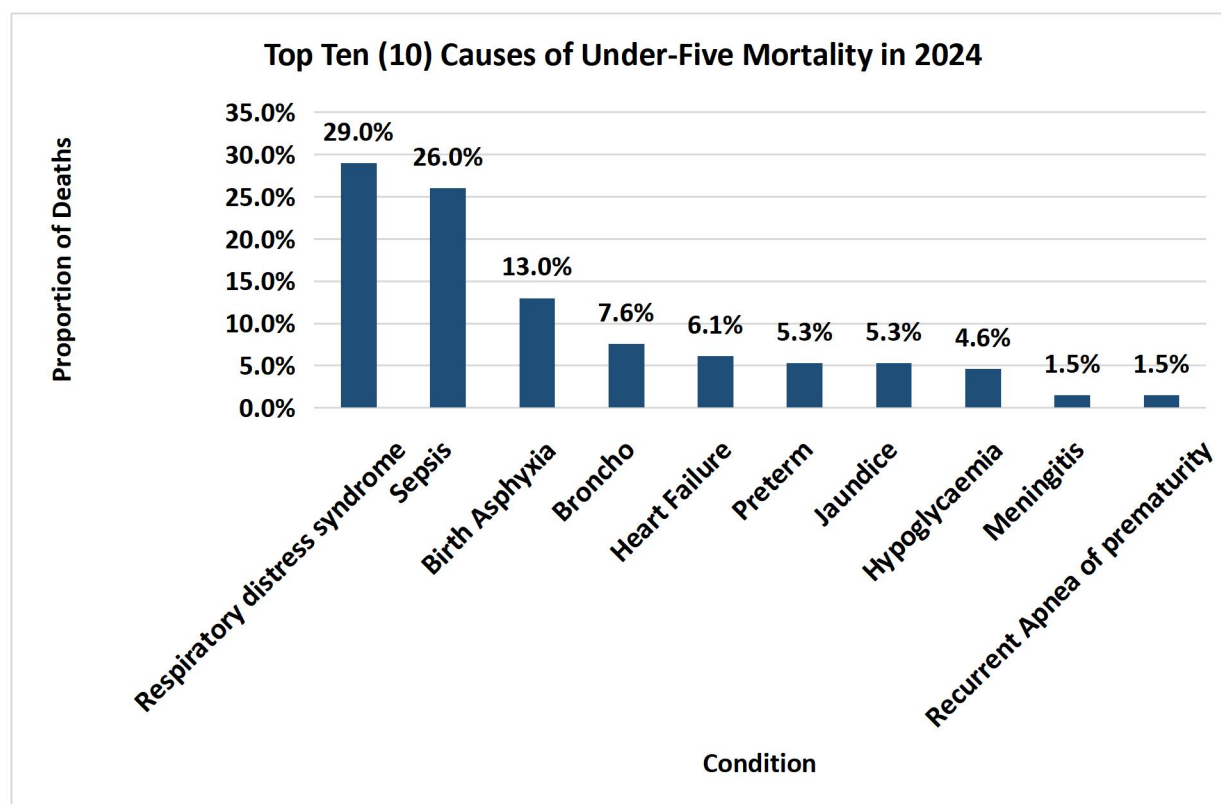


Figure 12.6.3.1. 1: Top Ten Causes of Under 5 Mortality in 2024

Table 12.6.3.1. 1: Comparative Analysis of Top Ten Causes of Under 5 Mortality

2022		2023		2024	
CONDITION	NO. (%)	CONDITION	NO. (%)	CONDITION	NO. (%)
Respiratory distress syndrome	63 (23.9%)	Respiratory distress syndrome	49 (29.00%)	Respiratory distress syndrome	38 (29.00%)
Asphyxia	43 (16.3%)	Birth Asphyxia	33 (19.50%)	Sepsis	34 (26%)
Sepsis	32 (12.1%)	Preterm	19 (11.20%)	Birth Asphyxia	17 (13%)
NEC	12 (4.5%)	Sepsis	16 (9.50%)	Broncho Pneumonia	10 (7.6%)
Respiratory Failure	9 (3.4%)	BIND	13 (7.70%)	Heart Failure	8 (6.1%)
BIND	8 (3.0%)	Jaundice	10 (5.9%)	Preterm	7 (5.3%)
Meconium aspiration	8 (3.0%)	Pneumonia	9 (5.3%)	Jaundice	7 (5.3%)
Pre-maturity	7 (2.75)	Congenital Heart Disease	8 (4.70%)	Hypoglycaemia	6 (4.6%)
Broncho Pneumonia	3 (1.1%)	Severe Acute Malnutrition	7 (4.10%)	Meningitis	2 (1.5%)
Aspiration Pneumonia	1 (0.4%)	Meningitis	5 (3.90%)	Recurrent Apnea of prematurity	2 (1.5%)

CHAPTER THIRTEEN

INTERNAL MEDICINE SUB-BMC

13.1 INTRODUCTION

The Internal Medicine Sub-BMC, also known as the general medicine is a medical specialty focused on the prevention, diagnosis, and the treatment of medical conditions in adults. The Intensive Care Unit, Dialysis, Executive Suite, Male Ward, and Female Ward comprise the department with a total bed state of 97.

13.2 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 13.2. 1: Summary of the 2024 Annual Performance of Internal Medicine Sub-BMC under the Strategic Objectives

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2020	2021	2022	2023	2024	Target	Remarks
Total OPD Attendance	22,031	21,301	20,291	20,546	19,768	-	3.8% decr
Incidence of renal disease	0.39	0.27	0.19	0.17	0.21	-	increased
Incidence of oncology disease	-	0.7	0.7	0.3	0.5	-	increased
Total Admission	2,073	1,752	1,931	2,207	2,271	-	2.9% incr
Submitted a proposal for the establishment of a Stroke Unit to improve acute neurological care							
Ensured the continuous availability of emergency drugs throughout the year to support timely clinical interventions							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Impact	2020	2021	2022	2023	2024	Target	Remarks
Total number of deaths	414	321	249	278	326	-	17.3% incr
Overall Sub-BMC death rate	29.2%	18.4%	12.9%	12.5%	14.4%	-	Decreased
Organised training for doctors and nurses on Advance Life Support/Basic Support (ALS/BLS) to enhance emergency response capacity							
Developed and implemented clinical protocols for 24 common medical conditions, geared towards standardising care delivery							
Trained nurses in the High Dependency Unit (HDU) to improve life-support and critical care services							
Ensured adequate supply of personal protective equipment (PPEs) throughout the year to promote staff and patient safety							
Celebrated key World Health Days to promote prevention and public awareness; - World Kidney Day: Screened 359 people and conducted public education on kidney disease - World Hepatitis Day: Screened 850 people for Hepatitis B and C and intensified campaigns within hospital departments and the wider community							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
Provided an automated external defibrillator (AED) each to both male and female medical wards							
Received and organised assorted medical equipment from KOFIH to support the establishment of a Stroke							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Unit
Upgraded the Dialysis Unit, including; - Repainting the unit and the waiting areas - Replacement of three (3) air conditioners - Installation of new water treatment plant - Installation of a 10,000-litre poly tank to ensure reliable water supply
Improved resident's rest room condition by installing a new air-conditioner
Improved ward environment by; - Replacing two (2) fans at the HDU - Installing four fans and four (4) white boards at balconies of the Male and Female Medical Wards - Repairing twelve (12) patient mattresses with new Mackintosh covers
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Organised eight (8) Sub-BMCs meetings to enhance clinical governance
Achieved 90% staff attendance at clinical meetings, contributing to improved staff knowledge and competence
Conducted patient satisfaction survey, with; 64.9% patients expressing satisfaction with the services provided 14.9% of staff indicating satisfaction with working conditions
4.2: Human Resource Related Performance
Completed staff performance appraisals for the year
4.3 Finance related performance
Successfully implemented new hospital fees and levies, including; - Ward procedure and consultation fee, - Sanitation and documentation levies
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
Initiated three (3) collaborative research projects, with initial publications done.
5.2 Improve on Teaching and Learning:
Continued the facilitation of postgraduate training for existing resident doctors
Two (2) specialist physicians graduated
Two nurses graduated from specialist training; - One (1) Nephrology - One (1) Infectious disease
Six (6) nurses were granted study leave to undergo specialist training; 1 Critical care nurses 1 Nephrology 1 Infectious disease 2 Neurosciences 1 Oncology

13.3 INTERNAL MEDICINE OPD SERVICES UTILISATION

The overall utilisation of the Internal Medicine OPD demonstrated a general declining trend between 2020 to 2022, followed by a slight increase of 1.3% in 2023 (from 20,291 in 2023 to 20,546 in 2023). However, this was not sustained as in 2024, a 3.8% reduction was recorded (20,546 in 2023 to 19,768 in 2024). Analysis of the sub-specialty clinics showed mixed utilization pattern in 2024, with some clinics experiencing notable increases. The TB clinic attendance saw a substantial rise of 135% (from 123 in 2023 to 289 in 2024), Haematology and Adolescent Clinic also experienced an increase of 58.6% (from 435 in 2023 to 690 in 2024) and 46.3% (from 110 in 2023 to 161 in 2023)

respectively. Also, Oncology, Asthma, Cardiology, Sickle Cell clinics recorded moderate increases in 2024.

On the other hand, decline in utilization were observed in high-volume clinics. HIV clinic attendance recorded a reduction of 31.9% (from 4,646 in 2023 to 3,162 in 2024). Marginal decrement was also seen in Endocrinology (6.8%), Hepatitis B (4.2%), Gastroenterology (1.7%), Renal (0.4%) and Diabetes (0.2%) clinics.

Dermatology clinic attendance showed fluctuating attendance in earlier years but recorded no attendance in 2024. This is as a result of the absence of a specialist within the period. Further details of these trends are provided in Figure 13.3.1 and Table 13.3.1 below.

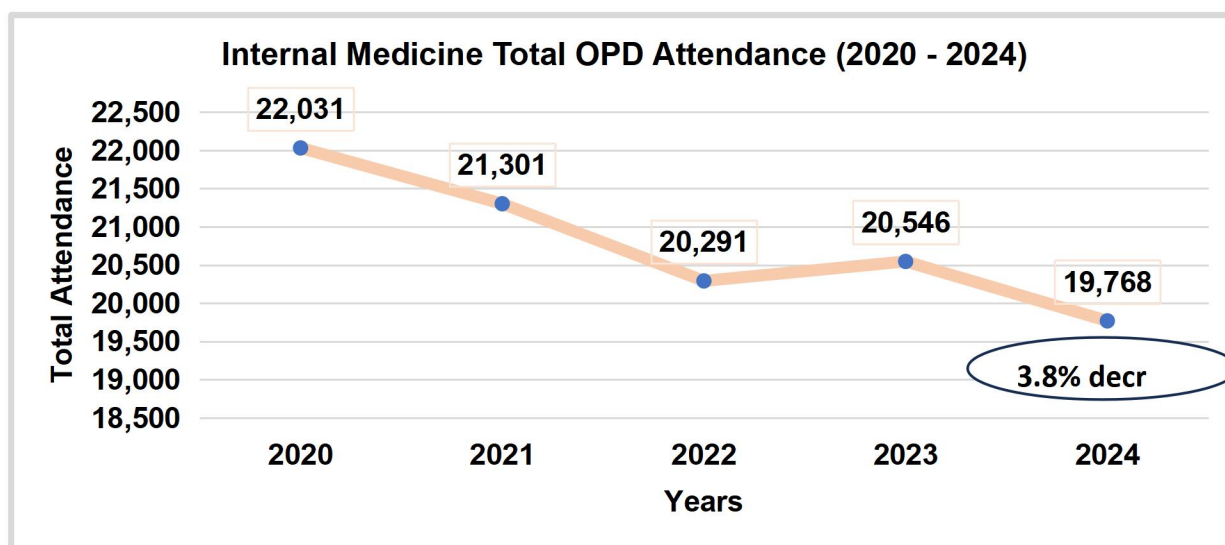


Figure 13.3. 1: Trend of Internal Medicine Total OPD Attendance (2020-2024)

Table 13.3. 1: Internal Medicine OPD Services from 2020 to 2024.

CLINICS	2020	2021	2022	2023	2024	REMARKS
Dermatology	353	462	185	178	0	The clinic did not run as there was no specialist
Asthma	819	626	691	734	769	4.8% incr
Sickle Cell	595	269	301	301	424	40.9% incr
Gastroenterology	662	866	663	766	753	1.7% decr
Cardiology	2,558	2718	2,438	2,586	2,811	8.7% incr
Diabetes	8,965	9,356	8,590	8,266	8,250	0.2% decr
Hepatitis B	850	775	748	737	706	4.2% decr
TB Clinic	292	271	187	123	289	135% incr
HIV Clinic	5,337	4,057	4,457	4,646	3,162	31.9% decr
Adolescent Clinic	126	102	162	110	161	46.3% incr
Endocrinology	97	184	136	190	177	6.8% decr

CLINICS	2020	2021	2022	2023	2024	REMARKS
Haematology	396	427	366	435	690	58.6% incr
Renal Clinic	919	1,005	1,167	1,154	1,149	0.4% decr
Oncology Clinic	62	183	200	320	427	33.4% incr
Total Attendance	22,031	21,301	20,291	20,546	19,768	3.8% decr

13.4 INTERNAL MEDICINE IN-PATIENT PERFORMANCE

The Internal Medicine in-patient performance has demonstrated consistent upward trend since the decline recorded in 2021. In 2024, the total admissions went up by 2.9% (from 2,207 in 2023 to 2,271 in 2024). In spite of the general increase, the ward-level performance varied. The Female Medical Ward admission saw an increase of 10.2% (from 1,094 in 2023 to 1,205 in 2024). However, the Male Medical Ward and Executive Suite recorded a reduction of 1.7% (from 999 in 2023 to 982 in 2024) and 26.3% (from 114 in 2023 to 84 in 2024) in admissions respectively. Overall discharges reduced marginally by 0.41%. Similarly, the number of discharges on the Executive Suite and Male Medical Ward decreased by 30.4% and 5.3% respectively, while the Female Medical Ward recorded a 6.8% increase in the number of discharges.

Further, the average length of stay (ALS) declined on both the Male and Female Medical Wards. However, the Executive Ward experienced an increase in the ALS from 6.9 days in 2023 to 10.7 days in 2024. Also, while the patterns of bed occupancy went up at the Executive Suite in 2024, the Male and Female Medical Wards recorded a decline compared to 2023. Further details of the analysis are presented in Figure 13.4.1 and Table 13.4.1 below.

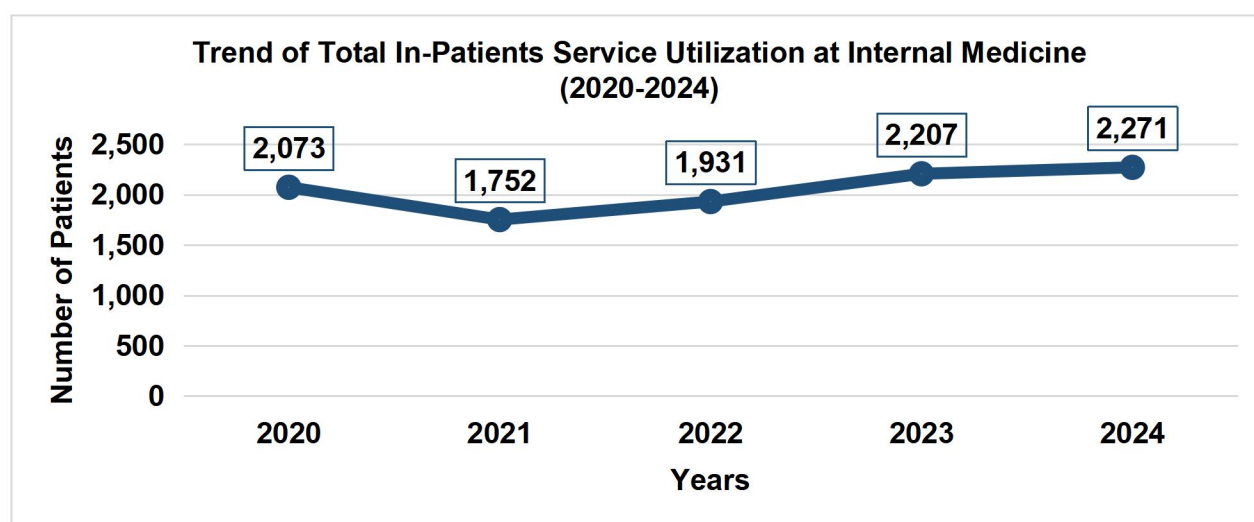


Figure 13.4. 1: Trend of Total In-Patient Service Utilization at Internal Medicine (2020-2024)

Table 13.4. 2: Trend of Overall In-Patient Service Utilization at Internal Medicine Sub-BMC

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Overall Admissions	2,073	1,752	1,931	2,207	2,271	2.9% incr
Overall Discharges	1,005	1,425	1,686	1,947	1,939	0.41% decr

Table 13.4. 3: In-Patient Utilization at the Internal Medicine's per Ward (2020 – 2024)

Indicator	WARD	2020	2021	2022	2023	2024	REMARKS
Admission	Male Medical	983	797	911	999	982	1.7% decr
	Female Medical	924	865	960	1,094	1,205	10.1% incr
	Executive Suite	55	90	60	114	84	26.3% decr
Discharges	Male Medical	211	626	771	861	815	5.3% decr
	Female Medical	722	709	845	966	1,032	6.8% incr
	Executive Suite	62	90	70	120	92	30.4% decr
Average Length of Stay (days)	Male Medical	6.2	6.6	7.1	6.9	6.8	Decr
	Female Medical	6.6	6.4	6.4	14.3	6.4	Decr
	Executive Suite	8.7	0.9	4.7	6.9	10.7	Incr
Average Daily Bed Occupancy	Male Medical	17.1	15	17.8	18.8	18.4	Decr
	Female Medical	17.2	15	16.8	20.8	20.7	Decr
	Executive Suite	1.7	2	0.9	2.1	2.7	Incr
Bed Occupancy Rate	Male Medical	50.2	34.1	50.2	57.1	42.9%	Decr
	Female Medical	40	35.6	40	48.8	48.2%	Decr
	Executive Suite	55.6	70.8	55.6	43	90.7%	Incr

13.4.1 TOP TEN CAUSES OF ADMISSION AT INTERNAL MEDICINE.

Over the years, pneumonia has continued to be the leading cause of admissions at the Internal Medicine Sub-BMC. Although it accounted for the most condition for admissions in 2024, comparatively, it decreased by 29% (from 435 in 2023 to 309 in 2024). This was followed by hypertension and diabetes mellitus with 308 and 244 respectively. Sickle cell and urinary tract infection (UTI) were the least common causing conditions of

admission with 71 and 65 respectively. Table 13.4.1.1 and Figure 13.4.1.1 below provides in details of the above.

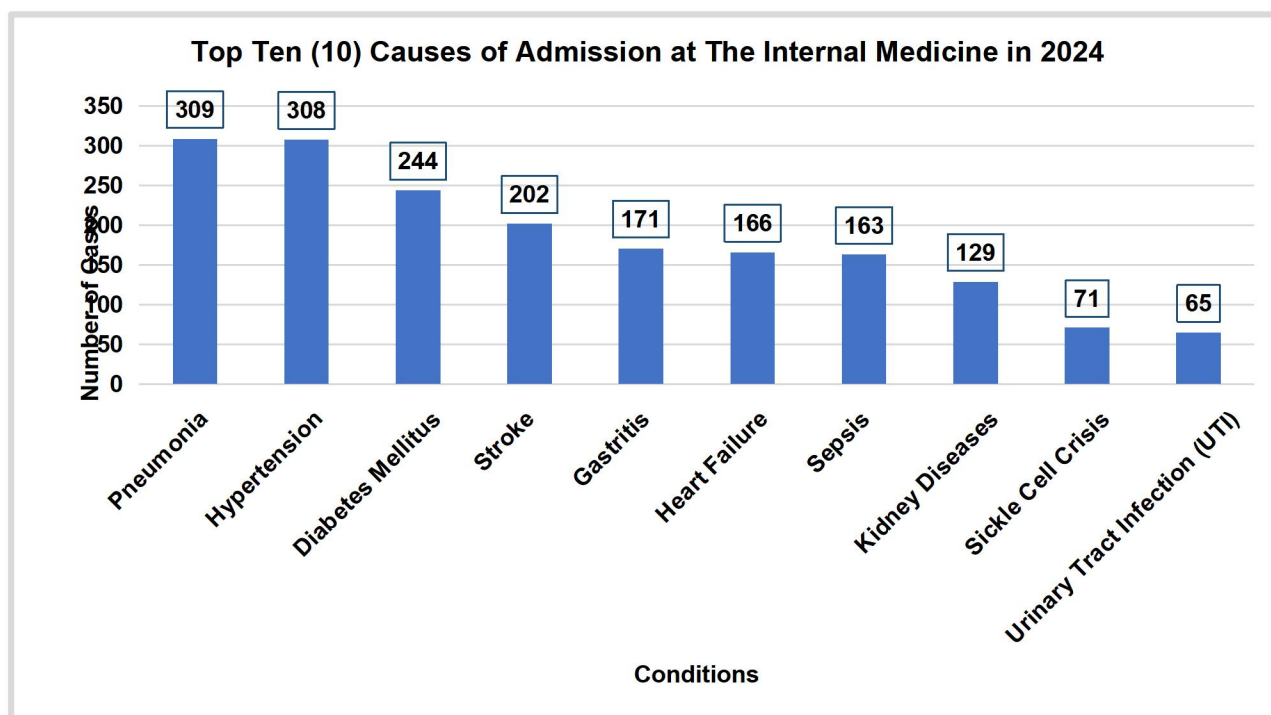


Figure 13.4.1. 1: Top Ten Causes of Admission at The Internal Medicine in 2024

Table 13.4.1. 1: Top Ten Causes of Admission at Internal Medicine

2022		2023		2024	
CONDITION	NO.	CONDITION	NO.	CONDITION	NO.
Pneumonia	304	Pneumonia	435	Pneumonia	309
Hypertension	240	Kidney Diseases	324	Hypertension	308
Diabetes Mellitus	234	Hypertension	305	Diabetes Mellitus	244
Kidney Diseases	215	Diabetes	236	Stroke	202
Stroke	175	Heart Failure	200	Gastritis	171
Heart Failure	110	Gastritis	171	Heart Failure	166
Pulmonary Embolism	108	Stroke	170	Sepsis	163
Anaemia	104	Sepsis	156	Kidney Diseases	129
Sepsis	91	Anaemia	132	Sickle Cell Crisis	71
Gastritis	86	Urinary Tract Infection (UTI)	116	Urinary Tract Infection (UTI)	65

13.4.2 MORTALITY AT INTERNAL MEDICINE SUB-BMC

Generally, the total number of deaths recorded at the Internal Medicine Sub-BMC increased by 17.3% (from 278 in 2023 to 326 in 2024). Despite the increase, the Female Medical Ward and the Medical Ward recorded a significant increase of 22.1% (from 127 in 2023 to 155 in 2024) and 15.7% (from 147 in 2023 to 170 in 2024) respectively, while the Executive Suite considerably decline 75% (from 4 in 2023 to 1 in 2024).

Similarly, the mortality rates reflected the number of deaths recorded. The mortality rate at the Sub-BMC level went up from 12.5% in 2023 to 14.4% in 2024. The Female Medical Ward mortality rate rose from 11.6% in 2023 to 13.1% in 2024 and Male Medical Ward went up to 37.3% in 2024 from 14.6 in 2023. However, the Executive Suite mortality rate improved from 3.2% in 2023 to 1.1% in 2024.

Figure 13.4.2.1, Table 13.4.2.1 To Table 13.4.2 below shows details of the analysis.

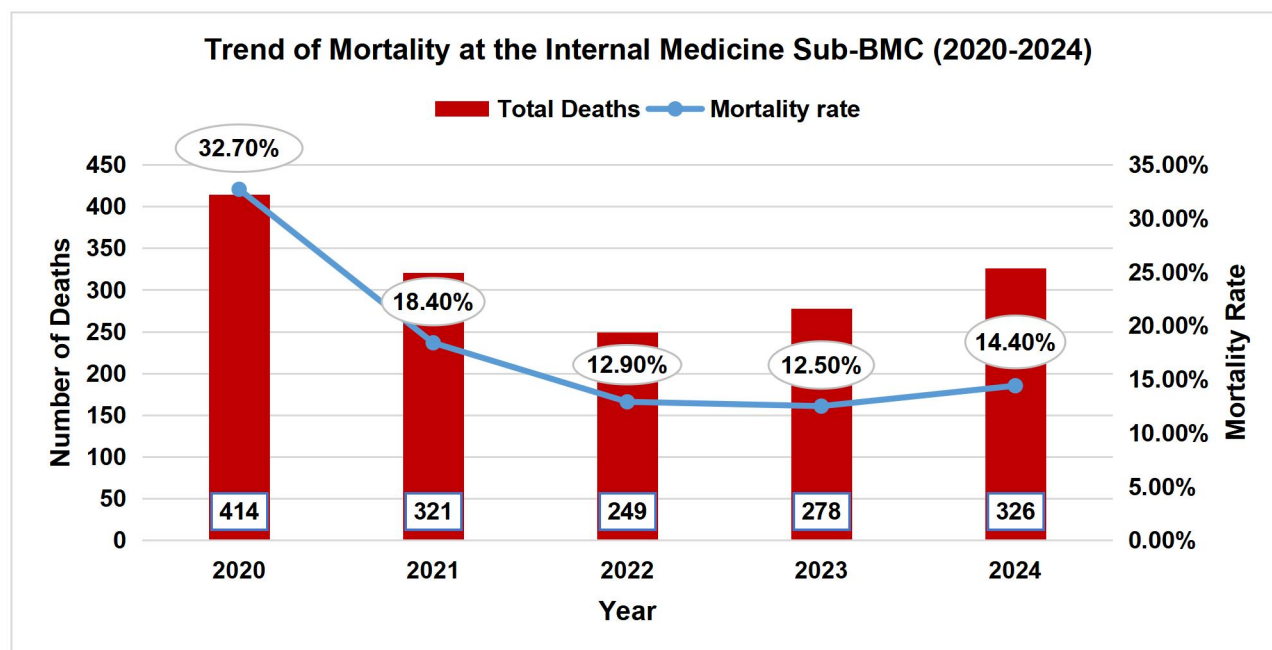


Figure 13.4.2. 1: Trend of Mortality at the Internal Medicine Sub-BMC (2020-2024)

Table 13.4.2. 1: Mortality Trend at the Internal Medicine Sub-BMC

Indicator	WARD	2020	2021	2022	2023	2024	REMARKS
Male Medical	Number of deaths	211	165	136	147	170	15.7% incr
	Mortality rate	21.0%	20.3%	15.0%	14.6%	37.3%	Incr
Female Medical	Number of deaths	202	152	112	127	155	22.1% incr
	Mortality rate	21.2%	17.4%	11.7%	11.6%	13.1%	Incr
Executive	Number of	1	4	1	4	1	75% decr

Indicator	WARD	2020	2021	2022	2023	2024	REMARKS
Suite	deaths						
	Mortality rate	1.4%	4.0%	1.4%	3.2%	1.1%	Decr
Overall	Number of deaths	488	321	249	278	326	17.3% incr
	Mortality rate	32.7%	18.4%	12.9%	12.5%	14.4%	increase

13.4.3 TOP TEN CAUSES OF DEATH AT INTERNAL MEDICINE

Stroke (60), pneumonia (49) and sepsis (41) were recorded as the leading causes of death at the Internal medicine Sub-BMC in 2024. This was followed by kidney diseases (36) and liver failure (23) with pulmonary embolism and shock being the least causes of death with 10 and 8 cases respectively. Further presentation of the above is illustrated in figure 13.4.3.1 and table 13.4.3.1 below.

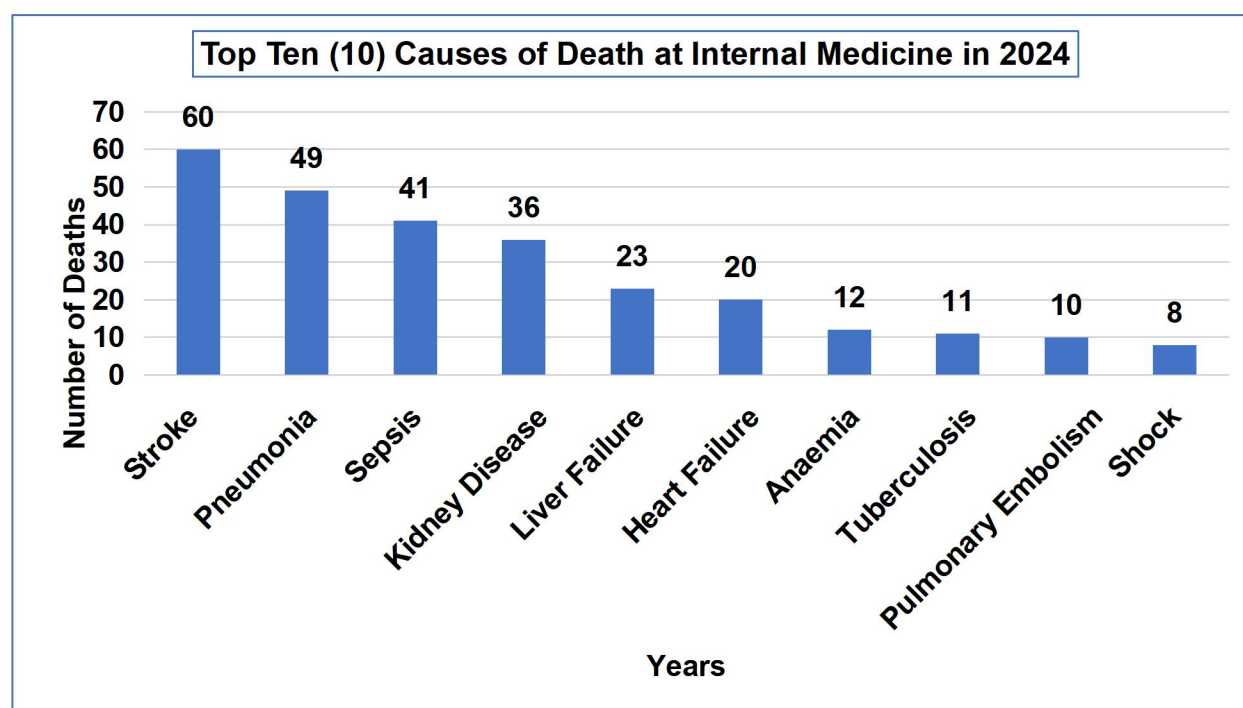


Figure 13.4.3. 1: Top Ten Causes of Death at The Internal Medicine

Table 13.4.3. 1: Top Ten Causes of Death at The Internal Medicine (2020-2024)

2021		2022		2024	
CONDITION	No.	CONDITIONS	No.	CONDITIONS	NO.
Sepsis	51	Sepsis	51	Stroke	60
Kidney Disease	34	Pneumonia	48	Pneumonia	49
CVA	30	Kidney Disease	43	Sepsis	41
Pneumonia	26	Heart Failure	26	Kidney Disease	36
Heart Failure	19	Stroke	24	Liver Failure	23

2021		2022		2024	
CONDITION	No.	CONDITIONS	No.	CONDITIONS	NO.
Tuberculosis	12	Liver Failure	23	Heart Failure	20
Hepatic Encephalopathy	10	HIV	10	Anaemia	12
Hepato-cellular Carcinoma	5	Tuberculosis	8	Tuberculosis	11
HIV	5	Shock	8	Pulmonary Embolism	10
Pulmonary Embolism	4	Pulmonary Embolism	6	Shock	8

CHAPTER FOURTEEN

CRITICAL CARE AND ANAESTHESIA SUB-BMC

14.1 INTRODUCTION

The Critical Care and Anaesthesia Sub-BMC of the hospital are mandated to provide anaesthesia services for surgeries, as well as managing patients with acute or chronic critical illnesses in an Intensive Care Unit (ICU). The sub-BMC is also responsible for the training of 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

These departments focus on skills such as airway management, advanced life support, and pain control, often taking a multidisciplinary approach to the care of critically ill patients.

14.2 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 14.2. 1: Summary of the 2024 Annual Performance of Critical Care and Anaesthesia Sub-BMC under the Strategic Objectives.

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2020	2021	2022	2023	2024	Target	Remarks
Anaesthesia Clinic OPD Attendance	480	1,042	784	889	1,816	-	104.3% incr
Anaesthesia Clinic was effectively managed by a single Anaesthesiologists							
Clinic operational days were increased from one to three days per week, improving patient access and service coverage							
Advanced anaesthetic techniques were introduced, including epidural anaesthesia/analgesia and peripheral nerve blocks, broadening the scope of clinical services							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Impact	2020	2021	2022	2023	2024	Target	Remarks
Deaths	74	63	65	56	78	-	39.3% incr
ICU Death rate	88.1%	50.00%	28.40%	44.40%	52.30%	-	Incr
Specialist-led perioperative consultations and reviews were consistently conducted to enhance patient outcomes							
Enhanced the quality of care by introducing modern equipment and standards, including infusomats, syringe pumps, and revised monitoring charts							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Ultrasound services were introduced at the Sub-BMC, improving diagnostic and procedural support
Organised regular in- service training for staff on Basic Life Support
Held mortality and morbidity audit committee meetings to promote clinical governance and continues quality improvement
Standard operating protocols were developed and formally adopted to guide anaesthesia practice
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Patient monitors were acquired for the recovery room, improving postoperative monitoring and patient safety
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Accreditation for the Sub-BMC was secured, strengthening compliance with regulatory and quality assurance standards
Four (4) management meetings were held
4.2: Human Resource Related Performance
Facilitated the training of: • 3 House Officers, • 5 Medical Officers • Resident Anaesthesiologists • Critical Care nurses under rotation
Conducted appraisal for all staff
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Research:
Operationalized the research desk at the sub-BMC
Conducted two (2) researches to support evidence-based practice
5.2 Improve on Teaching and Learning:
Clinical seminars were held regularly to promote continuous professional development and knowledge sharing among staff
Basic Life Support/Paediatric Advanced Life Support training were organized for selected staff to enhance emergency response capacity

14.3 ANAESTHESIA OPD SERVICES UTILISATION

The hospital since 2020 has experienced fluctuating pattern in the utilization of Anaesthesia OPD services, with 2024 recording the highest of 1,816, representing an increase of 104.3% from 889 in 2023 as illustrated in Figure 14.3. 1 below. This substantial increase is largely attributed to the hospital's strengthened policy of ensuring that all surgical patients, especially those scheduled for elective procedures, undergo comprehensive preoperative anaesthetic assessment prior to surgery.

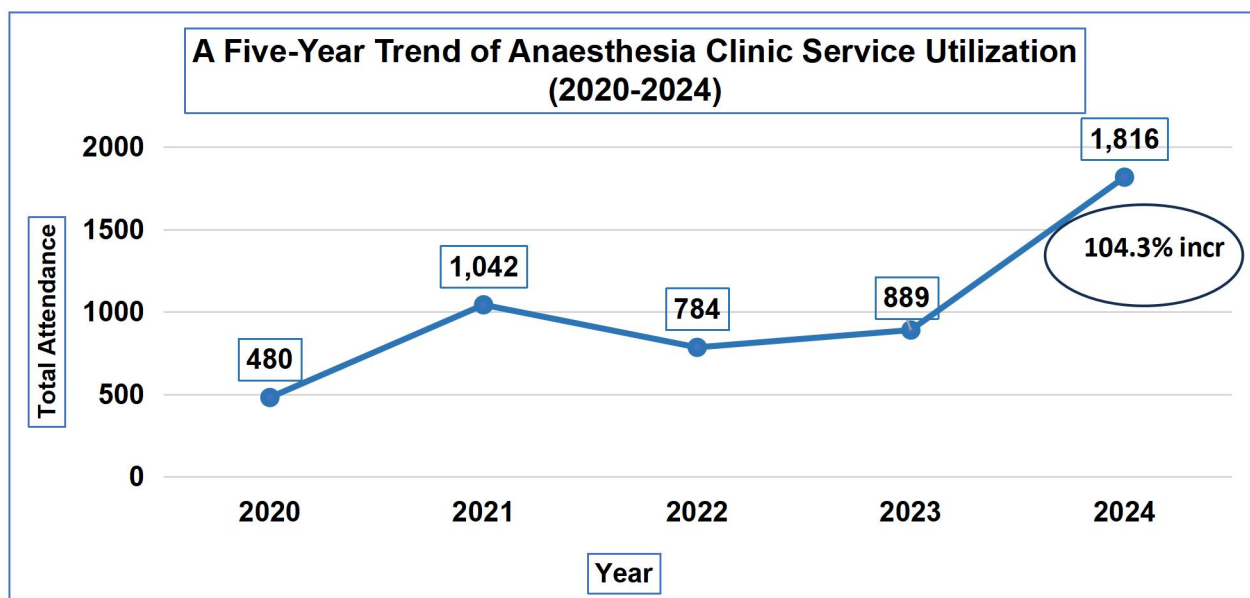


Figure 14.3. 1: A Five-Year Trend of Anaesthesia Clinic Service Utilization (2020-2024)

14.4 ANAESTHESIA ADMINISTRATION

The total number of anaesthesia administered in 2024 also went up in line with the increase in Anaesthesia OPD utilisation. In general, the number of anaesthetic procedures increased by 13.3% (from 3,967 cases in 2023 to 4,455 cases in 2024). Despite the rise, the anaesthesia types showed mixed performance. Spinal anaesthesia formed majority of the procedures performed with 49.0%, although it recorded a slight decline of 2.2% (from 2,235 in 2023 to 2,185 in 2024). General anaesthesia increased by 24.4% (from 1,219 cases in 2023 to 1,517 in 2024) and constituted 34.1% of all anaesthetic procedures. Local Anaesthesia increased by 67.8% (from 391 in 2023 to 656 in 2024), and accounted for 14.7% of total procedures. On the other hand, sedation cases dropped by 21.7% (from 120 in 2023 to 94 in 2024), forming 2.1% of the cases performed. Epidural anaesthesia remained the least utilized procedure, with 3 cases recorded in 2024 compared to 2 in 2023, representing a 50.0 % rise. Details of the distribution and trend in anaesthetic services are presented in Figure 14.4.1 and Table 14.4.1 below.

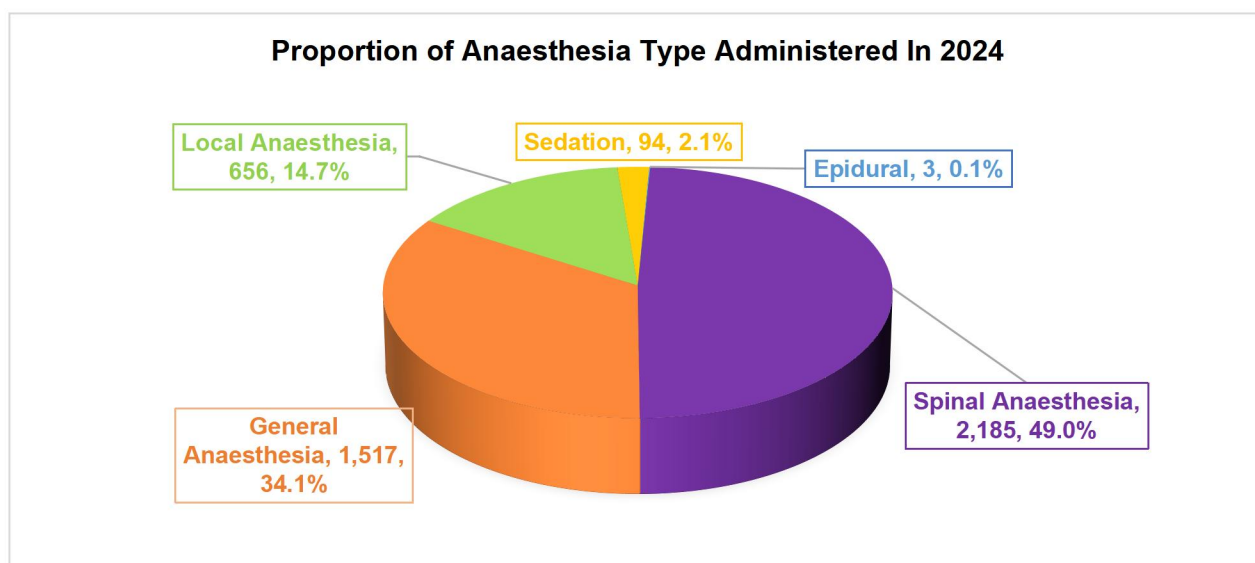


Figure 14.4. 1: Proportion of Anaesthesia Type Administered In 2024

Table 14.4. 1: Type of Anaesthesia Administered (2023-2024)

Anaesthesia Type Administered	2023	2024	Remarks
Spinal Anaesthesia	2,235	2,185	2.2% decr
General Anaesthesia	1,219	1,517	24.4% incr
Local Anaesthesia	391	656	67.8% incr
Sedation	120	94	21.7% decr
Epidural	2	3	50.0% incr
Total Cases	3,967	4,455	13.3% incr

14.5 THEATRE RECOVERY SERVICES

Theatre recovery services recorded a high volume of cases in 2024, with a total of 3,354 cases received. The number of cases received per month fluctuated, with the highest recorded in May (411), October (335) and August (324), reflecting periods of intensified surgical activity, particularly during periods when the hospital collaborates with local and external partners to undertake collaborative surgeries in eye (Himalayan Cataract Project), plastics and orthopedic (Medvac) as well as uro-surgery. Eye surgeries accounted for a significant portion of cases seen in several months, especially July (78 out of 278), August (120 out of 324) and November (73 out of 311).

Further, 2.1% (72) out of the total cases received were cancelled, with the highest cancelled in May (12 cases), March and April (8 cases each) whilst the least (1 case) happened in September. Clinical-related causes such as accounted for 31 cancellations, representing 43.1% of the total causes, while clinical related causes (including Low BP, High BP, infection of patients at the time of surgery, etc.) constituted 41.7% (30). Other causes, largely patient-related resulted in 15.5% (11) cancellations, with financial constraints (6 cases) and patient refusal (2 cases) being the main contributors.

Also, 1.3% (45) of the received cases were critical and hence transferred to the ICU for further management. However, 22 unfortunately died. Further details are illustrated in Tables 14.5.1 and 14.5.2 below.

Table 14.5. 1: Details of Cases in 2024

MONTH	RECEIVED	CANCELED	TO ICU	DEATH
January	186	2	4	3
February	281	6	4	1
March	249	8	3	2
April	290	8	3	4
May	411	12	4	0
June	263	7	2	1
July	278 (Eye – 78)	7	6	1
August	324 (Eye 120)	4	3	3
September	252	1	4	2
October	335 (Medvac -49, Uro – 11)	7	1	2
November	311 (Eye – 73)	7	4	2
December	174	3	7	1
Total	3354	72	45	22

Table 14.5. 2: Causes of Surgery Cancellation Per Year

Institutional Related	No	Clinical Related	No	Other Causes	No
No surgeon	5	Low BP	4	Patient's refusal	2
No knowledge of procedure	2	High BP	11	Patients not visiting anaesthesia clinic	3
Faulty machine	8	For further assessment	3	Financial constraints	6
No theater space	8	Condition resolved	2		
Cancelled for emergency cases	3	Patients took in food	3		
No blood	4	Infections at the time of operation	5		
		Wrong diagnosis	2		
		Clear eyes	1		
Total	30	Total	31	Total	11

14.6 CRITICAL CARE UTILISATION

Critical care unit (ICU) service utilization has experienced upward trend over the period, particularly in 2024. Admissions at the ICU in 2024 went up by 9.8% (from 133 in 2023 to 146 in 2024), the highest number of admissions recorded within the five-year period.

The average length of stay (ALS) decreased from 16.4 days in 2023 to 12.8 days in 2024. Also, the average daily occupancy decreased from 3.1% in 2023 to 2.8% in 2024, with bed occupancy rate reducing from 51.1% in 2023 to 46.6% in 2024. Mortality patterns remain a major concern. The number of deaths rose by 39.3% (from 56 in 2023 to 78 in 2024). Similarly, the mortality rate increased from 44.4% in 2023 to 52.3% in 2024. Further trend analysis is provided in Figure 14.6.1 to Figure 14.6.2 and Table 14.6.1 below.

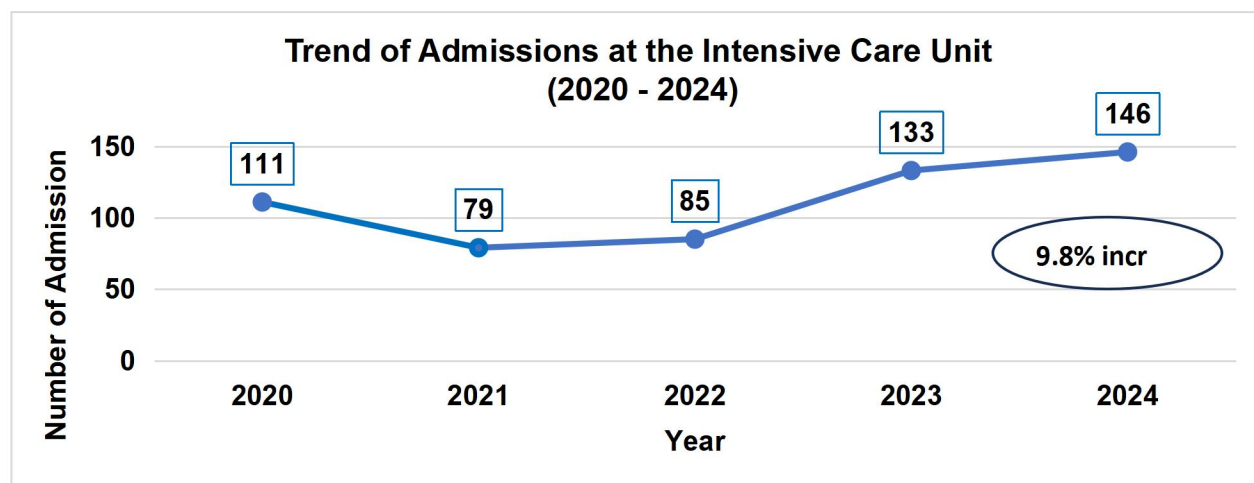


Figure 14.6. 1: Trend of Admission at the Intensive Care Unit (2020-2024)

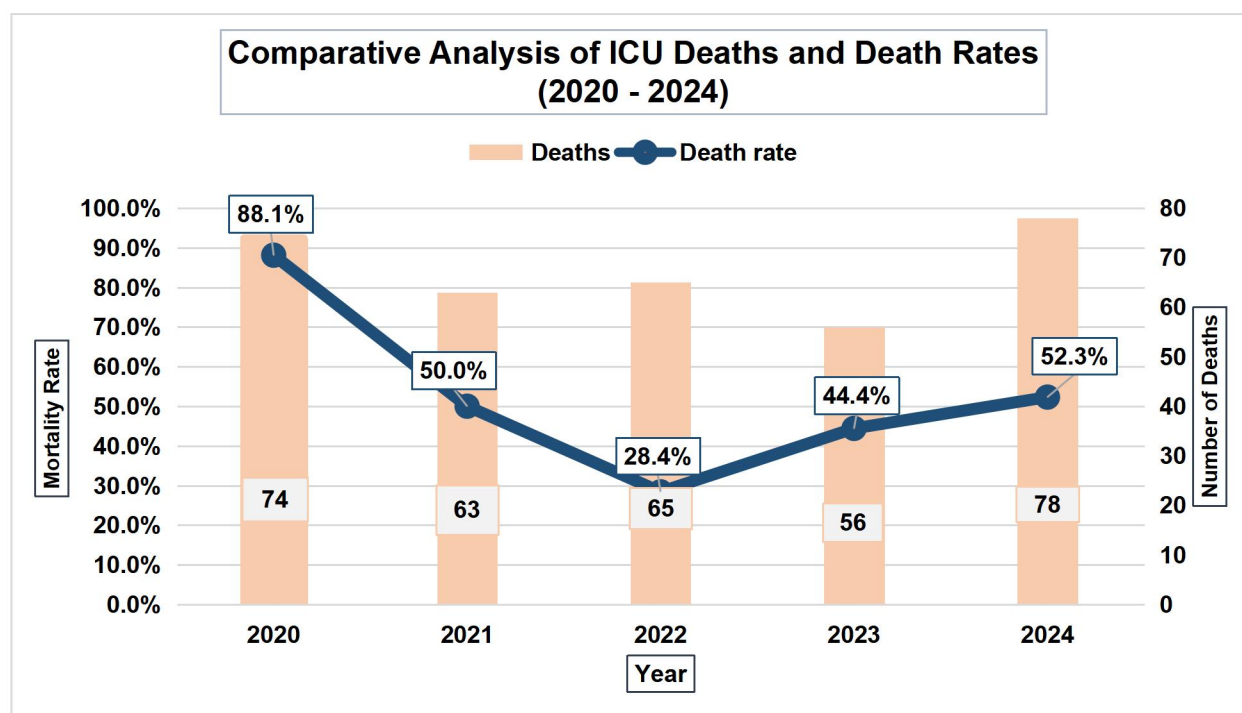


Figure 14.6. 2: Trend of Deaths at the Intensive Care Unit (2020-2024)

Table 14.6. 1: Critical Care Unit (ICU) In-patient Service Utilization

KPI	2020	2021	2022	2023	2024	REMARKS
Admission	111	79	85	133	146	9.8% incr
Discharge	10	12	15	12	2	83.3% decr
Transfer-in	-	-	-	64	56	
Transfer-out	-	-	-	66	69	
Average length of stay	6.5	6.3	10.2	16.4	12.8	Decr
Average daily occupancy	2.9	2.0	2.2	3.1	2.8	Decr
% Bed occupancy	58.4%	38.0%	58.4%	51.1%	46.6%	Decr
Deaths	74	63	65	56	78	39.3% incr
Death rate	88.1%	50.0%	28.4%	44.4%	52.3%	Incr

CHAPTER FIFTEEN

SURGICAL SUB-BMC

15.1 BACKGROUND

The Surgical Sub-BMC of the hospital provides specialized care and surgical treatment for patients with conditions that require manual or instrumental procedures. This includes routine elective surgery, emergency surgery, specialized procedures, medical training (teaching and research) as well as outreaches within its catchment area and beyond. With a bed capacity of 77, the department comprises of surgical wards, operating rooms and specialist outpatient clinics, and is staffed by surgeons, nurses, pharmacists and administrative staff. The department is divided into various sub-specialties, such as General Surgery, Orthopaedic, Urology Neurosurgery, Plastic & Reconstructive Surgery, Paediatric Surgery and Colorectal surgery services at both outpatient and inpatient level.

15.2 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 15.2. 1: Summary of the 2024 Annual Performance of Surgical Sub-BMCs under the Strategic Objectives.

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2020	2021	2022	2023	2024	Target	Remarks
Total surgical OPD Attendance	8,466	9,242	11,201	12,182	13,085	-	7.4% incr
Surgical OPD cases seen per doctor	-	1:258	1:370	1:268	1:247	-	decr
Total surgeries conducted by the Sub-BMC	1,280	1,668	1,568	1,511	2,103	-	39.2% incr
Surgery to Surgeon ratio	26:1	48:1	52:1	38:1	41:1	THs = 250:1	Incr
Commenced laparoscopic services with 2 cases performed with the support from KOFIH							
Collaborated with visiting surgical teams and performed 352 surgeries.							
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Impact	2020	2021	2022	2023	2024	Target	Remarks
Theatre Death Rate	0.40%	0.30%	0.30%	0.20%	0.5%	0.5%	incr
All recorded mortalities were audited, strengthening accountability, clinical review and quality improvement processes							
One (1) infection prevention and control (IPC) workshop was organised, with seventy-nine (79) staff trained to enhance compliance with IPC standards and improve patient and staff safety							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
Renovated three (3) doctors' rooms to improve working conditions							
Replaced all missing ceiling cards at the Male and Female Wards and the Theatre, and the collapsed							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE	
ceiling at the Isolation Ward was repaired	
Replaced torn nets at both the male and female surgical wards.	
Covered fifteen (15) torn mattresses at the Sub-BMC to improve patient comfort	
Acquired eighty-two (82) medical equipment, including; 2 Fingerprint pulse oximeters, 2 weighing scale, 2 wheelchairs, 3 bedstead, 3 BP apparatus, 3 suction machines, 2 swivel chairs, 20 Operating gowns, 40 laparotomy packs and 5 drip stands	
A Laparoscopic tower and accessories were donated by KoFIH Foundation, supporting the introduction of laparoscopic services.	
Received donations of split sheets, dressing towels and trolley towels from Dr. Victor Etwire, enhancing linen availability at the Sub-BMC.	
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM	
4.1: Governance Related Performance	
Conducted fifty-nine (59) clinical meetings to enhance case review and clinical coordination	
Organized one (1) infection prevention workshop with 79 staff trained	
Four (4) management meetings were held, including two (2) sessions with In-Charges, to strengthen leadership and coordination.	
Organised one (1) stakeholder meeting focusing on theatre utilization and efficiency	
4.2: Human Resource Related Performance	
Four (4) Nurses recommended for further training in the following specialties; - Two (2) fellowships in neurosurgery - One (1) BSc in perioperative nursing - One (1) membership program in orthopaedics	
4.3 Finance related performance	
-	
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING	
5.1 Improve on Research:	
Conducted and published ten (10) collaborative research on the ff topics; - Radiologic patterns of distant organ metastasis in advanced breast cancer patients: Prospective review of computed tomography images. Cancer Rep (Hoboken)-2024 Feb;7(2): e1988. doi:10.1002/cnr2.1988 - Accuracy of the Wound Healing Questionnaire in the diagnosis of surgical-site infection after abdominal surgery in low-and middle-income countries Br J Surg-2024 Jan 31:111(2): znad446. doi: 10.1093/bjs/znad446. - Outcomes after surgery for children in Africa (ASOS-Paeds): a14-day prospective observational cohort study. Lancet. 2024 Apr 13;403(10435):1482-1492. doi:10.1016/S0140-6736(24)00103-X. Epub 2024 Mar 22. - Routine sterile glove and instrument change at the time of abdominal wound closure to prevent surgical site infection (ChEETAh): a model-based cost-effectiveness analysis of a pragmatic, cluster-randomised trial in seven low-income and middle-income countries. Lancet Glob Health-2024 Feb;12(2): e235-e242.doi:10.1016/S2214-109X (23)00538-7. - Global access to technologies to support safe and effective inguinal hernia surgery: prospective, international cohort study. https://doi.org/10.1093/bjs/znad164. This paper won BJS European Hernia Society Competition prize and was presented at the European Hernia Society Conference,	

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
Prague,2024(https://ehs2024.org). • Access to and quality of elective care: a prospective cohort study using hernia surgery as a tracer condition in 83 countries. Lancet Glob Health. 2024 jul;12(7): e1094-e1103.doi:10.1016/S2214-109X (24)00142-6. Epub 2024 May 23. • Variation of elective healthcare in west Africa: secondary analysis of an inguinal hernia international cohort study. Impact Surgery, 1(4), 145-15 https://doi.org/10.62463/surgery.80 • Mechanisms and causes of death after abdominal surgery in low-income and middle-income countries: a secondary analysis of the FALCON trial. Lancet Glob Health 2024 Published Online September 5,2024 https://doi.org/10.1016/S2214-109X(24)00318-8 • Microbiology testing capacity and antimicrobial drug resistance in surgical-site infections: a post-hoc, prospective, secondary analysis of the FALCON randomized trial in seven low-income and middle-income countries. Lancet Glob Health.2024 e1816-e1825. doi :10.1016/s2214-109x (24)00330-9. Epub 2024 Sep 5. • Structures, processes and outcomes between first referral and referral hospitals in lo-income and middle-income countries: a secondary preplanned analysis of the FALCON and ChEETAh randomised trials. NHR Global Health Research Unit on Global surgery; P.BMJ Glob Health. 2024 Nov 7;9(Supple 4): e015599.doi:10.1136/bmjgh-2024-015599.
5.2 Improve on Teaching and Learning:
Organized laparoscopic training for some selected staff to build institutional capacity in minimally invasive surgery.
Supported the training of medical students, physician assistants and nurses, reinforcing the hospital's teaching mandate

15.3 SURGICAL OUTPATIENT SERVICES UTILIZATION

The utilization of surgical OPD services has consistently shown an upward trend over the past five-years, with a total of 13,085 visits in 2024. This represents an increase of 7.4% from 12,182 visits recorded in 2023. Despite the overall increase, the various sub-specialty clinics experienced mixed performance. Urology continued to be the major surgical specialty utilized at CCTH accounting for 42.8% (5,606) of the attendance in 2024, and increasing by 10.6% compared to 5,071 visits recorded in 2023. General Surgery attendance declined by 6.7% (from 3,190 in 2023 to 2,989 in 2024) and formed 22.8%, remaining the second-largest surgical services utilized. Orthopaedic clinic attendance formed 18.9% of the utilization, and also experienced a rise of 13% (from 2,191 in 2023 to 2,476 in 2024). Neurosurgery clinic saw the highest increase of 32.5% (from 74 in 2023 to 1,158 in 2024), forming 8.8% of the utilisation. Plastic surgery clinic attendance in 2024 rose marginally by 1.2% (from 846 in 2023 to 856 in 2024) and accounted for 6.5% of total utilization. Further details presented on trends and service distribution are presented in Figure 15.3.1 To Figure 15.3.3 and Table 15.3. 1 below.

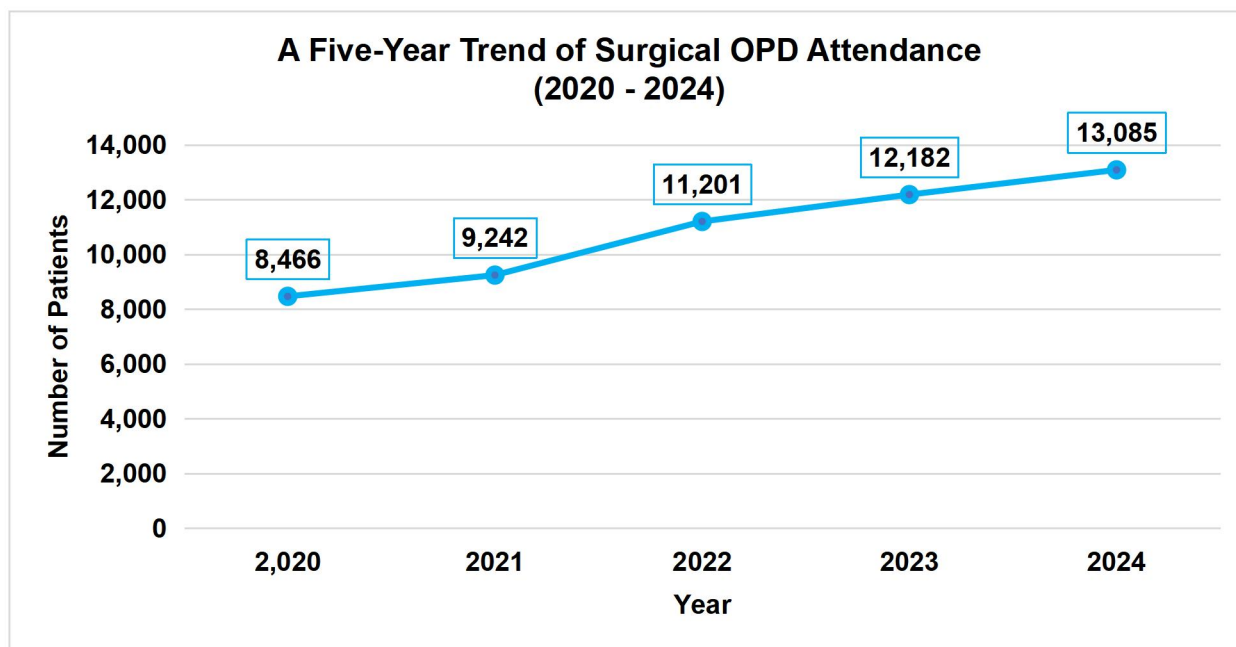


Figure 15.3. 1: A Five-Year Trend of Surgical OPD Attendance (2020 - 2024)

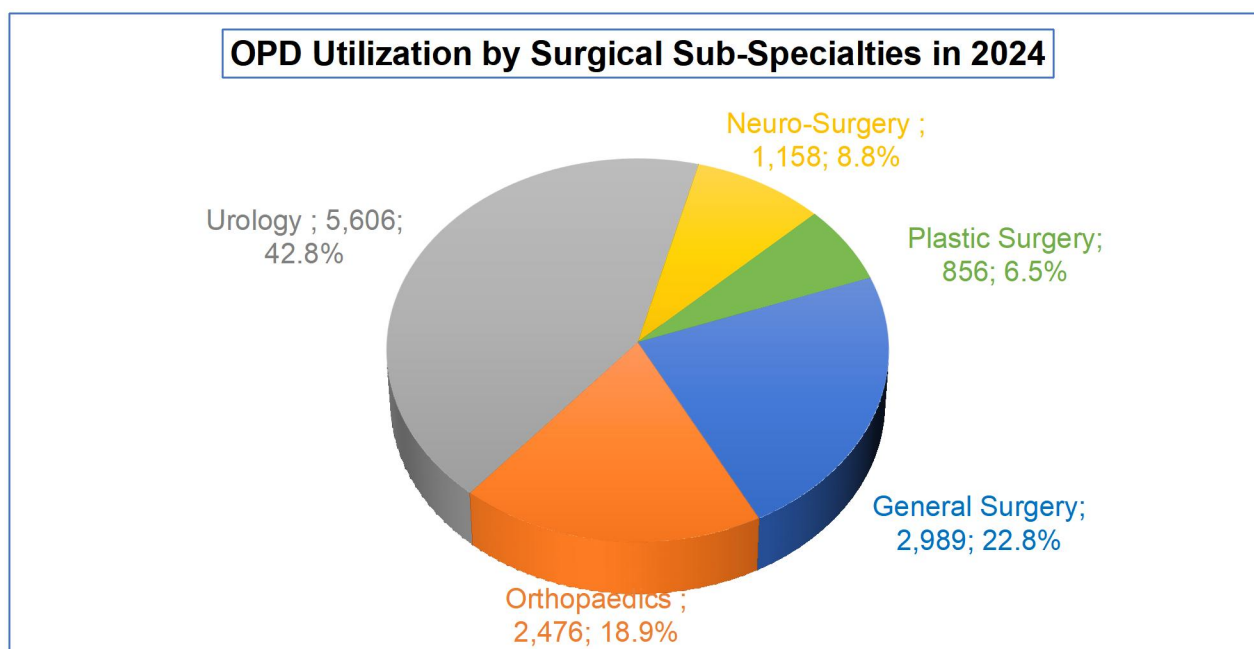


Figure 15.3. 2: OPD Utilization by Surgical Sub-Specialties in 2024

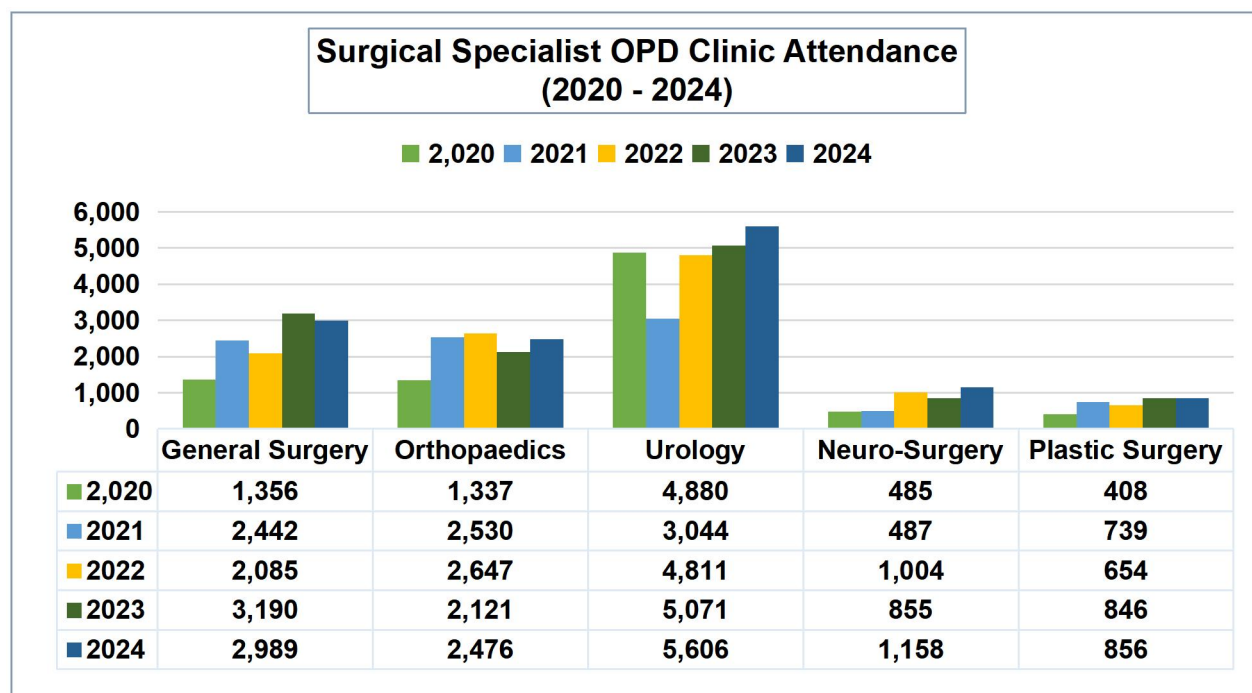


Figure 15.3. 3: Surgical Services Utilisation by Sub-Specialty (2020 - 2024)

Table 15.3. 1: Surgical Specialist OPD Clinic Attendance (2020 - 2024)

CLINICS	2020	2021	2022	2023	2024	REMARKS
General Surgery	1,356	2,442	2,085	3,200	2,989	6.6% decr
Orthopaedics	1,337	2,530	2,647	2,191	2,476	13.0% incr
Urology	4,880	3,044	4,811	5,071	5,606	10.6% incr
Neuro-Surgery	485	487	1,004	874	1,158	32.5% incr
Plastic Surgery	408	739	654	846	856	1.2% incr
Total	8,466	9,242	11,201	12,182	13,085	7.4% incr

15.4 SURGICAL INPATIENT SERVICES UTILISATION

The surgical in-patient service utilization showed fluctuations over the past five years. Total admissions declined between 2020 and 2022, but subsequently went up, recording an increase of 5.2% in 2024 from 1,999 in 2023. Also, total discharges fluctuated over the period and saw a 7.6% increase in 2024 (from 1,944 in 2023 to 2,091 in 2024).

Surgical-related mortality improved in 2021 and 2022. However, it went up in subsequent years with a 26.1% rise in 2024 (from 118 in 2023 to 167 in 2024). Theatre death rate increased by (from 0.2% in 2023 to 0.5% in 2024). Similarly, theatre deaths increased significantly by 100% (from 2 in 2023 to 4 in 2024). Deaths in the recovery ward surged from 10 in 2023 to 22 in 2024, representing an increase of 120%.

Performance at the ward-level was varied. Admissions at the Female Surgical Ward (FSW) rose by 11.7% (from 741 in 2023 to 828 in 2024) whereas Male Surgical Ward

(MSW) recorded a 1.3% increase (from 1,258 in 2023 to 1,274 in 2024). Similarly, the discharges increased on both wards, with the Female Surgical Ward increasing by 12.2% (from 713 in 2023 to 800 in 2024) in comparison 4.9% (from 1,231 in 2023 to 1,291 in 2024) at the Male Surgical ward.

Further, the average length of stay (ALOS) on both wards increased, suggesting increased case severity of cases. Female Surgical ALOS went up marginally from 8.0 days in 2023 to 8.4 days in 2024, while the Male Surgical ALOS increased significantly from 5.9 days in 2023 to 9.0 days in 2024. Similarly, the average daily bed occupancy experienced a rise on both wards, culminating into a higher bed occupancy rate (BOR) within the same period. The Female and Male Surgical Wards BOR increased to 54% and 78% in 2024 respectively.

Mortality on the wards were higher in 2024. The death rate went up to 5.1% from 4.1% in 2023 at the Male Surgical Ward, while the Female Surgical Ward recorded an increase from 7.5% in 2023 to 8.2% in 2024. Equally, Male Surgical Ward deaths increased by 32.1% (from 53 in 2023 to 70 in 2024), whereas the number of deaths on Female Surgical Ward went up by 22.4% (From 58 in 2023 to 71 in 2024). Detailed trend analysis is provided in Figure 15.4.1 and Table 15.4.1 to Table 15.4.2 below.

Table 15.4. 1: Surgical Sub-BMC In-Patient Services Utilization

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Total Admission	2,141	2,120	1,926	1,999	2,102	5.2% Incr
Total Discharges	2,095	2,112	1,926	1,944	2,091	7.6% incr
Surgical Death (MSW + FSW+ Surgical Suite + Recovery Ward + ICU surgical cases + Paedics surgical cases)	159	128	96	118	167	26.1% incr
Death (Theatre)	2	2	4	2	4	100% incr
Theatre Death Rate	0.40%	0.30%	0.30%	0.20%	0.5%	incr
Death (Recovery ward)	12	16	2	10	22	120% incr

Table 15.4. 2: In-patient utilization at the Surgical Wards

Indicator	WARD	2020	2021	2022	2023	2024	REMARKS
Admission	Male Surgical	1,339	1,316	1,203	1,258	1,274	1.3% incr
	Female Surgical	802	804	723	741	828	11.7% incr
Discharges	Male Surgical	1,320	1,331	1,206	1,231	1,291	4.9% incr
	Female Surgical	775	781	720	713	800	12.2% incr
Average Length of Stay (days)	Male Surgical	7.2	7.4	8.2	5.9	9.0	Incr
	Female Surgical	8.0	7.4	8.7	8	8.4	Incr
Average Daily Bed Occupancy	Male Surgical	29.1	30	28.1	25.4	33.5	Incr
	Female Surgical	19.3	18	18.2	17.4	20.0	Incr

Indicator	WARD	2020	2021	2022	2023	2024	REMARKS
Bed Occupancy Rate	Male Surgical	67.6	70.1	67.6	59.1	78	Incr
	Female Surgical	51.9	48.8	51.9	46.9	54	Incr
Number of Deaths	Male Surgical	84	65	52	53	70	32.1% incr
	Female Surgical	61	63	44	58	71	22.4% incr
Death Rate	Male Surgical	5.7%	4.4%	4.1%	4.1%	5.1%	Incr
	Female Surgical	6.9%	7.0%	5.8%	7.5%	8.2%	Incr

15.4.1 TOP TEN CAUSES OF SURGICAL ADMISSIONS

The pattern of surgical admissions since 2022 reveals a shift toward chronic and infection-related conditions, as illustrated in Figure 15.4.1.1 and Table 15.4.1.1. In 2024, malignant neoplasm, urinary tract infection and hernia emerged the leading causes of surgical admissions, with each recording 140 cases. Benign neoplasm and fracture followed, with 132 and 121 cases respectively. Appendicitis and cellulitis persisted across all three years, but with decreasing number of cases.

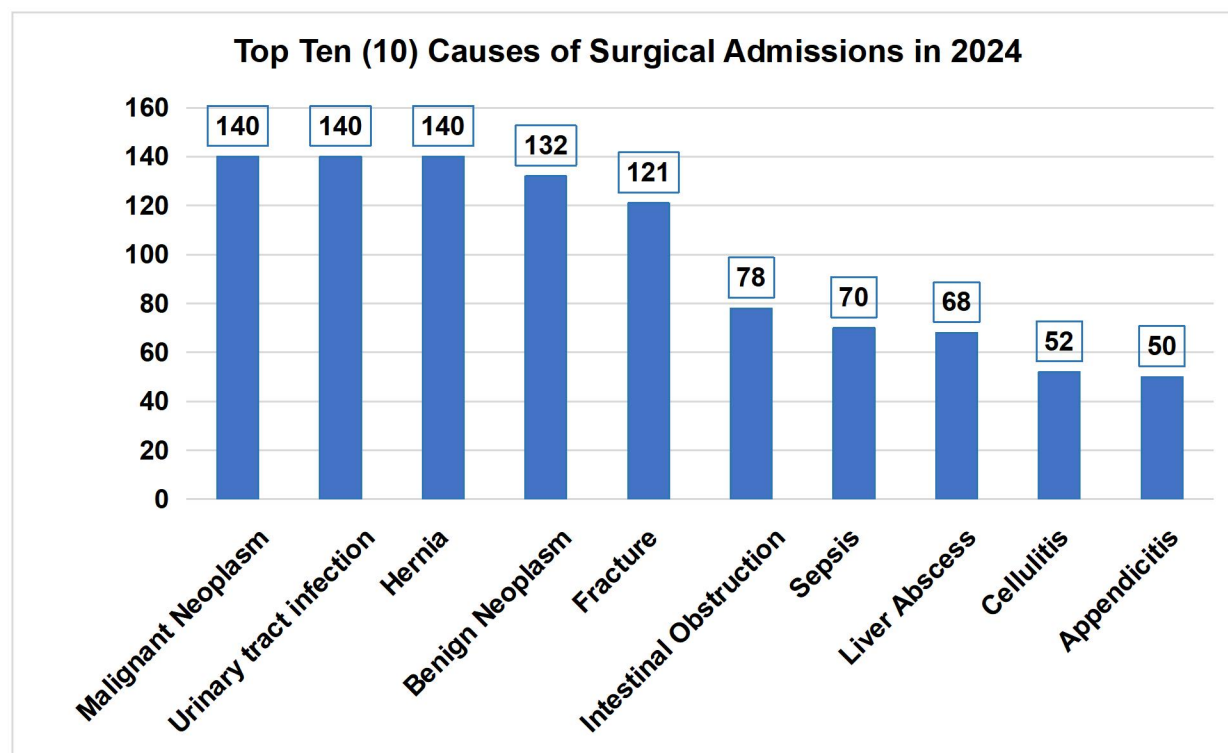


Figure 15.4.1. 1: Top Ten Causes of Surgical Admissions in 2024

Table 15.4.1. 1: Top Ten Causes of Surgical Admissions

2022		2023		2024	
Condition	No.	Condition	No.	Condition	No.
Fracture	165	Hernia	176	Malignant Neoplasm	140
Hernia	163	Benign Neoplasm	159	Urinary tract infection	140
Benign Neoplasm	134	Malignant Neoplasm	149	Hernia	140
Malignant Neoplasm	133	Fracture	116	Benign Neoplasm	132
Cellulitis	94	Acute pain due to trauma	107	Fracture	121
Acute pain due to trauma	81	Anaemia	79	Intestinal Obstruction	78
Intestinal Obstruction	74	Urinary tract infection	66	Sepsis	70
Appendicitis	67	Appendicitis	65	Liver Abscess	68
Abscess	53	Cellulitis	64	Cellulitis	52
Haemorrhage	49	Gastritis	64	Appendicitis	50

15.5 SURGERIES PERFORMED PER SUB-SPECIALTY

The overall number of surgeries performed by the Surgical Sub-BMC over the five-year period showed an upward trend, in spite of the decline observed in 2022 and 2023. In 2024, the total number of procedures performed went up significantly by 34.1% (increasing from 1,511 in 2023 to 2,103 in 2024). Performance among the sub-specialties were mixed. General surgery recorded the highest number of 1,110 procedures, accounting for 52.8% and represented a 46.3% increase compared to 759 in 2023. Uro-surgery, with 335 procedures formed 15.9% and saw an increase of 26.4% (from 265 in 2023), whereas orthopaedic surgery with 250 procedures constituted 11.9%, recording a rise of 41.2% (from 177 in 2023).

Plastic surgeries recorded the highest proportional increase of 65.3% (from 124 in 2023 to 205 in 2024), while forming 9.7% of the cases performed. Neurosurgery experienced a rise of 27%, increasing to 113 procedures from 89 in 2024. However, paediatric surgeries experienced a decrease of 7.2% (from 97 in 2023 to 90 in 2024) and formed 4.3% of total procedures. The surgery to surgeon ratio saw a marginal increase from 38:1 in 2023 to 41:1 in 2024, suggesting an improvement in the productivity. Figure 15.5.1 to Figure 15.5.3 and Tables 15.5.1, 15.5.2 below provide detailed trend analysis.

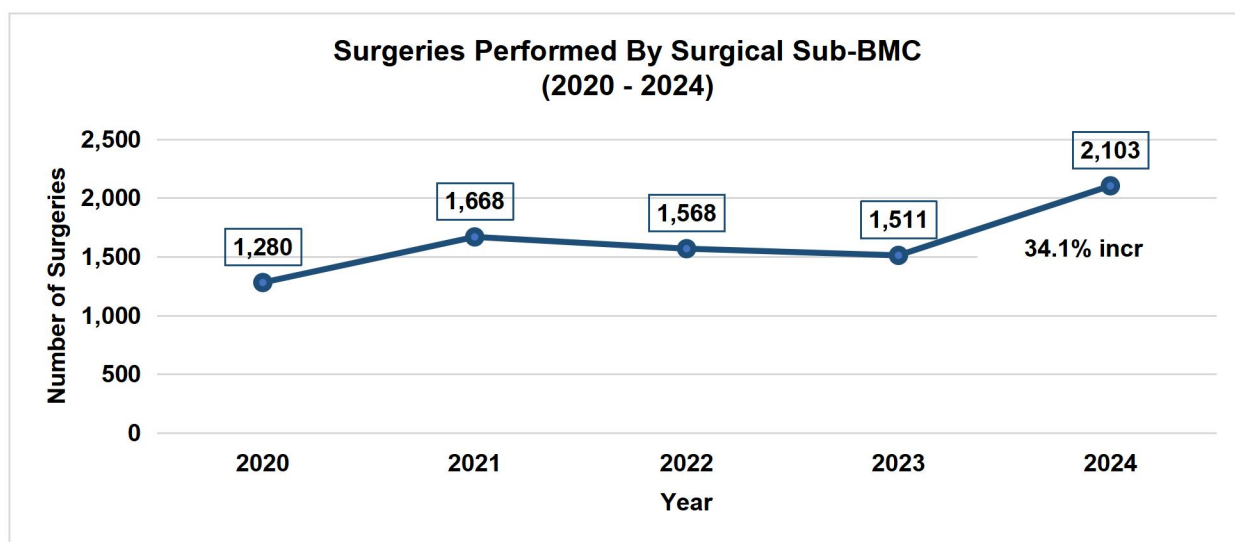


Figure 15.5. 1: Trend Analysis of Surgeries Performed by Surgical Sub-BMC (2020 - 2024)

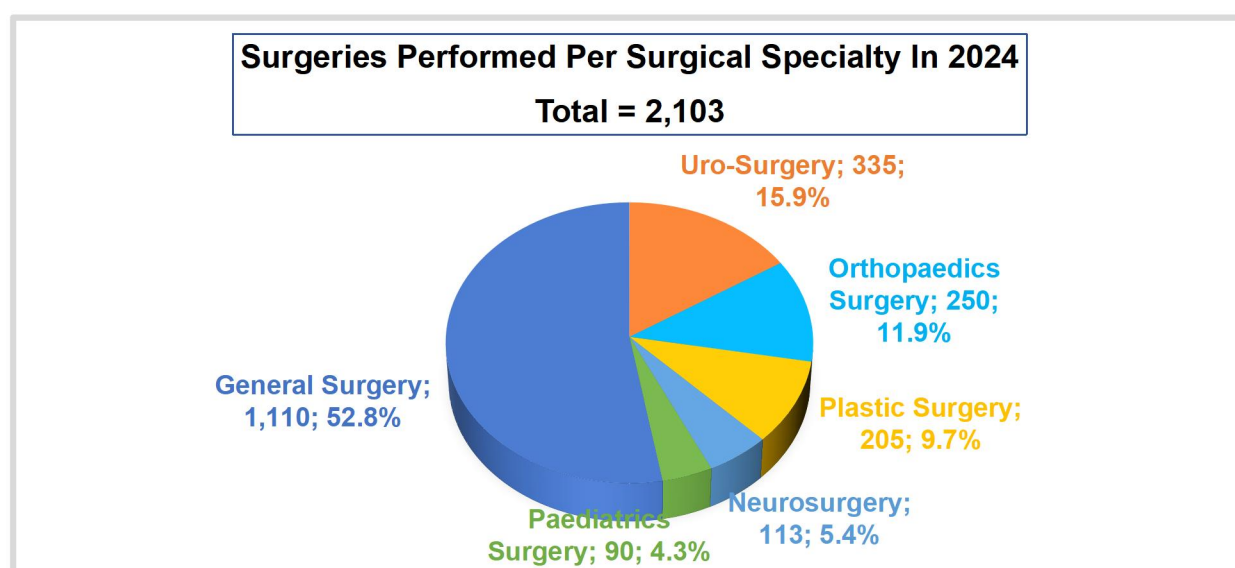


Figure 15.5. 2: Surgeries Performed Per Surgical Specialty In 2024

Table 15.5. 1: Surgical Service Performance under THs KPI (Sub-BMC Level Performance)

KEY INDICATORS	2020	2021	2022	2023	2024	REMARKS	MEASUREMENT	TARGET
Surgery - Surgeon Ratio	26:1	45:1	52:1	38:1	41:1	Incr	Total no. of surgeries performed/ total no. of Surgeons	THs = 250:1

KEY INDICATORS	2020	2021	2022	2023	2024	REMARKS	MEASUREMENT	TARGET
Number of surgeons at the Surgical Department	49	35	30	40	51	Incr		

Table 15.5. 2: Surgeries Performed per Surgical Sub-Specialty

Sub-Specialty	2020	2021	2022	2023	2024	REMARKS
General Surgery	690	949	863	759	1,110	46.3% incr
Uro-Surgery	219	256	271	265	335	26.4% incr
Orthopaedics Surgery	130	173	167	177	250	41.2% incr
Plastic Surgery	82	102	93	124	205	65.3% incr
Paediatrics Surgery	68	100	85	97	90	7.2% decr
Neurosurgery	91	88	89	89	113	27% incr
Total Surgeries	1,280	1,668	1,568	1,511	2,103	34.1% incr

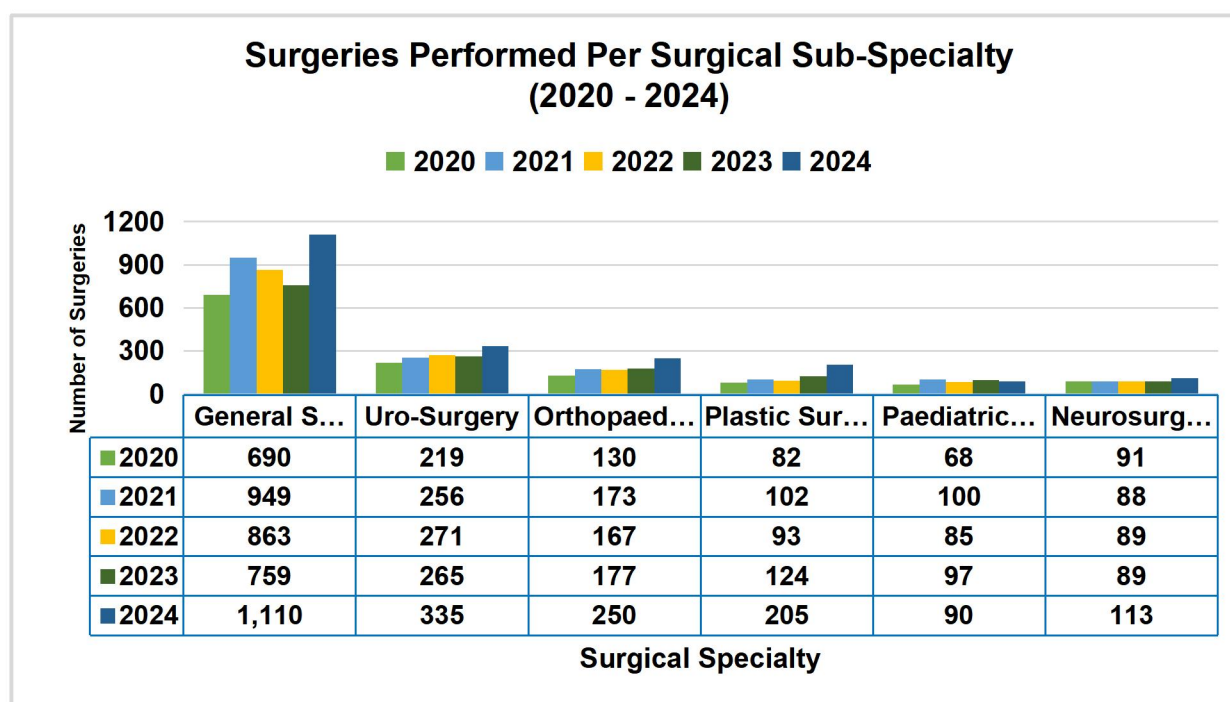


Figure 15.5. 3: Surgeries Performed Per Surgical Sub-Specialty

15.5.1 CAUSES OF SURGICAL PROCEDURES

In 2024, caesarean section and eye surgeries were recorded as the most common causes of surgeries at the surgical sub-BMC with 1,578 and 1,226 surgeries respectively. Neurosurgeries and myomectomy accounted for the least causes of surgeries at the surgical sub-BMC as shown in table 15.5.1. 1 below.

Table 15.5.1. 1: Top 10 Surgical Operations by Sub-BMC level (2020 - 2024)

2022		2023		2024	
Type of Case	No.	Type of Case	No.	Type of Case	No.
Eye surgeries	1,723	Cataract surgeries	1,913	Caesarean section	1,578
Caesarean section	1,691	Laparotomy	245	Eye surgeries	1,226
Hernia Reducible	198	Hernia repair	187	Hernia Surgeries	253
Laparotomy for exploratory	147	Biopsy	99	ENT surgeries	227
ENT surgeries	134	Myomectomy	72	Laparotomy	179
Operation on Fractures	109	Appendicectomy	68	Appendicectomy	131
Appendicectomy	90	Cornea repair	62	Plastic surgeries	115
Neurosurgeries	86	Caesarean section	60	Operation Fracture	105
Plastic Surgeries	77	Thyroidectomy	54	Neurosurgeries	97
Removal of tonsil and adenoids	75	Prostatectomy	41	Myomectomy	80

CHAPTER SIXTEEN

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

16.1 INTRODUCTION

The Dental, Eye, Ear, Nose and Throat (DEENT) Sub-BMC renders a comprehensive range of specialized clinical and diagnostic services that address conditions affecting oral, visual, auditory and upper respiratory systems. The Sub-BMC had a total of 66 staff in 2024 and is managed by a six-member team.

16.2 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 16.2.1 below

Table 16.2. 1: Summary of the 2024 Annual Performance of DEENT Sub-BMC under the Strategic Objectives.

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY
Triaged 21,308 patients and facilitated their consultation with various specialists' units
Conducted 8755 eye screenings and performed 934 cataract surgeries under specialized eye services
Performed 54 cleft lip and palate surgeries under Oral & Maxillofacial specialized Services
Carried out 56 specialized ENT surgeries
Provided a total of 3678 DEENT-related surgical procedures across service areas
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.
Developed two clinical protocols; Stammering and Treatment protocol and Dysphonia Assessment and Management Protocol
Sent a total of 1,547 appointment reminders to clients via phone calls and text messages – Dental (333), ENT (250), Eye (450) and Speech Therapy (106) to improve clinic attendance and continuity of care
Conducted 96 health education sessions at specialized DEENT Outpatients Departments (OPDs)
Undertook Language Stimulation and Awareness Creation activities, including - Autism Awareness campaign – 180 beneficiaries - Language Stimulation Sessions – 193 beneficiaries 'Feed Baby Words' Initiative - 20 beneficiaries-20
Language Stimulation and Awareness Creation - Autism Awareness (Beneficiaries 180) - Language Stimulation (Beneficiaries 193) - Feed baby words (Beneficiaries-20)
Delivered seven (7) radio talk shows on Pax FM, Ankaful Community Radio, Radio Central, Ahomka FM, Castle FM, Cafdil TV and Eagle FM to promote public health awareness
Commemorated the following World Health Days with a total of 935 individuals screened; - Hearing Day with 85 people screened - Oral Day with 425 people screened - Sight Day with 424 people screened
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Procured key equipment and tools; - Eye Unit – - Procured 2 swivel chairs - Repaired 2 swivel chairs

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE	
- ENT Unit - Procured 1 Eye's Tonsillar Snare, 10 Laryngeal Mirrors, 1 St. Claire Thompson's Adenoid Curette, 1 Dennis Brown Tonsil forceps, 1 Chevalier Jackson esophagoscopy forceps and 2 LED ENT headlights	
Received the following equipment as donations;	
- Head Lamps from the University of UTAH - Microscope from the Arizona Team	
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM	
4.1: Governance Related Performance	
Sub-BMC management trained on 2023 POW & Budget and Monitoring and Evaluation	
Conducted Sub-BMC management meetings to review operational progress, make informed decisions and coordinate the Sub-BMC's activities	
A total of 5 Clinical meetings were organized covering the following topics:	
- Tooth Sensitivity - Management of Tinnitus by Drug Presentation by Mega Life Science - Compassion Fatigue – Led by the Clinical Psychology Unit - Cholera Awareness and Management – Led by the Public Health - Pain Management	
4.2: Human Resource Related Performance	
Appraised 36 staff out of 66 representing 54.5%	
New Staff Joining the SUB BMC:	
- Eye - 8 (1 Ophthalmologist, 6 General Nurses and 1 Ophthalmic Nurse) - ENT - 2 (General Nurses) - Dental - 1 (General Nurse)	
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING	
5.2: Research:	
Four (4) Clinical research on-going:	
- Eye - Prevalence of Glaucoma cases in CCTH & - ENT- Iatrogenic Cushing's Syndrome – A Rare Effect of Nasal Steroid Use - Dental- Incidence and Treatment outcome of Odontogenic infections at CCTH-Done yet to publish - ENT/Dental- Ludwig's Angina – An Unnecessary Cause of Death	
5.2 Teaching and Learning:	
2 years provisional Accreditation secured from GCPS for Dental Residency Training - 1 - Rotational Accreditation secured from WACPS for ENT Residency Training- 5 Residents 392 students trained and supervised: - 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 - Eye, ENT AND SPEECH (123) & Optometrist Interns (3)	
- Eye Unit: Two Ophthalmologists completed specialized training in March and September 2024, respectively. - Speech and Language Therapy Unit - 1 staff of SLT has completed a professional certificate program in Hearing Rehabilitation 1 ENT Nurse specialist completed specialized nursing in August 2024 2 Nurses are being trained in MSc Speech and Language Therapy (Sponsors-Operation Smile	
Conducted Five (5) clinical presentations	
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS	
- Conducted Outreaches to 11 District (Communities-188 with a total of 14,241 benefiting) - Eye - 12,330 beneficiaries	

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE	
○ ENT – 1,020 beneficiaries ○ Dental – 891 beneficiaries	
• Conducted Outreaches to 5 Churches • Conducted Outreaches to 7 School with a total of 839 pupils benefiting • Conducted Outreaches to 7 Organisations	
• Collaborated with Himalayan Cataract Project/National Cataract Outreach Screened 8,755 with 934 Cataract Surgeries	
• Collaborated with Operation-Smile Ghana to provide free Cleft lip and 54 palate surgeries	
• Collaborated with University of UTAH and Arizona to conduct 56 ENT surgeries ○ UTAH (37) ○ Arizona (19)	

16.3 OVERALL DEENT PERFORMANCE

The Sub-BMC demonstrated mixed performance trends across the key service indicators between 2020 and 2024, reflecting both growth in certain areas and decline in others. The total OPD attendance declined by 2.12%, (from 21,770 in 2023 to 21,308 in 2024). Admissions went up significantly by 44% (from 275 in 2023 to 396 in 2024), the highest in the five-year period. The number of surgical procedures conducted across the various specialties dropped by 17.7% from 4,467 in 2023 to 3678 in 2024. Referrals from peripheral facilities went up marginally by 0.8% (from 478 in 2023 to 482 in 2024). However, referrals made went up substantially by 76.5% from 81 in 2023 to 143 in 2024. This may indicate gaps in subspecialty areas or temporal unavailability of certain expertise of diagnostic equipment, leading to more patients transfers to higher resourced-level centres. Details highlighted in Figure 16.3. 1 and Table 16.3. 1 below.

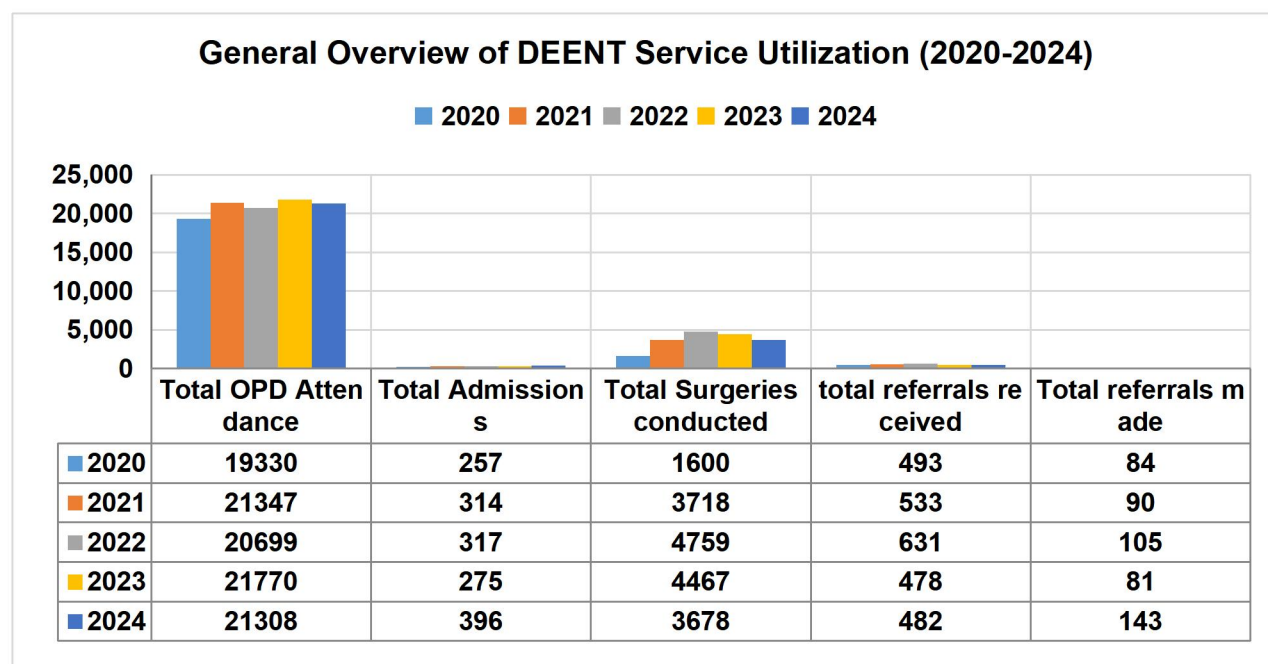


Figure 16.3. 1: General Overview of DEENT Service Utilization (2020-2024)

Table 16.3. 1: General Overview of DEENT Service Utilization

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Total DEENT OPD Attendance	19,330	21,347	20,699	21,770	21,308	2.12% decr
Total DEENT Admissions	257	314	317	275	396	44%incr
Total DEENT Surgeries conducted	1,600	3,718	4,759	4,467	3678	17.7%decr
Total DEENT referrals received	493	533	631	478	482	0.8%incr
Total DEENT referrals made	84	90	105	81	143	76.5%incr

16.4 DEENT SUB-SPECIALTY PERFORMANCE

16.4.1 EYE (OPHTHALMOLOGY) SERVICES

The Eye Unit focus on the prevention, diagnosis and treatment of eye diseases and visual impairment. Core services include cataract surgeries, glaucoma management, refraction and low vision-services, retina care and school-based eye screening programs. Generally, the Eye Unit saw fluctuation performance trends across its key service indicators between 2020 and 2024. While some areas recorded significant increase in performance in 2024, OPD attendance and surgical output declined compared to 2023.

16.4.1.1 EYE OUTPATIENT SERVICES UTILIZATION

The outpatient (OPD) attendance declined by 6.2% ((from 11,310 in 2023 to 10,613 in 2024). In spite of the drop in performance, the 2024 figure remains higher than the 2021, reflecting sustained public demand for eye care services. The reduction in attendance could be linked to the decline in the number of cases seen during the cataract outreach program initiative by the hospital in collaboration with the Himalayan Cataract Program (HCP) during the year, or patients' diversions to private eye care clinics. Conjunctivitis (all forms) was the most prevalent condition seen, accounting for 811 cases, while Retinopathies was the least common with 26 cases. Figure 16.4.1.1.1 and Table 16.4.1.1.1 below provides details of analysis.

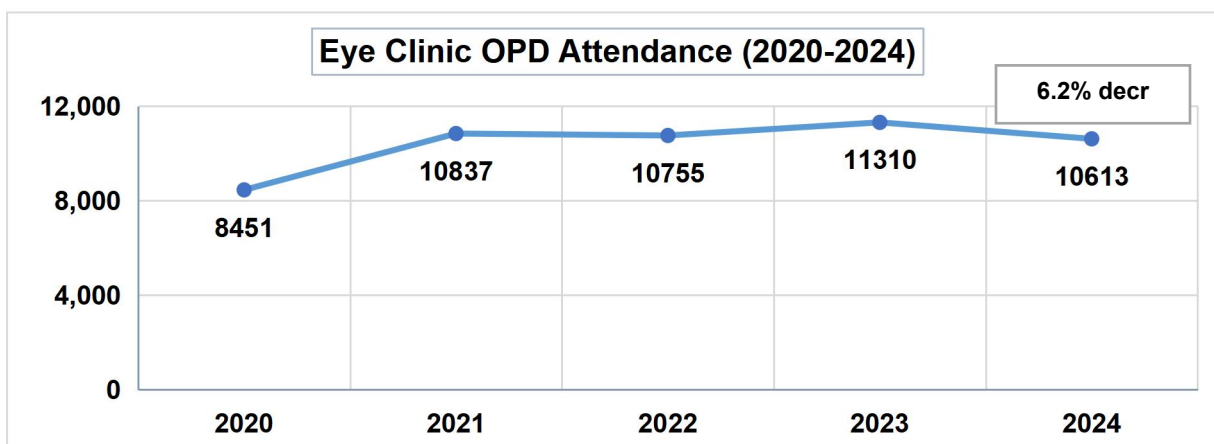


Figure 16.4.1.1. 1:Trend of Eye Clinic OPD Attendance (2020-2024)

Table 16.4.1.1. 1: Top Ten Eye Conditions Seen at the OPD (2022-2024)

2022		2023		2024	
Condition	No.	Condition	No.	Condition	No.
All Forms of Conjunctivitis	727	All Forms of Conjunctivitis	805	All Forms of Conjunctivitis	811
Cataract	548	Refractive Error	537	Refractive Error	610
Refractive Error	501	Cataract	522	Cataract	380
Glaucoma	295	Glaucoma	309	Glaucoma	238
Pterygium	232	Pterygium	182	Pterygium	155
Retinopathies	71	Normal Eyes	62	Uveitis	63
Trauma	64	Retinopathies	40	Cornea Ulcer	49
Normal Eyes	66	Cornea Ulcer	39	Lid Abnormalities	46
Lid Abnormalities	25	Trauma	26	Trauma	35
Cornea Ulcer	19	Lid Abnormalities	25	Retinopathies	26

16.4.1.2 EYE REFERRALS

The number of referrals received (in) decrease from 269 in 2023 to 232 in 2024, indicating a 13.6% reduction. This indicates that fewer cases are referred to the hospital, probably as a result of improved peripheral eye care services or communication gaps between referral facilities. On the other hand, referrals made (out) went up substantially by 72.9% (from 48 in 2023 to 83 in 2024). The rise in referrals made reflects unavailability of some sub-specialty ophthalmic services. Conditions requiring referral out during the year under review included corneal scars or opacities (3 cases), ocular surface growths of tumours (2 cases) and congenital cataract (2 cases). Table 16.4.1.2.1 to Table 16.4.1.2.2 presents details of the analysis.

Table 16.4.1.2. 1: Ophthalmology cases referred

Referral Type	2020	2021	2022	2023	2024	REMARKS
Referral In	309	293	309	269	232	13.6% decr
Referral out	48	47	62	48	83	72.9% incr

Table 16.4.1.2. 2: Causes of Referral Out

Condition	No.
Cornea Scar / Opacity	3
Ocular Surface Growth / Tumor	2
Congenital Cataract	2
Other	76
Total	83

16.4.1.3 EYE INPATIENT SERVICES UTILIZATION

The number of admissions went up modestly by 9.1%, from 88 in 2023 to 96 in 2024. Corneal Laceration with Iris Prolapse and cataract were the leading causes of admission by the Eye Department representing 26.0% (23) and 17.7% (17) of the total cases. Broom stick injury Iris Prolapse accounted for 1% (1) of the causes of admission recorded by the Department in 2024. Figure 16.4.1.3.1 and Table 16.4.1.3.1 below presents the details.

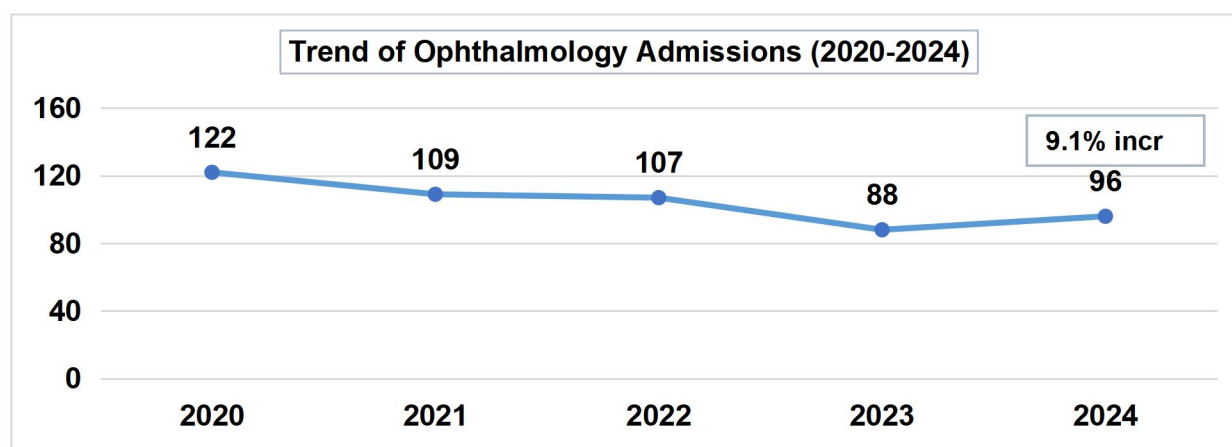


Figure 16.4.1.3. 1: Trend of Ophthalmology Admissions (2020-2024)

Table 16.4.1.3. 1: Causes of Ophthalmology Admissions in 2024

Condition	No.
Corneal Laceration with Iris Prolapse	23 (26.0%)
Cataract	17 (17.7%)

Condition	No.
Cornea Scleral Laceration	4 (4.2%)
Preseptal Cellulitis	4 (4.2%)
Lid Laceration	4 (4.2%)
Raptured Staphyloma	3 (3.1%)
Broom stick injury Iris Prolapse	1 (1.0%)
Others	40 (41.7%)
Total	96

16.4.1.4 EYE SURGICAL PROCEDURES

Generally, the Eye department recorded a decline of 41.14% in the surgical output. Major surgeries declined sharply by 43.4% (from 2,018 in 2023 to 1,142 in 2024). Minor surgeries on the other hand saw a slight increment, from 75% in 2023 to 84 in 2024, representing a 12% rise as shown in Figure 16.4.1.4.1 and Table 16.1.4.1.4.1 below.

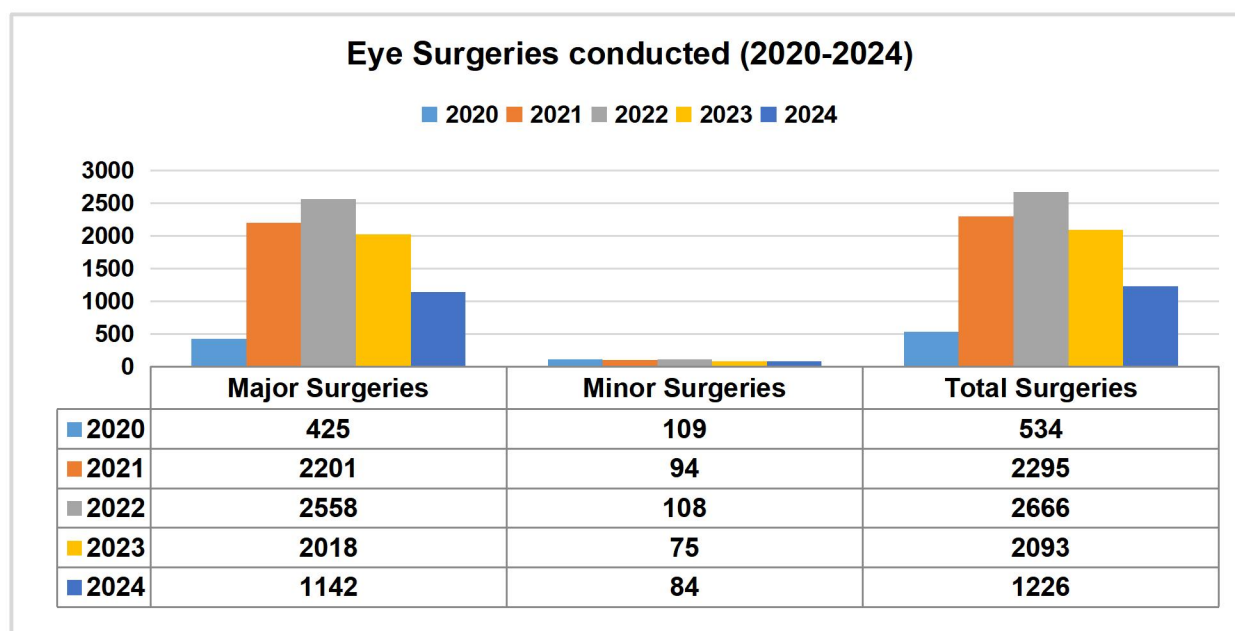


Figure 16.4.1.4. 1: Total Surgeries Performed by DEENT Specialty

Table 16.4.1.4. 1: Surgeries Performed by Eye Specialty

Eye Surgeries	2020	2021	2022	2023	2024	REMARKS
Major Surgeries	425	2,201	2,558	2,018	1,142	43.4%decr
Minor Surgeries	109	94	108	75	84	12%incr
Total Surgeries	534	2,295	2,666	2,093	1,226	41.4 % decr

16.4.2 EAR, NOSE AND THROAT (ENT) SERVICES

The Ear, Nose and Throat (ENT) Unit offers a comprehensive diagnostic, medical and surgical care to conditions affecting hearing, balance, swallowing and the upper respiratory tract. The scope of ENT services by offered by the department includes rhinology, otology and neurotology, laryngology and head and neck surgery. In addition to hospital-based care, the ENT Unit undertakes community and school outreach programs focused on hearing screening, ear and throat health education and early and detection of communication disorders. The performance of the Unit over the five-year period are highlighted below.

16.4.2.1 ENT OUTPATIENT SERVICES UTILIZATION

The OPD attendance went up by 3.1% from 5,569 in 2023 to 5,739 in 2024. However, this is slightly below the 2020 peak (6,004) in attendance. Otitis Media was the most frequently diagnosed condition with 872 cases, while Otomycosis was the least common with 99 cases. Figure 16.4.2.1.1 and Table 16.4.2.1.1 below provides details of analysis.

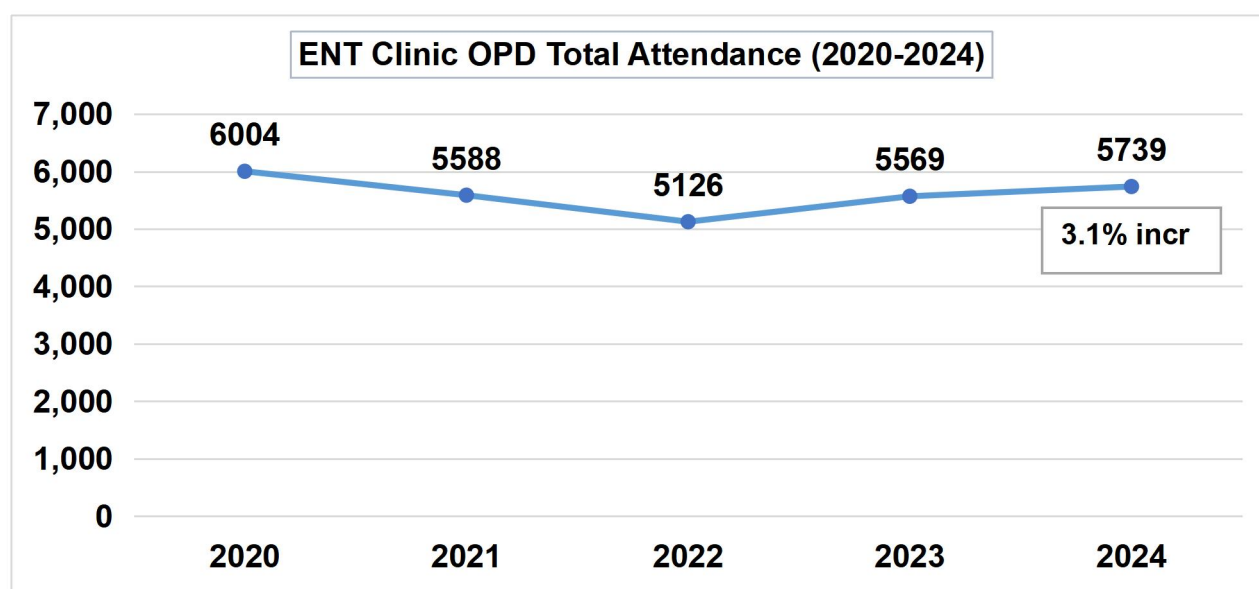


Figure 16.4.2.1. 1: Trend of ENT Clinic OPD Attendance (2020-2024)

Table 16.4.2.1. 1: Top Ten ENT Conditions Seen (2022-2024)

2022		2023		2024	
Condition	No.	Condition	No.	Condition	No.
Otitis Media	887	Otitis Media	887	Otitis Media	872
Impacted wax	822	Impacted wax	680	Impacted Wax	647
Tonsillitis/Pharyngitis	530	Tonsillitis/Pharyngitis	499	Otitis Externa	615
Otitis Externa-	504	Otitis Externa-	441	Tonsillitis/Pharyngitis	433
Sinusitis	480	Sinusitis	372	Sinusitis	432

2022		2023		2024	
Condition	No.	Condition	No.	Condition	No.
Allergies/Rhinitis	406	Allergies/Rhinitis	298	Allergies/Rhinitis	283
Adenoids Hypertrophy	330	Adenoids Hypertrophy	249	Adenoids Hypertrophy	241
Hearing Loss	91	Foreign Body	130	Foreign Body	136
Otomycosis	61	Otomycosis	92	Hearing Loss	119
Epistaxis	55	Hearing Loss	67	Otomycosis	99

16.4.2.2 ENT REFERRALS

Referrals received (in) dropped by 7.4% (from 190 in 2023 to 176 in 2024), possibly implying an improvement in the management of ENT cases among the lower-level facilities. Meanwhile, the number of cases referred out went up sharply by 60% (from 20 in 2023 to 32 in 2024). 56.3% (18) of the referrals made (out) were cancer-related (i.e.; Laryngeal Cancer – 8, Nasopharyngeal Cancer – 6 and Sinonasal Cancer – 4). This calls for the introduction of specialised services that are yet not available within the unit. Tables 16.4.2.2.1, 16.4.2.2.2 presents details of the analysis.

Table 16.4.2.2. 1: ENT Referrals (2020-2024)

CLINIC	2020	2021	2022	2023	2024	REMARKS
Referral In	143	214	224	190	176	7.4%decr
Referral out	21	28	24	20	32	60% incr

Table 16.4.2.2. 2: Causes of Referral Out at the ENT Unit

Condition	Number
Laryngeal Cancer	8
Nasopharyngeal Cancer	6
Sinonasal Cancer	4
Others	12
Total	32

16.4.2.3 ENT ADMISSIONS

ENT admissions saw a significant increase of 66.4%, rising from 143 in 2023 to 238 in 2024 – the highest in the five-year period. This increment reflects both an increase in case complexity and the unit's enhanced capacity to manage inpatients requiring surgical and postoperative care. The leading causes of admission during the year included chronic tonsillitis, otitis media with complication, nasal obstruction and sinusitis, tonsillar hypertrophy and head and neck and swelling. Figure 16.4.2.3.1 and Table 16.4.2.3.1 present details of the analysis.

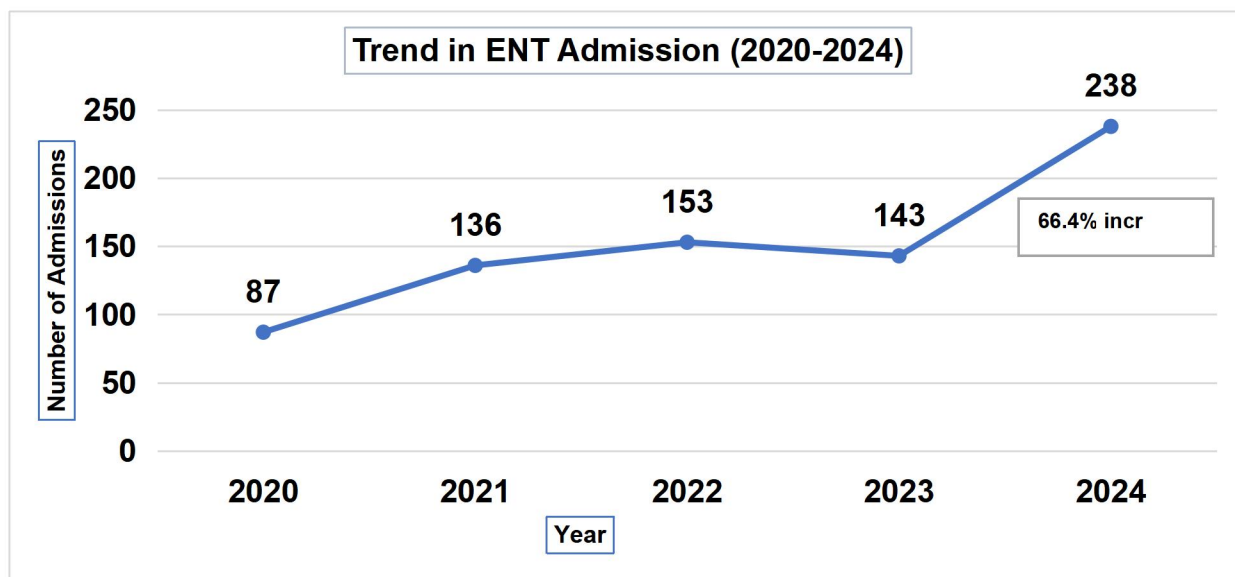


Figure 16.4.2.3. 1: Trend of ENT Admissions

Table 16.4.2.3. 1: Causes of ENT Admissions in 2024

Condition	No.
SRBD 2 ^o Adenotonsillar Hypertrophy	46 (19.3%)
Coin Impaction in the Oesophagus	19 (8.0%)
Chronic Suppurative Otitis Media	18 (7.6%)
Recurrent Tonsillitis	12 (5.0%)
CRS w NP	9 (3.8%)
Frontoethmoidal Mucocoele	6 (2.5%)
Deep neck Space Infection	6 (2.5%)
Respiratory Papillomatoes	6 (2.5%)
Tonsillar Mass	4 (1.7%)
Others	112 (47.1%)
Total	238

16.4.2.4 ENT SURGERIES

The Unit's overall surgical output increased by 47% (from 194 in 2023 to 286 in 2024). Major surgeries went up by 56.4% (from 117 in 2023 to 183 in 2024). In the same light, minor surgeries rose by 33.8% (from 77 in 2023 to 103 in 2024). The substantial increase in the surgeries indicates enhanced surgical productivity by the Unit. Details provided in Figure 16.4.2.4.1 and Table 16.4.2.4.1 below.

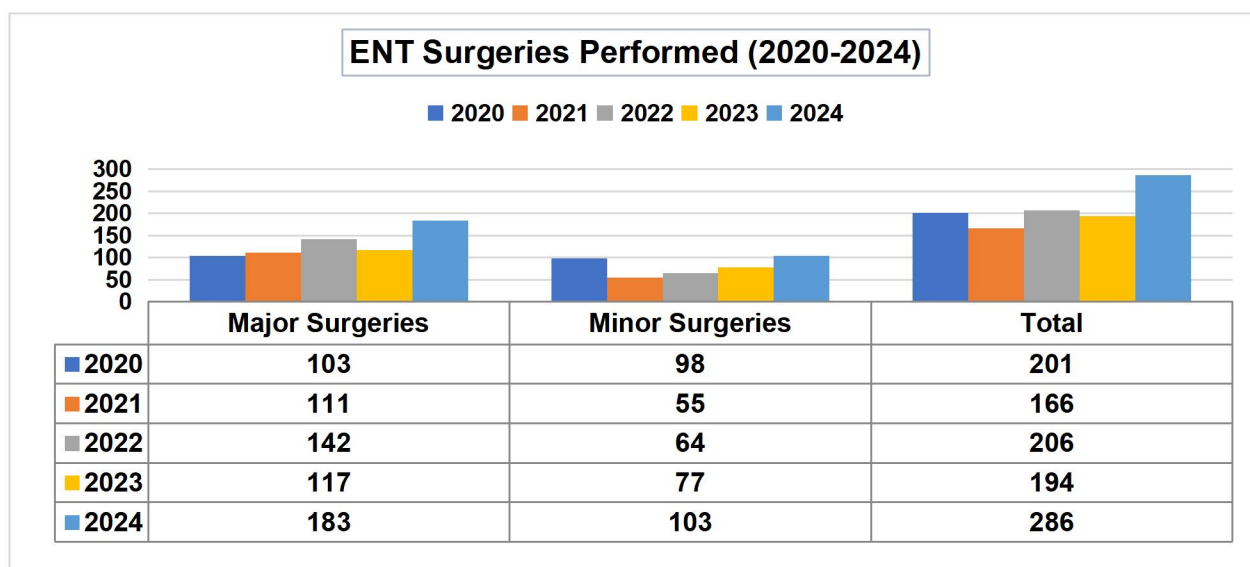


Figure 16.4.2.4. 1: ENT Surgeries Performed (2020-2024)

Table 16.4.2.4. 1: Surgeries Performed by ENT Specialty

Surgical Procedure	2020	2021	2022	2023	2024	REMARKS
Major Surgeries	103	111	142	117	183	56.4%incr
Minor Surgeries	98	55	64	77	103	33.8%incr
Total	201	166	206	194	286	47%incr

16.4.3 DENTAL AND MAXILLOFACIAL (ORAL) SERVICES

The Dental and Maxillofacial Unit offer holistic general and specialized care for various conditions and diseases of the orofacial region. During the reporting year, the Unit recorded significant improvements across key indicators which are presented below.

16.4.3.1 OVERALL DENTAL AND MAXILLOFACIAL OPD SERVICE UTILIZATION

Generally, the total Dental and Maxillofacial OPD attendance increased marginally by 1.3% (from 4,891 in 2023 to 4,956 in 2024). Orthodontic clinic went up substantially by 68.7% (from 351 in 2023 to 592 in 2024). Restorative dentistry clinic equally saw a rise of 19.8% (from 495 in 2023 to 593 in 2024). However, oral services utilization declined by 6.8% (from 4,045 in 2023 to 3,771 in 2024). Apical periodontitis ranked first among the top ten OPD conditions seen with 538 cases, whereas Impaction was the least common with 98 cases.

Referral activity increased significantly in 2024. Referrals received (in) rose from 19 in 2023 to 74 in 2024, representing an increase of 289.5% and suggesting an increase in complex case referrals. Also, referrals out went up by 115.4% (from 13 in 2023 to 28 in 2024). Further, admissions went up by 40.9% (from 44 in 2023 to 62 in 2024) whereas,

a total of 2,166 surgeries were performed in 2024 compared to 2,180 in 2023. Details presented in Tables 16.4.3.1, 16.4.3.2 below.

Table 16.4.3. 1: Overall Dental & Maxillofacial Service Utilization

Indicator	2020	2021	2022	2023	2024	Remarks
Clinic Attendance						
Orthodontic clinic	-	25	191	351	592	68.7% incr
Restorative Dentistry clinic	-	-	413	495	593	19.8% incr
Others	4,667	4,922	4,214	4,045	3,771	6.8% decr
Total OPD Attendance	4,667	4,947	4,818	4,891	4,956	1.3% incr
Referrals						
Referrals In	41	26	98	19	74	289.5%incr
Referrals Out	15	15	19	13	28	115.4%incr
Admissions						
Number of Admissions	48	69	57	44	62	40.9% incr
Surgeries						
Major Surgeries	98	96	35	25	42	68%incr
Minor Surgeries	767	1,161	1,852	2,155	2124	1.4%decr
Total Surgeries	865	1,257	1,887	2,180	2166	0.6%decr

Table 16.4.3. 2: Top Ten Dental & Maxillofacial Conditions Seen (2022-2024)

2022		2023		2024	
Condition	No.	Condition	No.	Condition	No.
Apical Periodontitis	938	Apical Periodontitis	674	Apical Periodontitis	538
Plaque Induced Gingivitis	411	Plaque Induced Gingivitis	414	Malocclusions	461
Reversible Pulpitis	342	Reversible Pulpitis	392	Irreversible Pulpitis	442
Periapical Abscess	289	Chronic Periodontitis	313	Plaque induced gingivitis	427
Developmental Lesion	279	Reversible	288	Chronic Periodontitis	284
Chronic Periodontitis	180	Malocclusions	231	Reversible	267
Dentoalveolar Abscess	160	Retained Root	226	Retained Root	218
Missing Tooth	140	Fractured Tooth	134	Fractured Tooth	158
Displaced Tooth	121	Periapical abscess	111	Periapical Abscess	128
Malocclusions	90	Cracked tooth	87	Impaction	98

2022		2023		2024	
Condition	No.	Condition	No.	Condition	No.
		Syndrome			

16.5 DEENT OUTREACH SERVICES

The Sub-BMC continued to strengthen its community, school and cooperate organisational outreach activities over the five-year period.

During the period of reporting, community outreach remained the highest coverage with a total of 188 communities visited and 14,241 beneficiaries. The number of schools visited increased from (6 in 2023 to 7 in 2024), resulting in a corresponding increase in beneficiaries. Outreaches to cooperate organisations continued to provide targeted opportunities for adult screening. Three (3) organisational outreaches were conducted within the period benefitting 272 people. Table 16.3.1.1 below provide a comprehensive trend analysis of the outreach services performed, offering further insights into the hospital's community engagement efforts. Tables 16.7.1 to 16.7.2 provide a comprehensive trend analysis of the outreach services performed, offering further insights into the Sub-BMC's community engagement efforts.

Table 16.5. 1: DEENT Sub-BMC's Outreach Activities (2020-2024)

INDICATOR	2020	2021	2022	2023	2024
Community Outreaches					
Total Districts visited	5	8	6	5	11
Total Communities Visited	102	398	-	209	188
Number of Beneficiaries	6872 • Sub-BMC Level = 719 • Eye Unit = 4,982 • ENT Unit = 1,171	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	14241 • Eye- 12,330 • ENT- 1,020 • Dental – 891
School Outreaches					
Number of Schools visited	8	3	3	6	7
Number of Beneficiaries	1,142	1,271	277	546	839
Outreaches to Organizations					
Number of Organizations visited	-	4	1	3	2
Number of beneficiaries	-	540	372	166	272

Table 16.5. 2: DEENT Sub-BMC's Outreach Activities in 2024

DEENT SUB-BMC		EYE UNIT		ENT UNIT	
Community/ School	No. of Clients Screened	Community/ School	No. of Clients Screened	Community/ School	No. of Clients Screened
St Peters Mission School	106	Cape Coast South (Adisadel Park)	118	Abrem Agona	188
Abura Roman School	75	Gomoa West	3502	Abura	85
Total	181	KEEA	634	Fa Womanye	395
		Mfantsiman West	197	Sekyere Krobo	215
		Cape Coast North	189	Moree	137
		AAK (Abura – Aseibu – Kwamankesse)	198	Total	1020
		Assin North District	582		
		Gomoa South Central	737		
		Gomoa West (Apam)	2578		
		Twifo Atti Moko District	1,705		
		Assikuma Odoben /Brakwa District	1,890		
		Total	12,330		

CHAPTER SEVENTEEN

PUBLIC HEALTH SERVICES

17.1 INTRODUCTION

The Public Health Department is a vital division dedicated to improving the health and well-being of people through delivery of holistic and preventive healthcare services. The department is a multi-cadre of professionals focused on disease prevention and health promotion. 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

17.2 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 17.2.1 below

Table 17.2. 1: Summary of the 2024 Annual Performance of Public Health Unit under the Strategic Objectives.

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2020	2021	2022	2023	2024	Target	Remarks
Couple year protection	1,891.2	2,233	2,626	2,075	2013.8	TH = 2,500	Target not met
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.							
Conducted public health education on various health conditions to improve community awareness and preventive practices							
Strengthened team capacity through training workshops on data analysis, interpretation and report writing to enhance evidence-based decision-making							
Carried out regular (weekly and monthly) analysis and interpretation of surveillance data to monitor disease trends and inform timely public health interventions							
Coordinated and observed national and international health awareness days to promote community education and engagement on key health issues							
Successfully traced and re-engaged clients who defaulted from Antiretroviral Therapy (ART), improving treatment continuity and adherence							
Prepared and submitted comprehensive monthly summaries of public health activities to the Medical Director to support management decision-making and reporting.							
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE							
Engaged Hospital Management to secure an appropriate and well-equipped space for effective tuberculosis (TB) care and management							
Advocated for the allocation of dedicated office space for the Disease Control and Health Promotion Units to enhance coordination and service delivery							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Monthly management meetings were held to review performance, address operational challenges and plan towards mitigating them
Quarterly general staff meetings were conducted to enhance communication and update staff on unit activities
4.2: Human Resource Related Performance
Performance appraisals were conducted for all staff, with unit heads assessed against pre-established objectives to ensure accountability and productivity
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Training
Conducted bi-monthly departmental teaching sessions to enhance professional knowledge and skills
Provided orientation to all staff on using LHIMs for immunization tracking and other public health services
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE DELIVERY POINTS
Conducted home visits to provide personalized public health interventions
A total of 53 school health sessions were conducted across pre-schools, primary, and junior high schools, reaching 2940 pupils with preventive and promotive health services
Successfully collaborated with other Sub-BMCs to implement joint outreach programs, improving coverage and service delivery at the community level.

17.3 DOSES OF VACCINES PROVIDED (EPI)

Vaccination plays a vital role in preventing infectious diseases and safeguarding population health. Over the five-year period (2020-2025), the hospital has seen fluctuations in the total vaccination performance, with steady decline from 2020-2023, followed by an increase in 2024. Total doses administered in 2024 increased by 15.9% compared to the previous year, rising from 14,802 in 2023 to 17,162 in 2024, as illustrated in Figure 17.3.1.

Furthermore, there were notable changes across specific vaccines administered in 2024. Tetanus for non-pregnant women recorded a significant increase of 114.3% (from 14 in 2023 to 30), and Tetanus for pregnant women also saw a substantial increase of 82.6% (from 333 to 608 in 2024). Similarly, RTSS (malaria vaccine), Rota Virus (27.1%), Polio (26.0%), IPV (19%), Pneumococcal vaccine (7.7%), Measles-Rubella 1 (MR1) (14.5%), Vitamin A (both 100,000 IU and 200,000 IU) and all showed an increase in uptake.

On the hand, some vaccines recorded a decline in 2024. Measles-Rubella 2 (MR2) decreased by 12.1% and TD1/TD2 fell by 16.8%, indicating potential challenges in completing multi-dose schedules or coverage gaps in certain cohorts. LLIN distribution also declined by 6.7%. Encouragingly, the total number of adverse events following immunization decreased significantly in 2024, (from 5 in 2023 to 1 in 2024), reflecting improved safety surveillance and reporting.

A detailed trend analysis is presented in Tables 17.3.1 to Table 17.3.2 below.

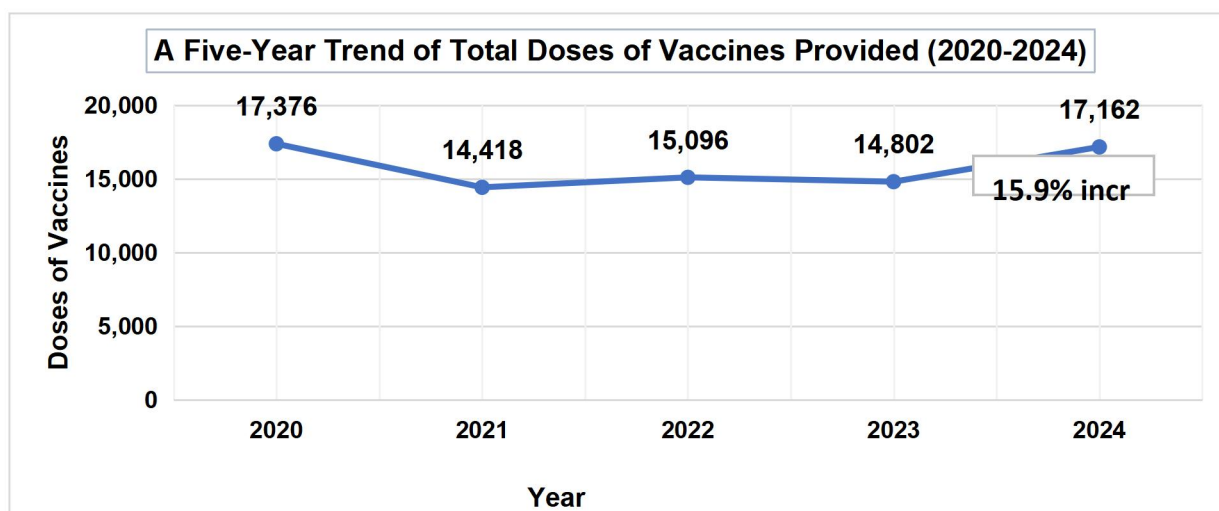


Figure 17.3. 1: A Five-Year Trend of Total Doses of Vaccines Provided (2020-2024)

Table 17.3. 1: Breakdown of Total Doses of Vaccines Provided (2020-2024)

Vaccines	2020	2021	2022	2023	2024	Remarks
BCG	3,271	2,462	2,596	2,196	2564	16.8%incr
Polio	5,003	3,853	3,232	3,506	4419	26.0%incr
Pentavalent (1-3)	1,745	1,948	1,858	1,857	1937	4.3%incr
• Pentavalent 1	-	998	1,023	1,037	-	-
• Pentavalent 2	-	551	446	472	-	-
• Pentavalent 3	-	399	389	348	-	-
Rota Virus Vaccine (ROTA 1&2)	1,409	1,122	1,327	1425	1811	27.1%incr
Yellow Fever	270	176	308	269	296	10.0%incr
TD1/TD2	734	623	610	637	530	16.8%decr
Vitamin 'A' 100,000 IU	215	281	189	291	329	13.1%incr
Vitamin 'A' 200,000 IU	368	343	424	550	669	21.6%incr
Pneumococcal Vaccine	1,745	1,418	1,843	1732	1865	7.7%incr
M.R. 1	270	179	285	248	284	14.5% incr
M.R 2	185	143	205	206	181	12.1% decr
Tetanus Pregnant	734	718	791	333	608	82.6%incr
Tetanus non-pregnant	410	158	162	14	30	114.3%incr
Inactivated Polio Vaccine (IPV)	336	296	348	342	407	19%incr

Vaccines	2020	2021	2022	2023	2024	Remarks
RTSS (Malaria Vaccine)	496	560	725	990	1059	36.6% incr
LLIN	185	138	193	206	173	6.7% incr
Total	17,376	14,418	15,096	14,802	17,162	15.9% incr

Table 17.3. 2: Adverse Events Following Immunization (2021 – 2024)

VACCINATION	ADVERSE EVENTS	2021	2022	2023	2024	REMARKS
Routine EPI Vaccination	Serious AEFI	6	2	1	0	Decr
	Non-Serious AEFI	47	0	4	1	Decr
Covid-19 Vaccination	Serious AEFI	1	1	0	0	
	Non-Serious AEFI	45	0	0	0	
	Total	99	3	5	1	Decr

17.4 CHILD WELFARE SERVICES

The Child Welfare Clinic (CWC) is a vital component of the public health department, providing essential services for children under five years, including growth monitoring, immunization, education, and counseling for mothers.

Analysis of the performance over the five-year (2020-2025) period reveals varied performance across indicators. In 2024, the hospital observed a decline of 1.9% in new registrations (from 1,654 in 2023 to 1,623 in 2024), following a substantial surge of 231.2% in 2023 (from 406 in 2022 to 1,654 in 2023). Children aged 0-11 months constituted majority 73.3% (1,190) of the total registrants, while registrations for children aged 12-23 months and 24-59 months accounted for 21.6% (350) and 5.1% (83) respectively of the total registrants.

Total attendance decreased marginally by 0.6%, (from 4,470 in 2023 to 4,444 in 2024). Attendance among infants (0-11 months) remained relatively stable whereas children aged 24-59 months experienced consistent downward trend over the five-year period, dropping by 13.2% (from 189 in 2023 to 164 in 2024).

Furthermore, nutritional assessment showed significant improvements in 2024. Normal weight babies increased by 11.6%, (from 3,950 in 2023 to 4,408 in 2024), moderate underweight babies decreased by 55.1%, (from 118 in 2023 to 53 in 2024), while no cases of severely underweight were recorded during the period.

A comprehensive five-year analysis of these trends is shown in Tables 17.4.1 to 17.4.2 below.

Table 17.4. 1: Child Welfare Clinic Performance (2020-2024)

Age (Months)	2020	2021	2022	2023	2024	REMARKS
Registration						
0-11	510	548	359	1,188	1190	0.2%incr
12-23	133	156	29	362	350	3.3%decr
24-59	79	68	18	104	83	20.2%decr
Total	722	772	406	1,654	1623	1.9%decr
Attendance						
0-11	3,209	3,346	3,923	3,629	3618	0.3%decr
12-23	769	748	671	652	662	1.5%incr
24-59	265	297	167	189	164	13.2%decr
Total	4,243	4,391	4,761	4,470	4444	0.6%decr

Table 17.4. 2: Nutritional Assessments of babies presented at Child Welfare Clinic (2020-2024)

Indicator	2020	2021	2022	2023	2024	REMARKS
Severe Underweight	15	0	0	2	0	100%decr
Moderate Underweight	84	0	44	118	53	55.1%decr
Normal Weight	3473	2636	4717	3950	4408	11.6%incr

17.5 ADOLESCENT HEALTH SERVICES

Adolescent health services continued to cater to young people aged 10-24 years. Over the five-year (2020-2024) period, the hospital recorded fluctuations in the service update. registrations and attendance figures within the five-year period were remained the same, indicating that all adolescents who registered subsequently utilized the services.

In 2024, total attendance went up 8.3% (from 84 in 2023 to 91 in 2024). Females accounted for the majority of the service users representing 82.4% (75) of the total attendees while males constituted 17.6% (16). Adolescent aged 20-24 years formed 59.3% (54) of the attendees, followed by the 15–19-year group forming 34.1% (31), and the 10–14-year group with 6.6% (6).

Details trends and distributions are illustrated in Figure 17.5.1 to Figure 17.5.2 as well as Table 17.5.1 below.

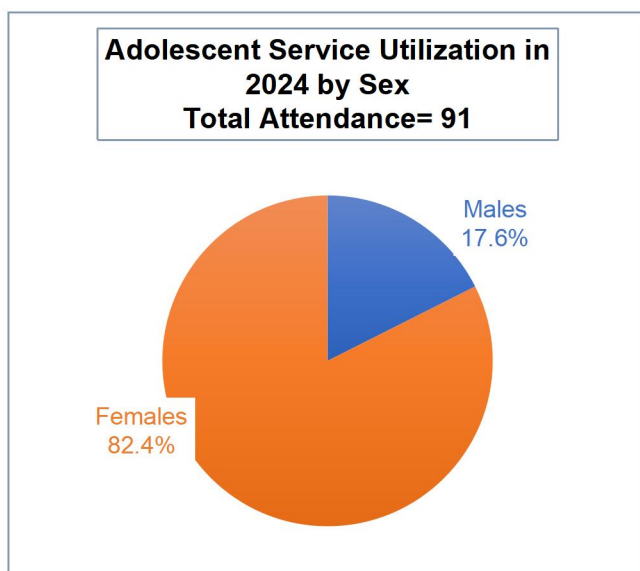


Figure 17.5. 1: Adolescent Service Utilization in 2024 by Sex

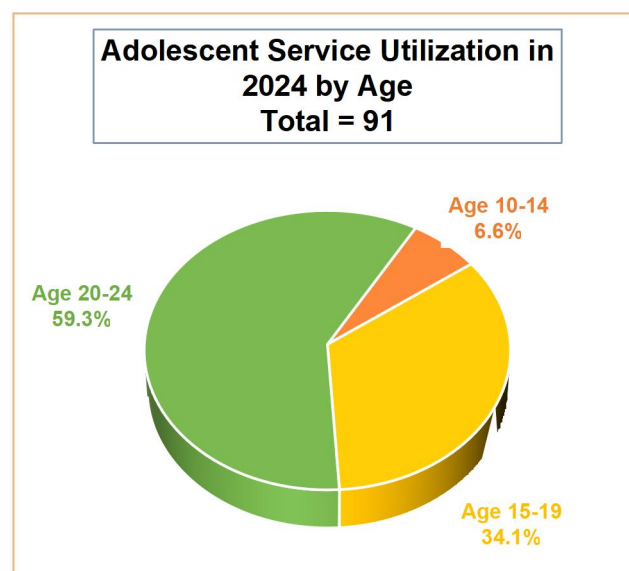


Figure 17.5. 2: Adolescent Service Utilization in 2024 by Age

Table 17.5. 1: Adolescent Service Utilization in 2024

Age (Years)	Sex	2021	2022	2023	2024	REMARKS
Registration						
10-14	Male	3	0	0	2	Incr
	Females	7	1	0	4	Incr
15-19	Male	8	2	0	4	Incr
	Females	26	20	23	27	Incr
20-24	Male	17	1	0	10	Incr
	Females	35	26	61	44	Decr
Total		96	50	84	91	8.3% incr
Attendance						
10-14	Male	3	0	0	2	Incr
	Females	7	1	0	4	Incr
15-19	Male	8	2	0	4	Incr
	Females	26	20	23	27	Incr
20-24	Male	17	1	0	10	Incr
	Females	35	26	61	44	Decr
Total		96	50	84	91	8.3% incr

17.6 INTEGRATED DISEASE SURVEILLANCE AND RESPONSE

Disease Surveillance is one of the core mandates of the Public Health Unit, ensuring the early detection, prevention and control of priority disease. In 2024, a total of 338 suspected COVID-19 cases were reported out of which 11 were confirmed positive. Also, none of the 17 suspected cases of meningitis were confirmed positive during the year.

Surveillance for other epidemic-prone diseases - namely measles, yellow fever, neonatal tetanus, acute flaccid paralysis (AFP), acute haemorrhagic fevers remained generally low since 2020, with none of these conditions recording confirmed cases in 2024. This trend reflects sustained impact of high immunization coverage over the period.

In response to the national cholera outbreak in 2024, the hospital detected and investigated 55 suspected cases (29 males and 26 females). Confirmation of the investigations revealed 12 confirmed cases (7 males and 5 females), all of which were duly managed, although one male died. Human rabies surveillance also recorded confirmed case in 2024 following two consecutive years with no confirmed cases.

Table 17.6.1 below highlight details of the analysis.

Table 17.6. 1: Surveillance Activities – Suspected and Investigated Cases

Con diti on	2020			2021			2022			2023			2024		
	Sus pec ted	Inve stig ated	Con firm ed	Sus pec ted	Inve stig ated	Con firm ed	Sus pec ted	Inve stig ated	Con firm ed	Sus pec ted	Inve stig ated	Con firm ed	Sus pec ted	Inve stig ated	Con firm ed
COVI D-19	2607	2607	447	4,085	4,085	1,542	227	227	227	1532	1532	83	338	338	11
Meas les	0	0	0	0	0	0	2	2	0	8	8	0	2	2	0
Yello w Feve r	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0
Meni ngitis	20	20	9	23	23	2	29	29	0	14	14	2	17	17	0
Chol era	0	0	0	0	0	0	0	0	0	1	1	0	55	55	12
Neon atal TT.	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0
AFP	1	1	0	1	1	0	2	0	0	0	0	0	2	2	0
Hum an Rabi es	1	1	0	1	1	1	2	2	3	3	3	0	2	2	1
Acute Hae morr hagic Feve rs	3	3	0	0	0	0	0	0	0	3	3	0	1	1	0

17.7 INFLUENZA SENTINEL SURVEY

The hospital is a sentinel site for influenza, sending suspected samples to Noguchi Memorial Institute for confirmation. The total number of influenza-like cases detected in 2024 decreased by 17.7% (from 1693 in 2023 to 1394 in 2024). The number of samples sent for confirmatory testing increased by 10.4% (from 241 in 2023 to 266 in 2024). Confirmed RTI cases however declined by 55.6% (from 27 in 2023 to 12 in 2024).

On the other hand, 2,194 cases of severe acute respiratory infection (SARI) were admitted in 2024 compared to the 398 cases in 2023. In addition, 3 out of the 72 SARI samples sent for confirmation proved positive. Table 17.6.1 below shows the five-year trend analysis of the ILI and SARI cases, samples sent and the confirmed results. Table 17.7.1 below highlight details of the analysis.

Table 17.7. 1: Influenza Sentinel Survey

INDICATOR	2020	2021	2022	2023	2024	REMARKS
INFLUENZA LIKE ILLNESS						
RTI cases	1475	2,247	1,877	1,693	1394	17.7%decr
Samples Sent	10	26	725	241	266	10.4%incr
Positive Cases	0	5	12	27	12	55.6%decr
SEVERE ACUTE RESPIRATORY INFECTION (SARI)						
RTI Admitted	10	0	13,074	398	2194	451.3% incr
Samples Sent	10	0	36	135	72	39.5% decr
Positive Cases	0	0	3	15	3	25% decr

17.8 REPRODUCTIVE AND CHILD HEALTH SERVICES

The hospitals remain committed in its effort to strengthen maternal and newborn care by promoting supervised deliveries, strengthening post-natal care and ensuring immunization services for newborns and children under-five through the Expanded Program of Immunization (EPI).

In 2024, supervised deliveries recorded a decline of 4.8% (from 2,877 in 2023 to 2750 in 2024). Total livebirths reduced by 5.3% (from 2,937 in 2023 to 2,782 in 2024) whereas total babies delivered decreased by 5.6%. The number BCG vaccines administered increased by 16.8% (from to 2,196 in 2023 to 2,564 in 2024).

Post-natal registrants reduced by 36.8% (from 4,351 in 2023 to 2,749 in 2024). This reduction is attributed to the hospital's current practice of referring mothers to the nearest health facilities for post-natal follow-up instead of returning to CCTH.

Table 17.8.1 provides a detailed breakdown of Reproductive and Child Health service performance over the five-year period from 2020-2024.

Table 17.8. 1: Reproductive and Child Health Services

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Total Deliveries	2,883	3,055	3,269	2,877	2750	4.8%decr
Total babies	2,979	3,176	3,408	3,042	2872	5.6%decr
Total Live Births	2793	3048	3288	2937	2782	5.3%decr
Number of BCG vaccination	3,271	3,217	2,596	2,196	2564	16.8%incr
Number of Post-natal Registrants	3,181	3,155	4,943	4,351	2749	36.8%dcr
Number of Still Birth	89	128	118	105	88	16.2%decr
Number of Maternal Deaths	26	32	38	20	24	20%incr
Number of Low Birth Weight (<2.5KG)	512	604	676	-	590	

17.9 FAMILY PLANNING (FP) SERVICES

Family Planning services continues to be one of the reproductive health services which contributes immensely to maternal, fertility regulation and overall population well-being. Hence, the hospital integrates FP interventions into reproductive and child health services through the Public Health Unit to promote informed contraceptive choices, reduce/prevent unintended pregnancies as well as improve couple year protection (CYP).

In 2024, the hospital recorded a significant rise in family planning uptake, recording an increase of 301.7% in the total FP acceptors (from 1,579 in 2023 to 6,343 in 2024). This improvement reveals the hospital's increased awareness creation, improved service availability of the various FP methods. A review of the individual methods showed mixed performance. While there was an increase in the utilization of short-term options in 2024, the utilization of long-term methods presented varied performance. For instance, Male condoms, a short-term method, saw a substantial increase of 1977.3%, (rising from 211 in 2023 to 4,383 in 2024), making it the dominant method for the period. In the same light, Depo Provera, Norigyon and Cyle Beads – which are also short-term methods, also recorded high increases within the same period, indicating an expansion in the utilization of short-term methods. With regards to long-term methods, Jadelle acceptors went up by 527.3% (from 11 in 2023 to 69 in 2024), Copper T also doubled by 554.2% (from 11 in 2023 to 23 in 2024). On the other hand, Implanon acceptor experienced a decline of 8.8% (from 34 in 2023 to 31 in 2024).

These trends are also reflected in the Couple-Year Protection (CYP). The overall CYP went up from 1,343.9 in 2023 to 2,013.8 in 2024, the highest recorded within the five-year period (2020-2024). Although both short-term and long-term methods demonstrated an increase in 2024, long-term methods contributed most significantly to the increase, especially C/S BTL (rising from 891.0 in 2023 to 1177.0 in 2024) and Jadelle (rising from 39 in 2023 to 242 in 2024). Figure 17.9.1, Figure 17.9.2 and Table 17.9. 1 to Table 17.9.2 below provide details of the analysis.

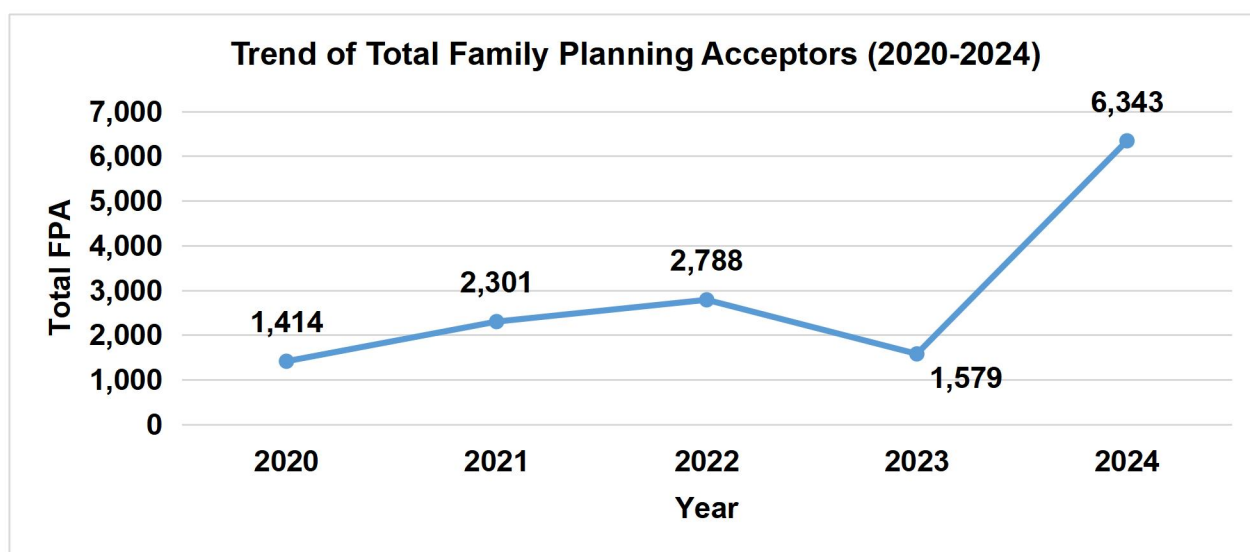


Figure 17.9. 1: Trend of Total Family Planning Acceptors (2020-2024)

Table 17.9. 1: Family Planning Acceptors by Commodity

Acceptors	2020	2021	2022	2023	2024	Remarks
Condom M	184	710	687	211	4383	1977.3% incr
Condom F	0	0	0	0	0	-
Copper T	8	27	25	11	23	109.1% incr
Depo Provera	79	308	342	59	386	554.2% incr
Jaddelle	20	24	44	11	69	527.3% incr
Implanon	21	21	60	34	31	8.8% decr
Cycle Beads	20	0	0	1	11	1000% incr
Micro G	34	67	114	61	-	
Micro N	18	4	48	0	-	
Lus	0	0	0	0	-	-
Mini Lap/BTL	81	57	0	81	107	32.1% incr
Vasectomy	0	0	0	0	-	-
Norigynon	25	34	0	5	54	980% incr
Emergency Contraceptives (Postinor)	-	0	0	0	0	-
LAM	924	982	1,354	1,083	1127	4.1% incr
Pills	-	67	114	22	152	590.9% incr
Total	1,414	2,301	2,788	1,579	6,343	301.7% incr

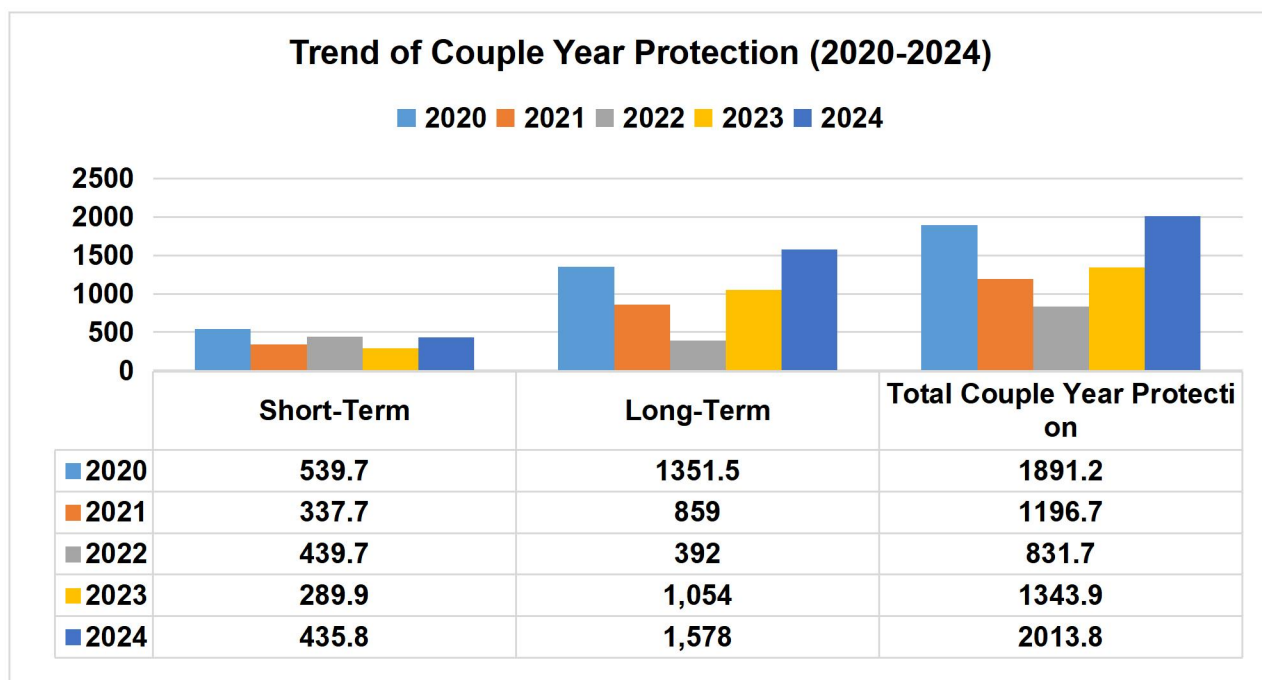


Figure 17.9. 2: Trend of Total Couple Year Protection

Table 17.9. 2: Couple Year Protection (CYP) per Commodity

Commodity	2020	2021	2022	2023	2024	Remarks
Short Term						
Pill	32.5	5.0	9.0	2.0	12.0	incr
Condom	134.4	5.9	5.7	1.6	37	incr
LAM	231	246.0	339	270.8	281.8	Incr
Depo	125	77.0	86.0	14.8	97.0	Incr
Cycle Beads	11.5	1.0	0	0.3	3.0	Incr
Norigynon	5.3	2.8	0	0.4	5.0	Incr
Total	539.7	337.7	439.7	289.9	435.8	Incr
Long Term						
Jadelle	164.5	84.0	154	39	242	Incr
Implanon	152.5	53	150	85	78	decr
Copper - T	143.5	95.0	88.0	39.0	81.0	incr
C/S BTL	891	627.0	0	891.0	1177.0	Incr
Total	1351.5	859.0	392.0	1,054	1,578	Incr
Overall Total C.Y. P	1891.2	1196.7	831.7	1343.9	2013.8	Incr

17.10 HEALTH PROMOTION ACTIVITIES

The Public Health Unit regularly conducts activities aimed at raising awareness and promoting health, tailoring these initiatives to specific target audiences, delivery methods/platforms such as outpatient departments (OPDs), radio, television, community, schools, faith-based settings.

Generally, there was a steady increase in the overall health promotional activities organized in 2024, with the total sessions rising by 7.2% (from 2,714 in 2023 to 2,910 in 2024). Nonetheless, there was varied performance across activity categories. OPD health talks decreased by 11.6% (from 1,110 in 2023 to 981 in 2024), community outreach activities (in collaboration with other departments) declined by 10.6% (from 293 in 2023 to 262 in 2024). The number of School Health Talks also reduced by 42.6% (from 94 in 2023 to 53 in 2024). Conversely, radio discussions increased by 24.7% (from 243 in 2023 to 303 in 2024), highlighting the increasing role of mass media in health communication. Focus client education and video shows also increased by 42.7% (from 743 in 2023 to 1,060 in 2024) and 8.65% respectively (from 231 in 2023 to 251 in 2024).

The trends in beneficiaries mirrored the distribution of activities. Beneficiaries of community outreaches dropped by 9.6% (from 29,851 in 2023 to 26,980 in 2024), while beneficiaries of school health talks reduced by 18.6% (from 3,610 in 2023 to 2,940 in 2024). However, the number of beneficiaries from focus client education went up 52.4% (from 1,334 in 2023 to 2,033 in 2024). OPD talks and video shows consistently reached all OPD attendants.

Tables 17.10.1 to 17.10.2 below summarizes the frequency of health promotional activities and beneficiary distribution for the five-year (2020-2024) period.

Table 17.10. 1: Trend of Frequency of Health Promotion Activities

ACTIVITY	FREQUENCY					REMARKS
	2020	2021	2022	2023	2024	
OPD Health Talk	366	245	315	1,110	981	11.6% Decr
Radio Discussion	104	161	226	243	303	24.7% Incr
TV Discussion	45	88	219	-	-	
Community Outreach	49	429	199	293	262	10.6% Decr
School Health Talks	3	9	99	94	53	42.6% Decr
Focus Client Education	280	197	301	743	1060	42.7% Incr
Video Show	-	7	151	231	251	8.65% Incr
Total	847	1,136	1,510	2,714	2,910	7.2% Incr

Table 17.10. 2: Trend of Beneficiaries of Health Promotion Activities

Activity	2020	2021	2022	2023	2024	Remarks
OPD Talk	All OPD attendants	All OPD attendants	All OPD attendants	All OPD attendants	All OPD attendants	-
Radio / TV Discussion	General Public	General Public	General Public	General Public	General Public	-
Community Outreach	12,112	21,820	21,360	29,851	26,980	9.6% Decr
School Health Talks	675	785	3,450	3,610	2,940	18.6% Decr
Other Focus Client Education	335	266	355	1,334	2,033	52.4% Incr
Video Show	All OPD's Attendants	All OPD's Attendants	All OPD's Attendants	All OPD's Attendants	All OPD's Attendants	

17.11 HIV / AIDS SERVICES

HIV counselling, and testing and linkage to care key strategies for the prevention and controlling of HIV/AIDS. CCTH remain committed to providing routine HIV screening and TB diagnostic services to ensure the early detection and comprehensive management. Notably, the hospital has observed variability in the annual number of HIV screenings performed over the years.

In 2024, the number of clients that were screened for HIV decreased by 21.6% (from 3,600 in 2023 to 2822 in 2024), out of which 7.4% (208) were positive. However, 77.4% (161) of the 208 positive cases were confirmed as true HIV cases. TB screening went up to 5,499 in 2024 out of which 24 (2 children and 11 adults) were diagnosed with TB and promptly placed on treatment.

Early diagnosis also saw mixed performances. The number of infants exposed to HIV went up by 8.6% (from 58 in 2023 to 63 in 2024). The number babies that underwent PCR testing was 62. However, only 42 were put on ARV prophylaxis compared to 45 in 2023, representing 6.2% decrease. Scepterin uptake declined by 50% (from 58 in 2023 to 29 in 2024). Remarkably, no infant tested positive during antibody retesting at 18 months.

With regards to ART cohort performance, 1,073 clients were actively receiving antiretroviral therapy (ART) in 2024, out of which 34 mortalities were recorded. Viral load suppression achieved was 70% (which is relatively below the national target of ≥95%) 21% were non-suppressed while 9% of the results were returned as errors, failed samples or other inconclusive outcomes.

Out of the 190 clients contacted through default tracing, only 14.2% (27) returned to care, 49 (25.8%) were unreachable, 35 (18.4%) gave wrong contacts while 14.7% (28) had unfortunately passed on. Others, 3.2% (6) cited spiritual beliefs and financial

constraints as reasons for discontinuing treatment. Further details are presented in Table 17.11.1 to Table 17.11.5 below

Table 17.11. 1: Utilization of HIV/TB Services

INDICATOR	2021			2022			2023			2024		
	Adult	Kids	Total	Adult	Kids	Total	Adult	Kids	Total	Adult	Kids	Total
Total suspected Cases	3863	194	4,057	-	-	4,457	-	-	3,600	-	-	2,822
New Cases	71	4	75	70	4	74	105	6	111	-	-	78
Clinical Follow Ups	3863	194	4,057	236	4,288	4,524	203	4,449	4,652	-	-	
Total Death	0	3	3	0	1	1	-	-	-	-	-	6
Number Screened For TB	1,702	173	1,875	169	4,288	4,457	203	4,449	4,652	4839	600	5499
Number Diagnosed with TB	13	0	13	7	29	36	4	7	11	22	2	24
Number placed on TB Treatment	13	0	13	7	29	36	4	7	11	22	2	24
Total number of HIV Cases Receiving ARV	1368	51	1,419	28	1,631	1,659	60	932	992	-	-	1073

Table 17.11. 2: HIV Testing and Counselling

Indicator	2020	2021	2022	2023	2024	Remarks
Number Screened	507	4,057	2,765	3,600	2,822	21.6%decr
Number Positives	95	225	221	319	208	34.8%
HIV Positivity Rate	18.7%	5.5%	7.6%	9%	7.4%	1.6%decr
Actual Positive	-	-	-	-	161	77.4% of the confirmed cases were identified as actual positive
Number	95	225	221	319	105	44.3% incr

Indicator	2020	2021	2022	2023	2024	Remarks
placed on treatment						
TB Screening	95	225	221	4,457	105	99.6%decr
Number of Exposed Babies Tested	43	37	34	25	58	132% incr
Number of Babies positive	1	1	1	0	0	

Table 17.11. 3: Early Infant Diagnosis for HIV

Indicator	2020	2021	2022	2023	2024	REMARKS
Number of exposed babies	37	34	25	58	63	8.6%incr
Number Tested (PCR)	37	34	25	58	62	6.9%incr
Number put on ARV Prophylaxis	37	34	24	45	42	6.7%decr
Number put on Sceptrin	37	34	24	58	29	50%decr
Number Retested at 18mths with Antibody Test	37	34	24	0	1	incr
Number Positive after Antibody Test	1	1	0	0	0	-

Table 17.11. 4: ART Cohort Performance in 2024

INDICATOR	NUMBER
Newly on ART	78
Loss to follow up	273
Stop treatment due to death	34 (6)
Currently on ART	1073
Total Client Visit	3162
Viral Load Results	
Results received	1055
Viral Suppression	740 (70%)
Non-suppression	218 (21%)
Error/Failed/others	97 (9%)

Table 17.11. 5: Defaulter Tracing in 2024

INDICATOR	NUMBER
Clients contacted	190
Outcome of Defaulter Tracing	
Returned to care	27
Non-compliant/adherent	7
Not a defaulter	9
Self-transfer	29
Unreachable	49
Wrong number	35
Dead	28
Disease is spiritual/willing to die	4
Financial reason	2

17.12 PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT) PROGRAMME

The Prevention of Mother-to-Child Transmission (PMTCT) intervention is an integrated health service intervention which is offered to mothers and their babies to prevent the spread of HIV from mothers to their newborns. This intervention is implemented by the Public Health Unit of the hospital in collaboration with the Maternal Health Sub-BMC. The program focuses on routine HIV testing, counselling, initiation of antiretroviral therapy (ART) for HIV- positive pregnant women, and follow-up services for HIV-exposed infants.

In the year under review, 99.4% (769) of the 774 ANC registrants were tested and counselled. Two of the registrants who were tested were confirmed HIV positive, with both cases detected at 34 weeks of gestation. Furthermore, the number of ANC registrants initiated on antiretroviral therapy (ART) decreased from 14 to 6 in 2024, representing a 57.1% reduction.

Infant follow-up indicators showed notable improvements. The number of HIV-exposed infants placed on ARV prophylaxis went up to 10 in 2024, with no recorded cases in 2022 and 2023. Early Infant Diagnosis (EID) uptake also increased by 5.8%, rising from 58 in 2023 to 63 in 2024. Table 17.12.1 below provides details of the analysis.

Table 17.12. 1: Pregnant Mother to Child Transmission (PMTCT)

INDICATORS	2020	2021	2022	2023	2024	REMARKS
Number of ANC Registrants	761	768	808	697	774	11.0%incr
Number Tested & Received Post-test Counselling	761	768	808	692	769	11.1%incr
Percentage (%)	100%	100%	100%	99.3%	99.4%	0.1%incr

INDICATORS	2020	2021	2022	2023	2024	REMARKS
of Clients Tested						
Number Positive	4	0	6	2	2	-
Number Positive at 34wks	1	0	3	3	2	33.3%decr
Number Given ARVs	5	0	12	14	6	57.1%decr
Number of Babies on ARVs	-	42	0	0	10	100%incr
EARLY INFANT DIAGNOSIS FOR HIV						
Number of infants Tested (EID)	37	34	25	58	63	8.6%incr
Number tested (PCR)	37	34	25	58	62	6.9% incr
Number of EID Positive (6wks - 18mths)	1	1	0	0	-	
Number put on Scepterin	-	34	24	58	29	
Given ARVs as Prophylaxis	37	42	15	45	42	6.7%decr
No. retested at 18 months with Antigens	-	34	24	0	1	incr

17.13 POST EXPOSURE PROPHYLAXIS (PEP)

Post-exposure prophylaxis services continued to provide immediate support to individuals potentially exposed to HIV, helping reduce infection risk and associated psychological distress.

During the period, the number of clients who reported being exposed to HIV decreased by 10.6% (from 47 in 2023 to 42 in 2024). Out of the total clients exposed, 31.0% (13) were considered at low-risk whiles 4.8% (2) were at very low risk. 64.3% (27) of the reported cases however were classified as high risk. Fortunately, none of the reported clients tested HIV-positive. Table 17.13.1 below provides further details of the performance.

Table 17.13. 1: Post Exposure Prophylaxis

INDICATORS	2020	2021	2022	2023	2024	REMARKS
Number of Cases Reported	30	26	34	47	42	10.6% decr
Number at Very Low Risk	4	21	5	9	2	77.8% decr
Number at Low Risk	9	2	26	30	13	56.7% decr

INDICATORS	2020	2021	2022	2023	2024	REMARKS
Number at High Risk	17	3	3 (3 rape)	8 (6 rape)	27 (3 Rape)	incr
Number who Tested Positive	0	0	0	0	0	

17.14 TUBERCULOSIS SERVICES UTILISATION

Tuberculosis (TB) is one of the priority public health conditions requiring prompt testing of all suspected cases and timely initiation of treatment for cases confirmed positive. Hence, the hospital continues to strengthen its case-finding, diagnostic, treatment and monitoring activities to reduce TB incidence and mortality.

In 2024, CCTH sustained its efforts in TB surveillance, through routine screening of clients presenting with symptoms suggestive of the disease. A total number of 10,919 persons were screened, representing a 19% reduction from 13,399 in 2023. Out of the number screened, 10.2% (1,111) were presumed to have TB. 98% (1,108) of the presumed cases underwent confirmatory test, out of which 8% (87) were confirmed positive and duly initiated on treatment.

Within the same period, routine programme data showed 16.3% decrease in normal TB cases detected (from 123 in 2023 to 103 in 2024), while the number of multiple drug-resistant TB (MDR-TB) cases went down by 39.3% (from 28 in 2023 to 17 in 2024). Out of the 103 normal cases detected, 77 were referred to other DOT centres whereas 26 were registered as TB clients of the hospital. Among the registered, 15 were pulmonary-positive, 3 pulmonary-negative whiles 8 were extrapulmonary cases.

Cohort analysis shows that pulmonary-positive and pulmonary-negative cases decreased by 25% (from 20 in 2023 to 15 in 2024) and 40% (from 5 in 2023 to 3 in 2024) respectively in 2024, while extrapulmonary TB increased significantly to eight cases – the highest in the past five-years (2020-2024). Most (24) of the registered cases were new infections, with one client returning after defaulting.

Treatment outcomes for the 2024 cohort are not yet available. Nonetheless, historical data from 2023 shoed improved cure (36.7%) and treatment success (54%) rates compared to previous years. Detailed trend analysis provided in Tables 17.14.1, 17.14.4 below.

Table 17.14. 1: Tuberculosis Case Screening (2020-2024)

INDICATOR	2021	2022	2023	2024	REMARKS
Number Screened For TB	11,453	12,762	13,399	10,919	19% decrease
Number Presumed TB	568	982	1330	1,111	10.2% of number screened were presumed TB
Number Tested for TB	486	843	1293	1,108	98% of presumed TB were tested

INDICATOR	2021	2022	2023	2024	REMARKS
Number Diagnosed TB	65	93	77	87	8% of tested were confirmed TB positive
Number Initiated on TB Treatment	65	93	77	87	100% were initiated into TB care

Table 17.14. 2: Tuberculosis Case Detection (2020-2024)

Indicator	2020	2021	2022	2023	2024	Remarks
Normal Cases Detected	115	147	116	123	103	16.3% decr
MDR Cases	1	0	22	28	17	39.3% decr
Total Referred	81	113	87	84	77	8.3% decr
Total Registered	34	26	14	28	26	7.1% decr
Total ward Deaths	-	-	12	8	10	25.0% incr

Table 17.14. 3: TB Referrals to Other DOT Centres

	GENDER	2020	2021	2022	2023	2024	REMARKS
Adult	Males	47	70	38	35	44	25.7%incr
	Females	23	39	29	47	25	46.8%decr
Paediatrics	Males	4	2	11	9	7	22.2%decr
	Females	7	2	6	4	1	75%decr
	Total	81	113	84	95	77	18.9%decr

Table 17.14. 4: Yearly Cohort Analysis of Registered Cases

Category of Cases	2020	2021	2022	2023	2024	Remarks
Pulmonary positive	18	14	15	20	15	25% decr
Pulmonary negative	8	3	4	5	3	40% decr
Extrapulmonary	6	3	3	3	8	incr
Total	32	19	27	28	26	decr
<i>comprising</i>						
• <i>New</i>	30	14	24	25	24	<i>decr</i>
• <i>Relapse</i>	0	4	1	2	0	<i>decr</i>
• <i>Return after Defaulter</i>	0	0	0	0	1	<i>incr</i>
• <i>Other previously</i>	2	0	1	1	1	<i>No change</i>
• Total cases	32	19	27	28	26	decr
Outcomes						
Cured	-	-	5	10	-	
Treatment completed	-	-	4	5	-	
Died	-	-	15	7	-	
Treatment failed	0	1	1	2	-	

Category of Cases	2020	2021	2022	2023	2024	Remarks
Default	-	-	0	-	-	
Loss to follow	5	4	0	4	-	
Cure rate (%)	-	-	19.4%	36.7%	-	
Treatment success (%)	-	-	36.0%	54%	-	
Not evaluated	0	0	1	0	-	

17.15 CERVICAL CANCER SCREENING (VIA)

Cervical cancer is one of the predominant causes of mortality among women globally. Consequently, it is strongly recommended that women of reproductive age undergo regular screening to facilitate early detection and timely intervention. In view of this, hospital continues to promote visual inspection with acetic acid (VIA) as a key strategy for screening to ensure early detection and timely management cervical cancer.

In 2024, a total of 390 women were screened compared to 11 in 2023. Out of 390 tested, 23 were suspected to have cancer, from which 21 tested positive – the highest number since 2020. However, 346 women tested negative. Hence, intensifying awareness creation, strengthening and promoting HPV vaccination is vital to improving detection outcomes and reducing the incidence of cervical cancer. Table 17.15.1 below provides details of the analysis.

Table 17.15. 1: Trend of Cervical Cancer Screening from 2020 to 2024

INDICATOR	2020	2021	2022	2023	2024	REMARKS
No. of Women Screened	110	151	132	11	390	incr
No. Suspected for Cancer.	0	2	5	0	23	incr
No. Tested Positive	0	2	1	0	21	incr
No. Tested Negative	110	149	131	11	346	incr

CHAPTER EIGHTEEN

PHARMACEUTICAL SERVICES

18.1 INTRODUCTION

Pharmaceutical Services are essential to the delivery of quality healthcare. The Pharmacy Directorate is committed to ensuring the safe, rational and effective use of medicines by continuously providing medications and contributing to essential clinical expertise. This mandate directly supports clinical decision-making and enhances positive health outcomes.

The services offered by the Directorate are; medication management and distribution, clinical support and patient safety: pharmacy preparation as well as education and outreach support.

18.2 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 18.2. 1: Summary of the 2024 Annual Performance of Pharmaceutical Services under the Strategic Objectives.

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE							
CCTH OBJECTIVE 1: INCREASE ACCESS TO SPECIALIST SERVICE DELIVERY							
Access	2020	2021	2022	2023	2024	Target	Remarks
% Tracer Medicine Availability	84.62%	95%	86.2%	93.10%	91.20%	• CCTH = 100% • TH = 90%	Decr CCTH target not met THs target met
Prescription to pharmacy ratio	9425:1	6,422:1	6,495:1	6,643:1	5,939:1	TH = 12000:1	Decr Target not met
Doctor to Pharmacist ratio	9:1	6:1	10:1	10:1	7:1	THs =10:1	
Percentage antibiotic prescribed	17.1%	11.6%	8.5%	10.25%	8.60%	TH = 35%	Decr Target not met
Percentage Injectable	24.2%	1.6%	7.23%	10.54%	1.67%	TH = 10%	Decr Target not met
Utilization of Pharmaceutical Care interventions	11.5%	21.2%	97%	98%	98.9%	TH = 30%	Target not met
Tracer medicines availability for 2024 decreased to 91.20% from 93.1% in 2023.							
The Manufacturing Unit produced 2,775 litres of distilled water and 70 litres of Syrup BP to support clinical							

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
operations
A total of 727 extemporaneous products were prepared, including Hydroxyurea, Furosemide, Levetiracetam Spironolactone, Propranolol, Baclofen and other specialized formulations tailored to patients needs
Operationalized the Annex B/VVIP Pharmacy, which provided dedicated pharmaceutical services for cholera case management
CCTH OBJECTIVE 2: IMPROVE QUALITY OF HEALTH CARE DELIVERY.
Clinical pharmacists participated in ward rounds across all 8 wards, contributing to rational medication use and improved therapeutic outcomes
Antimicrobial Stewardship (AMS) supported ward rounds were introduced at the Intensive Care Unit and Paediatric Unit to strengthen infection management practices
A total of 489 discharge counselling sessions were conducted at the Medical Wards to support patient understanding and medication adherence
CCTH OBJECTIVE 3: IMPROVE INFRASTRUCTURE AND EQUIPMENT BASE FOR THE DELIVERY OF QUALITY SERVICE
Initiated key processes toward the refurbishment of the Manufacturing Unit, aimed at modernizing compounding operations and improving production efficiency.
CCTH OBJECTIVE 4: STRENGTHEN GOVERNANCE SYSTEM
4.1: Governance Related Performance
Four (4) pharmacists were granted study leave to pursue membership at the Ghana College of Pharmacists
Six (6) pharmacists successfully graduated as specialists from the College of Pharmacists
The Pharmacy Directorate ranked third place during the institutional annual Peer Review Exercise
Two staff (a pharmacist and a technician) were awarded at the end of year Thanksgiving and award night
Attendance and visibility were improved through participation in professional events: • 7 Pharmacists attended the Annual General Meeting (AGM) • 6 pharmacy technologists attended the AGM • Pharmacists undertook various international trainings and conferences, including; • FIP in South Korea • Oncology training in UK • AMS workshops in UK and Vietnam • TB medicines quantification training in Kenya
4.2: Human Resource Related Performance
All pharmacy staff were appraised
Managers submitted 12 monthly performance reports, 12 attendance reports and held 12 monthly management meetings as part of governance processes.
Six (6) pharmacists and three (3) pharmacist technologists were posted to the unit to strengthen workforce
CCTH OBJECTIVE 5: IMPROVE HEALTH RESEARCH, TEACHING AND EXCELLENCE IN LEARNING
5.1 Improve on Training
A total of 202 students were trained within the year on various topics; • 13 postgraduate residents • 19 House Officers • 170 Undergraduate students
Organised 44 clinical meetings, 75 cases presentations and 115 general ward rounds to support continuous learning
Completed 49 pharmacist-led ward rounds to optimize pharmaceutical care
5.2 Conduct Research
Submitted 144 Adverse Drug Reaction (ADR) reports to the Food and Drug Authority
Conducted 1 Rational Use of Medicine (RUM) survey
Engaged in 6 collaborated research projects with resident pharmacists
A departmental workshop on research methods, design and interpretations was organized for all staff
CCTH OBJECTIVE 6: INTENSIFY SUPPORT TO THE LOWER LEVEL OF CARE AND SERVICE

2024 ANNUAL OUTCOME AND OUTPUT PERFORMANCE
DELIVERY POINTS
Provided pharmaceutical support for key medical collaborations including; • Medevac (Both orthopaedic & plastic surgeries) • Operation Smile • Himalayan cataract surgeries
Supported 2 community outreach programmes at Moree and Abura Dunkwa, contributing to public health and medication access

18.3 PERFORMANCE TREND OF PHARMACY DEPARTMENT

The Pharmacy Department in 2024 recorded varied performance across key indicators. The total prescriptions served increased by 8.8%, rising (from 152,800 in 2023 to 166,289 in 2024). Tracer medicine availability slightly declined from 93.1% in 2023 to 91.2% in 2024 but remained above the Teaching Hospital (TH) target of 90%. Clinical pharmacy practice on the wards improved significantly, from 52% in 2023 to 90% in 2024. In the same light, the utilization of pharmaceutical care interventions went up from 98% in 2023 to 98.9% in 2024, exceeding the Teaching Hospital's (TH) target of 30%. Workload distribution improved in 2024. The prescription to pharmacist ratio improved from 6,643:1 in 2023 to 5939:1 in 2024.

Performance across the various pharmacy outlets were varied during the year under review. The 24-hour Pharmacy remained the outlet with the highest number of prescriptions received, forming 33% (55,571) of the total prescriptions and recording a slight increase of 0.8% (from 55,154 in 2023 to 55,571 in 2024). Accident and Emergency pharmacy prescriptions increased by 11.0% (from 25,016 in 2023 to 27,777 in 2024), OPD Annex pharmacy recorded an increase of 18.8% (from 22,803 in 2023 to 27,095 in 2024), while Oncology Suite and ART clinic prescriptions rose by 9.6% (from 718 in 2023 to 787 in 2024) and 4.6% (from 5,157 in 2023 to 5,393 in 2024) respectively.

Prescriptions served at the Polyclinic went up remarkable from 1,925 in 2023 to 15,636 in 2024, representing an increase of 712.3%. This increment in prescriptions corresponds to the increase of 41.88% in the Polyclinic OPD attendance (from 16,404 in 2023 to 23,274 in 2024). On the other hand, prescriptions served at the Main OPD Pharmacy decreased substantially by 42.9% (from 19,223 to 10,980). Annex B (Infectious Disease Centre) pharmacy, which was operationalized during the cholera outbreak recorded a total of 32 prescriptions.

Further details of these trends are presented in Table 18.3.1 to Table 18.3.3 below.

Table 18.3. 1: Trend Performance of Pharmacy Department

Indicator	2020	2021	2022	2023	2024	Remarks
Clinical Pharmacy Practice on Wards	90%	90%	76%	52%	90%	Incr
No of Drug Bulletins issued	4	4	2	-	-	

Indicator	2020	2021	2022	2023	2024	Remarks
No of Students trained	11	106	90	171	202	18.1% incr
Total number of prescriptions served	169,655	160,563	149,390	152,800	166,289	8.8% incr
Prescriptions to Pharmacists ratio	9425:1	6,422:1	6,495:1	6,643:1	5939:1	Decr
No of Researches conducted	2	2	1	1	7	Incr

Table 18.3. 2: Five-Year Trend of Prescriptions Served by Various Pharmacy Outlets (2020-2024)

OUTLETS	2020	2021	2022	2023	2024	REMARKS
Out-Patient Dept. (OPD) Main	18,916	21,677	19,159	19,223	10,980	42.9% decr
Out-Patient Dept. (OPD) Annex	17,431	22,377	22,445	22,803	27,095	18.8% incr
Accident & Emergency	52,548	26,265	22,947	25,016	27,777	11.0% incr
In-Patient/Ward Pharmacy	11,966	20,600	21,815	22,428	22,640	0.9% incr
24hour Pharmacy	62,548	62,996	57,180	55,154	55,571	0.8% incr
Oncology suite	314	264	649	718	787	9.6% incr
Polyclinic	-	-	-	1,925	15,636	712.3% incr
TB Clinic	456	663	299	376	378	0.5% incr
ART Clinic	6,276	5721	4,896	5,157	5,393	4.6% incr
Annex B	-	-	-	-	32	Operationalized in 2024
Total	170,455	160,563	149,390	152,800	166,289	8.8% incr

Table 18.3. 3: Pharmaceutical Services Performance under THs KPI

KPI	2020	2021	2022	2023	2024	REMARKS	TARGET	MEASUREMENT
Tracer Medicine Availability (%)	84.62	95.00	86.25	93.10	91.20	decr	CCTH = 100%	Medicines available / Total medicines in the tracer medicines

KPI	2020	2021	2022	2023	2024	REMARKS	TARGET	MEASUREMENT
							TH = 90%	list * 100
Prescriptions - Pharmacist Ratio	9425:1	6422:1	6495:1	6,643:1	5939:1	decr	TH = 12000:1	Total no. of prescription served / total no. of pharmacists
Doctor to Pharmacist ratio	9:1	6:1	10:1	10:1	7:1	decr	THs =10:1	Total number of doctors/ Total Pharmacist in the Hospital
Percentage antibiotic prescribed	17.13	11.58%	8.5	10.25%	8.60%	decr	TH = 35%	Total number of antibiotic / Total of medicines on a prescription * 100
Percentage injectable prescribed	24.16	1.61%	7.23	10.54%	1.67%	decr	TH = 10%	Total number of injectable / Total of medicines on a prescription * 100
Utilization of pharmaceutical care interventions	11.52%	21.2%	97%	98%	98.9%	incr	TH = 30%	No. of interventions / no. of cases seen * 100
Proportion of ward round inputs by clinical pharmacist utilized	89.29%	100%	100%	95%	98%	decr		Number of clinical pharmacist inputs utilized / Total number of inputs

18.4 ANTI-RETRO VIRAL THERAPY (ART)

The Pharmacy Department remains committed to HIV care and treatment by ensuring that HIV clients and exposed persons are promptly initiated on treatment. In 2024, the total number of HIV clients served with Antiretroviral Therapy (ART) increased by 4.6%, (from 5,157 in 2023 to 5,393 in 2024). The monthly average attendance also went up by 4.4% (from 43 0 in 2023 to 449 in 2024).

However, the number of new adults placed on Anti-Retro Viral Therapy (ART) declined considerably by 41.9% (from 86 in 2023 to 50 in 2024). This decrease was more pronounced among males (54.8% from 31 in 2023 to 14 in 2024) than females (34.5% from 55 in 2023 to 36 in 2024). The number of children (below 14 years) receiving ART in 2024 on the hand went up by 66.7% (From 3 in 2023 to 5 in 2024), with higher numbers among males (3). In the same light, the number of HIV exposed babies given prophylaxis increased by 1.8% (from 56 in 2023 to 57 in 2024), reflecting the continued progress with PMTCT services.

Furthermore, the number of post exposure prophylaxis increased by 8% (from 50 in 2023 to 54 in 2024). Needle-prick injury accounted for the majority of exposure forming 74.1% (40) of the total cases. In addition, defilement and rape cases that were given prophylaxis constituted 9.3% (5) and 3.7% (2) respectively.

A detailed analysis of HIV services is presented in Table 18.4.1 and Table 18.4.2 respectively.

Table 18.4. 1: Summary of Performance - Anti-Retro Viral Therapy (2020-2024)

INDICATOR	2020	2021	2022	2023	2024	REMARKS
Attendance (Total no. of Clients)	6,276	5,721	4,896	5157	5,393	4.6% incr
Average. number of Client Seen per month	523	477	408	430	449	4.4% incr
New Adults	81	77	57	86	50	41.9% decr
• <i>Males</i>	20	26	19	31	14	54.8% decr
• <i>Females</i>	61	51	38	55	36	34.5% decr
Number of Children below 14yrs put AVR drugs	13	3	4	3	5	66.7% incr
• <i>Males</i>	6	1	3	1	3	<i>incr</i>
• <i>Females</i>	7	2	1	2	2	
Number of HIV exposed babies given prophylaxis	66	65	56	56	57	1.8%incr
Number of post exposure prophylaxis	47	39	34	50	54	8.0% incr

Table 18.4. 2: Post Exposure Prophylaxis services for HIV

INDICATOR	2023	2024	REMARKS
Number of cases Seen	50	54	8.0% incr
Needle Prick	35	40	14.3% incr
Mucocutaneous exposure	7	7	-
Rape	5	2	60% decr
Defilement	3	5	66.7% incr

18.5 RATIONAL USE OF MEDICINE (RUM)

The irrational use of medicines persists as a substantial global concern. Inappropriate prescribing, dispensing, and utilization of medications, including overuse, underuse, or misuse, can lead to medication shortages and pose significant health risks. Furthermore, the practice of polypharmacy exacerbates these challenges. According to the World

Health Organization (WHO, 1988; WHO, 2019), rational use of medicines entails patients receiving medications that align with their clinical needs, in doses tailored to their individual requirements, for an adequate duration, and at the lowest cost to both the patient and the community.

In line with this, the hospital, in collaboration with the Pharmacy Directorate and the Drug and Therapeutics Committee conducts periodic RUM surveys to evaluate prescription patterns, dispensing procedures and medicine-use behaviours. These findings help to provide targeted interventions designed to strengthen patient safety, improve medication availability and strengthen pharmaceutical stewardship.

18.5.1 RUM SURVEY FINDINGS

The results from the 2024 survey revealed mixed performance across prescriber and patient care indicators, as the prescribing indicators showed significant improvement compared to the dispensing indicators. Average consulting time went up from 12.5 minutes in 2023 to 14.5 minutes in 2024, indicating more time for detailed patient engagement. The percentage of generic medicine prescribed remained high at 96.5% and the proportion of medicines prescribed from Essential Drug List rose from 92.5% in 2023 to 100% in 2024, highlighting strong alignment with national guidelines. Also, the percentage of antibiotics prescribed decreased from 11.6% in 2023 to 8.60% in 2024, remaining below the THs target of 35% whereas the percentage of injectable used increased to 1.67% from 0.5% in 2023.

With regards to dispense indicators, the average dispensing communication time decreased significantly, from 126.7 seconds to 96 seconds. However, the average waiting time at the pharmacy increased from 12.5 minutes to 16.9 minutes. The percentage of medicines adequately labelled declined from 97.5% in 2023 to 94.50% in 2024 and the percentage of people with correct knowledge of dosage regimen improved from 79.5% in 2023 to 81.5% in 2024. Detailed trends are provided in table 18.5.1.1 below.

Table 18.5.1. 1: RUM Survey Result - Prescriber Indicator

Rum Prescribing Indicators	2020	2021	2022	2023	2024	Remarks	Target
Prescriber Indicators							
Average consulting time	21.9 mins	16.12	10.27 mins	12.5 mins	14.50 mins	incr	-
Percentage of Generic medicine prescribed	97.25%	92.60%	92.29%	96.5%	96.5%		-
Percentage of Antibiotics	17.13%	11.58%	8.5%	11.6%	8.60%	decr	TH =

Rum Prescribing Indicators	2020	2021	2022	2023	2024	Remarks	Target
prescribed							35%
Percentage of injectable prescribed	24.16%	1.61%	7.23%	0.5%	1.67%	incr	TH = 10%
Percentage of medicines prescribed from Essential Drug List (EDL)	93.88%	85.85%	89.88%	92.5%	100%	incr	-
Dispensing Indicators							
Average dispensing communication time	69.51 sec	70.20 sec	80.00 sec	126.70 sec	96.00 sec	incr	60 seconds
Average waiting time	24.45 mins	14.81/ 24.45 mins	10.27 mins	12.5 mins	16.9 min	incr	-
Percentage of medicines adequately labelled	89%	86%	94.24%	97.5%	94.50%	decr	100%
Percentage of with knowledge of correct dosage regimen	83.75%	79.25%	85.92%	79.5%	81.5%	incr	100%

SECTION 4

CHAPTER NINETEEN

CHALLENGES, MITIGATING STRATEGIES, WAY FORWARD

19.1 CHALLENGES AND MITIGATING STRATEGIES

During the year review, the hospital was confronted with several systemic, financial, infrastructural and service delivery challenges which affected operations and outcomes. Despite these constraints, the governing Board, together with Management implemented targeted mitigations strategies to lessen their impact and to ensure continuous service delivery. These challenges and their mitigating strategies used in addressing them are highlighted in the table 19.1.1 below.

Table 19.1. 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
Funding Challenges for key projects	Continue collaboration with key Partners
Sustainability of programme initiatives due to funding	Set up a Sustainability Fund for the Eye project
Illegal sale, development and encroachment of hospital lands	Continue with court issue and other measures to prevent illegal developments on the hospital land
Inadequate Staff Accommodation	Pursuing the PPP agreement for the construction of 270 accommodation units
Patients' inability to afford needed service, especially critical care, after first 24h care has been rendered.	Set up a fund for use in such instances. Create a revenue stream to support critical care service when needed.
Absence of Neonatal and Paediatric Intensive Care Units	Still engaging key stakeholders for support
Inadequate and ageing equipment e.g. Power Generators and CSSD equipment, etc.	Work with MOH for replacement of obsolete equipment and machinery (CSSD, Generator Sets).
MRI Machines not functioning	Exploring Public Private Partnership possibilities

19.2 WAY FORWARD / OUTLOOK FOR 2025

The hospital in 2025 envisage to prioritize the following in line with the strategic mandate and commitment to improving the quality of care.

1. Address critical care challenges
2. Advance discussions with National Blood Service towards establishing a blood fractionation centre, aimed at improving access to blood products.
3. Expand dialysis services through partnerships to increase the availability of dialysis chairs and consumables
4. Intensify efforts to strengthen antimicrobial stewardship
5. Continue mentoring peripheral facilities to improve referral quality and reduce avoidable complications.
6. Strengthen stakeholder engagement to improve on specialist- to- patient ratio
7. Engage stakeholders to support the operationalization of Annex B
8. Strengthen endolaparoscopy training and services
9. Complete and operationalise the Surgical Eye Training Centre
10. Engage key stakeholders to support the completion of the Accident and Emergency expansion project as well as the construction of a new Trauma Centre
11. Build staff capacity in specialist and subspecialist services
12. Strengthening health research output to support evidence-based practice and policy formulation

19.3 CONCLUSION

The year 2024 was characterised by significant improvement amidst the challenges encountered. Through strategic partnerships, proactive leadership and targeted interventions, the institution remained committed and resilient in delivery quality health services. The outlined mitigating strategies and the outlook for the ensuing year will enable the CCTH to sustain gains, improve on performance, address systemic gaps as well as propel the hospital in fulfilling its goals of bridging the gaps in access to specialist services and improving on the quality of health outcomes. With continuous stakeholder commitment and support the hospital is well-positioned to improve health outcomes and deliver on its mandate.