MINISTRY OF HEALTH
REPUBLIC OF GHANA

HEALTH SECTOR ANNUAL PROGRAMME OF WORK

2023 HOLISTIC ASSESSMENT REPORT

MAY 2024

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ACRONYMS AND ABBREVIATIONS

ABFA	Annual Budget Funding Account
AFP	Non-polio Acute Flaccid Paralysis
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal care
ART	Antiretroviral therapy
BCC	Behaviour Change Communication
BMCs	Budget and Management Centres
CAGD	Controller and Accountant General's Department
CAPEX	Capital Expenditure
CDR	Case Detection Rate
CFR	Case Fatality Rate
CHAG	Christian Health Association of Ghana
CHPS	Community-Based Health Planning and Services
CYP	Couple Year Protection
DHIMS 2	District Health Information Management System
DHS	Demographic and Health Survey
EMS	Emergency Medical Services
EPI	Expanded Programme on Immunization
EPRP	Emergency Preparedness and Response Plan
FDA	Food and Drugs Authority
FP/RH	Family Planning and Reproductive Health
GES	Ghana Education Service
GHC	Ghana Cedi
GHS	Ghana Health Service
GoG	Government of Ghana
GSS	Ghana Statistical Service
HIV	Human Immunodeficiency Virus
HeFRA	Health Facilities Regulatory Agency
HSMTDP	Health Sector Medium-Term Development Plan
HSWG	Health Sector Workers Group
IALC	Inter-Agency Leadership Committee
IGF	Internally Generated Fund
iMMR	Institutional Maternal Mortality Ratio
IPEP	Poverty Eradication Programme
KATH	Komfo Anokye Teaching Hospital
KBTH	Korle Bu Teaching Hospital
MHA	Mental Health Authority
MoF	Ministry of Finance

MoH	Ministry of Health
MTEF	Medium Term Expenditure Framework
NACP	National AIDS Control Programme
NBS	National Blood Service
NCD	Non-Communicable Diseases
NHIA	National Health Insurance Authority
NHIF	National Health Insurance Fund
NHIS	National Health Insurance Scheme
OPD	Outpatient Department
PLHIV	People living with Human Immune Virus
PMTCT	Prevention of Mother-to-Child Transmission
PNC	Postnatal Care
POW	Programme of Work
PPME	Policy, Planning, Monitoring and Evaluation
RDTs	Rapid Diagnostic Tests
RMNCAH	Reproductive, Maternal, Newborn, Child, and Adolescent Health
SDGs	Sustainable Development Goals
SSIs	Surgical Site Infections
TB	Tuberculosis
UHC	Universal Health Care
WAHO	West African Health Organisation
WHO	World Health Organization
WIFA	Women in Fertility Age

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EXECUTIVE SUMMARY

The 2023 holistic assessment marks the mid-term performance tracking of the 2022-2025 Health Sector Medium-Term Development Plan (HSMTDP). The health sector plan has three main policy objectives to help speed up implementation of the Ghana UHC Roadmap and progress towards attainment of the SDG 3 targets. Key findings of the assessment are summarized under each policy objective and presented below:

Policy objective one: universal access to a better, efficiently managed high quality primary health system

- Outpatients visit decreased marginally from 34.41 million to 33.39 million (3.0%) between 2022 and 2023. However, the OPD per capita increased from 1.06 to 1.10 over the same period. The Bono region recorded the highest OPD visits per person per year (1.68) whilst the Northern region had the lowest of 0.57.
- Government budget allocation to the sector increased from GHC10.75 billion to GHC15.94 billion (1.5%) between 2022 and 2023. Consequently, per capita spending increased from GHC341.58 (US$40.44[1]) to GHC496.62 (US$35.81[2]).
- The percentage of the population with active NHIS membership increased marginally from 17.2 million (54.5%) to 17.8 million (55.5%) between 2022 and 2023. The Upper West region recorded the highest coverage of 82.1% whilst the Oti region registered the lowest of 41.7%.
- Proportion of revenue used to settle health care provider claims declined from 60% to 55.4%.
- Doctor-to-population density increased from 1.7 to 2.0 doctors per 10,000 population between 2022 and 2023. The Greater Accra, Volta, and Ashanti recorded higher doctor-to-population ratio whilst the North East and Oti regions recorded the lower doctor-to-population density.
- Nurse to population ratio decreased marginally from 1.99 to 1.90 nurses per 1,000 population. Half of the regions recorded higher nurse-to-population density than the national density of 1.90 per 1,000 population. The Ahafo region recorded the highest ratio of 2.84 whilst the North East region recorded the lowest ratio of 1.28 per 1,000 population.

[1] Average exchange rate in 2022 was USD1.00=GHC8.45
[2] Average exchange rate in 2023 USD1=was GHC13.87

Policy objective two: reduce avoidable maternal, adolescent and child deaths and disabilities

- Proportions of pregnant women making at least 4+ antennal care visits; and mothers accessing postnatal care within 48 hours after delivery have assumed an upward trend.
- Proportion of births attended by skilled health personnel; however, decreased from 62.6% to 60.6%. Nonetheless, the proportion of births attended by skilled personnel in the northern part of the country (Upper East, Northern, North East, and Upper West) was higher (greater than 70%) than those in the other regions.
- Institutional maternal deaths increased from 102.6 to 109.3 deaths per 100,000 live births in the year under review, representing 1.2%. However, the more urbanized regions (Greater Accra and Ashanti) recorded higher maternal deaths than the other regions.
- Institutional under-five mortality increased from 9.8 to 10.9 deaths per 1,000 live births. The regions in the northern sector of the country, particularly Northern, North East, Bono, and Upper West recorded higher under-five mortality rates (greater than 11 deaths per 1,000 live births).
- There was a marginal decline in Midwife-to-WIFA population from 3.09 to 2.98 per 1000. Nonetheless, half of the regions particularly those in the northern part of the country recorded improved midwife-to-WIFA ratio.
- Prevalence of stunting (low height for age) among the under-five year group has seen a considerable improvement over the last five years. In the year review, it declined from 0.97 to 0.83%.
- Adolescent pregnancy rate (per 1,000 women) among the 10-19 years declined marginally from 106.6 to 101.1 in the year under review. It was lower among the 10-14 years group than the 15-19 years group.

Policy objective three: increase access to responsive clinical and public health emergency services

- Number of emergency cases responded to by the National Ambulance Service (NAS) decreased from 38,397 to 30,562 (2.4%) in the year under review. The case response time also worsened from 20.27 to 22.33 minutes in the year under review. Nonetheless, the Ahafo region recorded the best emergency case response time of 15:43 whilst the Oti registered the worse emergency case response time of 45:27 minutes.
- Number of beds available for admission in the hospitals increased marginally from 33,249 to 33,450 (0.6%) between 2022 and 2023. This translates into approximately 1 bed per 1,000 population. The Upper West region recorded the

best number of beds per population density (1.2 per 10,000 population) whilst the North East region recorded the worse (0.8 per 10,000 population).

- Percentage of beds occupied by patients decreased from 59.0% to 55% (4 percentage points difference), indicating that a little over 50% of available beds were utilized.
- Average length of stay in emergency wards worsened in the year under review; it increased from 2.3 to 3 days.
- Number of persons accepting to use modern family planning methods increased from 2.7 million to 3.0 million (11.1%) between 2022 and 2023, bringing the family planning acceptor rate to 35.8%. The acceptor rate was highest in the Ahafo region (48.1%) and lowest in the Savannah region (22.3%).
- New malaria infections per 1,000 population declined from 178 to 188 (5.6%) between 2022 and 2023. The Bono region recorded the worse malaria incidence of 310.2 per 1,000 population whilst the Greater Accra region posted the best of 42.4 per 1,000 population.
- The HIV incidence rate (new infections) increased marginally from 0.33% to 0.56% whilst the prevalence rate (new and old infections) decreased slightly from 1.66% to 1.53% in the year under review.
- HIV positive individuals who had their viral dose suppressed improved from 68% to 89%. However, the percentage of those who knew their status declined from 77.5% to 65 in the year under review. The percentage of those who were on treatment also decreased from 80.9% to 69.4%.
- New TB infection per 100,0000 population (incidence rate) increased consistently over the last five years. In the year under review, it went up by 3.8 percentage points difference (i.e. from 52.5% to 56.3%).
- TB detection rate has improved over the last three years (2021-2023) after a consistent decline between 2019 and 2021. It increased from 36.7% to 48.7% (12 percentage points difference) in the year under review. TB treatment success rate also improve marginally by 0.7 percentage points difference (i.e. from 87 to 87.6%) in the year under review.
- The number of blood donation per 1,000 population increased marginally from 5.8 to 5.9 donations per 1,000 population. The Upper East region recorded the highest rate of 8.6 donations per 1,000 population whilst the Bono region posted the lowest of 2.1 donations per 1,000 population.

These findings translate to an overall health sector performance score of -2 on a scale of -3 to +3, indicating a "**Below average**" performance. Clearly, there is a lot of work to be done to accelerate progress towards attainment of UHC by 2030. In addition to the sector-wide supportive monitoring and joint monitoring with development partners, we plan to

have regular Health Sector Workers Group (HSWG) and Inter-Agency Leadership Committee (IALC) meetings to track progress of implementation of the health plan, Aid Memoire, and other ongoing interventions to help achieve set targets and objectives. Therefore, I implore Heads of Agencies and Development Partners to continue to collaborate and double their efforts for improved sector performance in subsequent years.

HON. DR. BERNARD OKOE BOYE
MINISTER FOR HEALTH

1.0 INTRODUCTION

This report presents performance assessment of the health sector for the year 2023 with respect to the implementation of the annual programme of work. It represents the final stage of an intensive bottom-up review process for the Agencies of the Ministry of Health (MoH). The report was prepared by a Holistic Assessment Team, comprised of technical staff from selected Agencies of the MoH. The team assessed performance of the health sector using a set of indicators and a Holistic Assessment Tool, a scientific tool developed by the MoH together with its stakeholders.

This report is organized into five sections. Section one provides a background to the report. Section two discusses performance of the sector by objectives of the 2022-2025 HSMTDP; Section three presents the financial performance of the health sector; Section four provides updates on implementation of the 2023 Aide memoire; and Section five provides progress report on COVID-19 pandemic.

1.2 Performance Review Process

The MoH performance review employs a bottom-up approach to assess performance of the sector. It starts from the districts through to the regions and then to the national level, where strategic policy directives are discussed and reviewed. The overarching aim of the performance assessment is to measure and report on progress of the health sector using agreed set of core indicators and standardized tools. The review process forms part of the accountability agenda, and it starts from the Budget Management Centres (BMCs) through to the national level. The detailed process is elaborated below:

BMC performance reviews

This is the first step of the review process which is undertaken between January and February. At this stage, all Agencies of the Ministry ensure that all BMCs under their supervision, review their performance against targets set for the year using routine data generated from the health delivery system, as well as relevant research studies. The BMC reviews provide input into a district review and subsequent regional reviews.

Inter-Agency and Partners' reviews

The Inter-agency and partners review is organized by the MoH for Agencies and Development Partners to share their experiences and assess performance of the sector. Prior to this meeting, all Agencies hold technical review meetings as part of preparations for the meeting. The inter- agency and partners review meeting provides opportunity for Heads of Agencies to answer for their stewardship. It also provides opportunity for Development Partners to review their financial and technical contributions to the health sector and present their reports to the Minister of Health.

Holistic assessment of the health sector

At the end of the year under review, a holistic assessment of the sector is carried out by either key personnel of the Ministry or an independent assessor who will provide an independent opinion on the extent of achievement of the health sector programmes of work. Several tools are used to conduct this performance assessment of the sector. The algorithm for scoring the various indicators under each of the four policy objectives is shown in the Appendix.

The annual operational plan or Programme of Work (POW), derived from the Health Sector Medium-Term Development Plan (HSMTDP) forms the basis for this assessment. All these review processes and assessment culminate in a Health Summit, where stakeholders review and validate the assessment report. Recommendations for improvement are then made for consideration in subsequent years. Thus, the holistic assessment report is finalized after the Summit when stakeholders' inputs are considered to fine-tune it.

2.0 PERFORMANCE OF THE HEALTH SECTOR BY OBJECTIVES

2.1 Overall sector performance

In the year under review, a total of 51 out of 60 selected indicators from the 2022-2025 Health Sector Medium-Term Development Plan were used to assess the performance of the sector in relation to the 2023 annual programme of work. There were no readily available data for the nine indicators that were not used for the assessment. The overall sector score was -2 on a scale of -3 to +3, indicating a "**Below average**" performance.

2.2 Policy objective one: Universal access to a better, efficiently managed high quality primary health system

This objective seeks to measure access to healthcare services. It considered the extent of health services coverage and utilization through availability of medicines, availability of critical human resource and healthcare facilities, and population coverage of the National Health Insurance Scheme. In all, fourteen (14) out of eighteen (18) indicators were tracked to assess the performance of this objective. The remaining four (4) were survey indicators, which data was not available for analysis. This policy objective recorded a score of -2 overall on a scale of -3 to +3, representing a **"Below average"** performance (Table 1). Six out of the 18 indicators (33.3%) had positive scores.

Table 1 Performance score for policy objective one

Indicator	Performance score	Interpretation	Colour code
Proportion of encounters with antibiotics prescribed	3	Excellent	
Average number of medicines per prescription	3	Excellent	
Nurse to population ratio	3	Excellent	
Percentage of samples analysed	3	Excellent	
Percentage of the population with active NHIS coverage	0	Fairly Good	
Percentage of facilities in good standing with HeFRA	0	Fairly Good	
Nurse Population equity index (Geographical)	-1	Average	
Government health expenditure as % of total government expenditure	-2	Below Average	
Doctor to population ratio	-2	Below Average	
Doctor population equity index (Geographical)	-2	Below Average	
OPD per capita attendance	-2	Below Average	

Indicator	Performance score	Interpretation	Colour code
Proportion of facilities offering Traditional & Alternative Medicine	-2	Below Average	
Percentage of licensing inspections conducted	-2	Below Average	
Percentage of market surveillance outings conducted	-2	Below Average	
Out-of-pocket expenditure as % of current health expenditure (CHE)	-3	Poor	
Proportion of population with large household expenditures on health as a share of total household expenditure or income (Catastrophic Health Expenditure)	-3	Poor	
Average percentage of clients satisfied with OPD/IPD services	-3	Poor	
Availability of essential medicines (Tracer Drug Availability)	-3	Poor	
Overall score	**-2**	**Below Average**	

Trend analysis of key indicators under policy objective one

Outpatient department utilization (OPD) per capita

Several factors account for outpatient's service utilisation in Ghana. Predominantly among them on the supply side are the establishment of the National Health Insurance Scheme (NHIS), implementation of Community-based Health Planning and Services (CHPS), availability of human resource, and investment in healthcare infrastructure.

Interestingly, outpatient visit to health facilities, mainly the public health facilities did not see improvement in the year under review despite the ease of the COVID-19 restrictions. A total number of 33.4 million visits were made to the various health care facilities in the country (Table 2). The females made more visits (64.4%) to the facilities than the males. As expected, more than 80% of the facility visits occurred at the primary health care level (community level facilities to district hospitals). About 45% of the visits happened at the district hospitals. Visits by managing authority (or ownership of the facility) showed that close to 60% of them were made to the government health care facilities.

Table 2 Number of OPD visits by sex, facility type and managing authority, 2023

Sex	**Number**	**% Share**
Male	12,251,205	35.62
Female	22,147,530	64.38
Facility type		
CHPS	3,711,926	10.79
Health Centre	5903249	17.16
Polyclinic	4,308,179	12.52
District Hospital*	26,383,845	76.70
Regional Hospital	1,335,098	3.88
Teaching Hospital	901,267	2.62
Others	718,593	2.09
Managing Authority		
CHAG	6,122,227	17.80
Government	19,594,597	56.96
Mines	308,446	0.90
Other Faith-Based	184,223	0.54
Private	6,267,103	18.22
Quasi-Government	1,922,139	5.59
Total	**34,398,735**	**100**

*Includes other designated private or faith-based district hospitals

The trend analysis revealed that the number of outpatient visits decreased marginally from 34.41 million to 33.39 million (3.0%) between 2022 and 2023. However, the number of outpatient visits per person per year increased from 1.06 in 2022 to 1.10 in 2023 as shown in Figure 1. A trend analysis over the last five years (2019-2023) also showed a marginal improvement in this indicator; it increased from 1.08 in 2019 to 1.10 in 2023.

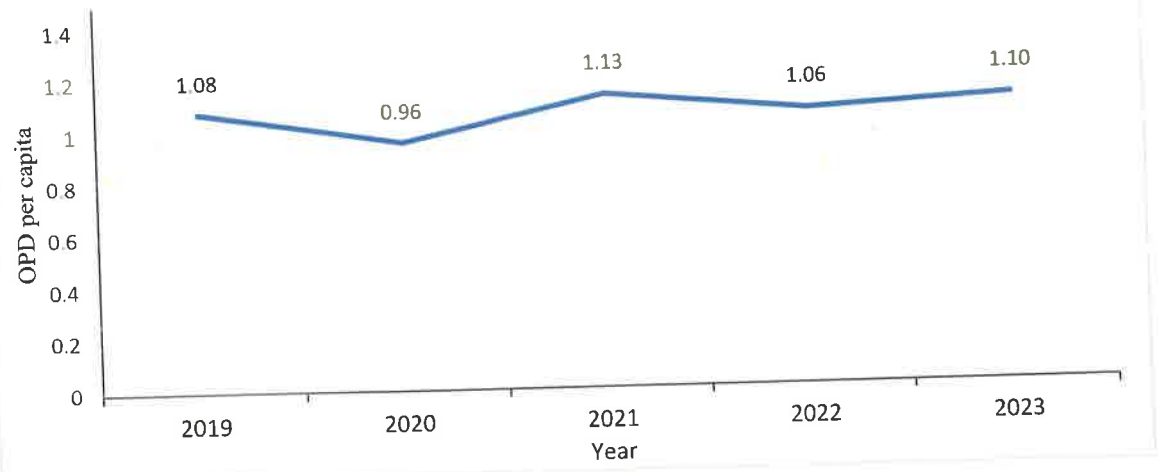

Figure 1 Trend in OPD per capita, 2019-2023

Nonetheless, regional decomposition of OPD per capita for the year under review showed high variation among the regions. Almost half of the regions (7 out of 16) recorded higher OPD visits per person per year than the national average of 1.10. The Bono region recorded the highest OPD visits per person per year (1.68) whilst the Northern region had the lowest of 0.57 (Table 3). This indicates that the OPD attendance per person per year in the Bono region was almost three times (2.9) higher than that in the Northern region. This variation could be due to more access to healthcare infrastructure particularly lower-level healthcare facilities, personnel, and higher NHIS coverage in the Bono region, compared to the Northern region. The presence of high-risk employment activities including mining in the Bono, Bono East, Ahafo and Eastern regions could also account for the relatively high per person per year visits in these regions. This phenomenon could also explain the high cases of malaria and respiratory tract infections reported to the OPD of healthcare facilities in the year under review.

Table 3 OPD per capita by regions, 2019 -2023

Region	2019	2020	2021	2022	2023
Ahafo	1.55	1.34	1.57	1.44	1.44
Ashanti	1.05	0.96	1.19	1.07	0.96
Bono	1.85	1.65	1.74	1.67	1.68
Bono East	1.47	1.25	1.36	1.37	1.47
Central	1.16	0.96	1.03	0.94	0.97
Eastern	1.16	1.00	1.51	1.26	1.35

Greater Accra	0.86	0.88	1.02	0.95	1.09
North East	0.76	0.73	0.76	0.76	0.73
Northern	0.64	0.60	0.55	0.55	0.57
Oti	0.73	0.65	0.76	0.74	0.78
Savannah	0.72	0.64	0.63	0.65	0.69
Upper East	1.48	1.19	1.34	1.17	1.13
Upper West	1.24	1.05	1.08	0.99	1.01
Volta	1.02	0.84	1.12	1.07	1.18
Western	1.18	1.01	1.21	1.13	1.16
Western North	1.14	1.03	1.13	1.97	0.95

Analysis of the health services delivery data also showed that Malaria remained the number one cause of health facility visit in the country (Table 4). It constituted more than 20% of all diseases diagnosed at the OPD each year over the last five years (2019-2023). This suggests that the intenventions to eliminate malaria, including rollout of the malaria vaccine in the country, need to be scaled up quickly to achieve the desired results. There is also the need for the implementing agencies to scale up implementation of the network of practice to shift facility visist more to the the lower-level facilities.

Table 4 Trend in top 10 OPD cause of morbidity, 2019-2023

No	2019	%	2020	%	2021	%	2022	%	2023	%
1	Malaria	23.8	Malaria	20.3	Malaria	21.0	Malaria	20.3	Malaria	21.45
2	Upper Respiratory Tract Infections	13.5	Upper Respiratory Tract Infections	10.1	Upper Respiratory Tract Infections	12.2	Upper Respiratory Tract Infections	11.3	Upper Respiratory Tract Infections	11.08
3	Rheumatism / Other Joint Pains / Arthritis	6.2	Rheumatism / Other Joint Pains / Arthritis	6.6	Rheumatism / Other Joint Pains / Arthritis	6.1	Rheumatism / Other Joint Pains / Arthritis	5.6	Rheumatism / Other Joint Pains / Arthritis	5.44
4	Diarrhoea Diseases	5	Diarrhoea Diseases	4.9	Diarrhoea Diseases	4.7	Diarrhoea Diseases	4.5	Diarrhoea Diseases	4.38
5	Anaemia	4.2	Anaemia	4.4	Anaemia	4.6	Anaemia	4.4	Anaemia	4.31
6	Skin Diseases	3.8	Acute Urinary Tract Infection	3.7	Acute Urinary Tract Infection	3.8	Acute Urinary Tract Infection	3.8	Acute Urinary Tract Infection	4.07
7	Acute Urinary Tract Infection	3.3	Skin Diseases	3.6	Skin Diseases	3.4	Skin Diseases	3.4	Skin Diseases	3.33

8	Intestinal Worms	2.9	Intestinal Worms	3.2	Intestinal Worms	3.1	Intestinal Worms	3.3	Intestinal Worms	3.19
9	Hypertension	2.2	Hypertension	2.3	Typhoid Fever	2.1	Typhoid Fever	2.4	Typhoid Fever	2.75
10	Acute Eye Infection	1.8	Typhoid Fever	2.1	Hypertension	2.1	Hypertension	2.3	Pneumonia	2.03
11	All other diseases	31.7	All other diseases	38.8	All other diseases	37.1	All Other Diseases	38.9	All Other Diseases	37.96
Total				100		100		100		100.0

Government budget allocation to the health sector

Government of Ghana is the main financier of health services in the country. It is therefore important that there is increased and consistent allocation of the share of general government expenditure to the health sector to improve the lives and wellbeing of the population towards attainment of UHC. In the year under review, government approved a budget of GHC15.94 billion for the Ministry; however, GHC13.86 billion (87%) was received.

There has been improvement in government allocation to the sector in the past especially in the pre-COVID-19 era, from GHC4.42 billion to 6.59 billion between 2018 and 2020. The post-pandemic period, however, has seen a decline in government allocation to the sector due to economic constraints and other exogenous factors. For instance, there has been a significant drop in allocation to the sector in the last three years (2021-2023). In the year under review, there was a marginal decrease in budget allocation by 0.4 percentage point difference, as shown in Figure 2.

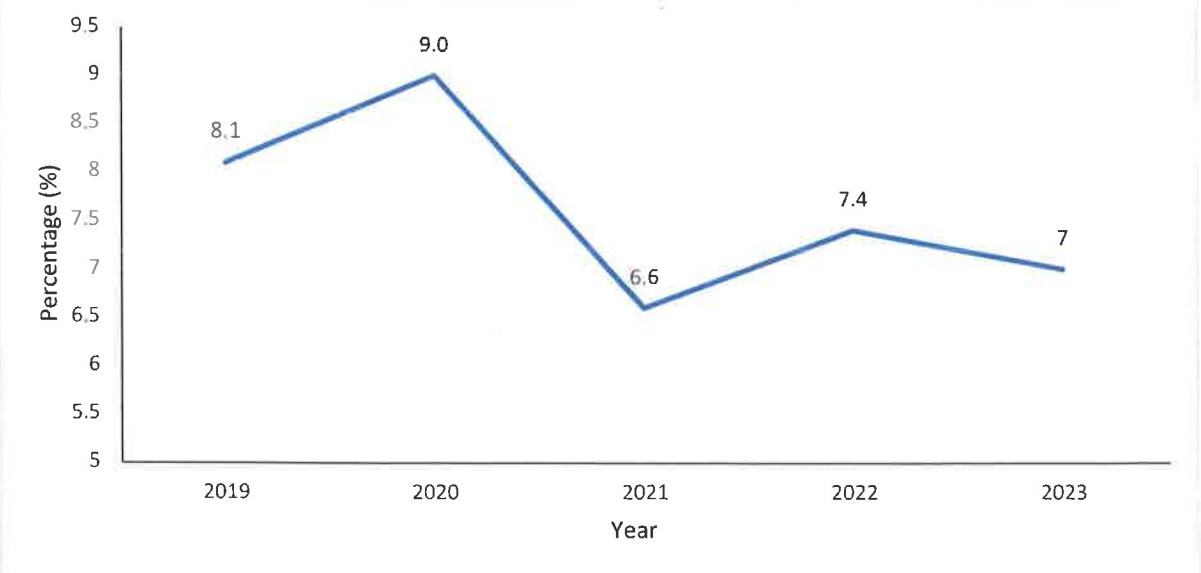

Figure 2 Trend of GoG allocation to the health sector, 2019-2023

Total health budget per capita

The total approved budget of GHC15.9 billion for the Ministry in 2023 translates to an average per capita health budget of GHC496.62 ($35.81). This is an increase of GHC155.05 (1.5%) from the base year (2022) health budget per person per year of GHC341.58 ($47.38), as shown in Figure 3. Over the last five years (2019-2023), health spending per person per year had increased by 2.4%. Although health spending per person increased in the year under assessment, it is far less than the reported sub-Saharan African average of $73.79[3] in 2020 and an African average of $83.00 in the same year. This indicates that government ought to spend more and in an efficient manner to guarantee attainment of the related SDGs by 2030.

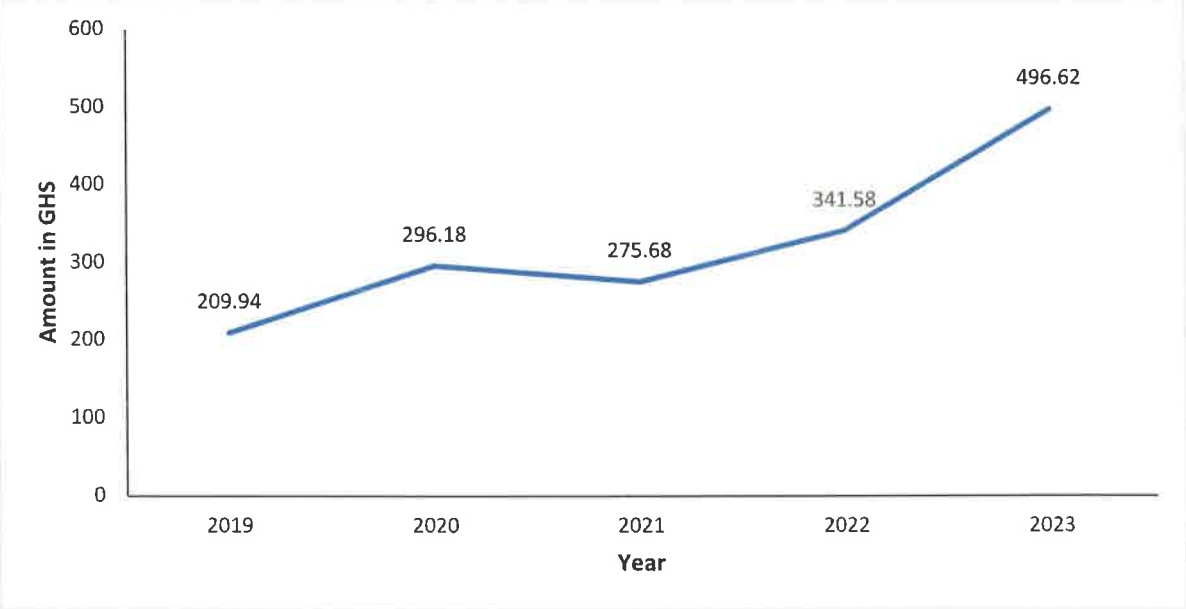

Figure 3 Trend in health expenditure per capita, 2019-2023

National Health Insurance Scheme (NHIS) population coverage

The NHIS is the main purchaser of health services in the country. Reports and anecdotal evidence showed that the scheme has provided financial access to health services to majority of the population; improved financial situation of healthcare facilities; and contributed to expansion of health infrastructure in the country.

Over the last five years, the number of people enrolling in the NHIS has seen a consistent improvement (Figure 4). The proportion of the population with active NHIS membership increased from 12.3 million (40.6%) to 17.8 million (55.5%) between 2019 and 2023. This

[3] Word bank Group (2023). https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD?locations=ZG

remarkable increase over the last five years could be attributed to the introduction of innovations such as the mobile renewal system in 2018, and its modification and re-introduction as "MyNHIS" in 2022. This mobile phone application allows non-members and members of the scheme to enrol as new members and renew their membership at the comfort of their homes. The system also allows entire family or groups of persons to enrol in the scheme.

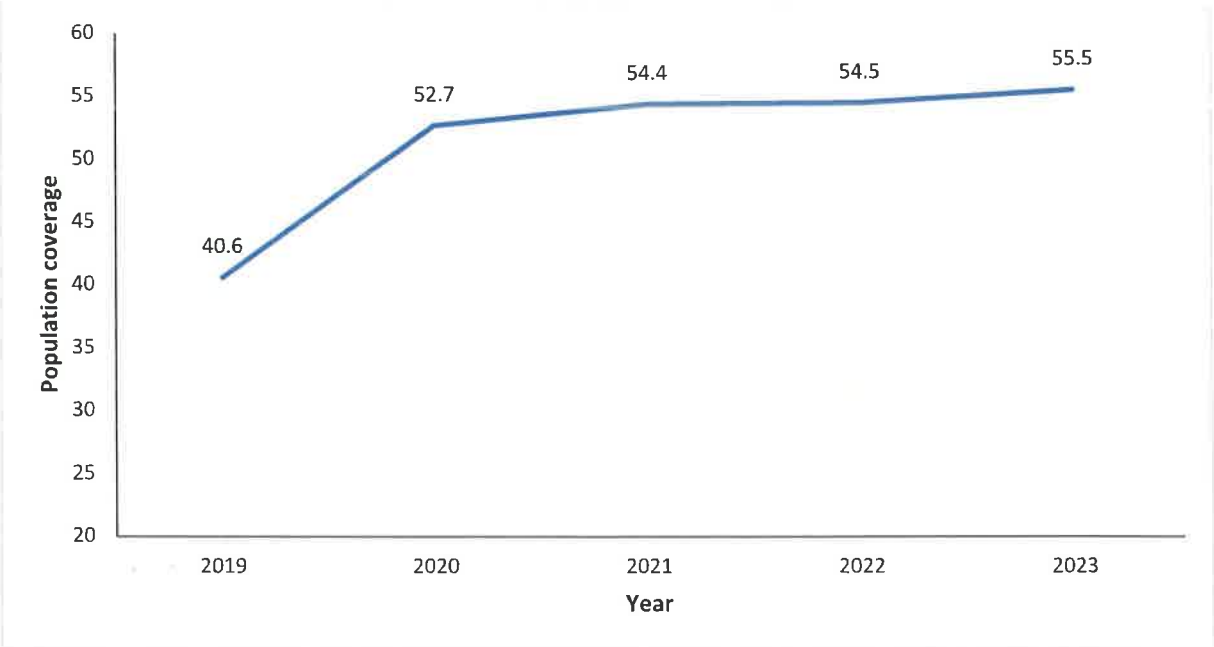

Figure 4 Trend of NHIS population coverage, 2019-2023

Analysis of the membership data by region showed that the Upper West and Bono regions recorded high population coverage of over 80% whilst the Oti region posted the low coverage of 41.7%, followed by the Greater Accra, 45.7%. Half of the regions recorded population coverages higher than the national coverage of 55.5% (Table 5). In addition, seven out of the sixteen regions (Western, Western North, Upper East, Oti, North East, Central, and Bono East), recorded declines in population coverage in the year under review.

The high population coverages in the Upper West, Bono, Ahafo and Bono East regions could be attributed to increased healthcare access to services; well-structured CHPS facilities; high number of indigents; presence of major market centres; and presence of NGOs, which encourage or support enrolment in the NHIS. However, increasing unauthorized co-payment at healthcare facilities particularly those in the urban centres contributed to the low NHIS coverage in the Greater Accra region. The revised population figures from the last census

(2020) could also account for low coverages in the urban regions. Regarding the Oti region, limited access to health services (personnel, infrastructure, long distance to healthcare facilities due many island communities) accounted for the low population coverage in the region. The relatively low coverages in the Central region could be due to poverty.

Table 5 NHIS population coverage, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	44.75	64.86	72.7	74.4	75.3
Ashanti	38.74	49.01	54.1	53.7	54.8
Bono	58.82	83.21	80.5	80.8	80.0
Bono East	50.54	70.01	68.5	71.0	70.2
Central	35.03	45.54	44.2	46.1	45.7
Eastern	41.74	56.03	63.2	61.8	62.1
Greater Accra	34.76	42.35	42.7	40.6	45.9
North East	42.72	59.19	54	55.3	54.4
Northern	38.06	48.77	40.7	45.5	46.4
Oti	28.32	35.44	38.8	41.9	41.7
Savannah	41	50.03	50.4	45.2	48.6
Upper East	57.93	74.88	73.4	70.5	63.9
Upper West	57.94	78.34	79.7	80.8	82.1
Volta	41.75	52.33	64.1	62.7	68.8
Western	35.25	44.56	48.5	49.8	49.1
Western North	40.94	56.31	57.4	58.9	56.2

Disaggregation of active members by sex showed that the females are enrolling in the scheme more than the males (Figure 5). Enrolment of the females in the scheme has remained close to 60% over the last five years (2019-2023). This finding also explains the higher outpatient per capita health services utilization for the females over the years. It also supports the long-standing empirical evidence that females have more healthcare needs than the males; therefore, they tend to seek financial risk protection against their healthcare cost more than their male counterpart.

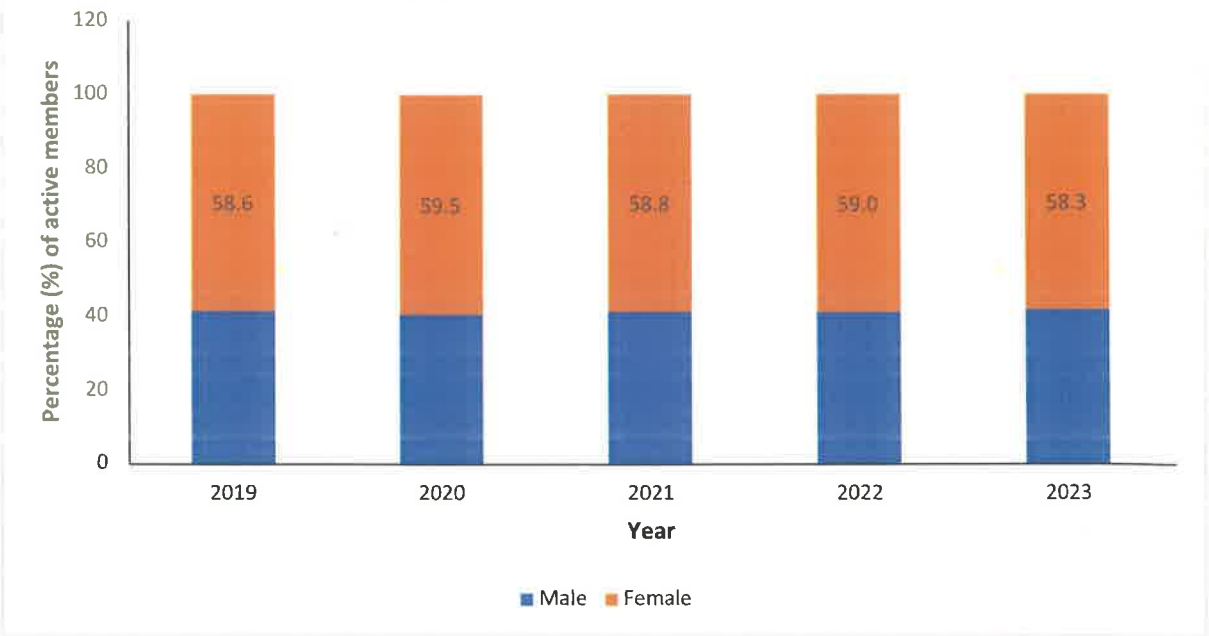

Figure 5 Proportion of active members by sex, 2019-2023

Further disaggregation of the enrolment data by member category showed that persons under the age of 18 years remained the largest category of active members (39.0%) in the scheme, followed by the informal sector workers (32.0%), who pay direct premiums (Figure 6). Trend analysis over the last five years (2019-2023) revealed that the proportion of indigents increased from 5.6% to 16.0%. However, there was a decline in membership of the other categories over the same period. Enrolment of the aged (70 years or older) and SSNIT pensioners have proportionally remained at less than 5% over the same period, reflecting their share of the total population in the country.

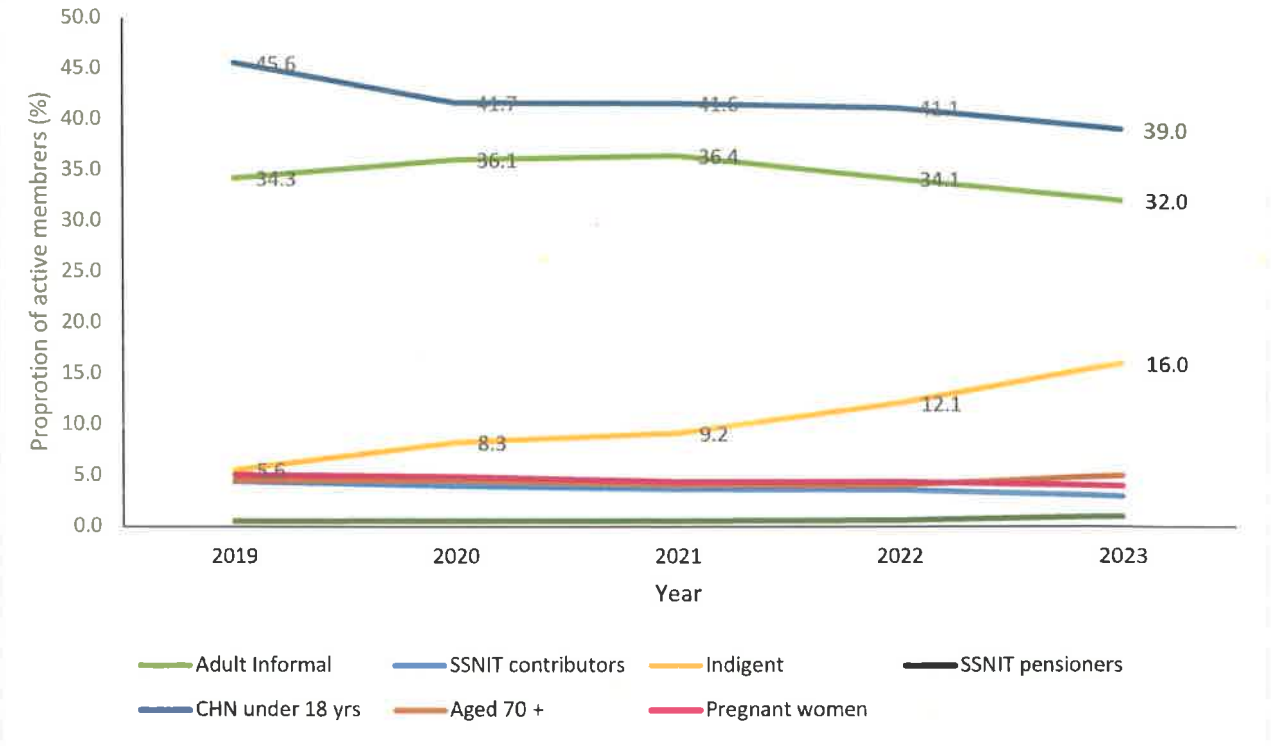

Figure 6 Trends in NHIS active members by category, 2019-2023

The reasons for the relatively high enrolment of persons under the age of 18 years in the scheme are that they are exempted from paying premium; those in schools under the school feeding programme are enrolled free of charge; they are decoupled from their parents; they are more vulnerable and susceptible to diseases; and active NHIS card is a prerequisite to registration in secondary schools for all first-year students. The decline in enrolment of this group in the year under review; however, could be that some of them might have moved to the indigent category. Concerning improvement in indigent enrolment in the scheme, it could be attributed to the collaborative effort with the Ministry of Gender and Social Protection through the Social Welfare Department to identify these groups in the community for enrolment in the Scheme. In addition, the World Bank support through the primary healthcare investment project (Performance for Results) is helping the NHIA to improve enrolment of this group in the Scheme.

National Health Insurance Authority (NHIA) receivable funds

In the year under review, GHC4.27 billion was approved for the NHIA from the Ministry of Finance (MoF), as shown in Figure 7. The Authority, however, received a total amount of GHC3.79 billion. Compared to the previous year, the total approved budget increased by 58.9%. There has also been general improvement in the approved budget over the last five

years (2019-2023). Releases from MoH to the NHIA also showed a similar pattern over the last five years (2018-2022). It almost tripled in the year under review compared to the previous year.

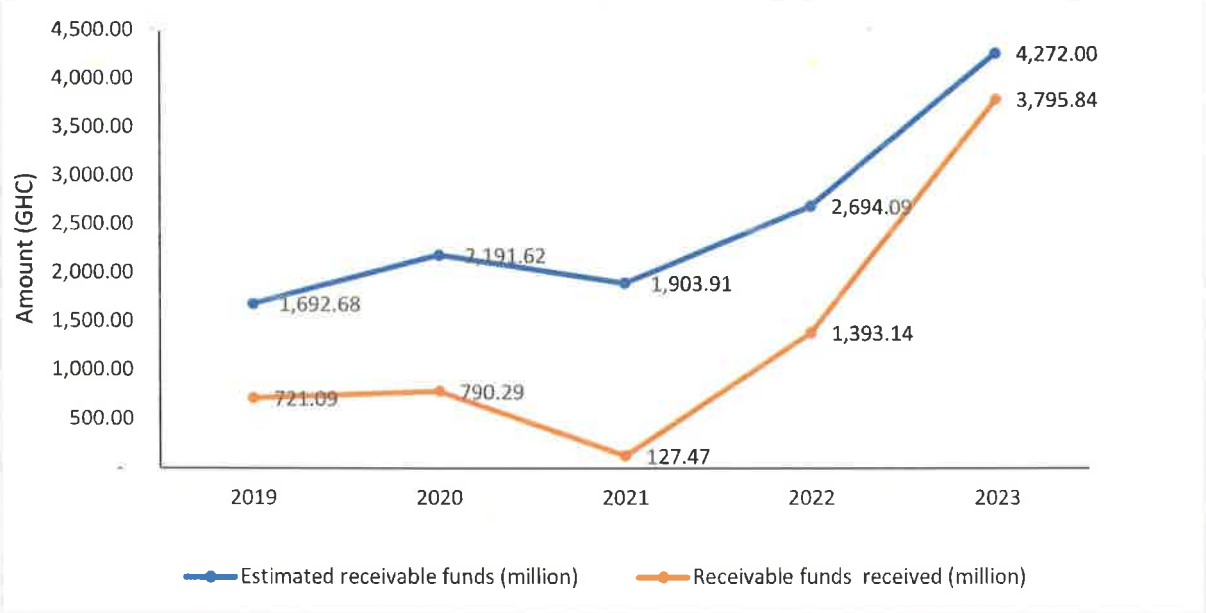

Figure 7 Trends in estimated funds and receivable funds, 2019-2023

Claims expenditure

There has been a consistent decline in the proportion of revenues allocated to purchase healthcare services for members of the scheme over the last five years (Figure 8). In the year under review, GHC1.95 billion, representing 55.4% of total NHIA expenditure (GHC3.52 billion) was used to pay for claims up to July 2023 for the higher-tier facilties (Polyclinics, hospitals, etc) and September 2023 for the lower-tier facilties (Maternity homes, health centres and CHPS). The analysis further shows that 49.5% of the total medical claims' expenditure was used to settle public healthcare providers whilst 30.8% was paid to the private providers.

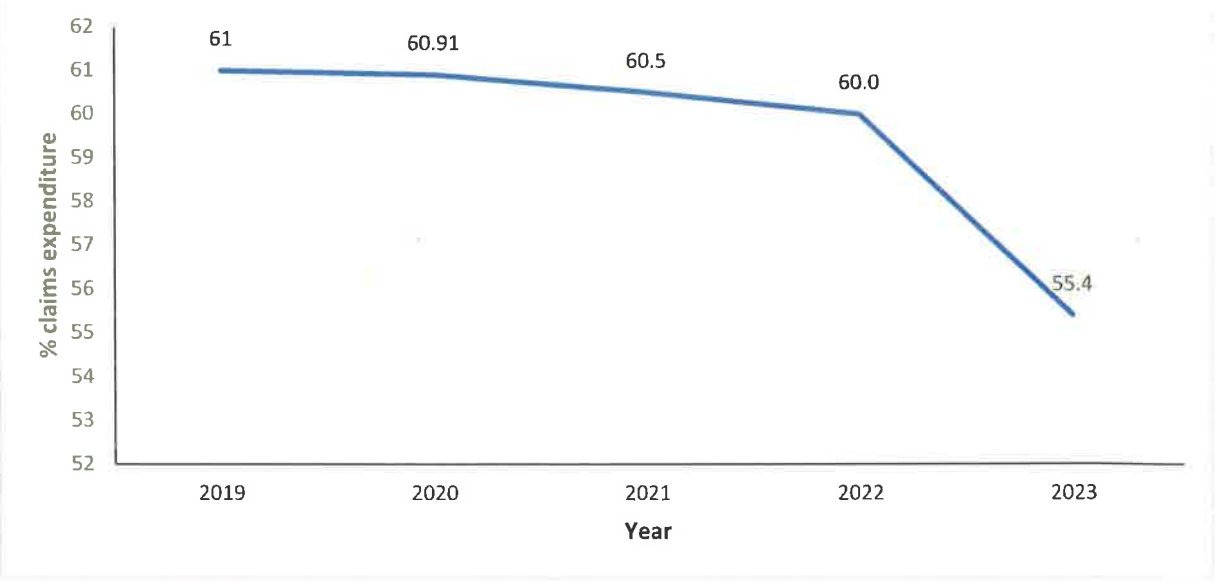

Figure 8 Trend in share of claims expenditure, 2019-2023

Average time of claims settlement

The NHIS regulation provides for NHIA to pay claims to healthcare service providers within 12 weeks (or three months) upon receipt of the claims. In the year under assessment, there was a marginal improvement in the average claims settlement time; it reduced by one month (Figure 9). However, performance of this indicator has not been fully met over some years now. Despite the seemingly lengthy period for provider claims reimbursement, there has been steady improvement over the last five years (2019-2023). For example, due to the ongoing implementation of the primary health care investment programme (Network of Practice) by the Ministry with support from the World Bank, it took on average, one month to pay claims from the lower-tier facilities (maternity homes, health centres, and CHPS) and 3 months from the higher-tier facilities in the year under review.

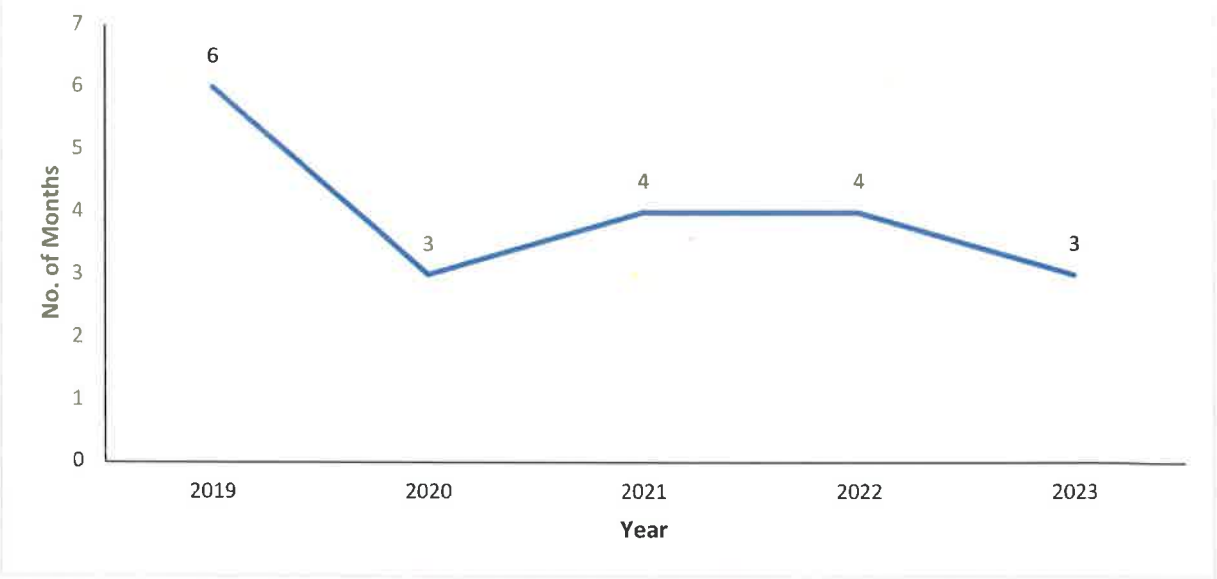

Figure 9 Trend in NHIS claims reimbursement time, 2019-2023

Human resource development for health

In the later part of 2021, the Ministry initiated steps to implement a recommendation that was raised at that same year's Health Summit to attract and retain health professionals in the rural areas for improved distribution and access to services. In that regard, a draft incentive package document for health professionals was developed and is being implemented by the Ghana Health Service. For instance, the non-financial component of the package including reduced number of years for promotions, study leaves, etc for those who accept postings to remote and hard-to-reach areas are currently being implemented. Several professionals have benefited from these incentives.

In the year under assessment, the number of doctors on the GoG payroll increased from 5,404 to 6,432 (20%) between 2022 and 2023. At the regional level, the number of doctors in the Greater Accra region had the highest increase from 2,344 to 2,777 over the same period whilst the Northern region recorded additional two doctors, from 298 to 300.

The density of health professionals (doctors, pharmacists, nurses, and midwives) relative to the population has seen remarkable improvement over the years. However, there is a surge in migration of these professionals particularly the nurses to high-income countries in recent years, which culminated in a decision by the Ministry to regulate the sale of clearance forms to control the situation.

Doctor to population ratio

The number of doctors serving a population in a defined geographic area has improved consistently over the last four years due to recent surge in recruitment of these professionals and implementation of the non-financial component of the incentive package. The number of doctors per 1,000 population increased to 0.20 in the year under review, compared to the previous year, which was 0.17 (Figure 10). The doctor to population density had fallen short of the WHO standard of 1 doctor to 1,000 population over the years, indicating the policy makers need to produce adequate number of doctors and ensure that they stay in the country to serve, as the country gets close to the SDG deadline. It is, however, same as the Sub-Saharan Africa average, according to the recent WHO global health workforce data.

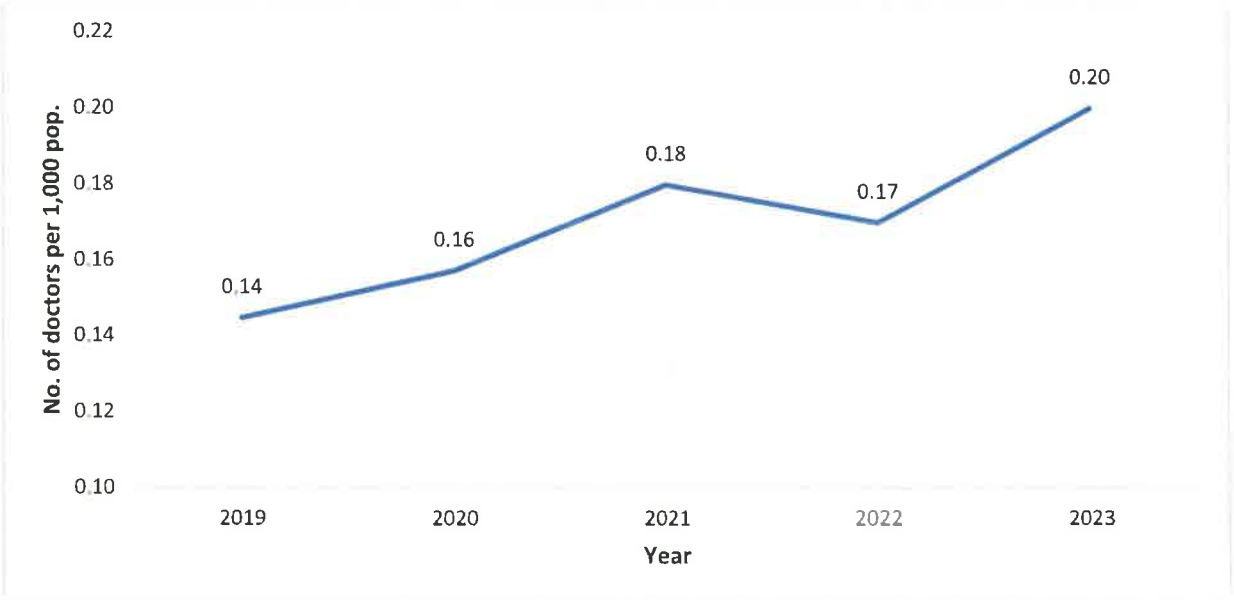

Figure 10 Trend in number of doctors per 1000 population, 2019-2023

Further analysis of the data showed that an inequity in the distribution of medical officers persist across the regions. The two most populous regions (Greater Accra and Ashanti) had more doctors whilst the newly created regions with limited health infrastructure (North East, Savannah, Oti, Western North) had less doctors serving their populations (Table 6). The Greater Accra region recorded the best doctor to population density of 0.49 per 1,000 (or 4.9 per 10,000) population whilst the North East had the worst of 0.03 per 1,000 (0.3 per 10,000) population. Generally, the doctors prefer to stay and work in the regions located in the middle and southern part of the country where the economic and social amenities are comparatively better than those in the northern part of the country.

Table 6 Number of doctors per 1,000 population by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	N/A	N/A	0.09	0.09	0.11
Ashanti	0.16	0.17	0.18	0.16	0.21
Bono	0.24[a]	0.25[a]	0.18	0.15	0.15
Bono East	N/A	N/A	0.10	0.09	0.10
Central	0.14	0.16	0.16	0.14	0.17
Eastern	0.09	0.09	0.13	0.11	0.12
Greater Accra	0.35	0.38	0.39	0.42	0.49
North East	N/A	N/A	0.02	0.02	0.03
Northern	0.16[b]	0.18[b]	0.15	0.13	0.16
Oti	N/A	N/A	0.05	0.04	0.05
Savannah	N/A	N/A	0.02	0.03	0.05
Upper East	0.04	0.05	0.06	0.05	0.06
Upper West	0.07	0.07	0.10	0.10	0.09
Volta	0.13[c]	0.15[c]	0.17	0.17	0.21
Western	0.08[d]	0.08[d]	0.10	0.09	0.09
Western North	N/A	N/A	0.04	0.04	0.06

Source: Controller and Accountant General's Department Payroll data, December 2019- 2023
Note
[a] Doctor-to-population density (per 1,000) for Ahafo, Bono and Bono East regions
[b] Doctor-to-population density (per 1,000) for Northern, Savannah and North East regions
[c] Doctor-to-population density (per 1,000) Oti and Volta, 2018-2021 regions
[d] Doctor-to-population density (per 1,000) Western and Western North regions
NA: Not applicable

Nurse-to-population ratio

There has been a considerable increase in the production of nurses over the last decade, resulting in an export of these professionals to Barbados based on bilateral arrangement between the two countries. Other countries, including the UK and Netherlands have also expressed interest in this bilateral arrangement of export of health professionals in the country to support healthcare delivery in their settings, but this is yet to be finalised.

In the year under review, the number of professional nurses including community health nurses on the GoG payroll decreased from 62,643 in 2022 to 61,228 in 2022, representing 2.3%. Consequently, the nurse to population density decreased from 1.99 to 1.90 per 1,000 over the same period although marginal, compared to the 2021-2022 increase (Figure 11). The main reason for the disengagement from the GoG payroll was due to vacation of posts.

The Nursing and Midwifery Council reported a total of 8,280 foreign verifications processed as of December 2023. This indicates that more nurses are interested in migrating to middle and high-income countries for job opportunities. Nonetheless, there has been a consistent improvement in the nurses to population density over the last 5-years, 2019-2023. This achievement is higher than the WHO recommended standard of 1 nurse per 1,000 although the issue of inequitable distribution remains.

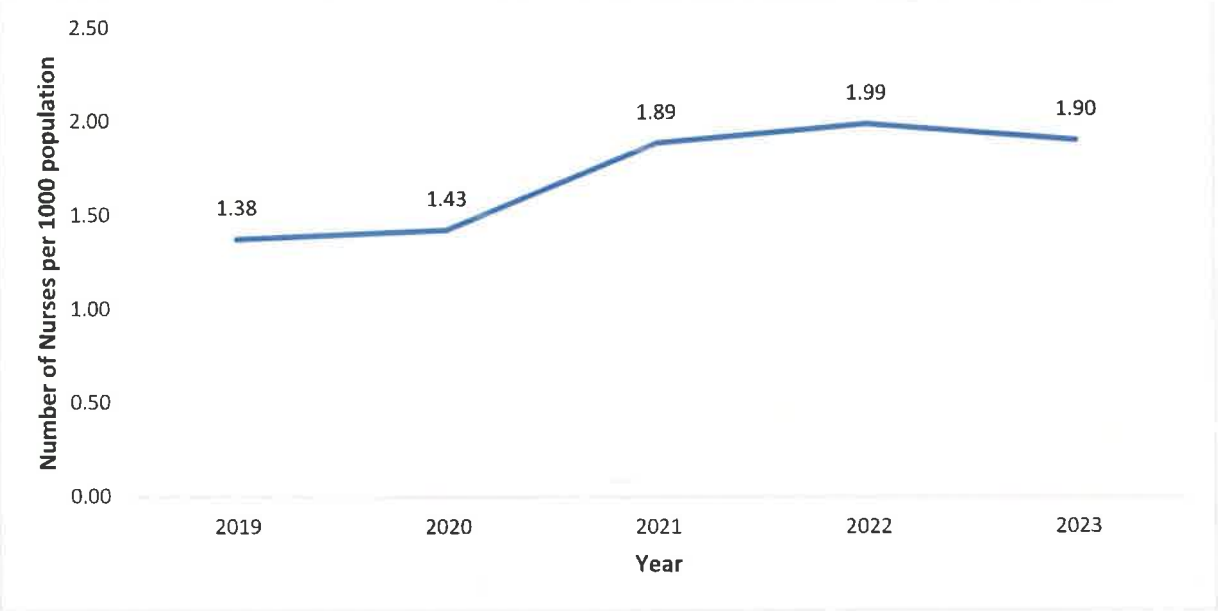

Figure 11 Trend in number of nurses per 1000 population, 2019-2023

At the regional level, there were high variations in the density of nurses (Table 7). However, unlike the distribution of doctors, there are more nurses concentrated in the less urbanised or developed regions due to high number of lower-level healthcare facilities (health centres, clinics, CHPS, etc) in those regions. The nurse-to-population density was the highest in the Ahafo region and lowest in North East for three consecutive years (2021-2023). The Ahafo region recorded the best nurse to population density of 2.84 per 1,000 population whilst North East region had the worst nurse to population density of 1.24 to 1,000 population due to limited healthcare facilities in the latter region (Table 7). In all, half of the regions, recorded higher nurse to population density than the national density of 1.90 per 1,000 population.

Table 7 Trends in number of nurses per 1000 population by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	N/A	N/A	2.25	2.93	2.84
Ashanti	1.26	1.31	1.81	1.93	1.79
Bono	3.31[a]	3.40[a]	2.58	2.70	2.54
Bono East	N/A	N/A	1.66	2.04	2.06
Central	1.63	1.65	1.82	1.83	1.73
Eastern	1.29	1.35	2.03	2.12	2.01
Greater Accra	1.48	1.56	1.75	1.84	1.75
North East	N/A	N/A	1.02	1.18	1.24
Northern	1.89[b]	1.97[b]	1.78	1.89	1.85
Oti	N/A	N/A	2.53	1.89	1.83
Savannah	N/A	N/A	1.37	1.46	1.58
Upper East	2.18	2.12	2.54	2.52	2.43
Upper West	1.95	2.03	2.27	2.31	2.30
Volta	1.91[c]	2.12[c]	2.01	2.34	2.23
Western	1.53[d]	1.51[d]	1.70	1.69	1.64
Western North	N/A	N/A	1.75	2.07	2.00

Note

[a] Nurse-to-population density (per 1,000) for Ahafo, Bono and Bono East regions

[b] Nurse -to-population density (per 1,000) for Northern, Savannah and North East regions

[c] Nurse-to-population density (per 1,000) Oti and Volta regions

[d] Nurse -to-population density (per 1,000) Western and Western North regions

NA: Not applicable

Regional and district public hospitals offering medicine practice

In 2011, the Ministry started integrating traditional and alternative medicines in the healthcare delivery system to improve access to medicines. In this same year, 19 herbal units were established in the various health facilities across the country to offer traditional and alternative medicines services to the population. During the year under review, the Ministry developed basic procedures for assessing the efficacy and safety of herbal medicinal products and reviewed and published the second edition of the Herbal Medicine List. In addition, the number of traditional medical herbalist working at the herbal units of the District and Regional hospitals increased from 45 in 2022 to 120 in 2023.

Trend over the last five years (2019-2023) showed that the number of regional and district public hospitals offering traditional and alternative medicine practice had increased from 35 to 55, representing 57%. In percentage terms, the coverage of traditional and alternative medicines increased from 25.8% to 32% between 2019 and 2021 and stagnated at 30.7%

between 2022 and 2023, as shown in Figure 12. The stagnation in 2022 and 2023 is that no financial clearance was received from the Ministry of Finance to enable the MoH to recruit staff and open new units in the hospitals.

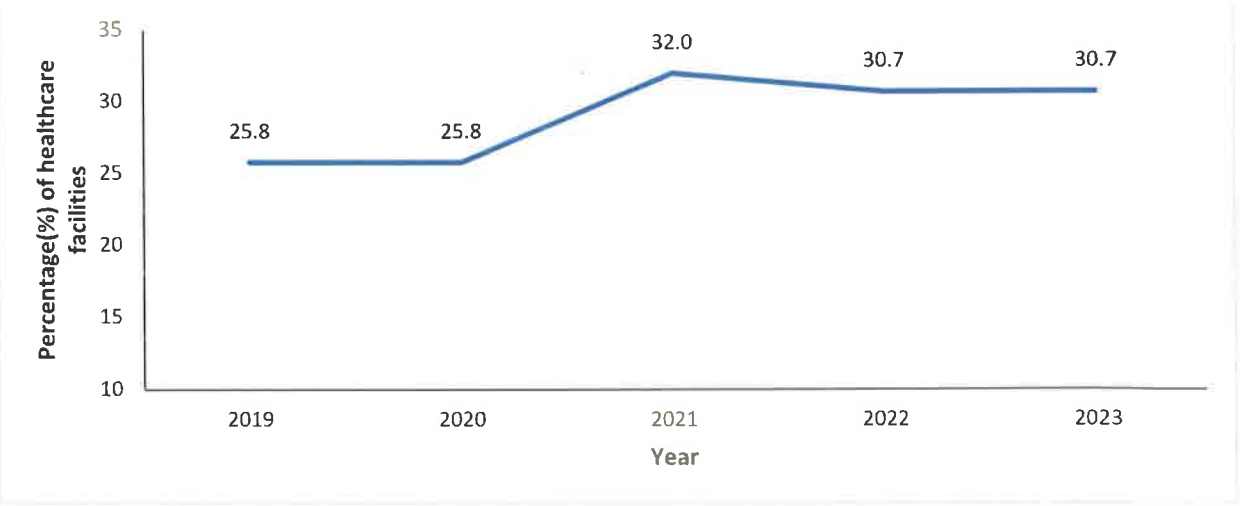

Figure 12 Trend in proportion of healthcare facilities offering traditional medicines, 2019-2023

Quality testing of food and drug products

In 2023, the number of medical products sampled and analysed by the FDA increased by 2 percentage points difference from 91% to 93% between 2022 and 2023. The FDA commenced Foreign Good Manufacturing Practices (GMP) in 2022. Out of the 58 licencing inspections conducted in 2022, 38 were foreign GMP with three facilities licenced. Products of these unlicensed foreign facilities were not allowed entry into the Country.

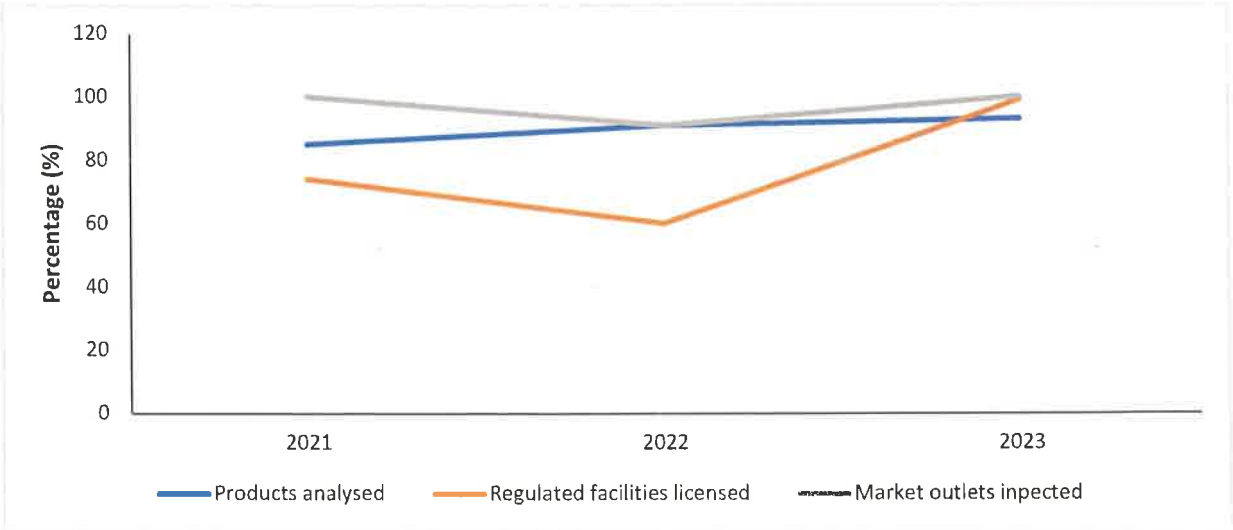

Figure 13 Trend in quality pass rate for food and medicinal products, 2021-2023

Rational use of medicines

Over the past few years, there has been a clarion call by health experts and other global health bodies, including WHO to promote rational use of medicines. As a member country of the WHO, Ghana has heeded this call by implementing a policy to promote rational use of medicines and to address the growing concern of polypharmacy and drug resistance. For instance, there is anecdotal evidence that many infections get better on their own; therefore, antibiotics should normally be prescribed for more serious bacterial infections.

In the year under review, the average number of medicines prescribed per patient encounter increased marginally from 2.9 to 3.0 between the base year (2022) and target year (2023), achieving the set target of 3 medicines per encounter (Figure 14). A significant reduction was, however, achieved in 2019. Since then, there had been an increase, stagnating around 3 medicines per patient encounter.

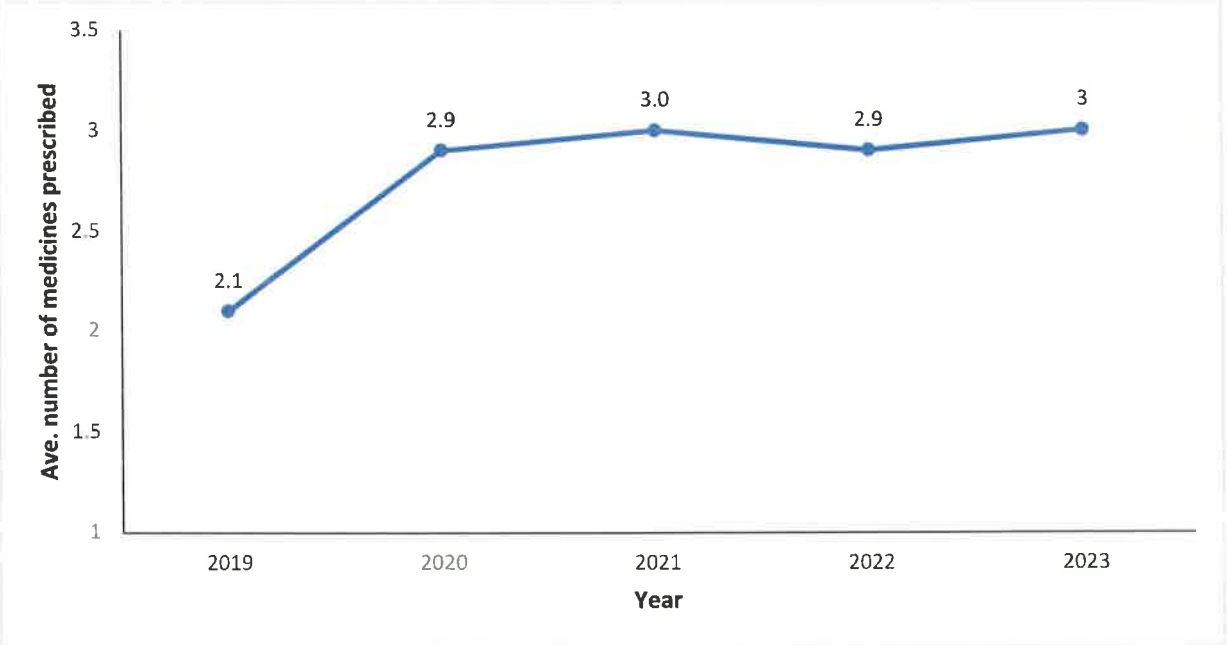

Figure 14 Trend in number of medicines prescribed per patient encounter, 2019-2023

Proportion of encounters with antibiotics prescribed

In addition, the proportion of patient encounter with antibiotics was assessed. There had been a consistent decline in the percentage of encounters in which antibiotics were prescribed between 2021 and 2023. This proportion of antibiotics prescribed is relatively high, considering that remarkable achievements were realised in 2019 and 2020 (Figure 15). The high prevalence of antimicrobial use could be attributed to the fact that majority of the population use the community pharmacies as their first point of care for minor illness.

The sharp rise in prescription of antibiotics from 2020 could be attributed to the outbreak of the COVID-19 pandemic, which required antibiotics and other medicines to treat it. Additionally, lower-level facilities have limited capacity to conduct tests before administering treatment, leading many prescribers to resort to broad-spectrum treatments for infectious diseases.

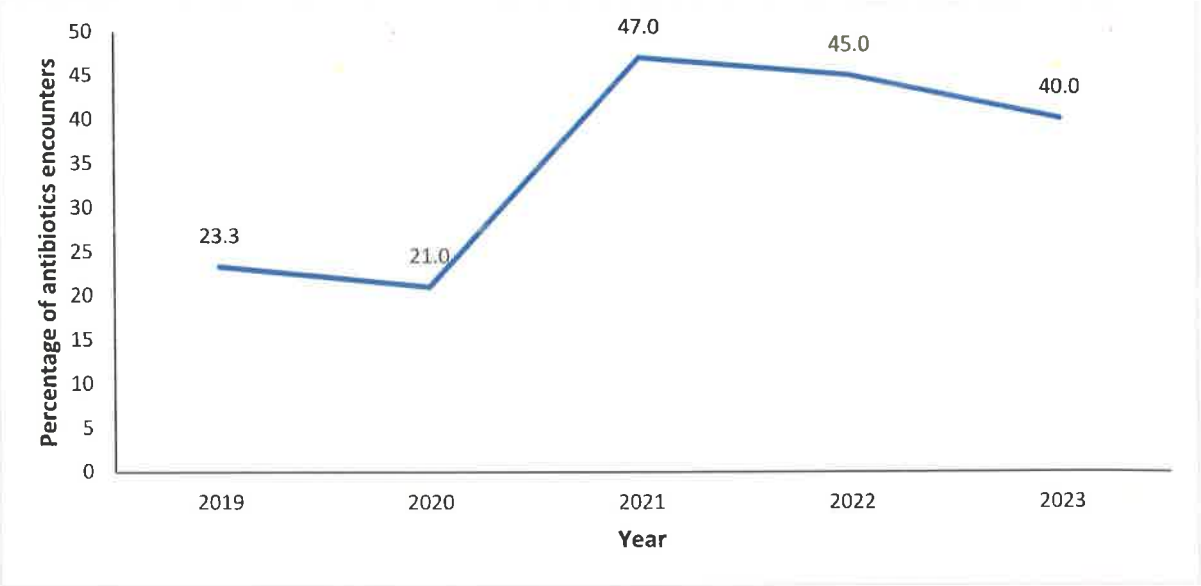

Figure 15 Trend in proportion of patient encounter with antibiotics, 2019-2023

2.3 Objective two: Reduce avoidable maternal, adolescent and child deaths and disabilities

The indicators in this domain are used to monitor the quality of maternal and child health services. The overall performance score for policy objective two is -1.5, interpreted as **below average** performance (Table 8). Seven out of the sixteen (16) indicators (43.8%) obtained a positive score. Only one indicator (prevalence of wasting among children in under-five) was not assessed due to lack of data.

Table 8 Performance score for policy objective two

Indicator	Performance score	Interpretation	Colour code
Institutional Neonatal Mortality Rate	3	Excellent	
Stillbirth Rate	3	Excellent	
Adolescent pregnancy rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group	3	Excellent	
Prevalence of underweight among children under five years	2	Very Good	

Indicator	Performance score	Interpretation	Colour code
Midwife to WIFA population equity index (Geographical)	0	Fairly Good	
ANC 4+ (%)	0	Fairly Good	
Prevalence of stunting among children under five years.	0	Fairly Good	
No. of children fully immunized (Using Penta 3 as proxy (%)	-1	Average	
Midwife to WIFA ratio	-2	Below Average	
Mother to child HIV transmission rate at 18 months	-2	Below Average	
Skilled birth attendance coverage (%)	-2	Below Average	
Institutional Under-five mortality rate (per 1000lb)	-2	Below Average	
Institutional Infant Mortality Rate (per 1000lb)	-2	Below Average	
Institutional Under 5 Malaria Case Fatality Rate	-2	Below Average	
Institutional Maternal Mortality ratio	-2	Below Average	
Prevalence of wasting among children under five (%)	-3	Poor	
Overall	**-1.5**	**Below Average**	

Trend analysis of key indicators under objective two

Maternal healthcare service

Access to quality maternal and child health services are crucial to achieving the SDG related goals (3.1 and 3.2). Antenatal utilisation, facility delivery and postnatal care provided within 48 hours are focused interventions to improve quality maternal and child healthcare. It is expected that women in the fertility age group (15-49 years), who visit health facility before pregnancy, during and after pregnancy would have a higher chance of improved health outcome.

In the year under review, the proportion of pregnant mothers making at least 4+ antennal care visits; and those accessing postnatal care increased marginally whilst those receiving skilled delivery declined (Figure 16). Proportion of births attended by skilled personnel declined from 62.6% to 60.6% between 2022 and 2023 due to gradual decline in midwives per WIFA population. There are also concerns about poor documentation of services due to inadequate registers and the limited capacities of staff responsible for gathering data at the service delivery points. Efforts are being made to address these challenges.

Implementation of policies and programmes including the NHIS, free maternal care, community-based health planning and services (CHPS), safe motherhood programme, and the task-sharing could be attributed to the general improvement in family planning, antenatal care, skilled delivery, and postnatal care services. Nonetheless, more efforts are needed from policymakers to improve the situation as the country strives to achieve the SDG of reducing maternal deaths to 72 per 100,000 live births by 2030 and under-five deaths by 25 per 1,000 live births.

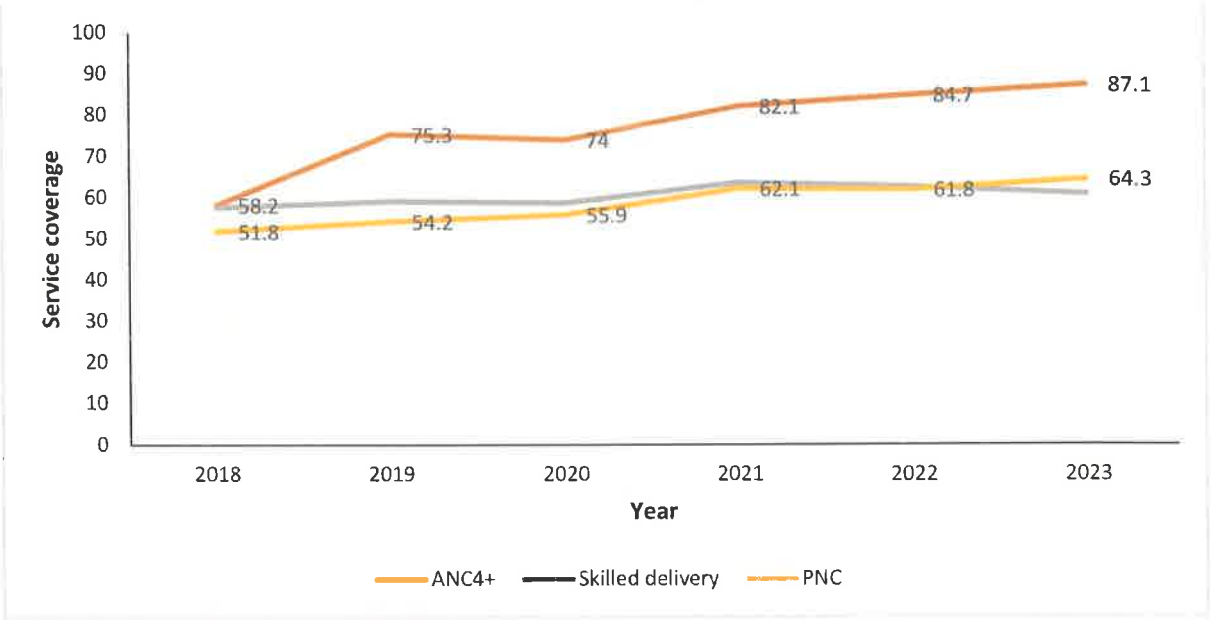

Figure 16 Trends in ANC, skilled delivery, and PNC coverage, 2019-2023

Geographical distribution of delivery attended by skilled personnel In the year under review showed variations across the regions. Majority of the pregnant women in the northern part of the country (Upper East, North East, Northern, and Upper West regions) had access to skilled personnel during delivery compared to their counterparts in the middle and southern part of the country (Table 9). This is due to the increasing number of lower-level healthcare facilities (CHPS, health centres, etc), midwives and nurse density, and more friendlier services) in these regions. The low service coverage of skilled birth attendance in the Greater Accra region (48.2%) is partly due to the proliferation of private healthcare facilities, where some pregnant mothers prefer to deliver and attend post-natal care at public healthcare facilities.

Table 9: Birth attended by skilled health personnel by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	59.9	61.0	68.3	66.0	64.9
Ashanti	53.3	53.7	60.8	60.6	57.0
Bono	68.1	68.3	66.5	66.9	62.6
Bono East	64.4	66.5	66.8	67.2	66.1
Central	64.8	66.0	66.0	64.8	63.9
Eastern	50.2	50.9	60.9	59.1	55.8
Greater Accra	57.1	51.7	52.0	51.1	48.2
North East	72.0	70.5	71.9	73.5	76.7
Northern	79.1	79.9	75.8	76.8	75.2
Oti	49.4	53.2	63.4	62.8	62.1
Savannah	59.9	57.7	61.2	62.6	64.4
Upper East	73.6	73.7	81.8	77.5	78.5
Upper West	70.3	71.4	76.7	73.1	71.5
Volta	46.1	47.4	58.2	58.1	58.4
Western	57.3	56.6	66.1	64.8	63.3
Western North	61.2	59.9	66.8	63.1	58.5

Institutional maternal mortality ratio (iMMR)

Generally, the number of women dying due to complications from pregnancy or childbirth has improved over the last five years. These deaths have declined from 119.5 to 102.6 per 100,000 live births between 2021 and 2022 (Figure 13). In the year under review, however, saw a rise in institutional maternal deaths from 102.6 to 109.3 deaths per 100,000 live births (6.5%) primarily influenced by high number of deaths in the Ashanti and Greater Accra region (Figure 17). This situation is not encouraging as the country strives to achieve the global SDG target of at least 70 deaths 100,000 by year 2030.

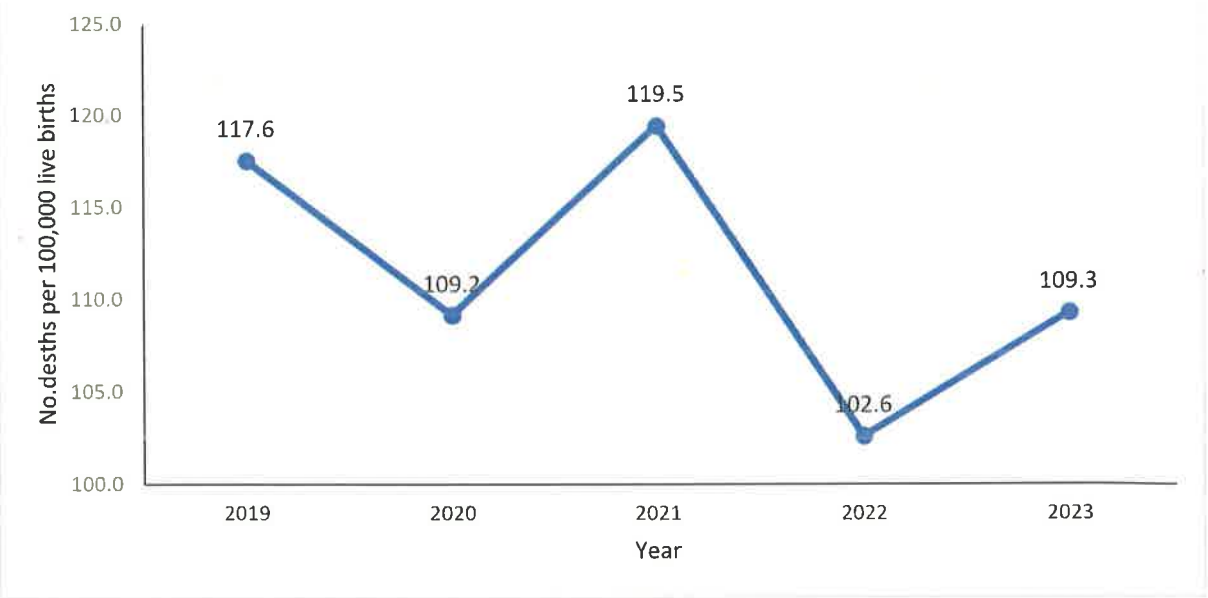

Figure 17 Trend in institutional maternal mortality ratio, 2019-2023

Generally, disaggregation of the maternal death data by administrative region showed that there were more maternal deaths in the regions with higher-level healthcare facilities such as Teaching hospitals (Greater, Ashanti, Northern). The highest maternal deaths per 100,000 livebirths occurred in the Ashanti region whilst the lowest happened in the Oti (Table 10). Due to the limited access to health services in the Oti region, it is more likely that majority of the deaths occurred outside the region through referral of complicated cases to higher-level healthcare facilities in the Volta and Greater Accra regions. On the other hand, the higher maternal deaths recorded in the regions with higher-level healthcare facilities are due to poor relationship with lower-level healthcare facilities, leading to late referrals of complicated cases from these peripheral healthcare facilities. The reason for the relatively lower maternal deaths in the Central Region is that the Cape Coast Teaching Hospital in collaboration with managers of the primary and secondary level healthcare facilities in the region, commenced an outreach and mentorship program to support these facilities to address RMNCAH issues.

Table 10 Institutional maternal mortality per 100,000 live births by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	97.6	68.0	83.5	52.6	90.4
Ashanti	155.9	96.6	127.5	134.5	167.5
Bono	70.3	79.6	87.5	75.7	60.1
Bono East	105.3	91.5	71.7	87.9	97.1

Central	105.2	109.2	104.4	95.2	71.3
Eastern	139.1	143.1	112.1	120.3	102.3
Greater Accra	139.7	143.1	163.7	155.5	154.2
North East	59.9	58.8	84.5	30.3	51.
Northern	144.0	120.2	98.6	95.2	136.7
Oti	54.9	93.9	61.1	5.2	30.7
Savannah	50.4	48.2	37.5	77.9	62.1
Upper East	79.2	90.7	98.0	65.6	79.
Upper West	74.8	78.8	100.5	59.4	69.5
Volta	131.63	95.20	102.52	82.4	96.9
Western	106.08	113.01	118.62	100.8	83.8
Western North	34.88	60.93	75.58	57.2	74.0

The sector is implementing several interventions to improve maternal health outcomes. Some of these interventions are maternal and perinatal death surveillance and response; group antennal; GhiLMIS to improving essential commodities and supplies; immediate postpartum family planning; and integration of maternal mental health into routine healthcare delivery.

Stillbirth, neonatal mortality, institutional infant, and under-5 mortalities

Stillbirth and neonatal deaths continued their downward trajectory whilst infant and under-five mortalities assumed an upward trend in the year under review (Figure 18). The death or loss of a baby before or during delivery (miscarriage and stillbirths) decreased from 11.2 to 10.2 per 1,000 live births between 2022 and 2023; the number of children who died in their first month of live (neonatal mortality) went down from 6.5 to 5.1 deaths per 1,000 live births. Unfortunately, the number of newborns who died under one year of age increased from 7.4 to 8.1 deaths per 1,000; and those who died by the age of 5 years (under-five mortality rate) increased from 9.8 to 10.9 deaths per 1,000 live births.

The improvement in the stillbirths and neonatal deaths could be attributed to the improved capacity to manage sick new-borns across the country and perinatal care. The upward trend in infant and under-five deaths, on the other hand, is because a lot of mothers are reluctant to send their children to child welfare clinics due to economic and social competing demands.

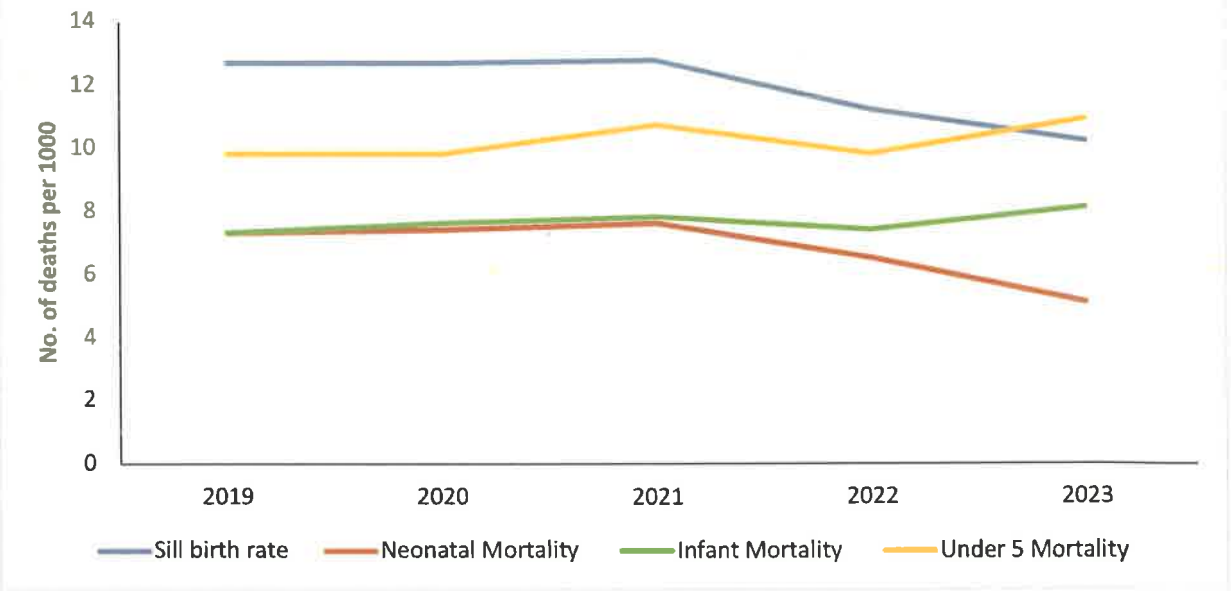

Figure 18 Trends in stillbirth, neonatal, infant and under-five mortality rates, 2019-2023

Disaggregation of the neonatal deaths by region showed lower rates in the newly created regions particualry Oti and Western North, as shown in Table 11. However, the rates in the Bono East and Greater Accra, Eastern, Volta and Bono are higher than the national rate of 5.1 deaths per 1,000 livebirths.

Table 11 Institutional neonatal deaths per 1,000 live births, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	5.4	6.4	5.5	4.0	4.6
Ashanti	7.3	6.5	6.5	7.6	4.7
Bono	8.4	8.0	7.7	6.5	6.9
Bono East	7.2	6.2	7.9	7.5	7.5
Central	7.5	6.6	6.9	4.8	3.2
Eastern	6.5	8.2	6.7	7.7	6.3
Greater Accra	11.9	10.2	11.4	10.4	7.1
North East	2.9	4.0	4.6	2.7	4.4
Northern	10.1	9.78	8.5	4.6	4.7
Oti	3.0	2.8	1.9	2.2	2.5
Savannah	2.3	2.8	3.9	2.3	4.3
Upper East	8.1	6.8	6.8	6.5	4.9
Upper West	8.8	7.4	5.5	5.8	5.0
Volta	6.0	6.6	6.6	7.1	5.7

Western	7.1	6.6	5.1	5.1	4.0
Western North	3.4	2.7	2.2	2.7	3.3

Regarding the under-five mortality rate, five regions recorded lower death rates than the national rate of 10.9 deaths per 1000 live births (Table 12). The Oti region recorded the lowest under-five mortality rate of 4.6 deaths per 1000 live births, followed by Western North region, 5.9. Generally, the under-five deaths are higher in the northern sector of the country (Northern, North East, Upper West) and the middle belt (Bono and Bono East). Again, the relatively lower mortalities in the Oti region is probably due to transfer of the complicated cases to other regions, e.g., Volta and Greater Accra regions, which have improved access to services. The consistent decline in the central region could be attributed to the improved collaboration with other facilities in the region. However, the higher mortalities in the northern and middle part of the country could be due to limited access to skilled personnel, equipment and essential services.

Table 12 Institutional under-five mortality by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	7.0	8.6	7.7	5.8	6.9
Ashanti	4.6	4.9	5.5	5.9	6.7
Bono	11.7	11	12.1	11.7	13.4
Bono East	13.1	10.9	13.2	13.4	12.8
Central	10.2	8.9	9.2	8.8	8.0
Eastern	9.0	10.1	9.1	10.9	10.7
Greater Accra	9.9	10.5	11.0	10.8	11.4
North East	17	17.3	18.8	15.7	15.8
Northern	12.7	13.2	15.1	15.1	19.6
Oti	6.7	6.0	5.5	5.1	4.6
Savannah	5.8	7.4	7.0	6.5	11.1
Upper East	14.7	12.6	12.7	10.7	13.0
Upper West	15.7	12.4	13.2	12.3	12.4
Volta	9.4	9.9	9.4	9.5	10.0
Western	12	10.9	10.1	9.7	11.0
Western North	5.9	6.0	6.1	4.7	5.9

While policies and programmes including the NHIS, free maternal care, CHPS, death audits and implementation of the recommended actions might have contributed to improvement in these child health outcomes indicators especially stillbirth and neonatal deaths over the years, a lot more clinical interventions are needed to reverse the negative trend of infant and under-five deaths. For example, there is the need to strengthen awareness in communities about early health-seeking behaviours and the importance of child survival in the first five years of life; integrated management of newborn and childhood illness; and improvement in care for small and sick newborns. Additionally, implementing agencies need to build the capacity of staff in essential newborn care and care for the sick newborn.

Institutional malaria under-five case fatality rate

The severity of malaria among children under the age of 5 years has gone down considerably in recent years in the country due to investments made to eliminate malaria. In the year under review, a total of 131,811 patients below the age of 5 years were admitted with malaria in the year under review, compared to 144,769 in 2022. Out of this number, 77 died, resulting in a case fatality rate of 0.06% (Figure 19). Trend analysis over the last five years has also seen remarkable improvement. It increased from 0.10% to 0.12% between 2019 and 2020 before assuming a downward trend. The higher spike in 2020 was probably

due to the COVID-19 pandemic and the consequential measures instituted to limit attendance to healthcare facilities only to patients that required critical or emergency care. Regarding the surge in 2023, late reporting to facilities and poor referrals (usually with no referral notes) might be the contributing factors. There is an ongoing intervention to sensitize care providers to ensure early reporting of severe cases to facilities for special care management.

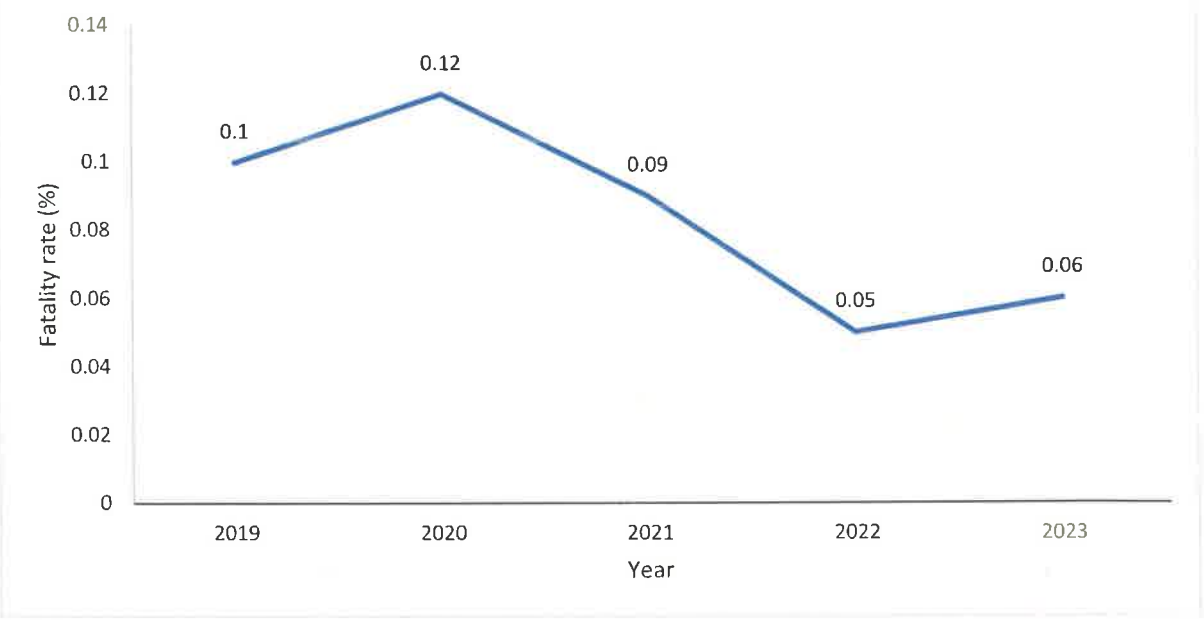

Figure 19 Trend in institutional malaria under-five case fatality rate, 2019-2023

Disaggregation of the malaria under-five case fatality rate by administrative region revealed zero death of children admitted with malaria in the Ashanti, Oti and Upper East. (Table 13). However, the case fatality rate in the North East, Bono East and Volta went up in the year under review. In the North East region, one facility recorded 17 deaths and another in the Bono East region registered 12 deaths.

Table 13 Trend in institutional malaria under-five case fatality rate by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	0.06	0.09	0.06	NA	0.03
Ashanti	0.05	0.07	0.02	0.02	0.00
Bono	0.17	0.13	0.14	0.05	0.03
Bono East	0.24	0.17	0.23	0.12	0.15
Central	0.07	0.13	0.05	0.02	0.04

Eastern	0.11	0.08	0.08	0.07	0.08
Greater Accra	0.19	0.1	0.08	0.14	0.10
North East	0.15	0.15	0.14	0.00	0.34
Northern	0.12	0.13	0.12	0.03	0.03
Oti	0.11	0.14	0.23	0.18	0.00
Savannah	0.07	0.23	0.07	0.11	0.10
Upper East	0.01	N/A	0.02	0.03	0.00
Upper West	0.14	0.26	0.14	0.16	0.06
Volta	0.19	0.28	0.25	0.10	0.12
Western	0.09	0.08	0.07	0.05	0.04
Western North	0.07	0.13	0.06	0.09	0.05

NA: Not available

Midwife to women in fertility age (WIFA) ratio

Women in fertility age (WIFA) is a core segment of the population that requires health care services such as family planning, antenatal care, skilled delivery, and postnatal care. Available data showed that midwife to women in fertility age population has improved over the last five years (Figure 20). It increased from 1.74 to 2.98 midwives per 1,000 women in fertility age (WIFA) over the last five years (2019-2023). However, there was a decline in the number of midwives from 2,336 in 2022 to 2,303 in 2023, translating to 2.98 midwives per 1,000 WIFA. This situation is due to removal from the GoG payroll of those who had vacated post, resigned, deceased, etc, during the period under review. This negative trend calls for full implementation of the rural incentives package and streamlining production of midwives.

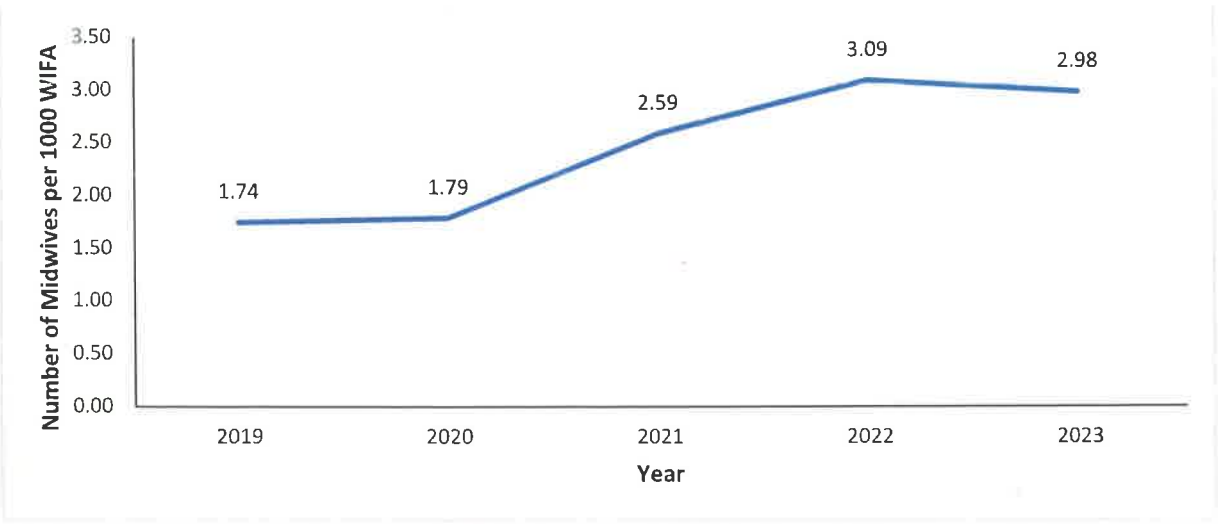

Figure 20 Trend in Midwife per 1000 Women in Fertility Age (WIFA), 2019-2023

Disaggregation of the midwife to WIFA population density data by region showed a decline in all the regions (Table 14) although variations exist among them. Higher midwife to 1,000 WIFA population density was recorded in Bono and Upper West regions, where there are more CHAG facilities with high staff retention rates and an ongoing JICA supported CHPS+ projects for midwives. These two regions had more than 4 midwives serving 1,000 WIFA populations. The worst midwife to WIFA population density was registered mainly in the newly created regions, where there is limited access to services (North East region, Savannah, Oti).

Table 14 Trends in midwife per 1000 WIFA population by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	N/A	N/A	3.00	4.16	3.96
Ashanti	2.05	2.09	3.12	3.72	3.57
Bono	4.36[a]	4.51[a]	3.97	4.53	4.16
Bono East	N/A	N/A	2.31	3.17	3.19
Central	1.70	1.68	2.19	2.61	2.52
Eastern	1.58	1.61	2.55	3.12	3.05
Greater Accra	1.62	1.75	2.19	2.70	2.64
North East	N/A	N/A	1.40	1.77	1.77
Northern	2.46[b]	2.53[b]	2.23	2.48	2.37
Oti	N/A	N/A	2.85	2.45	2.36
Savannah	N/A	N/A	1.93	2.24	2.07
Upper East	1.90	1.87	2.69	3.16	3.14
Upper West	2.62	2.60	3.75	4.28	4.18
Volta	2.27[c]	2.42[c]	2.39	3.18	3.18
Western	2.26[d]	2.22[d]	2.60	2.94	2.85
Western North	N/A	N/A	2.46	2.93	2.67

Note

[a] Midwife-to-WIFA population density (per 1,000) for Ahafo, Bono and Bono East regions
[b] Midwife-to-WIFA population density (per 1,000) for Northern, Savannah and North East regions
[c] Midwife-to-WIFA population density (per 1,000) Oti and Volta regions
[d] Midwife-to-WIFA population density (per 1,000) Western and Western North regions
NA: Not applicable

Stunting among children under-five years of age

Stunting, defined as "low height-for-age, is the result of chronic or recurrent undernutrition, usually associated with poverty, poor maternal health and nutrition, frequent illness and/or inappropriate feeding and care in early life". It prevents children from reaching their physical and cognitive potential. There has been improvement in the situation in the country over

the last five years (2019-2023) due to targeted policy interventions, including implementation of National Newborn Health and Strategy Action (2019-2023) and other nutrition programmes. However, the prevalence reduced from 0.97% to 0.83%, representing a change of in the year under review (Figure 21). There was also improvement in underweight in the year under assessment, from 1.5% to 1.1%.

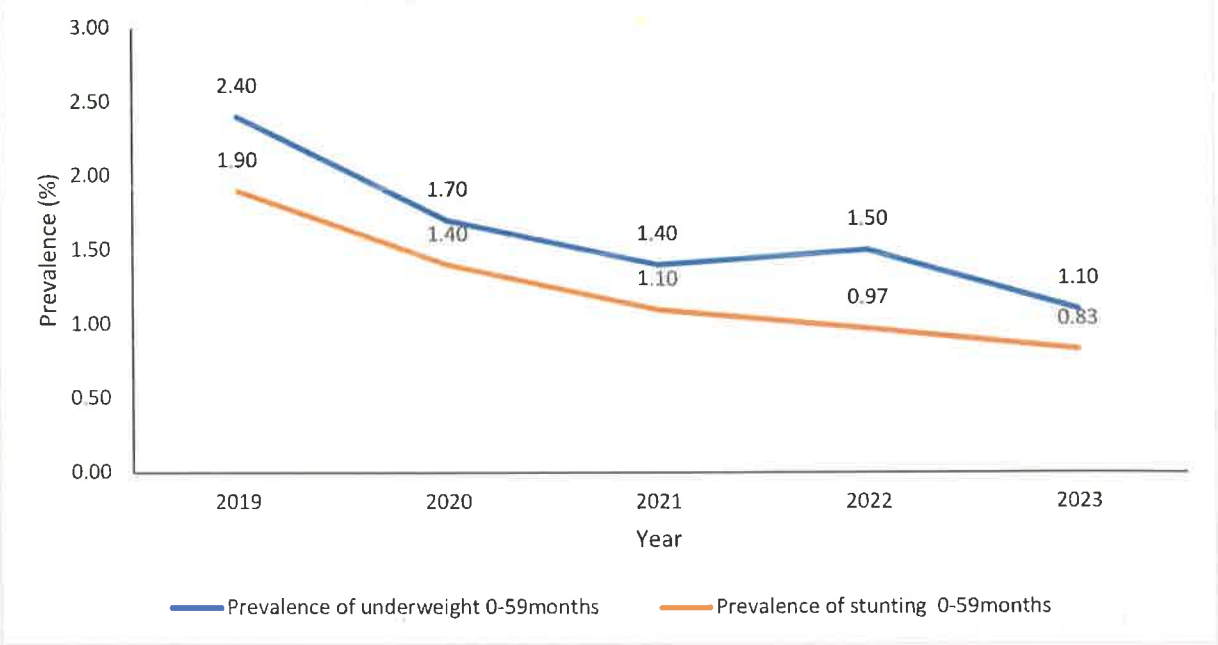

Figure 21 Trends in stunting and underweight among children under-five years, 2019-2023

Table 15 Stunting among children under-five years by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	2.50	1.30	0.80	1.20	0.83
Ashanti	2.30	1.70	1.60	1.10	0.67
Bono	3.20	2.30	1.50	2.10	1.10
Bono East	1.90	1.50	1.30	0.89	1.10
Central	2.30	1.20	0.74	0.57	0.80
Eastern	0.40	0.31	0.48	0.35	0.52
Greater Accra	2.50	0.98	1.30	1.10	0.24
North East	1.10	2.00	1.40	1.60	0.83
Northern	1.40	1.60	1.00	1.00	1.80
Oti	2.30	3.60	1.40	1.40	0.75
Savannah	0.94	0.94	0.85	0.85	1.30
Upper East	2.60	1.20	1.80	0.91	1.40

Upper West	2.80	1.50	1.50	1.10	0.77
Volta	1.50	1.20	1.40	1.00	0.75
Western	1.30	1.10	0.58	0.56	1.10
Western North	0.57	0.61	0.93	0.50	0.62

Adolescent Pregnancy rate (10-19years)

Generally, there has been a reduction in adolescent pregnancy over the last five years (2019-2023). The number of adolescent pregnancies recorded in the healthcare facilities decreased by 9.5%, from 102,878 in 2022 to 93,062 in 2023. Nonetheless, the prevalence rate is higher among adolescent aged 15-19 years (101.1 per 1,000 women) than those aged 10-14 years (98.3 per 1,000 women).

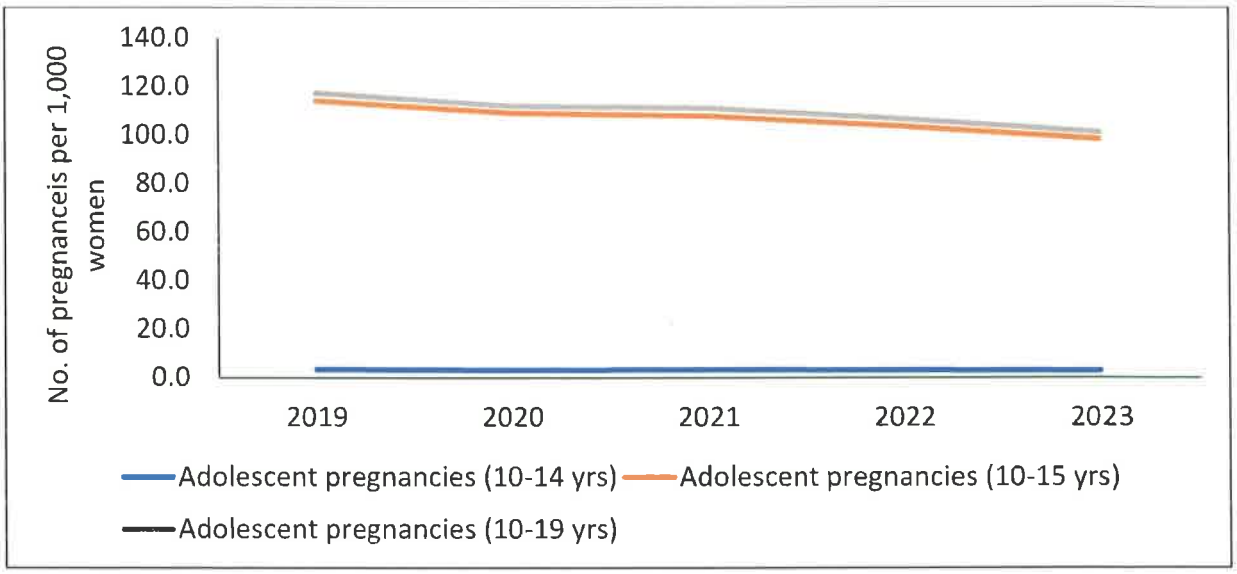

Figure 22 Number of adolescent pregnancies per 1000 women

Regional disaggregation revealed that adolescent pregnancy rate (per 1000 women) is the lowest in the Greater Accra region and highest in the North East. This could be attributed to poverty and other factors. Other regions including Oti, Savannah and Bono East region also registered high adolescent pregnancy rates of more than 120 per 1,000 women. In absolute numbers, Greater Accra recorded 7,780, while North East reported 3,911. The figure for North East is relatively higher in proportion to its population (Table 16). Additionally, many adolescent pregnancies in urban centres are attended to in private facilities, whereas in rural areas, alternative healthcare options are limited.

Table 16 Adolescent pregnancy per 1,000 women aged 10-19 years by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	146.3	140.6	141.4	116.7	93.1
Ashanti	116.1	108.7	107.4	104.6	101.5
Bono	133.1	120.6	114.9	115.8	107.9
Bono East	147.3	139.4	142.4	134.2	123.3
Central	128.9	118.6	116	113.2	104.3
Eastern	130.7	122.9	125.7	123.2	118
Greater Accra	66.2	58.8	56	55.7	54.8
North East	123.2	148.9	158.7	149.9	149.1
Northern	99.1	97.6	94.7	90.2	90
Oti	150.2	144.3	146.8	137.8	127.2
Savannah	143.8	143.1	143.8	129.8	131.5
Upper East	158.8	153.9	151.5	141.8	126.5
Upper West	135.3	117.7	118.2	99.1	88.7
Volta	140.4	135.1	142.5	135.2	123.6
Western	123.6	119.7	117.8	114.5	107.4
Western North	123.7	121.8	126	117.3	108

2.4 Objective three: Increase access to responsive clinical and public health emergency services

This objective focuses on the innovative ways to manage resource for delivery of quality healthcare services. In all, there were 26 indicators under this objective which included administrative indicators such as proportion of hospitals offering mental health, traditional and alternative medicine practice, facilities in good standing, bed occupancy rate, and length of stay at wards. It also has infectious disease indicators such as Tuberculosis, HIV/AIDS, Malaria, and many more.

Overall performance score for this objective is -2 on the scale of -3 to 3, representing a **below average** performance (Table 17). Eleven out of twenty-six (26) indicators (42.3%) under this objective obtained a positive score. Four indicators were not assessed because they required the use of survey data, which was not available.

Table 17 Performance score for policy objective three

Indicator	Performance score	Interpretation	Colour code
Prevalence of hypertension	3	Excellent	
Total estimated protection by contraceptive methods supplied (Couple Year Protection (CYP)	3	Excellent	
Surgical Site Infection Rate	3	Excellent	
Average length of stay	2	Very Good	
Proportion of disease outbreaks identified, and response actions started within 24-48 hours	1	Good	
Blood collection index (BCI) per 1000 population	0	Fairly Good	
95-95-95 Target (HIV Positive people receiving ART with viral Suppression)	0	Fairly Good	
TB treatment success rate (%)	0	Fairly Good	
TB case detection rate	0	Fairly Good	
Prevalence of diabetes	0	Fairly Good	
Malaria incidence per 1,000 population	0	Fairly Good	
Ratio of Functional Ambulance to population per 50,000 population	-2	Below Average	
95-95-95 Target (HIV Infected persons who are receiving sustained ART)	-2	Below Average	
95-95-95 Target (HIV Infected persons who know their HIV Status)	-2	Below Average	
HIV incidence per 1,000 population	-2	Below Average	

Indicator	Performance score	Interpretation	Colour code
Tuberculosis incidence per 100,000 population	-2	Below Average	
Prevalence of mental health disorders among women and young adults (all population)	-2	Below Average	
Family Planning Acceptor Rate	-2	Below Average	
Bed Occupancy Rate	-2	Below Average	
Institutional All-Cause Mortality	-2	Below Average	
Average response time to emergencies	-2	Below Average	
Percentage of Planned Preventive maintenance activities implemented	-2	Below Average	
Prevalence of NTDs (e.g Yaws, Bruli ulcer, etc)	-3	Poor	
Death rate due to road traffic injuries	-3	Poor	
Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory	-3	Poor	
Hepatitis B incidence per 100,000 population	-3	Poor	
Overall	**-2**	**Below Average**	

Trend analysis of key indicators under objective three

Emergency medical services (EMS)

The mandate of the National Ambulance Service (NAS) is to provide a nationwide, comprehensively, and timely emergency medical services to all people living in Ghana. In 2019, the NAS received 300 Ambulances from the government through the "One Ambulance One Constituency" initiative. This made it possible for all districts to have Ambulance Centres. In addition, the NAS has established other satellite stations to augment these emergency medical services centres. However, the key challenge facing the Service is lack of dedicated funding, which has resulted in patients being charged a token for transportation

cost. Inadequate office accommodation is also hampering the operations of the Service. Currently, many of the centres share offices with the Ghana National Fire Service.

In the year under review, 209 out of 301 (70.4%) ambulance stations were functioning with a dedicated ambulance and staff mix. The last three years (2021-2023) recorded a reduction in the number of emergency cases responded to by the Service (Figure 23). The number of emergencies responded to decreased from 38,397 in 2022 to 30,562 in 2023 (20.4%). This dip in emergency cases responded to is primarily due to broken-down vehicles. For example, about 100 ambulances were out of service, and three stations not in operation due to lack of office accommodation.

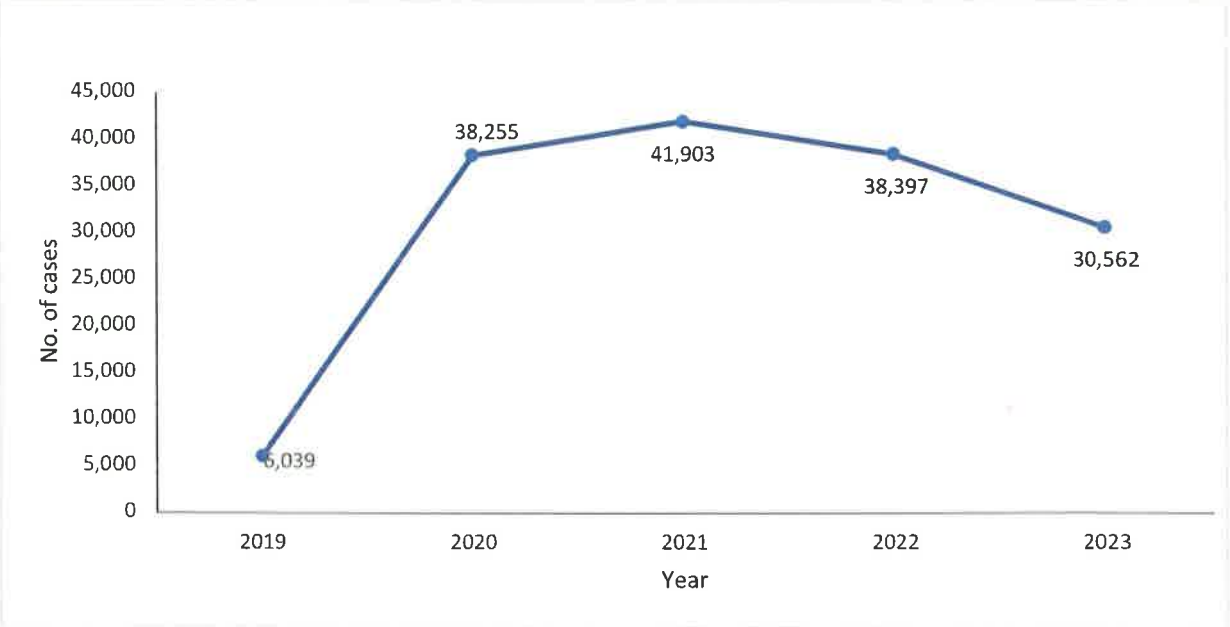

Figure 23 Trend of cases seen 2019-2023

As a result of the frequent breakdowns of the Ambulances, the response time to the emergencies deteriorated. It increased marginally by 2 minutes, from twenty minutes, twenty-seven seconds to twenty-two minutes, thirty-three seconds in the year under assessment (Figure 24). Often, clients may have to call an ambulance from another district, and this increases the time to response to the emergency case.

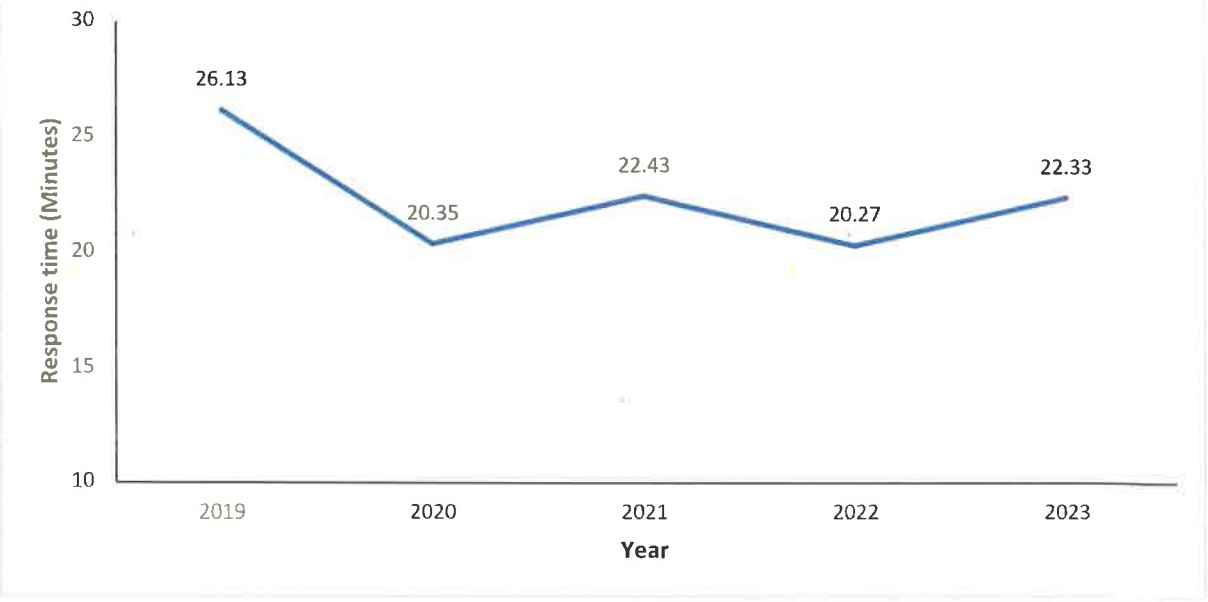

Figure 24 Case response time, 2019-2023

Regional distribution of the case response time showed that half of the administrative regions recorded worse case response times than the national average of twenty-two minutes, thirty-three seconds (Table 18). The Ahafo and Western North regions posted the shortest case response time of 15 minutes, 43 seconds because distances to the case locations are not far from the ambulance stations. On the other hand, the Oti and North East regions recorded the longer case response time of 45 minutes and 28 minutes, respectively. This is attributed to the poor road network and long distances between referral points. In addition, there are inadequate number of ambulances in the Oti region.

Table 18 Average case response time, case holding time, and vehicle engaged time by region, 2022

Region	Average case response time	Average vehicle engaged period	Average Facility Turnaround Time
Ahafo	00:15:43	02:02:36	00:37:16
Ashanti	00:17:01	03:33:17	00:45:29
Bono	00:16:38	03:53:52	00:31:26
Bono-East	00:26:12	06:35:34	00:38:21
Central	00:19:10	04:11:27	00:17:06
Eastern	00:19:40	04:33:31	00:27:50
Greater Accra	00:17:08	02:44:59	00:50:33
North East	00:28:30	05:52:38	00:24:04
Northern	00:18:18	03:20:53	00:58:19
Oti	00:45:27	09:45:56	00:26:49

Savannah	00:20:48	02:16:05	00:25:21
Upper East	00:26:12	05:15:42	00:24:34
Upper West	00:23:43	05:18:36	00:21:23
Volta	00:23:53	04:28:50	00:29:31
Western North	00:15:43	07:57:58	00:54:22
Western	00:26:39	04:26:22	00:29:59

Source: National Ambulance Service

Average vehicle engaged time, which represents the time taken for the vehicle to leave base and return to base, was lower in the Ahafo, Greater Accra, and Savannah regions (less than three hours) compared to the rest of the regions. This situation is probably due to the high density of health facilities (or shorter distances between referral points) and good road networks in these regions. The Oti and Western North regions, however, recorded higher average vehicle engaged times because of long travel distances between these regions and the nearest referral facilities. For instance, many of the cases in the Western North region that required emergency medical services are transported to the Komfo Anokye Teaching Hospital (KATH) in the Ashanti region. Those in the Oti region are referred to Ho Teaching Hospital, Greater Accra Regional Hospital or Korle Bu Teaching Hospital (KBTH), and KATH.

In the case of Oti region, there are barriers including rivers, which require the use of pontoon or the need for boat ambulance, but latter is not available currently. Other reasons for the lengthy average vehicle engaged time in these two regions are lack of prior referral information to the receiving facility; inadequate number of emergency beds at the receiving facility, reluctance of the receiving facility to take the patient because there were no accompanying relatives especially for cases such as knockdowns.

The facility turnaround time, which is the amount of time that the vehicle spends at the facility before the cases are taken and it leaves to base, was higher in Northen, Greater Accra and Ashanti regions due to the high number of cases that are transported to the referral facilities (mainly teaching hospitals) in these regions. For example, the KATH receives, on average, over 2,500 cases per year. Distribution of the average facility turnaround time by the ten most frequent facilities based on the number of emergency case, revealed that it was highest at KATH, followed by the Greater Accra Regional Hospital (Table 19).

Table 19 Average facility turnaround time by top ten most frequent facilities

Name of Facility	No. of Cases	Average Facility Turnaround Time
KATH	2,569	01:33:27
Tamale Teaching hospital	1,358	00:31:31
Koforidua Regional Hospital	1,239	00:22:34
Greater Accra Regional Hospital	793	00:47:50
Ho Teaching hospital	720	00:23:23
UGMC	447	00:36:46
KBTH	406	00:52:17
37 military Hospital	394	00:48:36
Tema General Hospital	294	00:26:56
Kumasi South Hospital	287	00:18:01

Source: National Ambulance Service

Proportion of hospitals offering mental health services

Mental health services remain a priority area in the health sector for attainment of UHC. This indicator measures the extent to which mental health services are provided at all levels of the health system. In 2021, the Mental Health Authority in attempt to strengthen community mental healthcare services as the new paradigm, conducted community durbars, school health talks, and outreach services. A helpline was also activated to operate via toll-free call Centre to allow the Authority receive feedback and improve on its services.

In the year under review, all district and regional hospitals had mental health units that provided mental health services alongside the general services. As part of the integration strategy, training was conducted for physician assistants, community health nurses, general nurses and doctors to manage basic mental health disorders. The Authority also collaborated with Ghana Health Service and CHAG to provide reserved or virtual beds for intensive care.

Psychiatric OPD attendance

There was a rise in psychiatric OPD attendance over the last five years (2019-2023), from 76,107 to 86,351 (13.45%). In the year under assessment, OPD attendance increased from 85,351 to 86,351 (1.45%). Distribution by region showed that the two most populous regions (Greater Accra and Ashanti) recorded the higher numbers of patients with mental health disorders (Table 20).

Table 20 Number of patients with Mental Health Disorders by Regions, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	2,035	1,976	1,775	1,478	1,414
Ashanti	10,759	10,743	12,410	14,439	19,178
Bono	7,883	4,184	4,289	5,096	5,841
Bono East	4,402	3,996	4,580	5,500	5,620
Central	6,008	5,901	7,179	7,503	6,410
Eastern	6,076	6,911	6,897	5,869	4,875
Greater Accra	9,605	9,355	13,725	16,864	16,443
North East	436	3,047	3,077	3,768	3,591
Northern	2,544	2,748	2,842	2,358	1,819
Oti	2,559	2,123	1,804	1,556	1,621
Savannah	1,615	2,678	1,321	2,121	2,261
Upper East	5,259	3,182	3,874	3,426	3,630
Upper West	4,016	2,344	2,507	2,826	2,748
Volta	8,699	7,975	7,160	7,238	6,727
Western	2,511	2,592	2,639	2,465	2,354
Western North	1,700	1,546	1,873	2,610	1,819

The top ten psychiatric conditions presented at the outpatient department over the last five years (2019-2023) are shown in Table 21. Schizophrenia, Epilepsy and Depression disorders remained the topmost conditions. Except for Epilepsy, mental disorder due to Alcohol use, and Delirium, the number of cases of the remaining conditions increased compared to the previous year, with the highest being Mental Retardation, which almost doubled.

Table 21 Top 10 causes of Psychiatric OPD attendance, 2019- 2023

	Conditions	2019	2020	2021	2022	2023
1	Schizophrenia, schizotypal and delusional disorders	41,438	19,856	20,755	24,790	26,405
2	Epilepsy	20,649	18,854	19,553	19,108	17,219
3	Depression	5,338	4,762	5,505	6,274	6,418
4	Mental Disorders due to other psychoactive substance use	4,155	3,928	4,576	5,249	5,554
5	Bipolar Disorder	4,049	2,646	3,170	3,629	4,259

6	Mental Disorders due to Alcohol use	4,130	3,700	4,369	4,319	3,765
7	Generalized Anxiety	2,261	2,926	3,530	3,037	3,753
8	Dementia	1,546	1,910	2,020	2,238	2,379
9	Mental Retardation	1,426	827	852	754	1,405
10	Delirium	1,045	1,367	1,105	1,122	972

Prevalence of mental health disorders in Ghana (Institutional) dropped by 2 percentage points difference (from 0.27 to 0.25%) after a sharp rise between 2020 and 2022 (Figure 25).

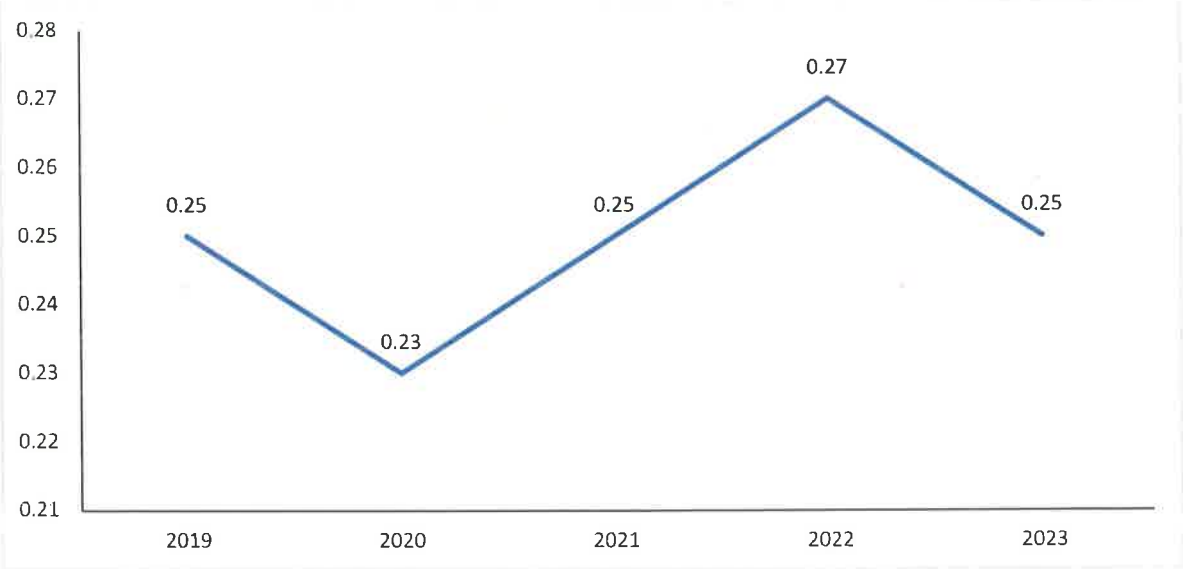

Figure 25 Prevalence of Mental Disorders by regions, 2019-2023

Regional distribution of prevalence of mental health disorders showed that the Western and Eastern regions recorded lower prevalences whilst North East, Bono and Bono East regions registered higher prevalences. The reasons for these phenomena are not readily available but can be partly attributed to the alarming rate of psychoactive substance abuse by the youth. Nonetheless, the relatively huge drop in the prevalence of mental health disorders across many of the regions in the year under review could be explained by underreporting in the DHIMS2; people becoming more aware of mental health disorder issues and are visiting facilities for services.

Table 22 Prevalence of Mental health disorders by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	0.31	0.27	0.31	0.26	0.24
Ashanti	0.19	0.18	0.23	0.26	0.34
Bono	0.67	0.28	0.35	0.41	0.46
Bono East	0.40	0.35	0.38	0.45	0.45
Central	0.21	0.21	0.25	0.26	0.21
Eastern	0.17	0.20	0.24	0.20	0.16
Greater Accra	0.19	0.19	0.25	0.30	0.29
North East	0.08	0.51	0.47	0.56	0.52
Northern	0.13	0.14	0.12	0.10	0.08
Oti	0.31	0.25	0.23	0.20	0.21
Savannah	0.31	0.43	0.20	0.32	0.33
Upper East	0.41	0.24	0.30	0.26	0.27
Upper West	0.47	0.27	0.28	0.31	0.29
Volta	0.49	0.44	0.44	0.43	0.39
Western	0.11	0.10	0.13	0.12	0.11
Western North	0.18	0.15	0.21	0.29	0.20

Hospital bed availability

There has been an improvement in the number of beds available for admission in the hospitals over the years. In the year under assessment, it increased from 33,286 to 34,409 (3.3%) between 2022 and 2023. This translates into about 1 bed per 1000 population. Together, the five Teaching Hospitals had a total of 4,061 beds available for admissions in 2023. The regional breakdown of hospital bed density showed that the Upper West region recorded the best bed to 1,000 population of 1.5 whilst the North East region had the worst bed density of 0.8 (Table 23). There was less than one bed per 1000 population in six regions.

The increase in bed to population density is due to increased number of facilities and beds (e.g. the recently commissioned Upper West regional hospital), as well as the relatively lower populations. The worst bed density in the Upper East is likely to change in 2024 due to the recent opening of the phase II Bolgatanga regional hospital in the region. Generally, there would be much improvement in the bed density across the country because of the planned opening of several of the ongoing Agenda 111 facilities.

Table 23 Hospital bed per 1,000 population by region, 2021-2023

Region	2021	2022	2023
Ahafo	0.11	0.11	1.2
Ashanti	0.12	0.12	1.0
Bono	0.11	0.12	1.2
Bono East	0.10	0.10	1.1
Central	0.10	0.10	0.9
Eastern	0.11	0.12	1.0
Greater Accra	0.08	0.09	0.9
North East	0.08	0.08	0.8
Northern	0.11	0.12	0.9
Oti	0.07	0.07	0.6
Savannah	0.05	0.07	0.9
Upper East	0.09	0.08	1.0
Upper West	0.14	0.14	1.5
Volta	0.13	0.13	1.1
Western	0.10	0.10	1.0
Western North	0.11	0.11	1.0

Bed occupancy rate

This indicator measures utilisation of the available bed capacity in the healthcare facilities. Trend of the indicator over the last five years (2019-2023) showed much improvement after a consistent rise between 2020 and 2022 (Figure 26). There was a considerable improvement in 2020 probably due to the COVID-19 pandemic restrictions on facility attendance. In the year under review, the percentage of beds occupied by patients decreased from the baseline rate of 59% to 55.0% (4percentage points difference). This indicates that a little over 50% of the bed capacity in the healthcare facilities were utilised. This could be attributed to improvement in OPD services; technology including medicines; hospital bed management; medical procedures; and health outcomes.

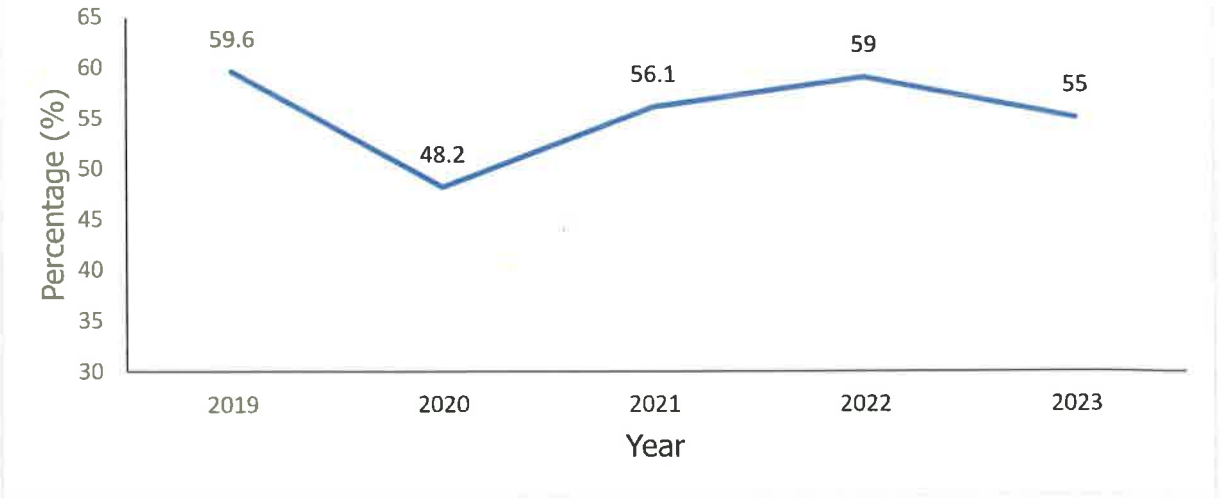

Figure 26 Trend in bed occupancy rate, 2019-2023

Average length of stay in emergencies

This indicator measures the efficiency of the hospital management. It is the average number of days a patient spends in an emergency ward. In 2022, there was a remarkable improvement in the average length of stay in emergency at primary and secondary facilities (Figure 27). However, this worsened in the year under review, where a patient stayed in the hospital averaged 3 days, compared to the set target of 2 days. The situation same in the tertiary level facilities, e.g., the Teaching Hospitals; it averaged 2.2 days per patient in the emergency wards. This situation is due to a limited coordination between the emergency and general wards; inadequate inpatient beds to absorb those treated from emergencies wards; and insufficient capacity in the emergency departments including limited number of critical nurses.

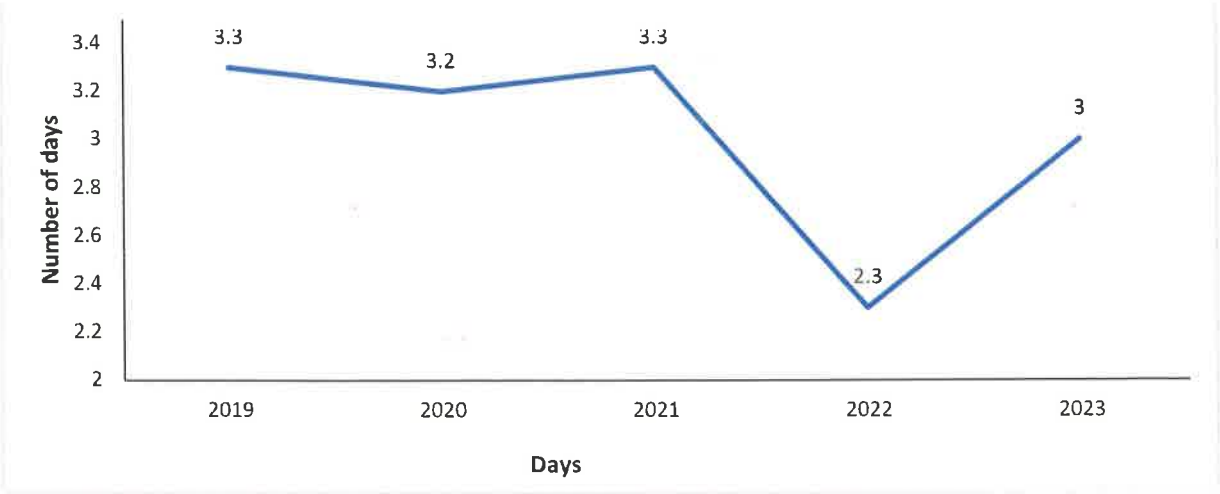

Figure 27 Trend in average length of stay in emergency, 2019-2023

Family planning

Expanding access to Family Planning and Reproductive Health (FP/RH) services is one of the best investments a country can make. FP/RH services can improve women and children's overall health, reduce maternal and child mortality, and help prevent HIV infections. As a country, family planning services are provided at all levels of the healthcare system with basic training offered to health workers to deliver appropriate family planning services. In a bid to increase access to family planning services towards attainment of the SDG related targets, clinical methods including contraceptive implants have been added to the NHIS benefits package.

There has been much improvement in the use of family planning services over the last four years (2020-2023), as shown in Figure 28. In the year under assessment, the number of persons accepting to use family planning methods increased to 3 million, resulting in an acceptance rate of 35.8% (Figure 23). This rate is slightly lower than the one recorded in the previous year (2022) and could be partly explained by presence of some cultural barriers and absence of commodity availability in NHIS benefits package.

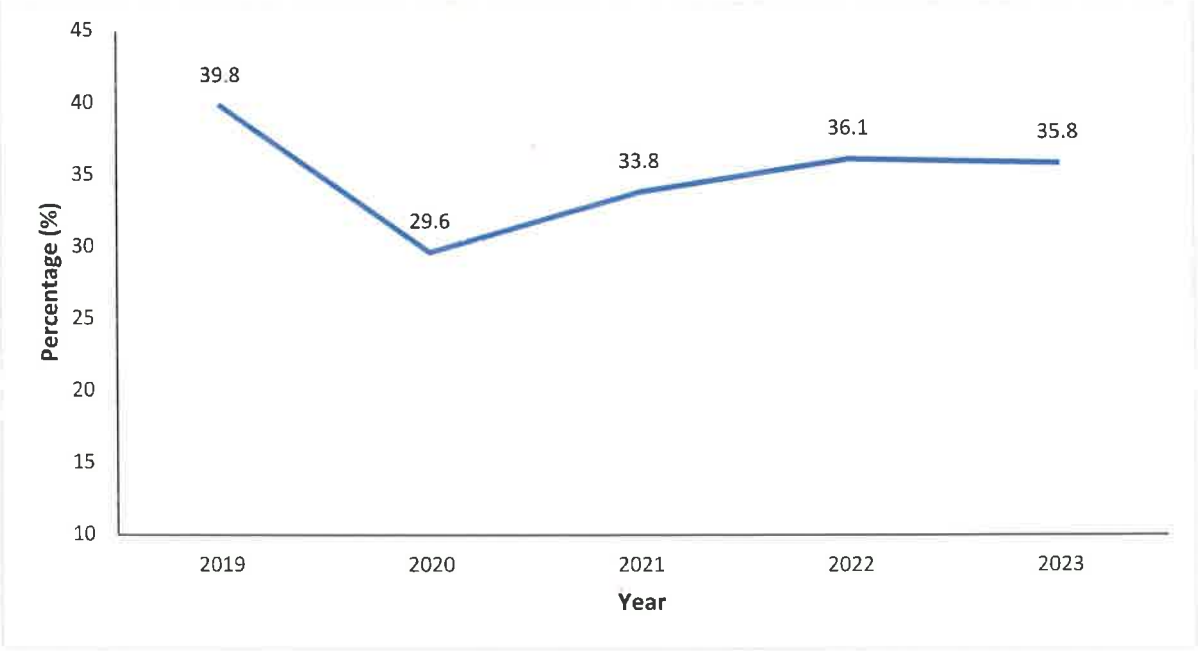

Figure 28 Trend in family planning acceptor rate, 2019-2023

The regional decomposition revealed that half of the regions recorded higher family planning acceptor rates than the national rate of 35.8% (Table 24). The Ahafo region recorded the highest family planning acceptor rate of 48.1%, followed by the Upper West (45.4%) and

Central (45.1%) regions. The Savannah region, on the other hand, registered the lowest family planning acceptor rate of 22.3%%, followed by North East (22.6%).

Monitoring of family planning activities showed that utilization of family planning services is low among Muslim communities. The North East and Savannah regions are predominantly Muslim. Additionally, while the supply of family planning commodities has improved, it remains irregular across regions. Majority of women prefer long-term methods, especially those requiring surgical procedures. However, there is limited capacity among health professionals to perform these procedures. With the inclusion of family planning services in the NHIS benefits package, it is expected that utilisation would improve in subsequent years.

Table 24 Family planning acceptor rate by region, 2018-2022

Region	2019	2020	2021	2022	2023
Ahafo	62.7	44.6	56.7	50.2	48.1
Ashanti	24.7	22.8	29.1	28.7	31.7
Bono	65.0	41.0	41.8	33.9	36.4
Bono East	47.7	41.1	43.8	43.4	44.0
Central	35.0	32.3	38.7	45.6	45.1
Eastern	28.5	25.0	30.2	29.9	29.0
Greater Accra	73.5	33.6	35.9	47.8	42.3
North East	50.4	23.7	21.6	21.0	22.6
Northern	33.5	28.2	27.8	26.5	25.2
Oti	28.0	31.7	34.8	34.4	37.0
Savannah	26.6	18.8	20.2	23.4	22.3
Upper East	31.3	31.8	35.8	33.1	34.5
Upper West	52.5	50.0	46.0	49.9	45.4
Volta	23.2	24.6	28.9	30.3	33.1
Western	31.4	29.0	34.0	38.1	40.8
Western North	27.8	24.5	27.9	26.5	26.5

The couple-year protection (CYP) which refers to the estimated protection provided by family planning methods during the year under review, based on the volume of all contraceptives sold or distributed free to clients increased from 1.6 million to 1.7 million (7.3%). The improvement in CYP is due to the continued financial support from the development partners especially UNICEF and West African Health Organisation (WAHO) in the procurement of the commodities and increasing uptake of long-term contraceptives by the target population.

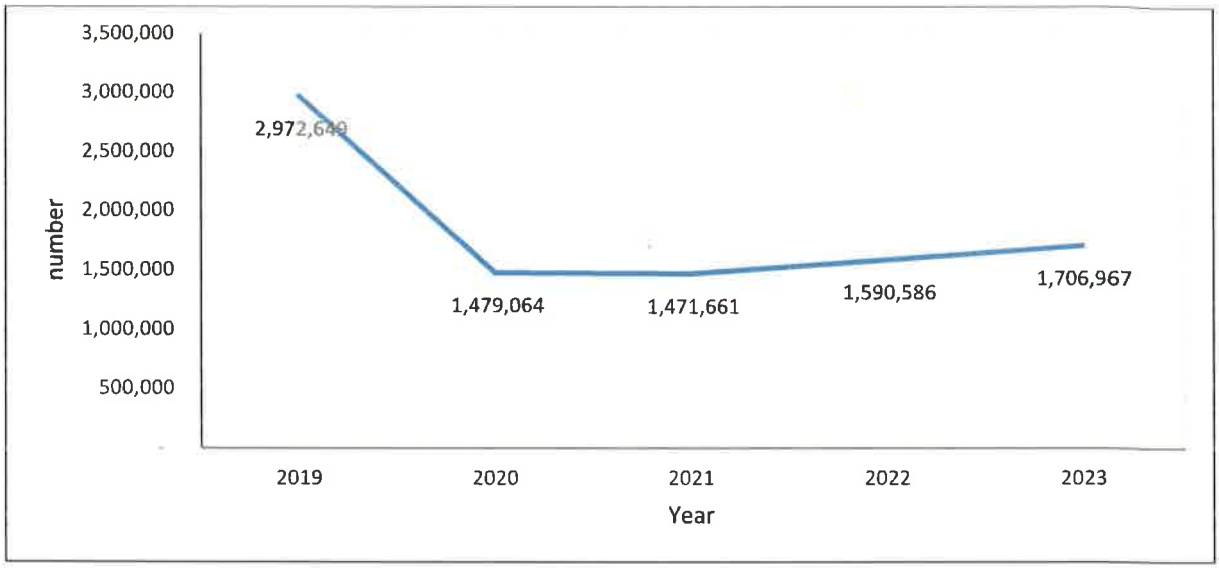

Figure 29 Trend in couple-year of protection, 2012-2023

Malaria incidence per 1000 population

The number of people getting infected with malaria has gone down over the last five years. The reported cases to the healthcare facilities per 1000 population had declined from 221 to 178 (19.5%) over the same period (Figure 30). In the year under assessment, however, the number of infections per 1000 population increased marginally from 178 to 188 (5.6%).

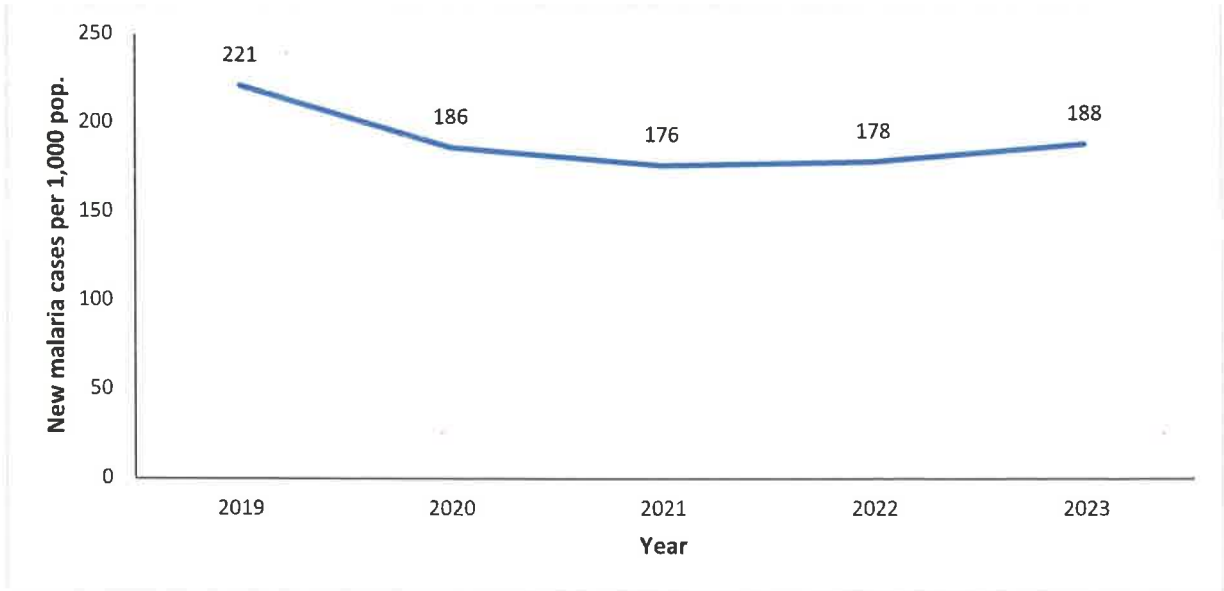

Figure 30 Malaria incidence per 1,000 population, 2019-2023

Regional distribution of malaria infection showed that the Greater Accra recorded the best incidence of 38.2 new cases per 1,000 population between 2019 and 2023. However, Bono region recorded the worst malaria incidence of 310.2 new cases per 1,000 population. Nine other regions also recorded worse incidence of more than 200 new infections per 1000 population (Table 25). The success in the Greater Accra could be attributed to alternative health care service points. However, the relative higher cases in the northern part of the country indicate that the seasonal malaria chemotherapy intervention being implemented in the five northern regions is not yielding the desired results. It is therefore hoped that introduction of malaria vaccines will improve the situation.

Table 25 Malaria Incidence per 1000 Population by regions 2019-2023

Ghana	**2019**	**2020**	**2021**	**2022**	**2023**
Ahafo	322.8	254.1	349.5	295.3	308.7
Ashanti	168.4	142.3	173.8	148.5	166.8
Bono	435.2	297.4	344.3	309.2	310.2
Bono East	388.2	300.1	266.5	269.3	291.4
Central	239.8	197.7	213.6	194.6	215.2
Eastern	223.3	194.3	272.8	240.3	276.1
Greater Accra	52.9	39.5	44.6	38.2	42.4
North East	194.7	198.2	231.1	256.5	196.1
Northern	151.1	128.3	121.1	116.9	114.9
Oti	235.7	202.9	199.8	209.4	229.6
Savannah	280.7	200.	185.2	206.7	214.1
Upper East	462.3	392.3	392.2	349.2	306.5
Upper West	422.6	336.1	317.8	299.4	286.2
Volta	184.	127.	191.7	146.5	179.4
Western	285.3	215.4	277.6	213.6	234.4
Western North	363.8	307.4	335.6	223.4	209.0

Prevalence of hypertension and diabetes

In 2022, the Ministry of Health revised the policy for the prevention and control of non-communicable diseases (NCDs) to address the increasing number of premature mortalities due to Cardiovascular Disease, Cancers, Respiratory Diseases and Diabetes Mellitus.

Available data indicates that the number of patients diagnosed with hypertension reduced from 193,099 in 2022 to 182,081 in 2023 (6%). In the same period, the number of diabetic patients reduced from 622,849 to 550,634(11.6%).

Trend analysis of prevalence of hypertension at the healthcare facilities showed that it had been less than 3% over the last five years (2019-2023) and that of diabetes hovered around less than 1% (Figure 31). In the year under review, the percentage of persons living with hypertension declined by less than 1 percentage point. Similar reduction was observed in those living with diabetes. Increased NCD advocacy and education as well as improved screening might have contributed to the observed reduction. Nonetheless, there is also underreporting of these two conditions in the DHMIS2.

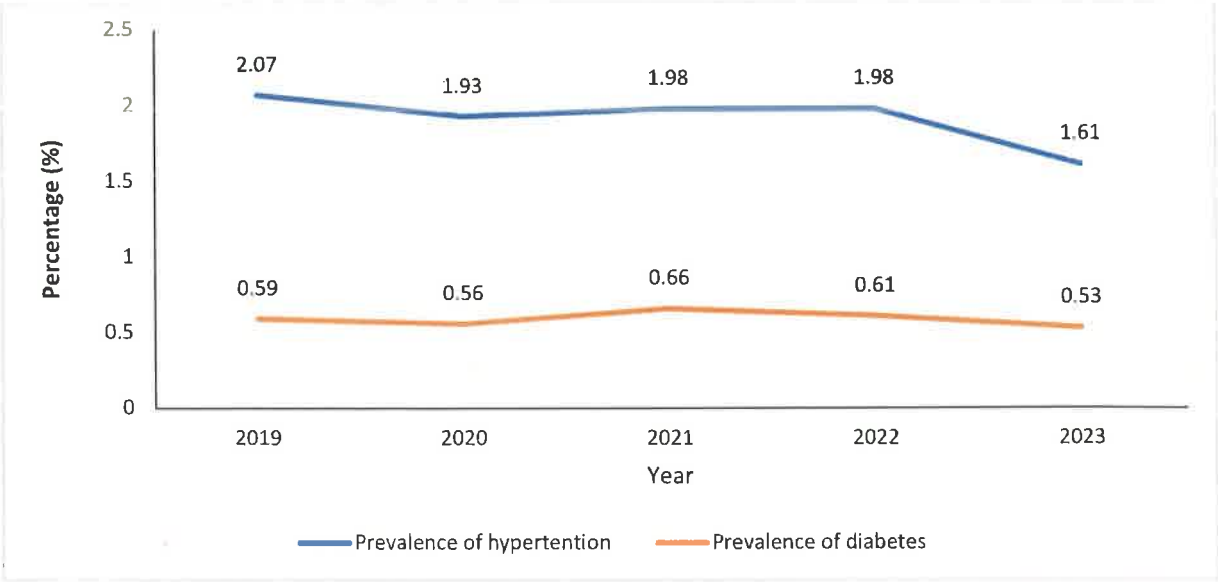

Figure 31 Trends in prevalence of hypertension and diabetes, 2019-2023

Moreover, there are many people with these conditions who are not reporting to health facilities for screening. Several measures, including setting up of sensitization programme to encourage people to seek care early; and regular outreach programme to screen people for hypertension and diabetes would be necessary to improve data capturing and management of the disease.

All-cause mortality

The number of persons dying from any cause of condition has gone down over the last four years (2020-2023) as shown in Figure 32. It declined from 22.9 to 20 per 1,000 hospital admissions. However, in the year under review, the number increased from 19 to 20 per 1,000 hospital admissions. The trend of the indicator over the last five years has not shown much improvement. It remains high compared to targets in the African sub-regions The reasons for hospital deaths are increased NCD deaths, late reporting of conditions to health facilities, delayed diagnostic capacity, and delayed initiation of treatment. Other reasons include late referrals and inadequate capacity at the peripheral facilities.

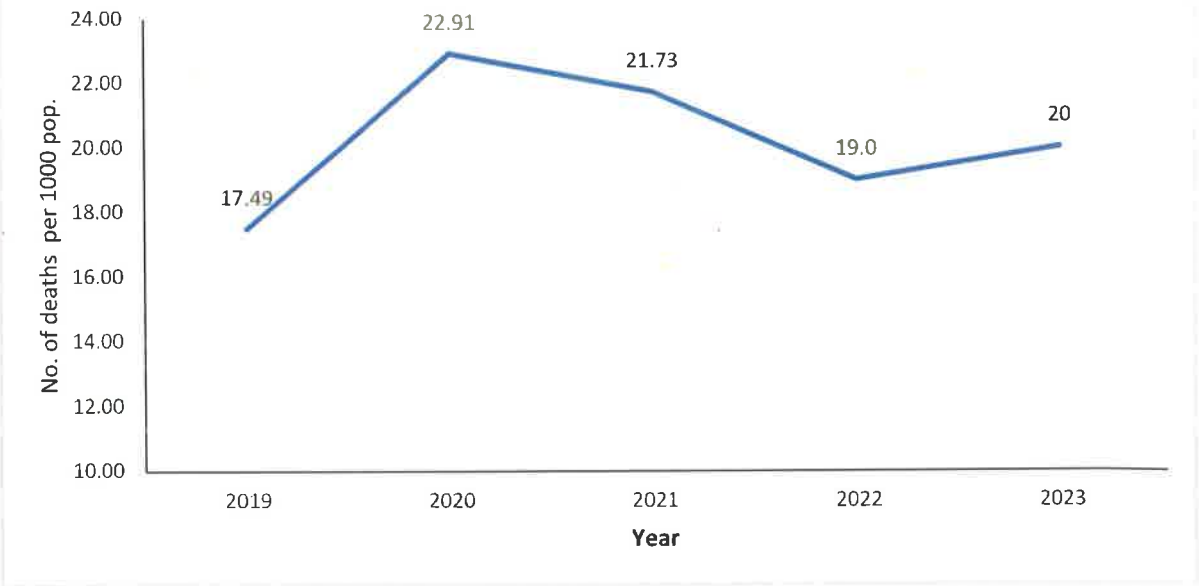

Figure 32 Trend in Institutional all- cause mortality rate, 2019-2023

Regional disaggregation of the indicator showed that the Ahafo region recorded the lowest all-cause mortality rate of 9.07 deaths per 1000 population (Table 26). The Volta region, on the other hand, posted the worst all-cause mortality rate of approximately 29 deaths per 1000 hospital admissions in the year under review. Overall, six out of the 16 regions (Volta, Eastern, Greater Accra, Upper East and Northern) recorded all-cause mortality rates higher than the national rate of 20 deaths per 1,000 hospital admissions. Generally, the Volta, Greater Accra, and Eastern regions had recorded higher institutional all-cause mortalities over the last five years compared to the other regions.

Table 26 Institutional all-cause mortality rate by region, 2018-2022

Regions	2019	2020	2021	2022	2023
Ahafo	9.24	14.35	12.33	9.82	9.07
Ashanti	10.43	14.65	13.10	12.24	13.19
Bono	18.87	24.71	24.85	26.01	23.00
Bono East	16.93	21.49	21.47	19.64	16.31
Central	19.03	24.64	22.44	19.44	15.52
Eastern	21.09	27.89	27.89	28.35	28.06
Greater Accra	30.39	35.81	31.74	29.86	27.19
North East	16.83	18.77	20.47	20.74	19.33
Northern	10.99	16.03	18.81	19.88	22.53
Oti	14.35	13.50	16.73	17.30	17.10

Savannah	11.09	8.80	13.42	11.88	12.86
Upper East	31.60	21.75	29.41	23.86	24.63
Upper West	15.75	15.32	20.53	18.43	18.01
Volta	29.33	29.41	35.57	30.77	29.37
Western	23.62	18.22	23.97	19.98	17.71
Western North	11.39	11.91	12.49	10.77	10.26

HIV incidence and prevalence

The new cases of HIV infections in the country increased marginally from 0.53% to 0.56% (0.03 percentage points difference) between 2022 and 2023 (Figure 33). The percentage of new and old HIV infections in the population (prevalence rate), however, reduced slightly from 1.66 to 1.53% (0.13 percentage points difference) over the same period. This probably indicates improvement in the supply of ARTs to People Living with HIV (PLHIV) in the country.

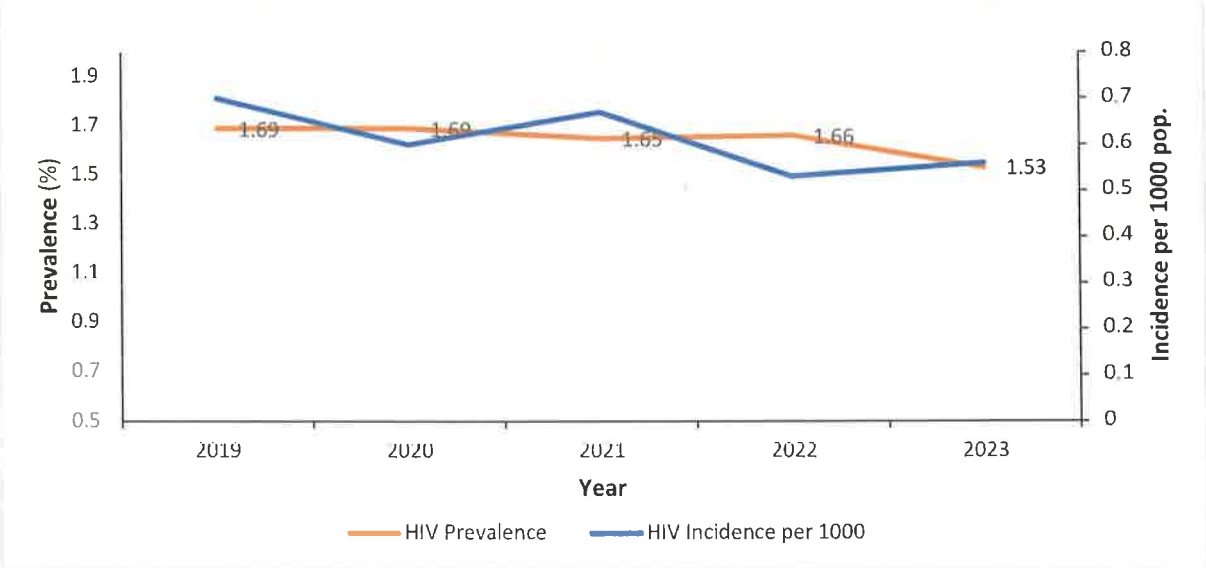

Figure 33 Trend in HIV prevalence and incidence, 2019-2023

At the regional level, the Northern region recorded the lowest new infections per 1000 population (0.13) whilst the Greater Accra region recorded the highest rate of 0.076 per 1000 population (Table 27). Infections were generally low (less than 0.05, per 1000 population) in the northern part of the country, as well as Oti and Volta regions.

Table 27 Number of new HIV infections per 1000 population by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	0.69	0.11	0.56	0.54	0.064
Ashanti	0.78	0.10	0.58	0.63	0.064
Bono	1.03	0.10	0.79	0.68	0.074
Bono East	0.66	0.11	0.54	0.55	0.056
Central	0.50	0.11	0.30	0.42	0.051
Eastern	0.77	0.10	0.74	0.69	0.068
Greater Accra	1.12	0.09	0.57	0.69	0.076
North East	0.08	0.13	0.17	0.14	0.016
Northern	0.11	0.13	0.16	0.16	0.013
Oti	0.41	0.12	0.30	0.42	0.041
Savannah	0.23	0.12	0.26	0.32	0.027
Upper East	0.26	0.10	0.37	0.23	0.027
Upper West	0.25	0.10	0.33	0.39	0.032
Volta	0.47	0.10	0.49	0.43	0.045
Western	0.53	0.10	0.57	0.52	0.057
Western North	0.72	0.11	0.42	0.67	0.068

HIV 95-95-95

The estimated number of people living with HIV decreased from 354,927 to 334,340 (5.8%) between 2022 and 2023. In the year under assessment, 218,196 persons infected with HIV knew their status; 151,526 were on treatment; and 87,823 had their viral load suppressed. The percentage of HIV positive individuals who were on treatment and had their viral load suppressed increased from 68% to 89% (21 percentage points difference), as shown in Figure 34. However, those who knew their status decreased from 77.5% to 65. % (12.5 percentage points difference) between 2022 and 2023. Likewise, those who received sustained treatment decreased from 80.9% to 69.4% (11.5 percentage points difference).

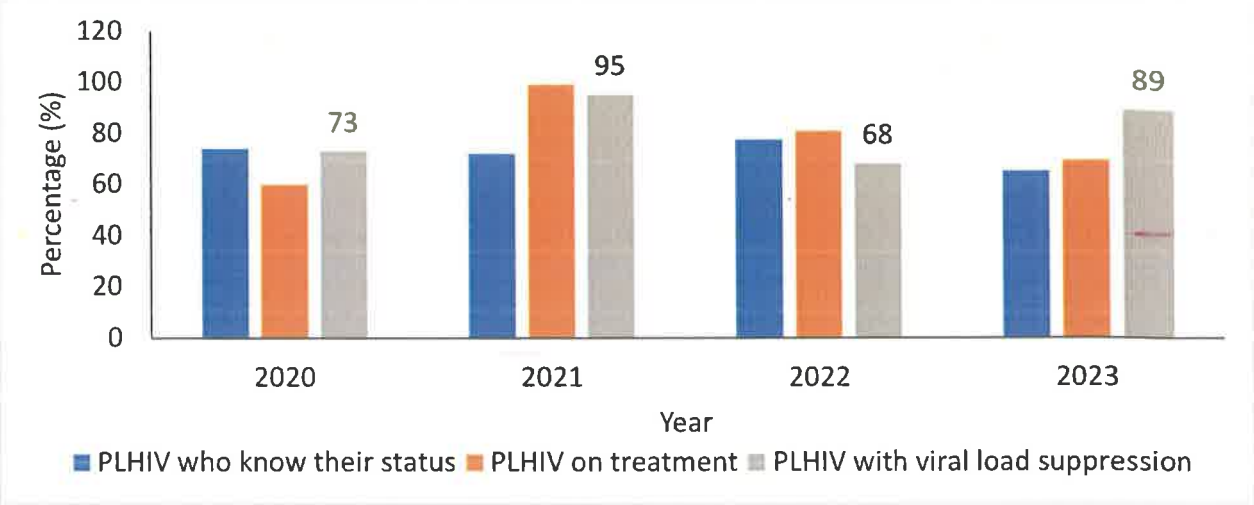

Figure 34 Percentage of PLHIV by knowledge status, treatment, and viral load suppression, 2020-2023

The decline in treatment is attributed to inadequate number of screening (or testing). The results suggest that more efforts including scaling up screening and purchasing adequate number of reliable reagents and equipment are needed to speed up progress towards the attainment of 95-95-95 target by 2025.

Tuberculosis (TB) incidence rate

The number of new TB infections had increased from 16,526 to 17,936, (8.3%) between 2022 and 2023. Consequently, the number of new cases per 100,000 population (incidence) had increased from 52.5% to 56.3% (4.2 percentage points difference) over the same period, as shown in Figure 35. In the year under review, the new and relapsed cases per 100,000 population increased from 52.5% to 56.3% (3.8 percentage points difference).

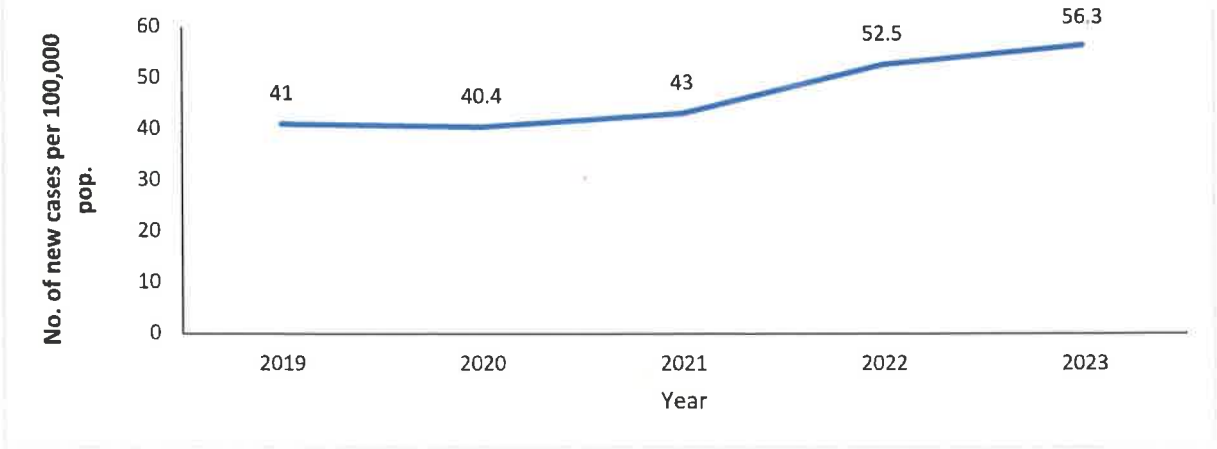

Figure 35 TB Incidence per 100,000 population, 2019-2023

TB case detection rate

In 2023, the National Tuberculosis Programme reported 18,826 new and relapsed TB cases, an increase of 2,300 cases (13.9%) from the base year, 2022. This improved notification can be attributed to the introduction of the Sputum Sample Transportation, an intervention where sputum samples are transported through Ghana Post. Consequently, TB case detection rate increased from 30.3% % to 48.7% between 2021 and 2023 (Figure 36). There was an increase of 18.4 percentage points difference in the year under review.

Several challenges have been raised regarding the appropriateness of the survey projections of the number of occurrences of TB each year. Other notable concerns raised by the TB control programme include issues regarding the sensitivity of screening tools and diagnostic algorithms, as well as low case suspicion index by health professionals.

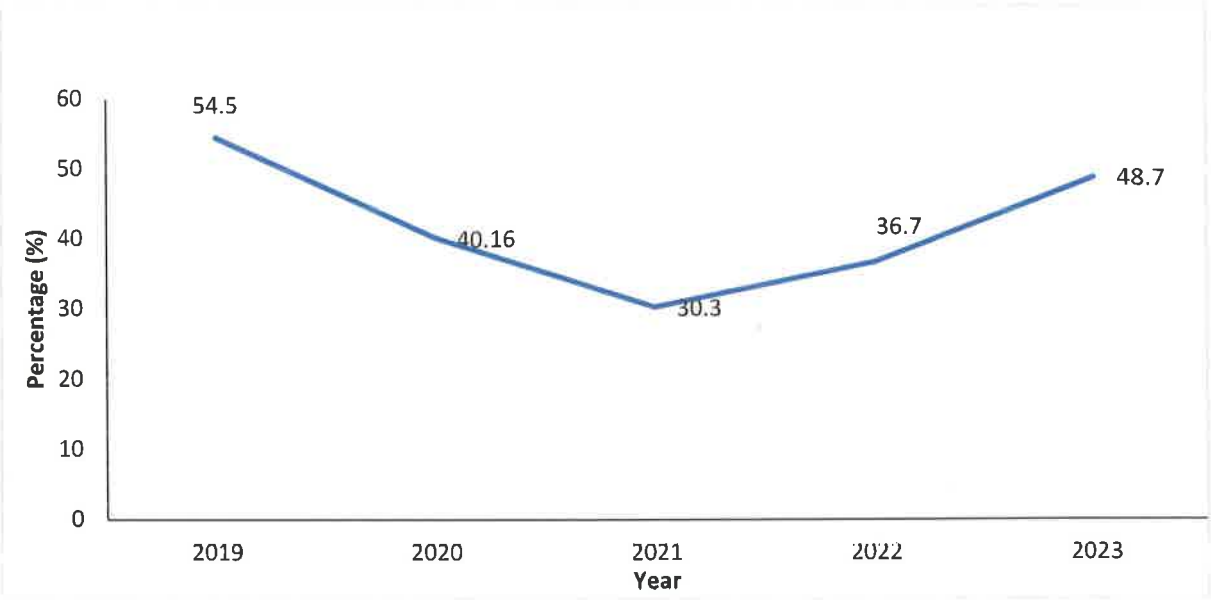

Figure 36 TB case detection rate, 2019-2023

At the regional level, the Western region recorded the highest detection rate of 100% whilst the North East region recorded the lowest rate of 26.9%. The heavy mining activities in the Western region could account for the high prevalence of TB cases in the region. Apart from Upper East and West regions, the other regions in the northern part of the country posted detection rates below 30%.

Table 28 TB case detection rate by region, 2019-2023

Region	2019	2020	2021	2022	2023
Ahafo	N/A	26.7	41.4	55.0	64.7
Ashanti	42.6	36.3	37.9	52.4	55.4
Bono	56.2	53.7	51.3	53.4	66.4
Bono East	N/A	86.4	46.5	49.5	59.3
Central	48	42.7	41.3	56.6	56.6
Eastern	51.9	44.5	48.8	67.5	72.6
Greater Accra	54.4	43.1	42.2	48.0	55.3
North East	N/A	22.9	27.9	28.7	26.9
Northern	22.9	19.8	24.8	25.6	27.2
Oti	N/A	51.6	42.2	50.7	64.1
Savannah	N/A	11	23.3	24.1	39.4
Upper East	54	42.1	45.7	55.3	57.7
Upper West	35.6	39.7	40.6	50.5	53.0
Volta	49	42.5	48.4	52.4	62.1
Western	65	60.5	69	92.1	100.0
Western North	N/A	27.3	38.9	36.0	40.6

NA: Not available

TB treatment success rate

The country has made progress in treatment success rate over the last four years after a drop in 2020 due to the COVID-19 restrictions. In the assessment year, the national TB programme successfully treated 87.6% of all detected TB patients (Figure 37). In the year under assessment, the programme commenced processes to reduce the number of patients defaulting treatment by ensuring that persons diagnosed with TB are recorded in the TB e-Tracker and the Institutional TB register. Patients are easily identified and initiated on treatment early. This has partly contributed to the increase in notification over the last three years.

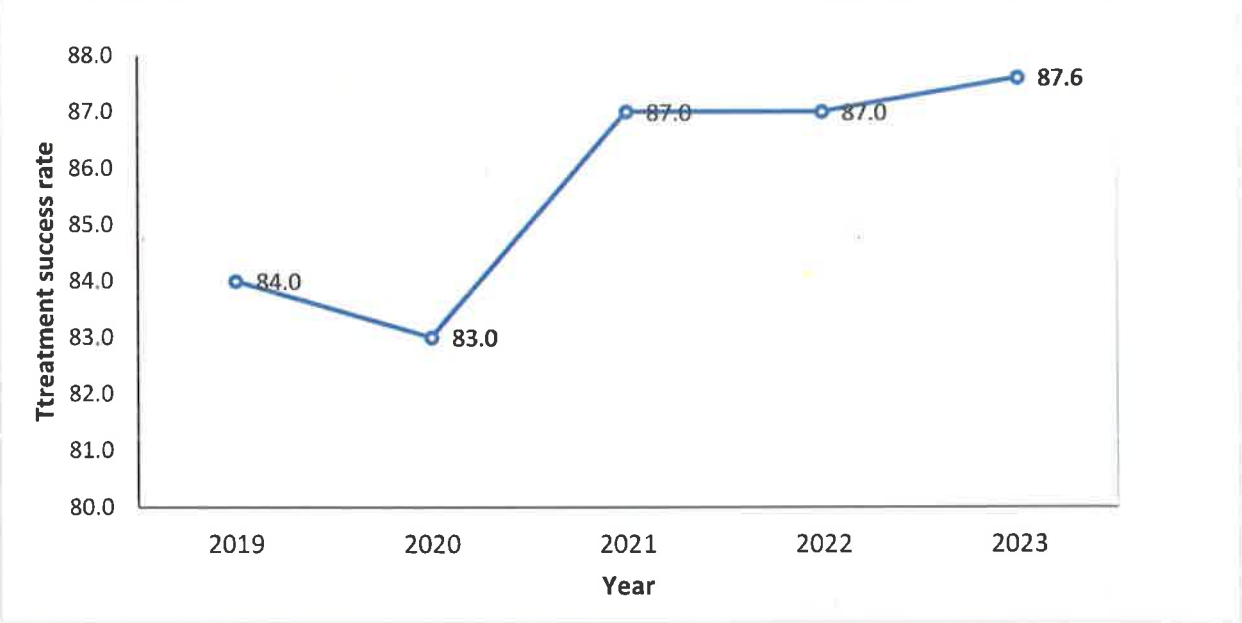

Figure 37 Trend in TB treatment success rate, 2019-2023

Surgical site infection rate

Surgical site infections (SSIs) occur among a small proportion of patients undergoing inpatient surgical procedures. Although SSIs are treatable with antibiotics, it is a major cause of mobility and mortality after surgery. In 2023, the number of surgeries almost doubled to 81,458 from 46,807 in 2022 representing 74%. In the same year, a total of 20,029 surgeries were performed at Korle Bu Teaching Hospital and 18,609 at Komfo Anokye Teaching Hospital, the two largest teaching hospitals in the country.

The number of people reporting back to facilities with infected wounds after surgery has seen a remarkable decline over the last four years (2020-2023), as shown in Figure 38. In the year under review, it declined to 0.04%, from 1.7% in 2023 due to improved surgical procedures and adherence to Infection Prevention and Control measures.

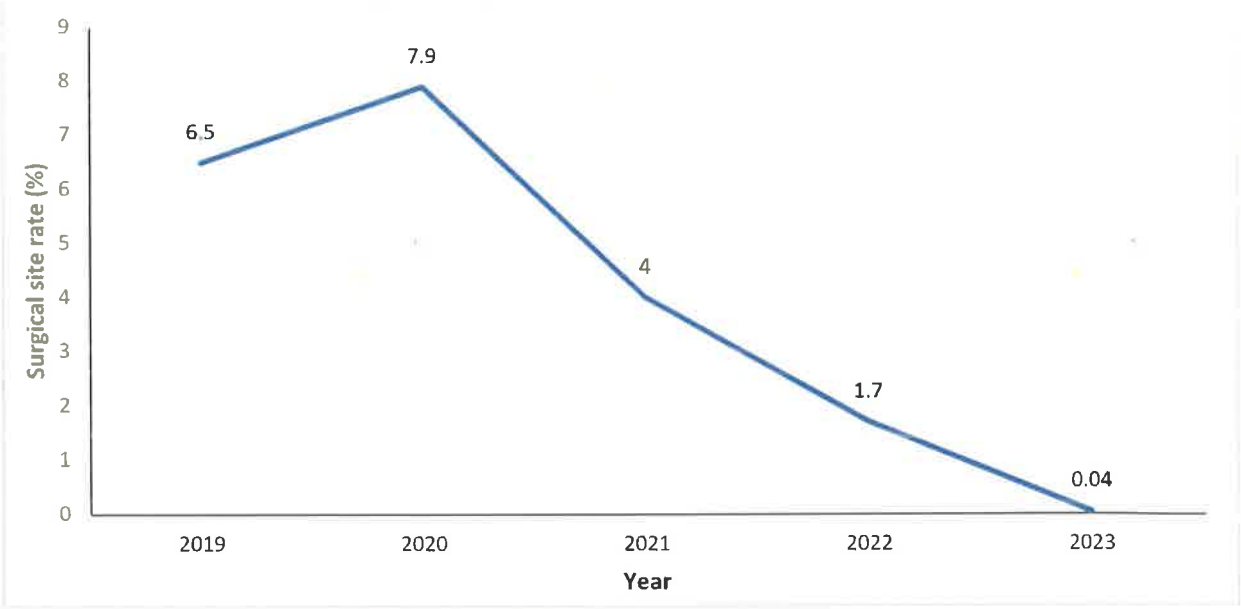

Figure 38 Trend in surgical site infection rate, 2019-2023

Note

**Graph excludes data from the five teaching hospitals

Voluntary unpaid blood

The National Blood Service (NBS) organized 897 voluntary mobile blood collection sessions in 2022 compared to 824 sessions in 2023 (due inadequate specialized vehicles (beds, etc.) for mobile sessions). In general, the units of blood collected across the country increased from 179,765 to 182,696 between 2022 and 2023. This resulted in a marginal improvement in the voluntary unpaid donations from 45,463 to 54,029, representing 18.8% over the same period. Consequently, the percentage of voluntary blood donations increased from 25% in 2022 to 30% in 2023 (Figure 39).

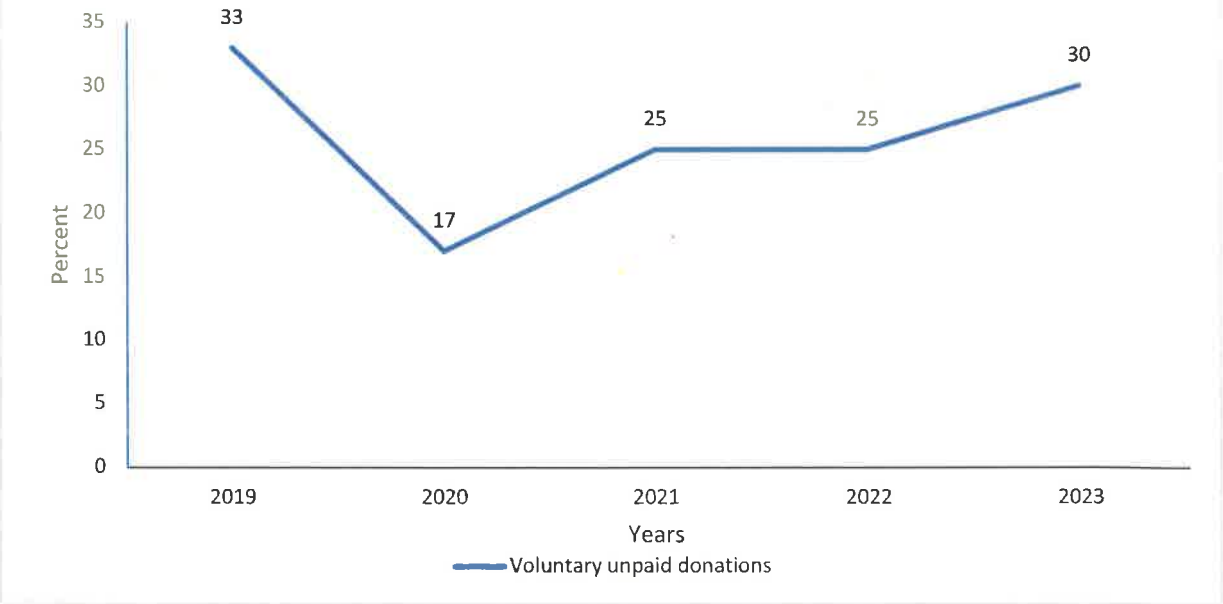

Figure 39 Voluntary unpaid and Family replacement donations, 2019-2023

Family replacement donation is the most reliable source of blood collection, even though it is not the ideal method. The NBS plans to partner with the private sector to establish regional blood centres for recruiting voluntary blood donors. Additionally, the service would continue its advocacy and education efforts to dispel myths about blood donation to improve blood collection and access to blood related services.

Blood collection index per 1000 population (BCI)

The average number of blood donation per 1,000 population increased marginally from 5.8% in 2021 to 5.9% in 2023 (0.1 percentage points difference) as shown in Figure 38. This achievement, however, falls short of the national target of 10 donations per 1,000 population in the assessment year (2023). There has been a gradual improvement in the blood collection index over the last four years (2020-2023) showed after a marked dip in 2020 due to the COVID-19 pandemic.

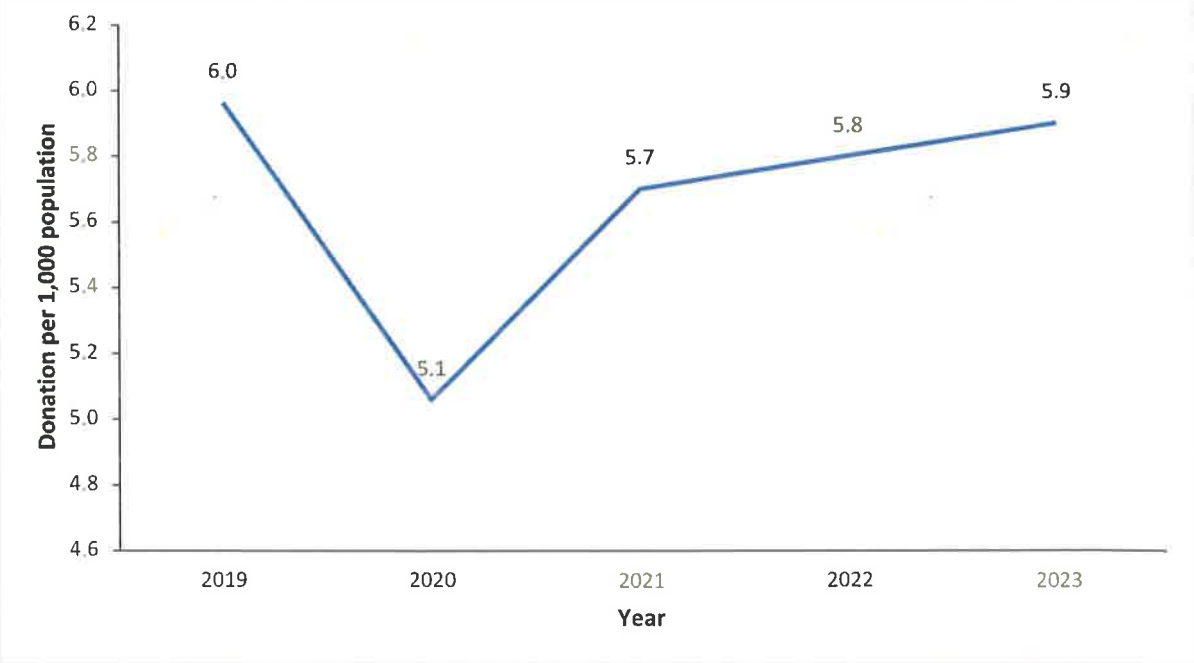

Figure 40 Trend in blood collection index, 2019-2023

Regional decomposing of the number of blood donations per 1,000 population showed that less than half of the regions (six) recorded blood donation index higher than the national index of 5.9 in the year under review. The Upper East region recorded the highest collection index of 8.6, followed by Upper West (8.0). The worst blood collection index was recorded in the Bono region (2.1), followed by the Oti region (2.5) Table 29. Trend over the last five years showed that the Upper East and Upper West regions recorded high blood collection index due to high number of family member donations in these regions. The Bono, Oti and Western North regions, on the other hand, recorded low blood collection index over the same period because of the creation of new regions in 2018. Centres that used to collect blood for these regions are now disproportionally concentrated in one area outside these regions. As a way forward, the NBS plans to licence, and accredit professionals to provide blood services. In addition, it plans to recruit more recruiters to increase voluntary donations.

Table 29 Blood collection index by region 2019- 2022

Region	2019	2020	2021	2022	2023
Ahafo	6.7	6.9	7.2	6.2	5.3
Ashanti	4.2	3.4	5.0	4.4	5.1
Bono	2.7	2.5	2.3	2.8	2.1
Bono East	6.5	6.9	6.4	7.8	7.5
Central	4.4	5.6	5.2	5.3	5.3
Eastern	6.4	6.7	7.2	6.6	6.8
Greater Accra	7.7	5.8	7.7	7.5	7.7
North East	0.2	0.0*	3.3	3.7	6.5
Northern	5.2	4.6	6.7	7.1	5.7
Oti	2.7	2.7	3.7	3.0	2.5
Savannah	0.0*	0.8	3.1	4.3	3.5
Upper East	9.2	9.0	8.8	6.8	8.6
Upper West	9.4	7.3	9.8	10.7	8.0
Volta	6.9	5.8	5.9	6.1	5.4
Western	5.9	4.1	4.2	4.5	5.5
Western North	5.6	4.4	4.8	4.0	3.8

Note

*No blood collection was reported

3.0 FINANCIAL PERFORMANCE

The main sources of the health budget were Government of Ghana (GoG), Additional Budget Funding Allocation (ABFA); Internally Generated Fund (IGF); and Donor Support (Table 30). GoG is the major source of funding for the sector, and it constituted 56.8% of the total approved budget of GHC15.9 billion in the year under review. Out of the total GoG expenditure, compensation of employees constituted 98.2%.

As of December 2023, 87% of the total budget was executed. This may be due to reporting issues or possible delay of National Health Insurance Scheme (NHIS) claim reimbursement. The Donor Goods & Services budget execution of 177% is due to off-budget expenditure while the capital expenditure is because of delays in processes of claims.

The Ministry of Finance, in 2023, made transfer payments of GHC202 million on behalf of the Ministry of Health under the Office of Government Machinery budget to support the activities of the Ministry of Health.

Table 30 2023 Budget Performance as of December 2023

Source of Funds	Approved Budget	Actual Expenditure	Execution Rate (%)
GOG	**9,061,071,139.00**	**9,423,673,945.00**	**104**
Compensation	*8,900,715,972*	*9,276,323,397.00*	*104*
Goods and Services	*23,853,476*	*21,768,917.00*	*91*
Capital Expenditure	*75,454,229*	*73,753,549.00*	*98*
ABFA	**61,047,462.00**	**51,828,082.00**	**85**
IGF	**3,886,926,154.00**	**3,831,762,967.73**	**99**
Compensation	*524,096,512.00*	*397,672,987.60*	*76*
Goods and Services	*2,790,770,640.00*	*2,900,870,599.09*	*104*
Capital Expenditure	*572,059,002.00*	*533,219,381.04*	*93*
DONOR	**2,996,542,520.00**	**606,884,012.55**	**20**
Goods and Services	*277,937,800.00*	*492,255,873.55*	*177*
Capital Expenditure	*2,718,604,720.00*	*114,628,139.00*	*4*
Total	**15,944,539,813.00**	**13,862,320,925.28**	**87**
NHIA		85,604,572.00	
Transfer from MOF to MOH under the office of Government Machinery Budget		202,093,324.00	

Source: *2023 MoF Budget Statement and Economic Policy and 2023 MoH Financial Statement*

4.0 Implementation status of 2023 aide memoire

The Ministry of Health and its Development Partners held a business meeting to discuss keys issues that were identified during the 2023 Health Summit. The outcome of that meeting was translated into an Aide Memoire, which highlighted activities under 14 thematic areas to be implemented by the relevant Agencies alongside the programme of work (Table 31). Majority of the activities were completed within the stipulated time.

Table 31 Summary of 2023 Aide Memoire Implementation

KEY ISSUE	AGREED ACTION	TIMELINE	RESPONSIBILITY	STATUS OF IMPLEMENTATION
1. Migration of health professionals	Develop guidelines for migration of health professionals. Demonstrate progress in implementing the non-financial incentive package to attract and retain staff at rural areas across regions. Negotiate with the countries receiving the health care workers so that Ghana's health system can benefit from the migrations.	December 2023	MOH Relevant Agencies DPs	Draft Policy developed in 2019 is being updated. Reduced number of years for promotions, study leave, etc. for professionals in rural areas are being implemented. Ongoing. Draft MoU, Implementation Guidelines, Activity Timelines and Cost Table developed. Discussions on the Implementation Guidelines on hold pending feedback from the UK Team.
2. Lack of nationally represented data for assessment of the health sector	Commence implementation of the Health Information System Strategic Plan by 2024 • Seek ministerial approval for implementation of the plan. • Build comprehensive indicators list for the sector.	May 2024	MOH, Relevant Agencies, DPs	National database establishment ongoing. Contract awarded with support from USAID. Data task team created. Meeting scheduled 21-23 February 2024. Platform installed on MOH servers. Engagement with five (5) Agencies

KEY ISSUE	AGREED ACTION	TIMELINE	RESPONSIBILITY	STATUS OF IMPLEMENTATION
	• Build capacities of Agencies in data management. • Establish a national database.			(NHIA, GHS, FDA, HEFRA, MDC, NMC) for data sharing started. Comprehensive indicators for the sector built. Needs assessment/gap analysis is ongoing with support from GFF
3. Health sector performance assessment	Conduct mid-year evaluation of the 2022-2025 HSMTDP.	June 2024	MOH, relevant Agencies DPs	Ongoing. Concept note developed and official request for financial and technical support sent to WHO. Lead consultant recruited and steering committee, and technical working group constituted. Inception meeting held. Awaiting inception report from the Lead consultant for review. Data collection scheduled for Feb. 2024.
4. Lack of consensus on the denominator for MCH analysis	Expedite action on MOH/GSS engagement on a correct population denominator for the MCH indicators in the DHIMS.	November 2023	MOH/GHS, DPs, GSS	A team of experts from UG Regional Institute for Population Studies (RIPS) and UCC is working on it.

KEY ISSUE	AGREED ACTION	TIMELINE	RESPONSIBILITY	STATUS OF IMPLEMENTATION
5. Poor and low number of private health facilities reporting to DHIMS2 and other relevant HIS.	Use regulatory frameworks to improve private sector reporting to DHIMS2.	December 2023	MOH, relevant Agencies	Data on whether health care facilities report to DHMIS2 or not is collected as part of HeFRA's accreditation assessment. However, it is challenging to verify the information collected due to lack of access to DHMIS2. Discussions ongoing to resolve this challenge.
6. Weak structures at the PHC levels for the implementation of NoPs	Build capacity of regional and district officers in management and finance. Build capacity of Physician Assistants in-charge of the NoPs on the sub-district governance Build capacity of the NHIA to develop a viable framework for purchasing healthcare services, including health promotion. Seek MoF approval for financial clearance to deploy requisite staff for the implementation of NoPs.	December 2023 December 2023	MOH, GHS, DPs MOH, MOF	Training on Management Accounting and IGF Guidelines done for some staff senior at the regional and district levels. Development of the NoPs Implementation Guidelines will be completed by the end of January 2024. Then trainings will start at all levels of care (district, region, national). NoP trainings will start from February 2024.
7. Persistent stock out of	Develop and implement a co-financing plan.	December 2023	MOH, relevant DPs including USAID.	Roadmap for co-financing and self-financing of

KEY ISSUE	AGREED ACTION	TIMELINE	RESPONSIBILITY	STATUS OF IMPLEMENTATION
essential medicines and programme funded commodities.	Develop reimbursement and payment plans for the Regional Medical Stores.			programme funded commodities, e.g., vaccines are being developed.
8. Misalignment of donor programmes in the health sector	Finalise and institutionalise resource mapping tool.	December 2023	MOH, DPs including GFF	Partners retreat held in September last year and a communique issued to address this issue. Following from this, the GFF is supporting the Ministry to complete and use the RMET. We look forward to receiving DPs commitments (Workplans and Budgets) to facilitate this work.
9. Low awareness of the implementation of the Network of Practice (NoP).	Accelerate the implementation of the NoP model through dissemination of NoP guidelines at regional level by May 2024 and district level by December 2024. Create a system whereby district, regional and teaching hospitals as well as the training institutions contribute to the NoPs	December 2024	MOH, GHS, DPs	NoPs programme and Implementation Guideline completed and launched at the GHS SMM prime. yesterday (06 Feb. 2024). Trainings will start at all levels of care (district, region, national) in Feb. 2024.

KEY ISSUE	AGREED ACTION	TIMELINE	RESPONSIBILITY	STATUS OF IMPLEMENTATION
10. Health sector funding gap • Capping of NHIS fund • Adequate budget for goods and services	Advocate for de-capping and exemption of the NHIF. Strengthen engagement with parliament and MOF to increase fiscal space for health. Develop investment case for funding of health activities.	December 2023	MOH, MOF, Parliament with support of DPs	A lot of meetings were held to discuss the issues. As a result, all health facilities have been de-capped. In addition, Agencies such as FDA, NMC, PC, among others have had their de-capped rates reduced. Not much has been achieved despite the Ministers' engagement with the MoF due to the current economic constraints.
11. Delay in production of National Health Accounts	Conduct National Health Accounts for default years.	December 2023	MOH, DPs	The development is underway with support from WHO. We hope to produce reports by 30th March 2024.
12. Low engagement with private partners in health	Review and implement the Private Health Development Policy.	December 2024	MOH, relevant Agencies, DP	Concept Note for the assessment and revision of the Private Health Sector Development Policy (PHSDP) completed. UNFPA is providing Technical Assistance for Consultancy and some TWG meetings.

KEY ISSUE	AGREED ACTION	TIMELINE	RESPONSIBILITY	STATUS OF IMPLEMENTATION
				Initial engagements with some stakeholders have taken place as of December 2023.
13. Delay in implementation of health sector policies, strategies, and guidelines for service delivery.	Finalize, publish, and disseminate the following policy documents and survey reports: • Essential Healthcare service Package. • Health Financing strategy. • HIS strategy. • Referral Policy. • EmONC survey. • One Health policy and operational plan. • Ghana DHS 2022. • Work on other essential SGD indicators not included in the current EmONC survey (e.g., MMR).	December 2023	MoH, DPs	**Essential services package**: Completed and printed. Alignment with the NHIA benefit done. Dissemination to Health Technology Assessment working group, Alignment working group, and the Prioritization working group done. Prioritization exercise ongoing to recommend services and interventions for consideration by the NHIA. **Health financing strategy**: Completed and launched. It was disseminated during the 2023 Health Summit at Labadi Beach Hotel. WHO is helping to print. **Health information strategy**: completed and being implemented.

KEY ISSUE	AGREED ACTION	TIMELINE	RESPONSIBILITY	STATUS OF IMPLEMENTATION
				Referral policy: Completed. Awaiting submission of cabinet memo to the Hon. Minister. **One Health Policy and Operational Plan:** This is being coordinated by NADMO. It has been ongoing for the past four years. **EmONC survey:** It started in 2020 and has been completed. Draft report produced. **Ghana DHS 2022**: Report produced by GSS. Dissemination of the report done last two weeks at Alisa Hotel. Dissemination of sector-specific sections ongoing.
14. Review Governance Mechanism and update CMA accordingly.	Review the Common Management Arrangements to facilitate the implementation of the HSMTDP.	December 2023	MoH, DPs	Ongoing. Engagements with Heads of Agency and DPs held. TWG meeting held to incorporate the feedback. A validation meeting with stakeholders will be held in February

KEY ISSUE	AGREED ACTION	TIMELINE	RESPONSIBILITY	STATUS OF IMPLEMENTATION
				towards finalization of the document by March 2024.

5.0 STATUS REPORT OF COVID- 19

In the period under review, a total of 171,065 cases were recorded with 169,586 recoveries/discharges; 1,461 deaths; and 18 active cases (Table 32). Majority of the cases were detected in the communities through the enhanced surveillance approach.

Table 32 Confirmed cases of COVID-19 and Treatment Outcomes, 2023

Category	Number of cases	Recovered/ Discharged	Severe	Critical	Dead	Active
Routine Surveillance	62,721	162,771	0	0	1,462	7
Enhanced Contact Tracing	101,519					
International travellers (KIA)	7,705	7,705				
Total	171,945	170,476	0	0	1,462	7

****Severe-0, Critical-0**

The positivity rate, which indicates the percentage of people who tested positive for the virus out of the total test conducted is low (6.8%). Nonetheless, the rate is higher among cases detected through routine surveillance than those from the enhanced contact tracing in the communities and at the Airport (Table 33).

Table 33 Positivity rate by Surveillance type for samples tested in Ghana Mar 2020- Dec 2023

Surveillance Type	Total no. Tested	Total no. positive	Positivity rate
Routine Surveillance-22	507,265	62,721	12.4
Enhanced Contact Tracing-102	1,149,266	101,519	8.8
International travellers (KIA)	885,433	7,705	0.9
Total	2,541,964	171,945	6.8

Covid-19 Vaccination Programme (Vaccine procurement, supply and deployment)

As of December 2023, the country had received a total of 36,920,398 doses of vaccines, of which 36,133,198 (97.9) was distributed (Table 34). Among the Vaccines received, 12,971,470 (35.1%) were AstraZeneca. The number of persons receiving at least 1 dose of the vaccines was 14,867,012, representing 71.6% of the targeted 20.7 million population and 46.3 % of total population. The number of persons fully vaccinated was 11,782,609, which represented 56.7% of 20.7 million targeted population, and 36.7% of the total population. In addition, 6,691,825 persons received booster dose.

Table 34 vaccine receipt update, December 2023

Vaccine Brand Name_1	SUM of Quantity	Prop (%)	Doses Distributed	Doses available
AstraZeneca	12,971,470	35.1%	12,971,470	0
COVID-19 Vaccine Janssen	11,661,650	31.6%	10,874,450	787,200
Moderna COVID-19 vaccine	1229620	3.3%	1229620	0
Pfizer-BioNTech	11,036,658	29.9%	11,036,658	0
Sputnik-V	21,000	0.1%	21,000	0
Grand Total	**36,920,398**	**100.0%**	**36,133,198**	**787,200**

Source of Vaccine	Quantity received	Prop (%)
COVAX	23,255,550	63.0%
AVATT/AU/WB	8,738,400	23.7%
Bilateral	4,926,448	13.3%
Grand Total	**36,920,398**	**100.0%**

*AVATT/AU/WB includes the **314,850** donation from the **MTN**

Some of the preventive measures for reducing spread of the disease among the public included avoiding handshaking and overcrowded places; being encouraged to wear a mask when leaving home especially during indoor activities and events; and washing one's hands often with soap and water for at least 20 seconds. Other measures were covering one's cough or sneeze with a tissue, disposing the tissue in a closed bin, and then washing one's hands; avoiding close contact with people who are sick; and eligible persons (aged 15 years and above, not fully vaccinated) were requested to go to a nearby vaccination centre for COVID-19 vaccination.

APPENDICE

Appendix 1: Assessment algorithm

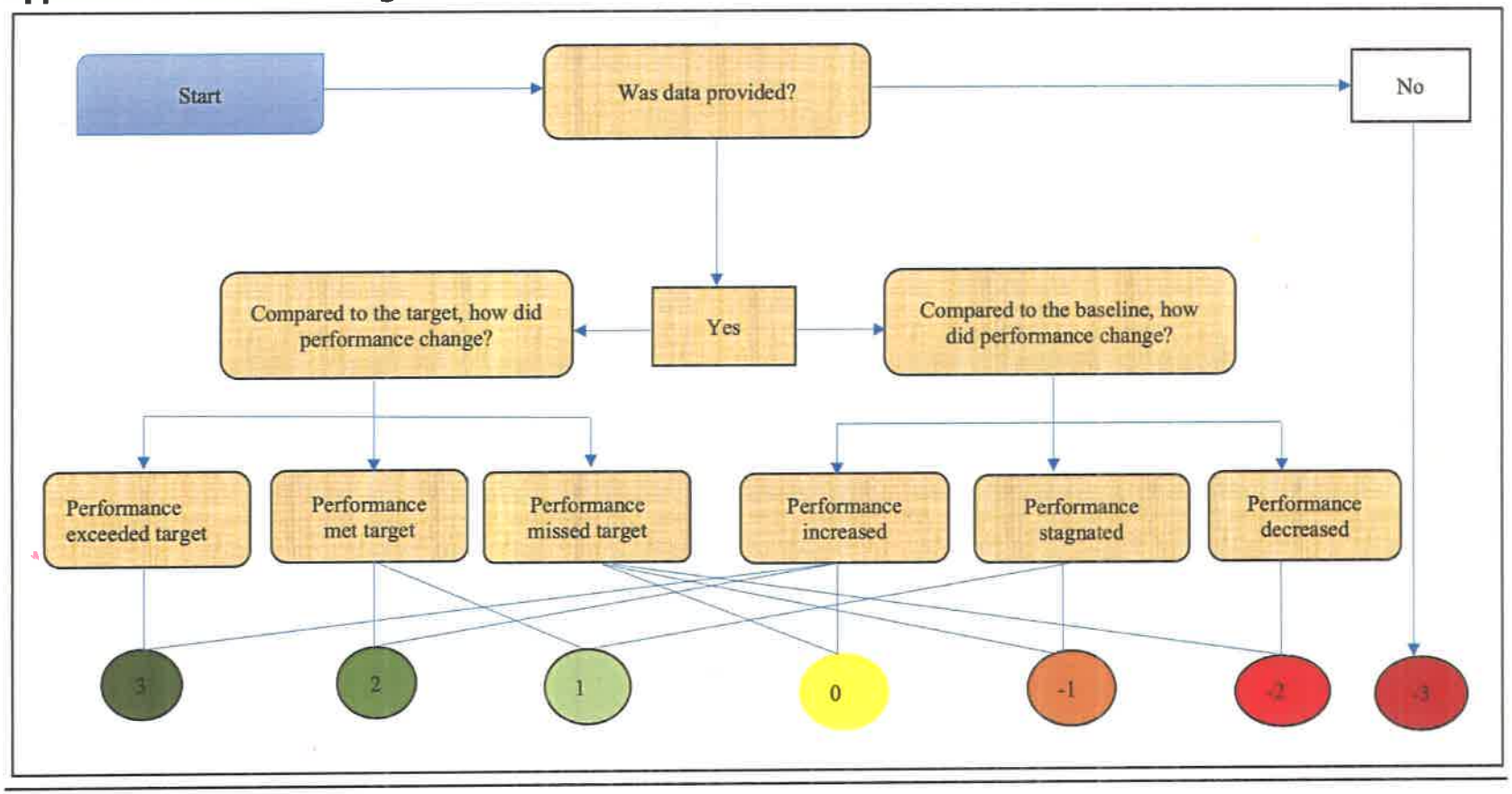

Figure 1: Flow chart for scoring performance of an indicator

Appendix 2: Trends in sector-wide indicators, 2023

MINISTRY OF HEALTH: ANNUAL HEALTH SECTOR HOLISTIC ASSESSMENT TOOL

Objective	INDICATOR	INDICATOR DIRECTION (+/-)	BASELINE	TARGET	2023 PERFORMANCE OUTLOOK						
			2022	2023	Actual	Relative to Target	Description of performance relative to Target	Relative to Baseline	Description of performance relative to Baseline	Performance Score	Score Description
Objective One	Proportion of encounters with antibiotics prescribed	(-) Downward	45.0	15.0	40.6	-170.7	Missed	9.8	Increased	0	Fairly Good
	Government health expenditure as % of total government expenditure	(+) Upward	7.4	11.0	7.0	-36.4	Missed	-5.4	Decreased	-2	Below Average
	Out-of-pocket expenditure as % of current health expenditure (CHE)	(-) Downward	36.0	34.0	27.0	20.6	Exceeded	25.0	Increased	3	Excellent
	Proportion of population with large household expenditures on health as a share of total household expenditure or income (Catastrophic Health Expenditure)	(-) Downward	N/A	N/A	N/A	** Missing Value**	***	**Missing Value**	***	-3	Poor
	Percentage of the population with active NHIS coverage	(+) Upward	54.5	62.0	55.5	-10.5	Missed	1.8	Increased	0	Fairly Good
	Average percentage of clients satisfied with OPD/IPD services	(+) Upward	N/A	N/A	N/A	** Missing Value**	***	**Missing Value**	***	-3	Poor
	Average number of medicines per prescription	(-) Downward	2.9	2.87	3.0	-4.5	Missed	-3.4	Decreased	-2	Below Average
	Doctor to population ratio	(+) Upward	0.2	1.0	0.2	-80.0	Missed	17.6	Increased	0	Fairly Good
	Nurse to population ratio	(+) Upward	2.0	2.0	1.8	-10.5	Missed	-10.1	Decreased	-2	Below Average
	Doctor population equity index (Geographical)	(-) Downward	21.0	1.0	16.0	-1500.0	Missed	23.8	Increased	0	Fairly Good
	Nurse Population equity index (Geographical)	(-) Downward	2.5	1.0	2.3	-130.0	Missed	8.0	Increased	0	Fairly Good
	OPD per capita attendance	(+) Upward	1.06	1.0	1.10	10.0	Exceeded	3.8	Increased	3	Excellent
	Availability of essential medicines (Tracer Drug Availability)	(+) Upward	N/A	N/A	N/A	** Missing Value**	***	**Missing Value**	***	-3	Poor
	Percentage of facilities in good standing with HeFRA	(+) Upward	40.0	50.0	41.0	-18.0	Missed	2.5	Increased	0	Fairly Good
	Proportion of facilities offering Traditional & Alternative Medicine	(+) Upward	31.0	54.0	31.0	-42.6	Missed	0.0	Stagnated	-1	Average
	Percentage of samples analyzed	(+) Upward	91.0	100.0	93.2	-6.8	Missed	2.4	Increased	0	Fairly Good
	Percentage of licensing inspections conducted	(+) Upward	89.0	89.0	88.0	-1.1	Missed	-1.1	Decreased	-2	Below Average
	Percentage of market surveillance outings conducted	(+) Upward	91.0	100.0	100.0	0.0	Met	9.9	Increased	2	Very Good
Objective Two	Midwife to WIFA ratio	(+) Upward	3.1	3.6	3.0	-16.1	Missed	-3.9	Decreased	-2	Below Average
	Midwife to WIFA population equity index (Geographical)	(-) Downward	2.5	1.0	2.3	-130.0	Missed	8.0	Increased	0	Fairly Good
	ANC 4+ (%)	(+) Upward	84.7	87.2	87.1	-0.2	Missed	2.8	Increased	0	Fairly Good
	Institutional Neonatal Mortality Rate	(-) Downward	6.5	6.3	5.1	19.2	Exceeded	21.5	Increased	3	Excellent
	Mother to child HIV transmission rate at 18 months	(-) Downward	82.8	80.0	87.2	-9.0	Missed	-5.3	Decreased	-2	Below Average
	Stillbirth Rate	(-) Downward	11.2	10.7	10.2	4.9	Exceeded	8.9	Increased	3	Excellent
	Skilled birth attendance coverage (%)	(+) Upward	62.6	63.9	60.6	-5.1	Missed	-3.2	Decreased	-2	Below Average
	No. of children fully immunized (Using Penta 3 as proxy (%)	(+) Upward	96.7	96.9	96.7	-0.2	Missed	0.0	Stagnated	-1	Average
	Prevalence of stunting among children under five years	(-) Downward	0.97	0.10	0.83	-730.0	Missed	14.4	Increased	0	Fairly Good
	Institutional Under-five mortality rate (per 1000lb)	(-) Downward	9.8	8.7	10.9	-25.3	Missed	-11.2	Decreased	-2	Below Average
	Institutional Infant Mortality Rate (per 1000lb)	(-) Downward	7.4	5.8	8.1	-39.7	Missed	-9.5	Decreased	-2	Below Average
	Institutional Under 5 Malaria Case Fatality Rate	(-) Downward	0.1	0.0	0.1	-50.0	Missed	-15.4	Decreased	-2	Below Average
	Prevalence of wasting among children under five (%)	(-) Downward	N/A	N/A	N/A	** Missing Value**	***	**Missing Value**	***	-3	Poor
	Adolescent pregnancy rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group	(-) Downward	14.6	12.0	10.1	15.8	Exceeded	30.8	Increased	3	Excellent
	Institutional Maternal Mortality ratio	(-) Downward	102.6	97.5	109.3	-12.1	Missed	-6.5	Decreased	-2	Below Average
	Prevalence of underweight among children under five years	(-) Downward	1.5	1.1	1.1	0.0	Met	26.7	Increased	2	Very Good

Objective Three	Ratio of Functional Ambulance to population per 50,000 population	(+) Upward	0.5	1.0	0.4	-56.6	Missed	-14.0	Decreased	-2	Below Average
	Proportion of disease outbreaks identified, and response actions started within 24-48 hours	(+) Upward	100.0	100.0	100.0	0.0	Met	0.0	Stagnated	1	Good
	Blood collection index (BCI) per 1000 population	(+) Upward	5.8	6.2	5.9	-4.8	Missed	1.7	Increased	0	Fairly Good
	95-95-95 Target (HIV Positive people receiving ART with viral Suppression)	(+) Upward	68.0	95.0	89.0	-6.3	Missed	30.9	Increased	0	Fairly Good
	95-95-95 Target (HIV Infected persons who are receiving sustained ART)	(+) Upward	80.9	95.0	69.4	-26.9	Missed	-14.2	Decreased	-2	Below Average
	95-95-95 Target (HIV Infected persons who know their HIV Status)	(+) Upward	77.5	95.0	65.0	-31.6	Missed	-16.1	Decreased	-2	Below Average
	HIV incidence per 1,000 population	(-) Downward	0.5	0.5	0.6	-12.0	Missed	-5.7	Decreased	-2	Below Average
	Tuberculosis incidence per 100,000 population	(-) Downward	52.5	41.9	56.3	-34.5	Missed	-7.2	Decreased	-2	Below Average
	TB treatment success rate (%)	(+) Upward	87.0	90.0	87.6	-2.7	Missed	0.7	Increased	0	Fairly Good
	TB case detection rate	(+) Upward	36.7	74.5	48.7	-34.6	Missed	32.7	Increased	0	Fairly Good
	Prevalence of mental health disorders among women and young adults (all populations)	(-) Downward	0.2	0.2	0.3	-25.0	Missed	-19.0	Decreased	-2	Below Average
	Prevalence of hypertension	(-) Downward	2.0	2.0	1.7	13.3	Exceeded	15.0	Increased	3	Excellent
	Prevalence of NTDs (e.g Yaws, Bruli ulcer, etc)	(-) Downward	N/A	50.0	N/A	"" Missing Value""	***	""Missing Value""	***	-3	Poor
	Family Planning Acceptor Rate	(+) Upward	36.1	37.2	35.8	-3.7	Missed	-0.8	Decreased	-2	Below Average
	Total estimated protection by contraceptive methods supplied (Couple Year Protection (CYP)	(+) Upward	1,590,586.0	1,700,000.0	1,706,967.0	0.4	Exceeded	7.3	Increased	3	Excellent
	Prevalence of diabetes	(-) Downward	0.6	0.2	0.6	-185.0	Missed	5.0	Increased	0	Fairly Good
	Death rate due to road traffic injuries	(-) Downward	N/A	N/A	N/A	"" Missing Value""	***	""Missing Value""	***	-3	Poor
	Malaria incidence per 1,000 population	(-) Downward	178.0	154.9	166.0	-7.2	Missed	6.7	Increased	0	Fairly Good
	Bed Occupancy Rate	(+) Upward	59.0	65.0	55.0	-15.4	Missed	-6.8	Decreased	-2	Below Average
	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	(-) Downward	NA	N/A	NA	"" Missing Value""	***	""Missing Value""	***	-3	Poor
	Institutional All-Cause Mortality	(-) Downward	19.0	18.8	20.9	-11.1	Missed	-10.0	Decreased	-2	Below Average
	Surgical Site Infection Rate	(-) Downward	1.7	1.2	0.04	96.7	Exceeded	97.6	Increased	3	Excellent
	Average length of stay	(-) Downward	3.6	3.0	3.0	0.0	Met	16.7	Increased	2	Very Good
	Hepatitis B incidence per 100,000 population	(-) Downward	N/A	90.8	N/A	"" Missing Value""	***	""Missing Value""	***	-3	Poor
	Average response time to emergencies	(-) Downward	20.3	15.0	22.3	-48.9	Missed	-10.0	Decreased	-2	Below Average
	Percentage of Planned Preventive maintenance activities implemented (Ambulances)	(+) Upward	95.0	100.0	70.4	-29.6	Missed	-25.9	Decreased	-2	Below Average