Under the Office of the President

GHANA NATIONAL AIDS SPENDING ASSESSMENT, 2022

NATIONAL AIDS SPENDING ASSESSMENT REPORT

2022

FOREWORD

Fast-tracking the HIV and AIDS response to reach the 95–95–95 targets and achieving zero HIV infections, zero AIDS-related deaths and zero discrimination requires additional investment and focused efforts. Not reaching these targets would negatively impact the HIV and AIDS response and result in a reversal of the current positive trends. Investing in the control of the epidemic now would help save resources over the longer term.

The Government of Ghana is committed to monitoring national spending on HIV and AIDS. The first National AIDS Spending Assessment (NASA) exercise was conducted in 2005. The current assessment was conducted in 2023 for the financial year 2022. The findings of this assessment will be useful in resource allocation for the current National HIV and AIDS Strategic Plan (NSP) 2021-2025.

On behalf of the Ghana AIDS Commission, I strongly recommend that the information in this report be used to improve the funds allocation for the HIV and AIDS response and to show the importance of sustaining adequate HIV and AIDS financing in Ghana. It is my sincere hope that all stakeholders in the multi-sectoral HIV and AIDS response, including development partners, implementing partners, service providers, decision-makers and policymakers at the national and sub-national levels will use this report to inform their planning and resource allocation in our joint efforts to end AIDS as a public threat in Ghana by 2030.

Dr. Kyeremeh Atuahene
Director General

ACKNOWLEDGEMENT

We extend our sincere gratitude to all partners and individuals at both national and sub-national levels whose contributions were instrumental in the successful implementation of the National AIDS Spending Assessment (NASA). Their active involvement and timely submission of financial data to the Ghana AIDS Commission were crucial to achieving our objectives.

This report owes much of its success to the generous financial support provided by UNAIDS, the Global Fund, and other anonymous partners. Their contributions have been invaluable in facilitating our work. Special appreciation is reserved for the Ghana AIDS Commission (GAC) for their leadership and coordination throughout the NASA implementation process. Their guidance was pivotal in ensuring the smooth execution of the assessment.

We would like to express our heartfelt thanks to all members of the Steering Committee (SC), appointed by GAC, for their unwavering support and direction throughout the exercise. Their technical expertise and leadership were indispensable. A word of recognition is also due to the National Resource Tracking Team (NASA Team) and NASA consultant for their meticulous planning and execution of the assessment.

The evidence gathered from this assessment will serve as a foundation for the development of new strategic planning approaches and resource mobilization efforts. It will also aid in the establishment of sustainable financing mechanisms for HIV and AIDS initiatives as we strive towards the goal of ending AIDS by 2030 in Ghana.

Table of Contents

ABBREVIATIONS

ASC	AIDS Spending Category
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
BP	Beneficiary segments of the population
CBO	Community Based Organizations
CSO	Civil Society Organizations
COI	Cost of Illness
C&T	Care and Treatment
DACF	District Assembly Common Fund
DCT	Data Consolidation Tool
FAP	Financing agents & purchasers
FE	Financing entities
GAC	Ghana AIDS Commission
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV	Human Immunodeficiency Virus
KP	Key Population
MMDA	Metropolitan, Municipal and District Assemblies
NASA	National AIDS Spending Assessment
ND	Not Disaggregated
NGO	Non-governmental Organization

NSP	National Strategic Plan
OI	Opportunistic Infection
OOPP	Out of Pocket Payment
PEPFAR	President Emergency Plan for AIDS Relief
PMTCT	Prevention of Mother-to-Child Transmission
PF	Production factors
PS	Providers of services
RTT	Resource Tracking Tool
SBCC	Social and Behaviour Change Communication
SDM	Service delivery modality
UN	United Nations
UNGASS	UN General Assembly Special Session

LIST OF TABLES

LIST OF FIGURES

DEFINITION AND DESCRIPTION OF TERMS

a. AIDS Spending Category

These are HIV-related interventions and activities (Prevention, HIV testing, and counselling, HIV care and treatment, social protection, and economic support, social enablers, Program enablers and systems strengthening, Development synergies, and HIV research).

b. Beneficiary Population

The populations presented here are explicitly targeted or intended to benefit from specific activities. Identification of a beneficiary population aims to quantify the resources specifically allocated to the population as part of the service delivery process of programmatic intervention. Beneficiary populations are selected according to the intention or target of the spending in programmatic interventions. This represents an outcome linked to the resources spent regardless of its effectiveness or effective coverage.

c. Production Factors

This classification of cost components (budget items) uses comparable breakdowns that can easily cross over to other reports. The resource cost classification captures expenditure according to the standard economic classification of resources used to produce goods and services, such as salaries, commodities, buildings, equipment, etc. The classification includes two major categories: current expenditure and capital expenditure. In NASA the classification of production factors categorizes expenditure in terms of resources used for production.

d. Current Expenditure

Current expenditure is expenditure on goods and services consumed within the current year, which needs to be made recurrently to sustain the production of the services by the organization. (e.g., wages, salaries, commodities).

e. Capital Expenditure

The main categories in this classification are buildings, capital equipment, and capital transfers. These categories may include major renovations, reconstruction, or enlargement of existing fixed assets, as these can improve and extend the previously expected service life of an asset.

f. Financing Agent-Purchaser

FAP are entities that mobilize financial resources collected from different financing sources (pools) and transfer them to pay for or to purchase health care or other services

or goods. These entities directly purchase from providers or steer in full, or as co-guarantors of payment, resources earmarked for the provision of commodities (services and/or goods) to satisfy a need.

g. Financing Entity

Financing entities (FE). Refers to economic units providing the resources to the schemes (used by the agents). They include public entities, domestic private entities, and international entities (bilateral, multilateral, and for-profit).

h. Revenue of the Schemes

This is the mechanism (transactions) involved in providing resources to financing schemes. The classification of revenues of financing schemes is suitable for tracking the collection mechanisms of a financing framework. The new classification makes it possible to analyse the contribution of institutional units to health and social HIV and AIDS financing.

i. Financing Schemes

These are structural components of healthcare financing systems. They are financing arrangements through which people obtain health services. Healthcare financing schemes include direct payments by households for services and goods and third-party financing arrangements. Third-party financing schemes are distinct bodies of rules that govern the mode of participation in the scheme, the basis for entitlement to health services, and the rules on raising and pooling the revenues of the given scheme.

j. Service Delivery Modalities

This variable indicates the modality through which the service is provided (such as facility-based or home and community-based service delivery modalities). Where the intervention is not a service delivered directly to beneficiaries, then 'SDM Non-applicable' is applied.

k. Out-of-Pocket Expenses

This is expenditure by households and individuals on HIV and AIDS-related services, such as household income spent on care and treatment services and pooled funds of support groups to provide support.

l. Development Synergies

These are programmes necessary to enable the efficacy, equity, and rollout of basic programme activities. They encourage the sustainability of HIV and AIDS responses through integration into broader health and non-health sectors. While development synergies can significantly influence the outcomes of HIV and AIDS, their primary purpose usually extends beyond addressing HIV and AIDS specifically. Maximizing the HIV and AIDS-related benefits and minimizing the related harms of development synergies would make them HIV -sensitive.

EXECUTIVE SUMMARY

Background

Ghana has adopted the Sustainable Development Goals which includes a firm commitment to ending the AIDS epidemic by 2030. Understanding the context of public, private and international funding is increasingly important to ending AIDS by 2030. In a financial climate with increasingly limited resources, tracking investment in HIV is essential for a detailed understanding of the source of funds, its management, and usage. Equitable allocation and efficient use of available resources are needed to increase affordable access to quality health care. The National AIDS Spending Assessment (NASA) is a comprehensive systematic methodology used to track the flow of resources for the HIV and AIDS response, from the sources, through different economic agents to the beneficiaries. The financial flows for the national HIV and AIDS response were grouped into three dimensions: finance, provision, and consumption. Expenditure is reconciled from these three dimensions using data triangulation. The overall objective behind conducting NASA is to better understand spending patterns on national AIDS response and analyse HIV and AIDS spending priorities. The information generated is critical to inform health financing decisions, including future health financing systems for universal health coverage, and strategies to sustain current levels of health financing.

Methodology

The data collection for the assessment was mainly based on a top-down approach. The sampling included all major HIV and AIDS financing entities in Ghana, from public, private, and international sectors. The top-down approach obtained sources of expenditure data from government and donor reports. The bottom-up approach was applied when the financing entities did not have disaggregated data on HIV and AIDS spending, and then the implementing partners were interviewed, and their data were triangulated to prevent double-counting. Primary data were collected through a customized MS Excel-based data-collection template (Appendix 1). Detailed disaggregated HIV and AIDS expenditure data were captured in the NASA consolidation tool developed by UNAIDS and exported into the Resource Tracking Tool for analysis. Quality control was assured through data triangulation by cross-checking multiple sources of data to avoid duplication.

Key Findings

- From 2019 to 2020, there was a noticeable increase in expenditure, from US$88.6 million to US$107.2 million in 2020, thus reflecting a growing commitment to addressing HIV response in Ghana. The trend continued in 2021, with expenditure reaching US$127.8 million, reflecting a further increase in investment in HIV and AIDS-related initiatives. However, in 2022 there was a slight decrease of 1% compared to the previous year, with expenditure reaching US$126.4 million.
- International organizations accounted for the largest portion of financing, representing a 3% increase from 2021 to 2022, amounting to US$54 million in 2022, made up primarily of the Global Fund (comprising 67%) and the United States Government

(making up 20%). The proportion of funds from public financing entities towards HIV-related activities has also increased over the years, and impressively by 19% from 2021 to 2022, reaching a total of US$51.6 million in 2022. Thus, although a large share (43%) came from external sources, the public sector contributions have reached 40% in 2022 – an important achievement towards sustainability of the response in Ghana. Private funds (primarily Out-of-Pocket payments) accounted for 16% of the total spending reaching a total of US$20.6 million for 2022.

- HIV care and treatment (53.8%) took the largest share of HIV financing, followed by programme enablers and systems strengthening (32.2%), HIV prevention (7.3%), HIV Testing Services (3.8%), Social enablers (1.3%), Social Protection and Economic Support and Development Synergies (0.7%) with HIV Related Research been the least with 0.3% for the year 2022. Majority of the financing for HIV-related Research and Development Synergies came from international donors.
- The main beneficiary population was people living with HIV, who benefited from more than half of total HIV and AIDS spending (54%) in 2022.
- Very low spending was directed towards prevention interventions for adolescent girls and young women. Additionally, no expenditure on medical male circumcision was found, an important intervention for young men.
- The key cost drivers were medical products and supplies, including antiretroviral drugs (ARVs), which accounted for a substantial portion of HIV expenditure at 35% in 2022. ARVs alone constituted approximately 21% of overall HIV spending. Personnel expenses emerged as another major cost driver, accounting for 26% and other operational and program management costs at 25%. With HIV and AIDS service delivery modalities, facility-based interventions accounted for the largest share of expenditure 56%. With the decentralized provision of antiretroviral therapy, care and treatment are mostly delivered in facilities. Only a small proportion of activities, especially support for adherence and retention of treatment were home- or community-based.
- The comparison between the estimated resources outlined in Ghana's National Strategic Plan (NSP) and the actual spending documented in the National AIDS Spending Assessment (NASA) for 2022 reveals only marginal potential gap of 1%. This highlights Ghana's adequate mobilization of funding for the HIV response. Additionally, the comparison of the spending per programme area against the NSP estimated need also found close proportional and nominal alignment, apart from for HTS. This implies the government and all stakeholders have successfully mobilized and efficiently allocated resources according to the intended NPS priorities and needs.

Conclusion

Although there is increasing public funding for HIV, dependence on external donors for funding HIV prevention activities presents a risk to effectively reducing new infections. To achieve the objectives outlined in the National Strategic Plan (NSP) 2021-2025 and meet the 95–95–95 targets, it is imperative to prioritize the promotion of HIV testing services, as well as streamlining HIV prevention intervention through domestic financing channels. This approach not only enhances sustainability but also strengthens the Government of Ghana's commitment to the HIV response.

1.0
INTRODUCTION AND BACKGROUND

1.1 Background Information

National AIDS Spending Assessment (NASA) is a tool developed by the Joint United Nations Programme on HIV and AIDS (UNAIDS) to track the flow of resources spent in the HIV response from their origin to the beneficiary populations. NASA for Ghana encompasses a comprehensive evaluation and analysis of the financial resources allocated to the national response against HIV/AIDS. This assessment aims to provide a detailed overview of how funds are mobilized, allocated, and utilized within the country to address the multifaceted challenges posed by the HIV/AIDS epidemic. NASA not only serves as a tool for financial transparency but also plays a crucial role in guiding policy decisions, resource allocation strategies, and programmatic interventions to enhance the overall effectiveness of the national response.

In a financial climate with increasingly limited resources, tracking investment in HIV and AIDS allows for a detailed understanding of the source of funds, their management, and usage. Equitable allocation and efficient use of available resources are needed to increase affordable access to quality health care.

1.2 HIV and AIDS Financing in Ghana

Securing funding for Ghana's HIV and AIDS response has posed difficulties for the National response. Historical data indicates that a significant portion of resources allocated to direct HIV programs has come from external financing entities. Previous NASAs in Ghana indicated reliance on international funds in financing the response. For example, in 2019, 2020 and 2021 international organizations provided the largest share of financing representing 42%, 40%, and 41% respectively of funds committed to HIV and AIDS activities.

Financing for HIV commodities largely relies on development partners such as the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). The Government of Ghana (GoG), however, has increased its contribution over time. For example, in 2019, 2020 and 2021 government's expenditures were US$ 29,291,178 (33%) US$ 36,426,106 (34%) and US$ 43,504,523 (34%) respectively. The GoG expenditure is primarily through the public sector agents and service providers.

1.3 HIV and AIDS Situation and Country's Response

Ghana is classified as having a generalized HIV epidemic which is characterized by a relatively higher HIV prevalence in urban sites compared to rural sites over the years. But in recent years, there has been an increase in some rural areas. Despite the pockets of increase in prevalence in some areas, Ghana has made significant progress in its response for example, there has been a decrease in deaths among Persons Living with HIV (PLHIV) according to the National and Sub-National HIV Estimates and Projections' 2022 report, total AIDS-related deaths in 2021 was 11,008 compared to 2022 which stood at 9,359 AIDS deaths. Additionally, treatment programmes for all ages have scaled up to 62.7% of the country in 2022 as against 56% coverage in 2021 for all HIV positive persons.

The 2022 National and Sub-National HIV and AIDS Estimates and Projections estimated the adult national HIV prevalence to be 1.66% with an estimated HIV population of 354,927. Females and males accounting for 66% (239,692) and 34% (115,235), respectively among adults aged 15 years and above. Among the age brackets of 10-19 and 15-24 years, the total HIV population is estimated at 21,439 and 40,497, respectively, with females accounting for 60.6% (12,987) and 73.6% (29,810) and males 39.4% (8,452) and 26.4% (10,687) respectively. Children aged 0-14 years accounted for 17.3% (2,868) of the total new HIV infections. Of the total 1,791 new HIV infections among the 10-19 age group, 91.6% (1,640) occurred among females, with 8.4% (151) occurring among males. New HIV infections among the 15-24 age bracket also followed a similar trend, with 82.7% (3,812) of the 4,610 new HIV infections occurring among females and 17.3% (798) occurring among males. The total number of AIDS-related deaths for 2022 is estimated at 9,359, comprising 46.5% (4,353) males and 53.5% (5,006) females. Among adults aged 15 years and above and children aged 0-14, AIDS-related deaths for 2022 were estimated at 7,179 and 2,180, respectively. The coverage for ART (15+ years) and PMTCT for 2022 is estimated at 64.1% and 84.8%, respectively, with an unmet need for ART and PMTCT of 118,407 and 2,523. The estimated HIV prevalence, while stable at the national level along with the success of care and treatment programs, is not decreasing in all locations, and the HIV response remains highly dependent on donor funding which is a challenge.

1.4 National Strategic Plan (NSP) 2021-2025

The National Strategic Plan (NSP 2021 – 2025) is a five-year strategic document guided by the premise that HIV is a development issue as well as a public health challenge and should be treated as such to fast-track the country's efforts toward ending AIDS by 2030.

The objectives of the National Strategic Plan 2021-2025 are to:

- Empower the population to prevent new HIV infections.
- Ensure the availability of and accessibility to prevention, treatment, care, and support services.
- Mitigate the social and economic effect of HIV on persons infected and/or affected by HIV.
- Ensure the availability of adequate funding to execute the policy strategies.

The NSP 2021–2025 aims to achieve two key objectives: first, to increase the proportion of people living with HIV (PLHIV) who receive treatment, and second, to reduce new infections

by virtually eliminating mother-to-child HIV transmission (Ghana AIDS Commission, 2020). To ensure the successful implementation of these goals and strategies in the fight against the HIV epidemic, the strategic plan aligns with other national and programmatic initiatives. These evidence-based strategies also consider the rapidly evolving global health landscape and identify programmatic, social, and environmental factors that facilitate the achievement of established targets.

1.5 Objectives and Justification for the Assessment

The overall objective behind performing the National AIDS Spending Assessment is to better understand spending patterns on national AIDS response and analyse HIV spending priorities by applying the NASA methodology for the collection, collation, and analysis of HIV expenditure data in Ghana for the financial year 2022.

1.5.1 Specific Objectives

The specific objects of the assessment are to:

- Monitor allocation of HIV and AIDS funds from source to last point of service – for all financial sources (public, external and private).
- Generate, analyse, and present data on the allocation of HIV and AIDS expenditures.
- Provide strategic information to support national strategic planning and decision-making.
- Provide and initiate steps to improve the nation's HIV resource tracking capacity.

Additionally, NASA attempted to answer the following:

- What have been the trends in HIV expenditure in Ghana over the past 10 years: 2012 to 2022?
- Were adequate resources allocated to achieve the NSP targets for the year (2022), compared to the estimated resources needed? Where financing gaps (or surpluses) experienced for any interventions?
- What was spent on key interventions to reach one person? Have technical or allocative efficiencies been achieved?

1.6 Scope of the Assessment

The NASA process was instituted by the Ghana AIDS Commission (GAC) in 2023 to report financial data for 2022, to inform strategic planning and decision-making processes related to HIV and AIDS programming. This assessment included funding from public, international, and private sources for HIV, including out-of-pocket payments (OOP) estimates that were informed by available secondary data in the country. The assessment was conducted at the national level and the findings are presented in US dollars to allow for international dissemination and comparability.

2.0
METHODOLOGY

The NASA methodology was applied, and the expenditure was analysed in line with all the NASA vectors according to the NASA 2021 framework, as indicated below (refer to the definitions section for an explanation of these terms):

- Financing vectors: Financing entities (FE): Financing revenues (REV); Financing schemes (SCH); Financing agents & purchasers (FAP).
- Provision vectors: Providers of services (PS); and Production factors (PF).
- Use/consumption vectors: AIDS spending categories (ASC); Beneficiary segments of the population (BP); and Service delivery modality (SDM).

2.1 Implementation Phases

This NASA was conducted by the NASA Resource Tracking Team under the leadership of the Ghana AIDS Commission (GAC) with funding from UNAIDS and the Global Fund. The NASA Steering Committee provided guidance and oversight during the implementation of the assessment, securing the buy-in of all partners, and ensuring the process met Ghana's needs. Stakeholder engagement meetings were held with partners to facilitate the process.

The NASA Team obtained all necessary permissions from the national and local authorities to access relevant data and conduct the assessment. The Implementation involved the following phases:

- Planning and mapping of stakeholders.
- NASA training on new guidelines and Resource Tracking Tool
- Sampling and data collection.
- Quality control and data validation.
- Data analysis and report writing.

2.2 Sampling and Data Collection

2.2.1 Sampling Approach

The sampling frame included ministries; government agencies; metropolitan, municipal and district assemblies; development partners; international and local non-governmental organizations; civil society organizations; and private-sector organizations. The major financing entities included the Global Fund, the Government of Ghana, United Nations agencies, and the United States Government through PEPFAR. For completeness, other major HIV and

AIDS funders such as international non-governmental organizations and foundations and large-local nongovernmental organizations were also included. The business sector sampling included industries such as manufacturing, banking, and private health insurance. Table 1 below presents the list of institutions visited for HIV and AIDS expenditures and the status of data collected for NASA 2022. All major HIV and AIDS financing sources in Ghana from the public, private, and international sectors were contacted, and the overall response rate was 98%.

Table 1: Response rates

Sector	Number Targeted	Number of Responses	Response Rate
Government	25	24	96%
Development Partners	17	17	100%
Private Sector	5	5	100%
Civil Society Organizations	78	77	99%
Total	**125**	**123**	**98%**

2.3 Data Collection

For the 2022 financial year, spanning from January 1st to December 31st, comprehensive financial records and various recurrent reports were diligently acquired directly from primary sources. These primary sources were stakeholders, including government agencies, development partners, civil society organizations (CSOs), and businesses actively engaged in HIV interventions and programs. Primary data was obtained using a customized NASA data collection template which was administered through face-to-face interviews and virtual meetings. The assessment obtained secondary data through a desk review of key financial reports and documents, policies, health financing documents, and annual programme reports. The data collection was conducted by the resource tracking team, with the responsibility of collecting, cleaning, processing, and validating the data. To ensure a systematic approach to data collection and analysis, institutions were meticulously categorized into distinct groups, namely public entities, Development Partners, CSOs, and businesses. Each category represented a unique segment of stakeholders with distinct roles and contributions to the HIV response. This categorization facilitated a targeted and comprehensive approach to data collection, enabling us to obtain a holistic view of resource allocations, expenditures, and programmatic activities within each sector. The data collection phase of the assessment was conducted from December 2023 to mid-January 2024. The assessment mainly used a top-down approach for data collection. Resources allocated to financing agents from financing entities were identified and tracked down. After the identification of service providers and allocated spending, the resources were tracked down to specific AIDS spending categories and beneficiary groups.

2.4 Out-of-Pocket Payment (OOPP)

The estimation of the household out-of-pocket payment for HIV and AIDS was extracted from the study report on the 'Out-of-Pocket Payment for HIV and AIDS in Ghana' conducted

for the Ghana AIDS Commission in February 2018. The OOPP study used the Cost of Illness (COI) approach that included the following:

i. direct cost of hospitalization (includes expenditure on the bed, medical, clinical tests, transport cost, tips, and diet/lodging for caregivers)
ii. monthly amount spent on ARVs, and other medicines taken regularly (includes prophylaxis and others)
iii. monthly amount spent on additional nutrition.

The study showed that the average household out-of-pocket expenditure for 2017 was US$ 77.89 (Ghana AIDS Commission, 2018). This amount was adjusted to GH¢745 (US$ 89.64) (accounting for inflation from 2018 to 2022) and used for the 2022 NASA.

2.5 Data Capturing and Processing

The collected data were entered into the Data Consolidation Tool (DCT). The DCT tool is an Excel-based spreadsheet that follows the nine vectors of the NASA methodology. It translates raw data into the NASA format and organizes, cleans, and verifies data completeness so that any missing, incomplete, or contradictory data can be identified and addressed. Data capturing and processing occurred concurrently in the field. During data processing, the transactions were triangulated by cross-checking multiple sources of data to avoid double-counting and thus the full transactions could be recreated with the nine NASA vectors. The team captured all data into the DCTs which were eventually imported into the NASA Resource Tracking Tool (RTT).

2.6 Data Analysis

The imported data were consolidated by the Resource Tracking Tool (RTT), which also identified coding or data errors that were eventually corrected. The RTT allows the user to enter, validate, map, and classify the spending data according to the NASA framework. The RTT was also essential in aggregating and analysing the data and in creating financing flow diagrams. It also generated the full dataset in Excel spreadsheets that were used to create graphical displays and tables.

2.7 Quality Control

The UNAIDS NASA consultant provided the resource tracking team with mentorship and enhanced their capacity in data collection, processing, cleaning, validation, and data entry into the RTT. Data collection and processing occurred concurrently in the field. The collected data were checked, cleaned, triangulated, and validated, before entry into the RTT. For accuracy and consistency, daily checks of captured transactions were performed. During data processing, the transactions were triangulated by cross-checking multiple sources of data to avoid double-counting. The Team reviewed the data entry sheet regularly to troubleshoot potential inconsistencies and guided standardized data coding entries in the DCT. The preliminary results have undergone validation by primary data sources, whereas the final NASA findings were presented during a stakeholders' validation meeting convened by the Ghana AIDS Commission. UNAIDS Global Centre provided also some quality reviews of outputs, to ensure global standards.

2.8 Overview of Data Sources

Data were collected from Government entities (national and regional), international agencies, and private sectors. The bulk of public HIV financing comprised the following: Ministry of Health, Ministry of Education, Ministry of Gender Children and Social Protection, Ghana AIDS Commission and Local/municipal authorities. The total public HIV financing expenditure was obtained through primary data collection.

International development partners, including the Global Fund, PEPFAR, United Nations agencies, and other donors (bilateral organizations, international non-governmental organizations, and foundations), shared their data using different expenditure reporting formats. Global Fund data was extracted from expenditure reports in ledger format from PRs and PEPFAR's Expenditure Report (ER) 2022 was used. The private sector included the following: mainly Household out-of-pocket expenditure and private profit-making organizations (a few of these also generate their resources).

Table 2: Overview of the data quality

Overall type of NASA data	2022	%
PxQ / Estimation	19,952,721	16%
Expense reports/ primary source	106,462,548	84%
Grand Total	**126,415,269**	**100%**

2.9 Assumptions

- A few development partners such as PEPFAR and its agencies had different financial years from the Government of Ghana fiscal year (which is from 1st January to 31st December). In this case, the team used the PEPFAR expenditure reporting data for 2022 (for the period 1st Oct 2021 to 30th Sept 2022) without making any adjustment to avoid distortion of their annual spending.
- Public sector spending in this study included the 0.5 percent allocation of each District's Assemblies Common Fund (DACF) for HIV and AIDS activities. Funds such as these were treated as one entity.
- The household out-of-pocket survey on HIV and AIDS conducted in 2018 and adjusted for inflation was used for the assessment. This represents the direct OOPP for hospitalization; monthly spending on other OI medicines; and monthly spending on additional nutrition and opportunity costs.
- For this report, the average interbank annual exchange rate of the US dollar to the cedi was used. The rate was GH¢ 8.3109 to US$1 in 2022.

2.10 Limitations of the Assessment

- A few organizations were not able to provide data disaggregated to the level required by NASA. In these cases, funds spent on different activities were not broken down into specific AIDS spending categories and production factors and were lumped together as "not disaggregated", but these were minimal.

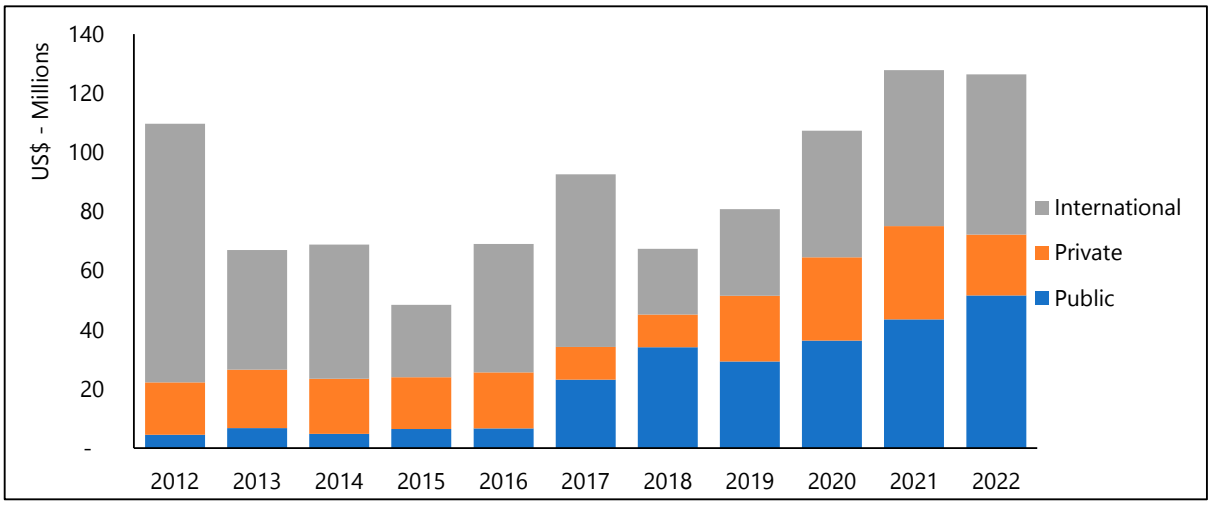
- The lack of recent HIV Out-of-Pocket studies hinders our ability to estimate expenditures for the current fiscal year, and changes might have occurred since the 2018 OOPP that has been used.
- This NASA has tried to compare trends of HIV and AIDS spending with those in previous assessments, but it is important to note that different NASAs used different approaches to estimate costs, and some comparisons may not be appropriate.
- Despite the recognized importance of sexual reproductive health services and VMMC in HIV prevention strategies, their financial allocations could not be accounted for in the analysis due to data limitations.

3.0
KEY FINDINGS

3.1 Trends in HIV Spending by Financing Entities (2012 – 2022)

Figure 1 depicts HIV spending trends in Ghana from 2012 to 2022, from International, Private, and Public financing entities. In 2012, funding from international financing entities for HIV was at its peak, but it declined sharply in subsequent years. However, from around 2016, international spending began to increase again, although it did not reach the initial 2012 peak. Conversely, both Private and Public funding remained relatively consistent in the early years (2012-2016) but in 2017, a large increase in public financing and a decrease in private sources occurred, and thereafter gradual increases observed until 2022. Thus, although a large share (43%) came from external sources, the public sector contributions have reached 40% in 2022 – an important achievement towards sustainability of the response in Ghana.

Figure 1: Expenditure on HIV and AIDS in Ghana (US$ 2012 – 2022)



3.2 Total Expenditure on HIV By Financing Entities (2021 – 2022)

In 2022, Ghana's total expenditure on HIV and AIDS-related activities amounted to US$ 126,4 million, a slight decrease from the US$ 127,8 million recorded in 2021, marking a nominal decline of 1%. Although both public and international funding experienced slight increases, the overall spending decrease can be attributed primarily to a 35% reduction in Out-of-Pocket Payments (OOPP) estimates. This adjustment resulted from a change in the estimation

approach compared to the previous NASA. International financing entities contributed 43% of the funds in 2022, slightly up from 41% in 2021. Conversely, public financing entities increased their contribution from 34% in 2021 to 41% in 2022, representing a 19% increase in nominal terms. However, private sector funds, mainly Out-of-Pocket payments, were reduced from 25% in 2021 to 16% in 2022, firstly due to adjustments made in estimating OOPP and secondly due to the inadequate information from the business sector. Figure 2 illustrates the expenditure distribution as percentages, while Table 3 presents the expenditure in nominal terms.

Figure 2: Total expenditure on HIV by Financing Entities in Ghana (US$, 2021 – 2022)

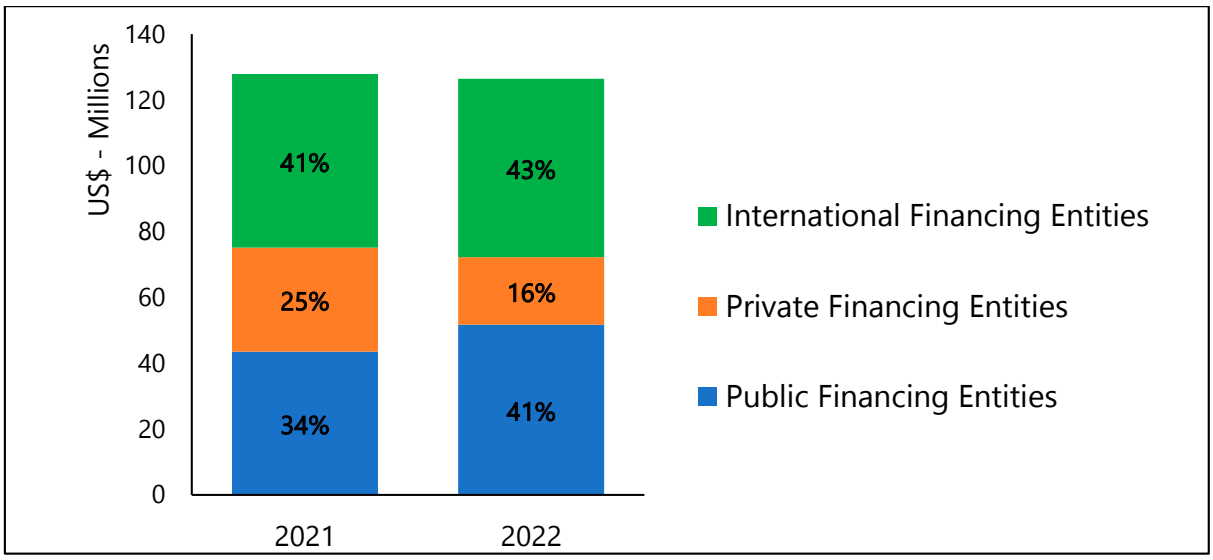


Table 3: Total expenditure on HIV by Financing Entities (2021 – 2022)

Financing Entities	Amount (US$)		% Share	
	2021	2022	2021	2022
Public Entities	43,504,523	51,650,765	34%	41%
Private Entities	31,620,836	20,589,629	25%	16%
International Entities	52,702,941	54,174,875	41%	43%
Total Spending	**127,828,300**	**126,415,269**	**100%**	**100%**

Figure 3 and Table 4 illustrate the breakdown of HIV expenditure by international financing entities in Ghana for the years 2021 and 2022. Funding from the Global Fund, although the largest, experienced a decrease in both nominal (from US$ 40,442,723 in 2021 to US$ 36,267,361 in 2022) and proportional (29% in 2022 compared to 32% in 2021) terms. The proportional decline was due to an increase in spending by public entities. Similarly, contributions from the government of the USA, via the PEPFAR mechanism, saw a slight decrease from US$ 11,340,474 in 2021 to US$ 10,802,357 in 2022, representing a 4.7% decrease. Other donors, including other governments, bilateral agencies, international NGOs and foundations, and international for-profit entities, collectively contributed less than 2%

towards HIV-related expenditure in both 2021 and 2022. It's noteworthy that UN agencies significantly increased their funding, surpassing a 500% increase to reach US$5.7 million in 2022, almost 5% of the total spending.

Figure 3: Total expenditure on HIV by Financing Entities (2021 – 2022)

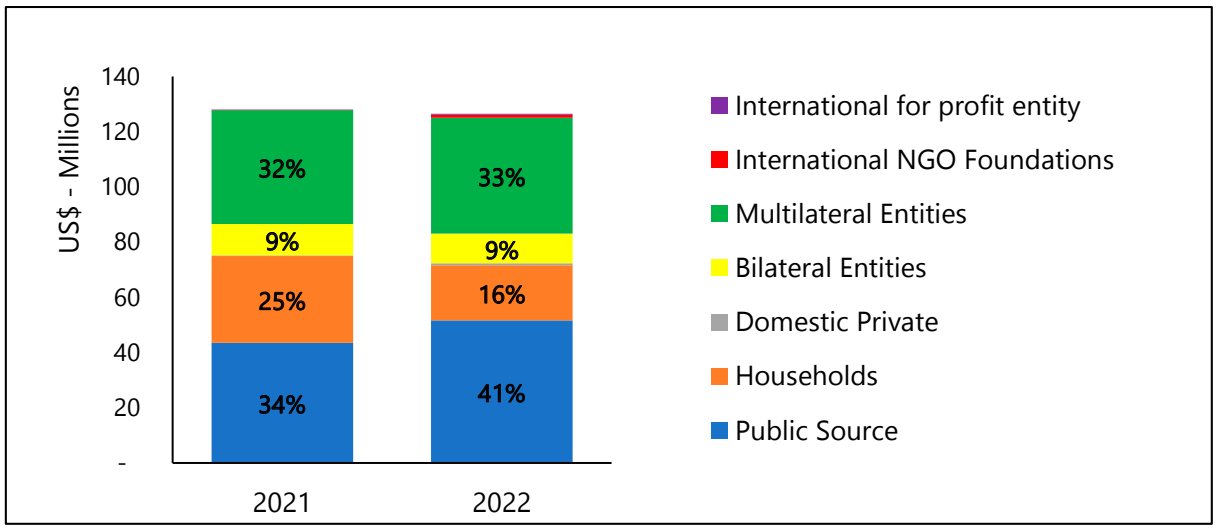


Table 4: Total expenditure on HIV and AIDS by financing entities (2021 – 2022)

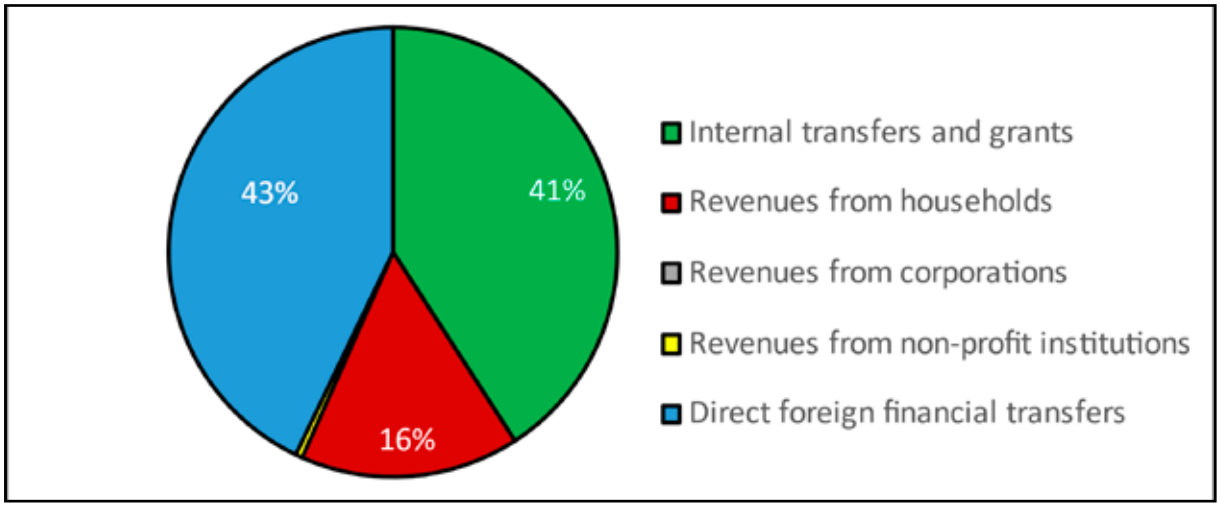
Financing Entities	Amount (US$)		% Share	
	2021	2022	2021	2022
Public Entities	43,504,523	51,650,765	34.03%	40.86%
Households	31,467,874	19,952,721	24.62%	15.78%
Domestic Private	152,962	636,908	0.12%	0.50%
PEPFAR	11,340,474	10,802,357	8.87%	8.55%
Global Fund	40,442,723	36,267,361	31.64%	28.69%
UN Agencies	825,808	5,702,677	0.65%	4.51%
Other government(s) /other bilateral agencies	31,911	6,016	0.02%	0.00%
International NGOs and Foundations	60,543	1,111,626	0.05%	0.88%
International for profit	1,482	284,838	0.00%	0.23%
Total Spending	**127,828,300**	**126,415,269**	**100.00%**	**100.00%**

3.3 Revenues of Financing Schemes

As displayed in Figure 4, direct foreign transfers contributed 43% of revenues of financing schemes in Ghana HIV-related expenditure in 2022. This is followed by transfers from

government revenue (internal transfers and grants) which accounted for 41% and then revenue from households accounting for 16%.

Figure 4: Revenues of financing schemes (%, 2022)



The results in Table 5 below show that in 2022, all funds allocated by public financing entities for HIV-related expenditures originated from transfers sourced from government domestic revenue. Concerning domestic private entities, 97% of their expenditure stemmed from other domestic revenue sources, primarily referring to out-of-pocket payments (OOPP) which accounted for 16% of the total HIV spending, while the remaining portion was attributed to voluntary prepayments. Direct foreign transfers constituted the total of funds received from international entities.

Table 5: Financing Entities and their revenues (US$, % 2021-2022)

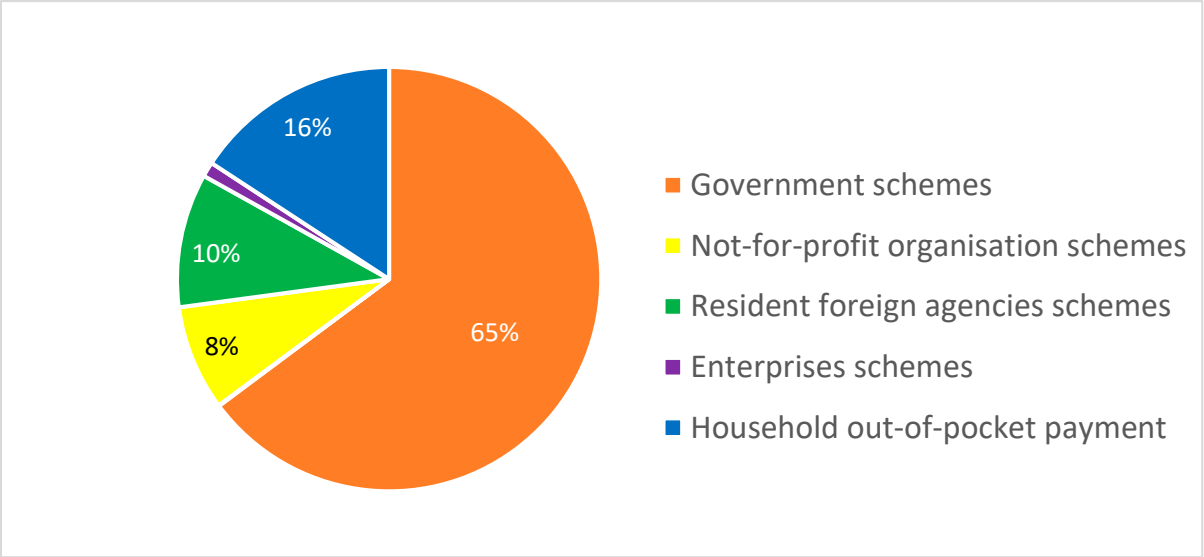
HIV Financing Entities and their Revenue	2022	
	Amount (US$	%Share
FE.01 Public Entities	**51,650,765**	**41%**
Transfers from government domestic revenue	51,650,765	100%
FE.02 Domestic Private Entities	**20,589,629**	**16%**
Voluntary prepayment revenue	612,040	3%
Other domestic revenues	19,977,589	97%
FE.03 International Entities	**54,174,875**	**43%**
Direct foreign transfers	54,174,875	100%
Total Spending	**126,415,269**	**100%**

3.4 Financing Schemes for HIV Funding

The financing schemes are modalities that reflect the main types of financing arrangements through which people obtain health services. Figure 5 illustrates the distribution of HIV

funding across different financing schemes in Ghana during the year 2022. The largest was the government schemes, accounting for 65% of the total HIV expenditures. This is important as it shows that citizens of Ghana primarily obtain their HIV services through governmental schemes, irrespective of the financing sources. However, household out-of-pocket payments towards their private schemes still accounting for approximately 16%.

Figure 5. Financing schemes for HIV funding (US$, 2022)



The Residents' foreign schemes accounted for 10% and the Not-for-profit organization schemes also stood at only 8%, in 2022. Most of the international entities' financing flows via government schemes (56%), Voluntary payment schemes (including Not-for-profit organization schemes and resident foreign agencies schemes (44%), of the total funds from international entities. Table 6 below provides details about the HIV Financing Entities and their respective Schemes.

Table 6. HIV financing entities and their financing schemes (US$, % 2022)

HIV Financing Entities and their Schemes	2022	
	Amount (US$)	%Share
FE.01 Public Entities	51,650,765	41%
Government schemes	51,650,765	100%
FE.02 Domestic Private Entities	20,589,629	16%
Voluntary payment schemes	636,908	3%
Household out-of-pocket payment	19,952,721	97%
FE.03 International Entities	54,174,875	43%
Government schemes	30,332,095	56%
Voluntary payment schemes	23,842,780	44%
Total Spending	**126,415,269**	**100%**

3.5 Financing Agents/Purchasers of HIV Funds

Table 7 shows the HIV financing agents and purchasers (FAP) in Ghana and the percentage share of HIV financing managed by each FAP in 2022. The public sector was the largest HIV financing agent and purchaser in Ghana, managing up to 63% of the total HIV spending in 2022, with the Ministry of Health alone managing 97% of the public sector FAP total in 2022. The second largest HIV financing agent and purchaser were domestic private entities which accounted for 23%, primarily managed by households, with a small portion by not-for-profit institutions and other corporations. The international financing agents and purchasers that managed 14% distributed their funding through different financing agents and purchasers, including the country office of bilateral agencies (62%) and multilateral agencies managed 38% of the resources managed by the international agents and purchasers.

Table 7: Financing agents & Purchasers for HIV funding (US$, % 2022)

Financing Agents & Purchasers	2022	
	Amount (US$)	% Share
FAP.01 Public Agents	**79,536,121**	**63%**
Ministry of Health	76,806,158	96.57%
Ministry of Education	42,197	0.05%
Ministry of Gender Children and Social Protection	573,940	0.72%
Ghana AIDS Commission	1,929,347	2.43%
Local/municipal authorities	184,479	0.23%
FAP.02 Private Agents	**29,580,047**	**23%**
Private households (out-of-pocket payments)	19,952,721	67.45%
Not-for-profit institutions	9,620,226	32.52%
Corporations	7,100	0.02%
FAP.03 International Agents	**17,299,101**	**14%**
Country offices of bilateral agencies	10,802,357	62.44%
Multilateral agencies	6,496,744	37.56%
Total Spending	**126,415,269**	**100.00%**

Table 8: Financing entities and their agents & purchasers for HIV services (US$, %, 2022)

Financing entities and their financing agents	2022	
	Amount (US$)	% Share
FE.01 Public Entities	**51,650,765**	**40.9%**
Territorial Government agent/purchasers	51,650,765	100.0%
FE.02 Domestic Private Entities	**20,589,629**	**16.3%**
Private households as agent/purchasers	19,952,721	96.9%
Not-for-profit institutions agent/purchasers	629,808	3.1%
Corporations	7,100	0.0%
FE.03 International Entities	**54,174,875**	**42.9%**
Territorial government agent/purchasers	27,885,356	51.5%
Not-for-profit institution agent/purchasers	8,990,418	16.6%
Country offices of bilateral agencies/purchasers	10,802,357	19.9%
Multilateral agencies/purchasers	6,496,744	12.0%
Total Spending	**126,415,269**	**100.0%**

3.6 AIDS Spending Categories

NASA uses the term "AIDS spending categories" to define all HIV and AIDS-related interventions and activities in HIV and AIDS response. AIDS spending categories include prevention, care and treatment, and other health and non-health services related to HIV and AIDS. This section presents the broader programme areas and a breakdown of each category.

In Ghana, most of the HIV spending was allocated to care and treatment (C&T), comprising 65% in 2021 and 54% of the total expenditure in 2022 (figure 6). Program enablers, which facilitate access to health services, and health system strengthening together accounted for 24% and 32% of the total spending in 2021 and 2022 respectively. Although there was a reduction in spending on care and treatment from US$ 83 million in 2021 to US$ 68 million in 2022 (representing an 18% decrease in nominal terms); when excluding the estimated OOPP for C&T services, which constituted 38% in 2021 and 30% in 2022, the decrease in C&T spending was only 8%. This decline was deemed not to have impacted the continuity and quality of ART services in Ghana as the number of clients on ART increased gradually over the years. Conversely, there was a 34% increase in expenditure for program enablers and health system strengthening during the same period. The third largest, but declining expenditure was prevention, accounting for 7.9% (US$ 10 million) in 2021 and 7.3% (US$ 9 million) in 2022. This was below the average 14% expenditure target for prevention activities as stipulated in the NSP.

Despite developing a prevention accelerating roadmap to scale–up prevention services in Ghana, the decrease in financing for prevention may reduce efforts to avert new infections. Conversely, expenditures on HIV testing and services (HTS) experienced a substantial increase, rising from US$1.6 million in 2021 to US$4.7 million in 2022. This remarkable surge represents a 200% nominal increase over the 2 years. The remaining categories (social protection and economic support, social enablers, development synergies, and research) combined accounted for 3% of total HIV and AIDS spending in 2022. The findings from previous NASA (2019, 2020, and 2021) showed similar trends.

Table 9: HIV spending by program area (US$, % 2022)

HIV Programme Area	Amount (US$)		% Share	
	2021	2022	2021	2022
Prevention	10,079,635	9,170,372	7.9%	7.3%
HIV testing and counselling	1,579,808	4,745,049	1.2%	3.8%
HIV care and treatment	83,209,270	68,011,545	65.1%	53.8%
Social protection and economic support	1,162,532	913,478	0.9%	0.7%
Social enablers	679,995	1,619,939	0.5%	1.3%
Programme enablers & HSS	30,349,410	40,696,870	23.7%	32.2%
Development synergies	98,317	857,141	0.1%	0.7%
HIV-related research	669,333	400,875	0.5%	0.3%
Total Spending	**127,828,300**	**126,415,269**	**100.0%**	**100.0%**

Figure 6: Percentage of HIV spending by program area (%, 2022)

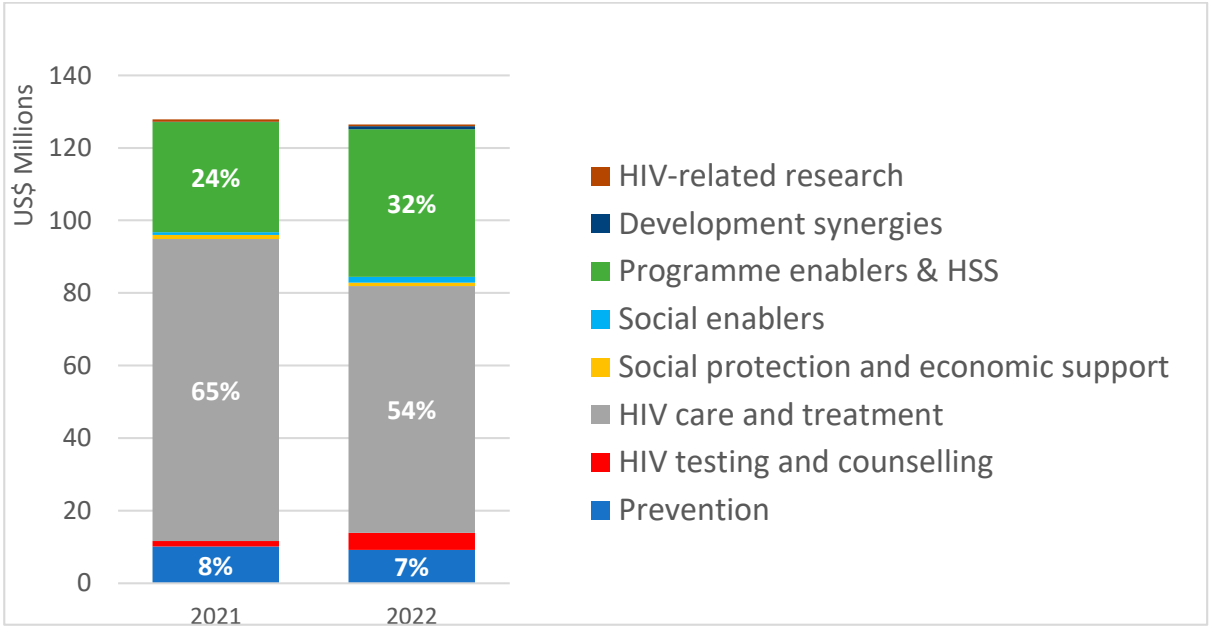
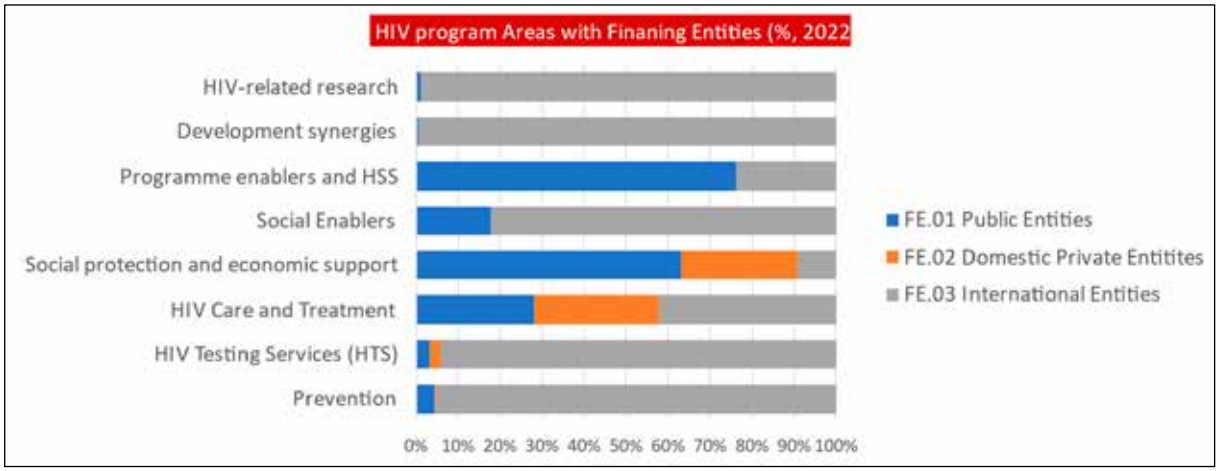


Figure 7 indicates the proportional contributions of different financing entities to each program area in 2022. For care and treatment activities, as the primary spending category, 43% came from international financing entities, 28% from public financing entities, and 29% from OOP payments. Prevention and HTS received small amounts (less than 5%) of funding from public financing entities, while the bulk came from international entities. For the program enablers and systems strengthening (PESS) interventions, the majority (75%) came from public entities, and only 25% from international entities. Importantly, 62% of social protection and economic support spending came from public financing (although very small nominal amounts), 27% from private sources and the remaining 10% from international entities.

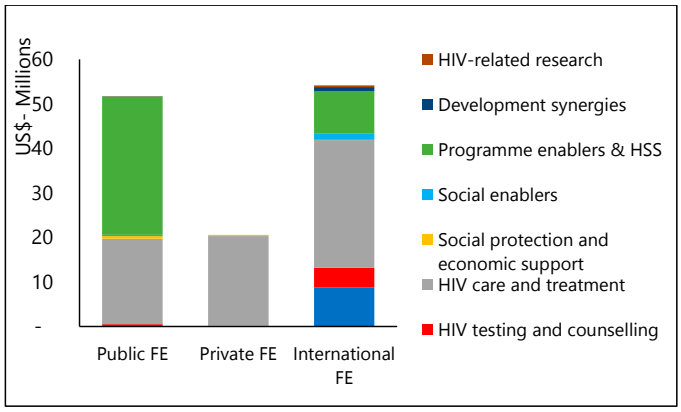
Other interventions, including social enablers, development synergies, and research received the least funding for HIV spending and were mainly financed by international entities.

Figure 7: Percentage of HIV program area by their funding entities (%, 2022)



When looking for the perspective of the financing entities' priorities (Figure 8), public financing prioritized Program enablers and system strengthening (PESS) with 60% of public funds, followed by care and treatment with 29%, and prevention and social protection forming very small portions of the public portfolio (less than 1%). For the international financing entities, C&T was the main priority, taking 60% of external funds, prevention taking around 16% and PESS slightly more (17%), while HIV testing and counselling represented 8.3% of the funding from international entities.

Figure 8: Funding entities and their contributions to HIV program area (US$, 2022)



3.6.1.Prevention Activities

The decrease in total spending on prevention from US$ 10 million in 2021 to US$9 million in 2022, and the low contributions from public financing entities to prevention, suggest a potential challenge in Ghana's HIV response strategy. Prevention is a cornerstone of Ghana's national strategy to combat the HIV and AIDS epidemic, making it crucial for progress toward its objectives. The reduction in funding for prevention activities raises concerns about the country's ability to effectively implement preventive measures and could hinder efforts to curb the spread of HIV. This finding underscores the importance of prioritizing and adequately funding prevention initiatives to maintain momentum in Ghana's HIV response efforts. Over 80% of prevention spending went towards the Five Pillars of Prevention in 2022, and the remaining percentage was shared among other prevention interventions, such as PMTCT, SBCC, community mobilization, programmatic activities for vulnerable populations, prevention for children and youth and prevention of HIV transmission aimed at PLWHIV (Figure 9). The small public prevention funds were directed towards SBCC and wellness programmes, which are not considered the most impactful prevention interventions, since they fall outside the Five Pillars.

Figure 9: Spending on HIV Prevention (%, 2022)

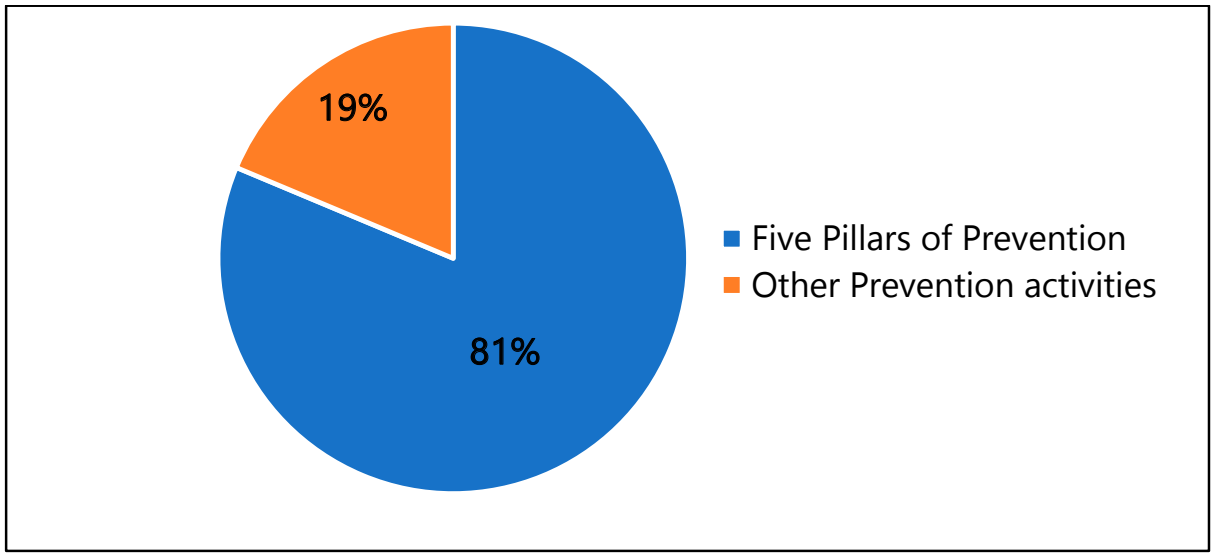


Table 10 provides a breakdown of HIV prevention spending in Ghana for the year 2022, highlighting the allocation of funds to various prevention activities. Majority of the expenditure, 81%, was allocated to the Five Pillars of Prevention (AGYW, Key populations, Condoms, PrEP), indicating a strong emphasis on comprehensive prevention strategies. Also, it's important to note that only 1% towards adolescent girls and young women (AGYW), while 31% of the prevention spending being directed towards KPs. This may reflect targeted efforts to address HIV prevalence among key populations. Condom distribution received a substantial portion, accounting for 48% of total prevention spending. While promoting safe sexual practices is essential, the relatively lower allocation to Pre-Exposure Prophylaxis (PrEP) at only 1% raises questions about the prioritization of newer, highly effective prevention methods. This disparity may indicate a need for re-evaluation to ensure optimal resource allocation in line with evolving prevention strategies. Within the category of "Other Prevention

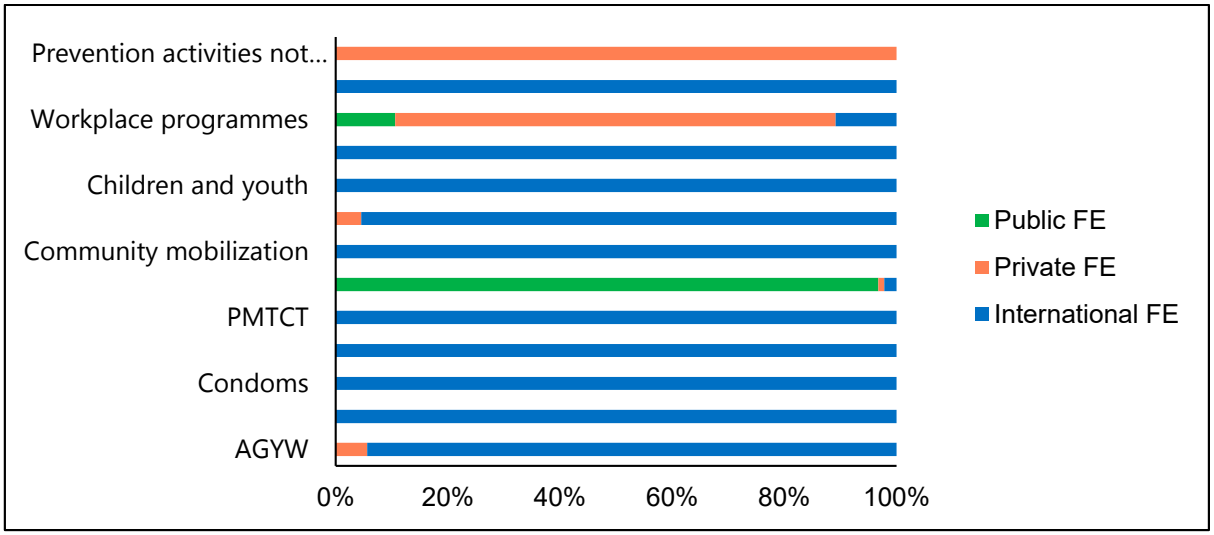
activities," Prevention of Mother-to-Child Transmission (PMTCT) received a modest 5% of the prevention spending. Similarly, activities aimed at vulnerable and accessible populations received minimal funding, highlighting potential gaps in addressing the needs of marginalized groups.

Table 10: Spending on the different HIV prevention activities (US$ %, 2022)

HIV Prevention in Ghana (US$)	2022	% share
ASC.01.01 Five Pillars of Prevention	**7,456,556**	**81%**
AGYW	124,279	1%
Key populations	2,876,443	31%
Condoms	4,394,659	48%
PrEP	61,175	1%
ASC.01.02 Other Prevention activities	**1,713,816**	**19%**
PMTCT	485,743	5%
SBCC	401,369	4%
Community mobilization for other populations	438,185	5%
Activities for vulnerable and accessible populations	31,684	0%
Prevention for children and youth	50,904	1%
Prevention of HIV transmission aimed at PLHIV	244,389	3%
Prevention programmes in the workplace	6,127	0%
Post-exposure prophylaxis	50,000	1%
Prevention activities not disaggregated	5,415	0%
Total Spending	**9,170,372**	**100%**

Figure 10 depicts the proportional contributions of the financing entities towards the different HIV prevention activities. Funding for diverse prevention initiatives mostly (95%) originated from international financing entities. For instance, expenditures related to condoms, PEP, PrEP, key populations, PMTCT, children and youth, and prevention for PLHIV were primarily covered by international funding sources. Additionally, international entities accounted for over 90% of the expenditure on activities targeting adolescent girls and young women (AGYW), which was very low. Conversely, while making minimal contributions to prevention efforts, public financing entities prioritized investments in social and behaviour change communication (SBCC) and workplace prevention and wellness programs.

Figure 10: HIV prevention by funding entity (%, 2022)



3.6.2.HIV Testing and Counselling Activities

The overall expenditure on HIV testing and services (HTS) initiatives in Ghana saw a significant rise, increasing by 200% from US$ 1,6 million in 2021 to US$ 4,7 million in 2022. This represented only 4% of the total HIV expenditure in 2022. However, the percentage distribution of spending across the different HTS modalities and target populations also changed over the 2 years. This could be due to the aggregated data used in 2021 NASA. Hence comparing the two years in terms of spending per HTS activities may not be appropriate.

Table 11 and Figure 11 illustrate the distribution of spending on HIV testing services (HTS) in Ghana for the year 2022. The largest portion of HTS expenditure, accounting for 36%, was allocated to HTS for the general population, followed by 30% allocated to HTS for key populations. HTS on early infant diagnosis (EID) of HIV constituted 10% of the spending, while HTS for vulnerable populations and HIV screening in blood banks represented smaller proportions at 3% and 2%, respectively. Additionally, 19% of the spending was attributed to HTS activities that were not disaggregated in the data.

Figure 11: Expenditure on HTS activities (%, 2022)

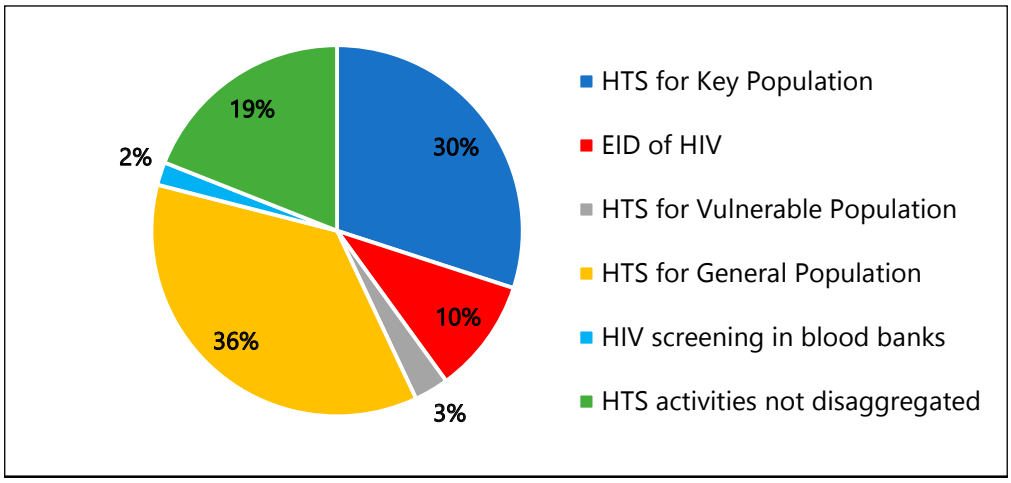
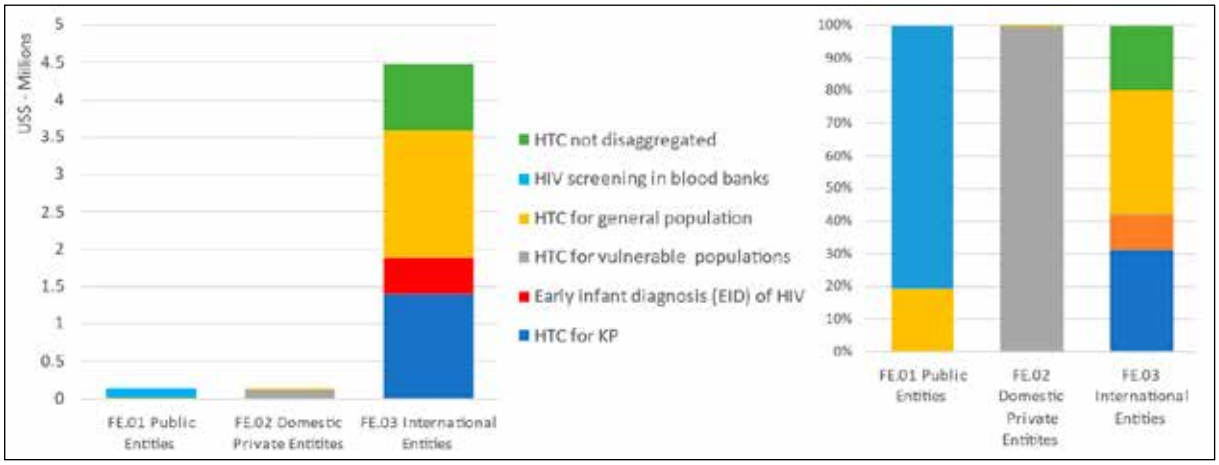


Table 11: Expenditure on HTS activities (US$, %, 2022)

HTS activities in Ghana	Amount (US$)	% share
HTS for sex workers	621,796	13.1%
HTS for MSM	765,143	16.1%
HTS for inmates	22,325	0.5%
Early infant diagnosis (EID) of HIV	472,662	10.0%
HTS for vulnerable populations	138,755	2.9%
HTS for the general population	1,720,072	36.2%
HIV screening in blood banks	121,236	2.6%
HTS not disaggregated	883,060	18.6%
Total Spending	**4,745,049**	**100.0%**

Figure 12 presents a breakdown of spending on HIV testing services (HTS) across different financing entities in Ghana. Public financing entities contributed very little (3.2%) to HTS spending. Conversely, international entities allocated the largest portion of funds to HTS (94%), particularly for key populations (KP) and general population testing, amounting to $4.5 million. Notably, domestic private entities showed a modest contribution (2.8%) to HTS, primarily directed towards testing for vulnerable populations. However, it was evident that there was no allocation from public entities for HTS targeting KP, indicating a potential gap in reaching this high-risk group. This analysis underscores the reliance on international funding for HTS initiatives and highlights the need for increased domestic investment, particularly in reaching key and vulnerable populations.

Figure 12: Expenditure on HTS by financing entity.



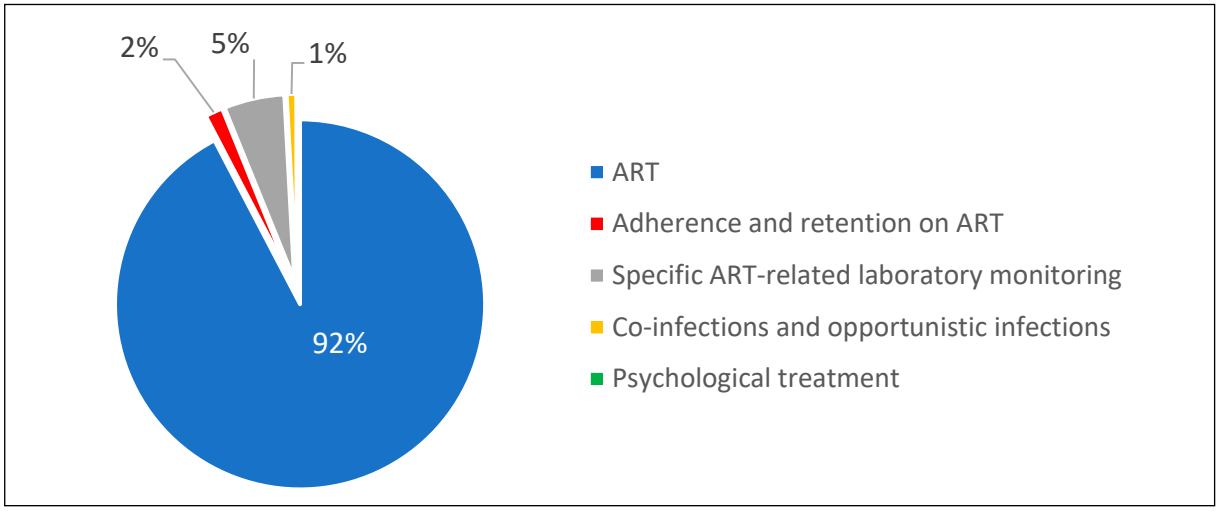
The limited spending on HTS and over-reliance on international funds underscores the importance of prioritizing and investing in HIV testing services as a cornerstone of comprehensive HIV prevention, treatment, and care programs. It highlights the need for increased funding, resource allocation, and strategic planning to scale up access to HTS,

particularly among key populations, vulnerable groups, and underserved communities, to achieve the goals of HIV epidemic control and public health impact in Ghana.

3.6.3.Care and Treatment Activities

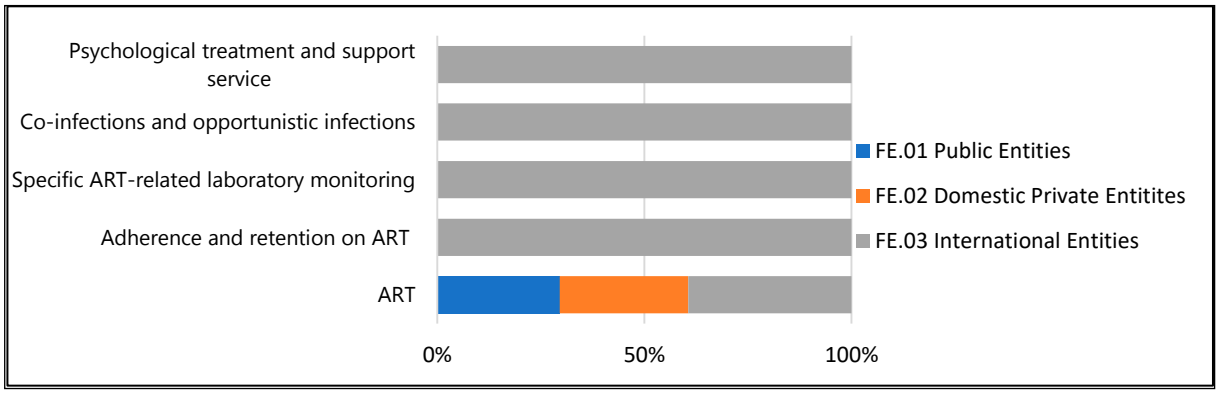
The total spent on care and treatment amounted to US$68 million in 2022, representing 54% of the overall HIV spending in Ghana. Figure 13 outlines the distribution of spending on HIV Care and Treatment activities (C&T) in Ghana for the year 2022. It indicates that majority of the spending (US$ 63 million, representing 92%), was allocated to Anti-retroviral therapy (ART), which is a cornerstone of HIV treatment. However, there are minimal allocations for other essential components of care and treatment, such as specific ART-related laboratory monitoring 5%, adherence and retention on ART 2%, and managing co-infections and opportunistic infections (OIs) 1%. The negligible allocation for psychological treatment and support services is also notable. This distribution suggests that while ART receives significant attention and funding other crucial aspects of care and treatment should have been prioritized. This result implies that a more comprehensive approach to care and treatment is needed to address the diverse needs of people living with HIV in Ghana effectively.

Figure 13: Expenditure on care and treatment (%, 2022)



In 2022, the expenditure on ART was primarily supported by contributions from international funding entities (42%), Private (30%), and Public (28%) as shown below in figure 14. This finding underscores the significant reliance on external funding for ART programs in Ghana. Relying heavily on international donors for all the other C&T activities poses a risk, as the country could face substantial challenges if these donors withdraw their support. Therefore, increasing the government's allocation to ART and other C&T activities funding is crucial for ensuring the sustainability and continuity of HIV treatment programs in Ghana.

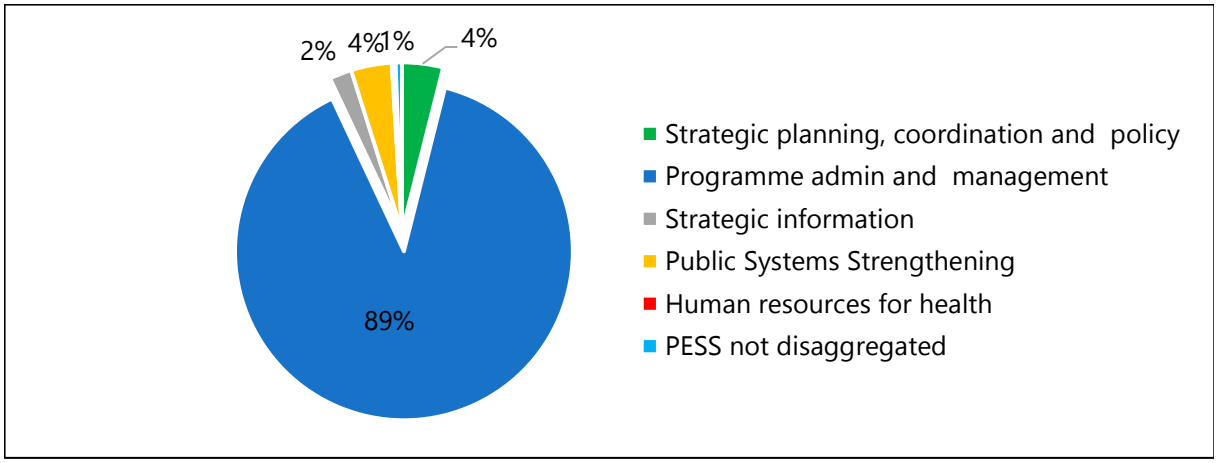
Figure 14: Expenditure on care and treatment by funding entity (%, 2022)



3.6.4.Programme Enablers and Systems Strengthening Spending

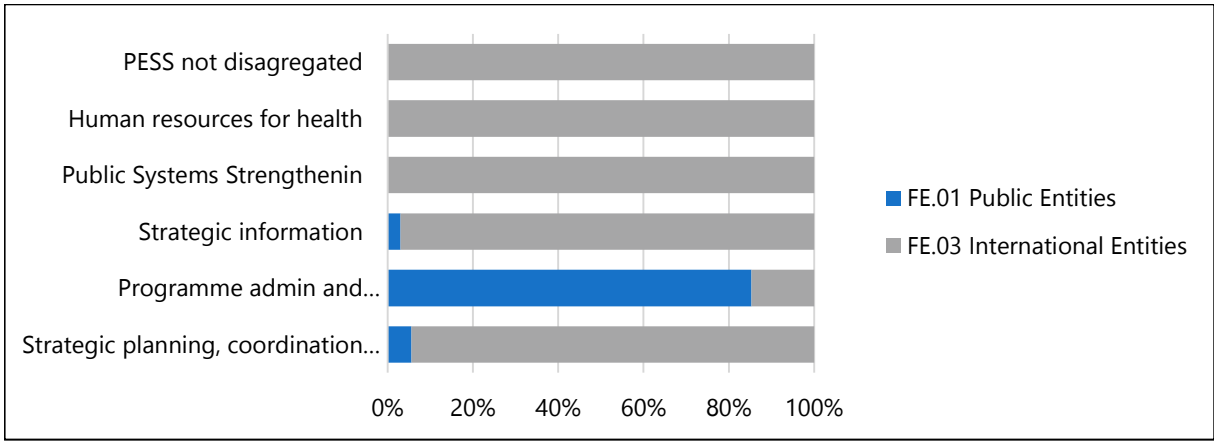
In 2022, the total expenditure on program enablers and systems strengthening (PESS) amounted to US$40.7 million, constituting 32% of the overall HIV spending in Ghana. Figure 15 shows the bulk spending for PESS was allocated towards Programme administration and management costs, accounting for 89% of the total PESS spending (and which made up 28% of the total HIV expenditure). Other minimal spending included Strategic planning, coordination, and policy development (4%), Strategic Information (2%), and Public Systems Strengthening (4%). These findings may imply the prioritization of program management and administration over frontline prevention and testing efforts as projected in the National Strategic Plan (NSP). Therefore, a balanced approach that allocates resources appropriately to both program enablers/HSS, prevention, and HTS is necessary to optimize HIV response efforts in Ghana.

Figure 15: Expenditure on program enablers and systems strengthening (%, 2022)



Almost 90% of expenditure on programme administration and management costs for 2022 were from public financing entities compared to other funding sources. The rest of PESS's activities were entirely or largely funded by international financing entities, with small public contributions only to strategic planning and coordination, and strategic information. (figure 16)

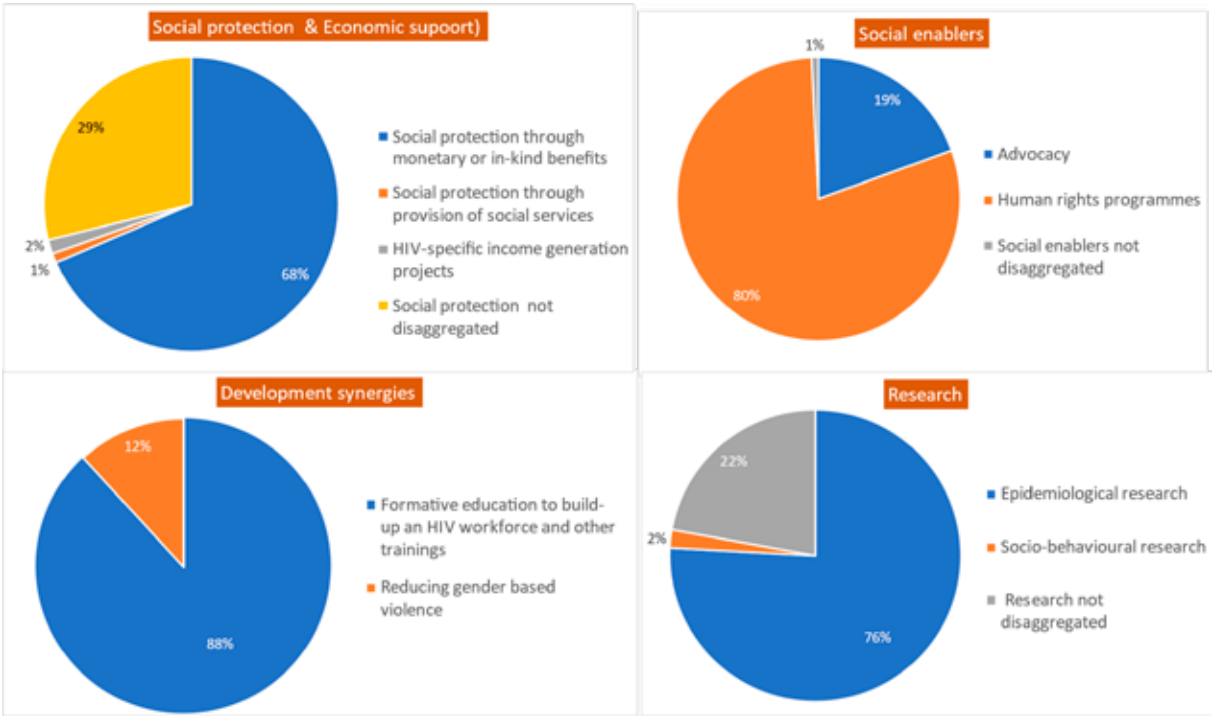
Figure 16: Expenditure on PESS by financing entities (%, 2022)



3.6.5.Spending on Other Programme Areas/Interventions

Figure 17 shows spending on social protection and economic support remained limited, constituting 0.9% and 0.7% of the total HIV and AIDS spending in 2021 and 2022 respectively. The bulk of social enablers spending (which made up only 0.5% and 1.3% of total spending) was allocated to the Human rights programme, accounting for 80% of social enablers in 2022, and advocacy received 19%, while the remaining 1% was for social enablers not disaggregated. The other two activities, development synergies; and research, all together accounted for 1% of the total HIV spending in 2022. A possible implication of this negligible spending is that the HIV response may not be sufficiently integrated within the broader development agenda and may not address the underlying social and economic determinants of the epidemic.

Figure 17: Spending on others AIDS Spending categories/HIV interventions (%, 2022)



International financing entities predominantly funded HIV-related research, Development synergies, and social enablers. The significant investment by international entities in these interventions may suggest a lack of priority from both private and public sectors in these areas. Domestic Private Entities solely invested in social protection and economic support. Similarly, public financing entities prioritized social protection and economic support.

3.7. Beneficiaries of HIV Spending

The beneficiary populations of the HIV and AIDS-related programmes and activities are grouped into five broad areas – PLHIV, key populations, vulnerable and accessible populations, general population, and non-targeted interventions. The non-targeted interventions category includes interventions that are not designed or implemented directly for any beneficiary populations, but that may have an indirect or spillover effect on them, such as health system strengthening, development synergies, HIV-related research, coordination, +and management, etc.

The data presented in Figure 18 indicates that people living with HIV (PLHIV) constituted the primary recipients and beneficiaries of expenditure in 2022, accounting for 54% of the total HIV spending. This aligns with the predominant allocation towards Care and Treatment programs within Ghana's HIV response. Non-targeted interventions received the second largest portion of spending, comprising 34% in 2022. This category is directed towards strengthening the capacity and efficacy of the healthcare system and HIV response in Ghana, alongside facilitating the implementation and coordination of various programs and services for the beneficiary populations. The analysis shows that the general population received the third largest share of the total HIV spending in 2022, with 6%, followed by the key populations category, which includes categories sex workers, men who have sex with men, injecting drug users, prisoners, and transgender, and which received a minimal share of total HIV spending with only 4% in 2022. This suggests that there may be inadequacies in addressing the specific needs and vulnerabilities of key populations within Ghana's HIV response strategy. Similarly, the vulnerable and accessible populations category, which includes AGYW, Children and youth out of school, Junior high/high school students, and Employees (e.g. for workplace interventions), received the lowest priority and the smallest share of total HIV spending, representing only 2% of the total expenditure in 2022. To enhance efficiency, the country must prioritize key populations (KP) and specific vulnerable groups for activities like HIV testing, and prevention rather than focusing on the general population. This strategic shift would ensure that resources are directed towards those at high risk and in need of targeted interventions, thereby maximizing the impact of HIV prevention and control efforts.

Figure 18: Beneficiaries of HIV spending (%, 2022)

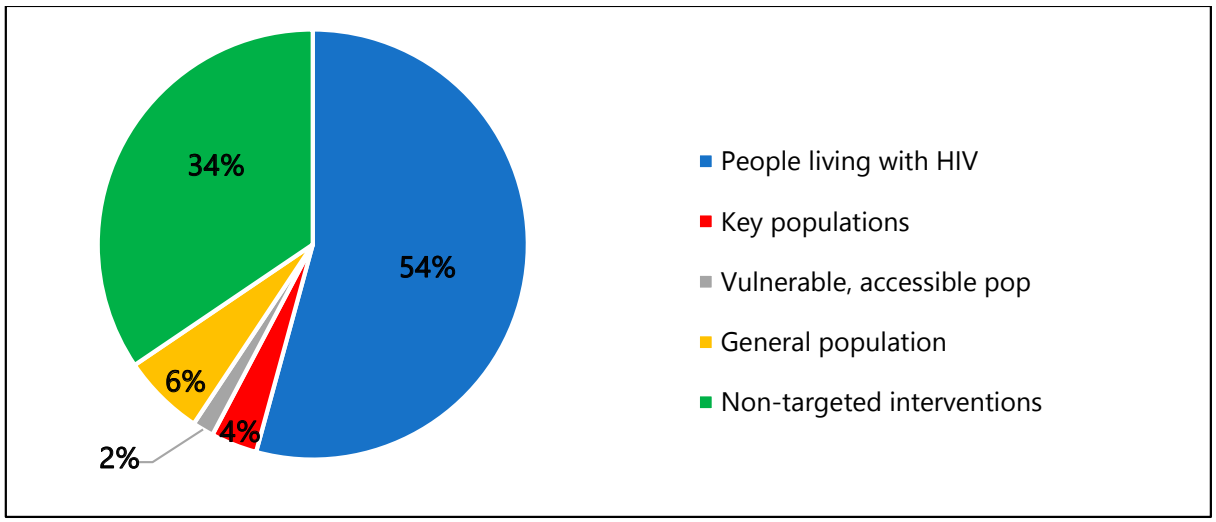


Table 12: Beneficiaries of HIV spending (US$, %, 2022)

Beneficiaries of HIV services	2022	
	Amount (US$)	% Share
People living with HIV	**68,572,310**	**54.2%**
Adult and young people living with HIV	789,651	0.6%
PLHIV ND	67,782,659	53.6%
Key populations	**4,396,882**	**3.5%**
FSW	1,883,833	1.5%
MSM	1,237,969	1.0%
Prison Inmates	122,325	0.1%
Key population ND	1,152,755	0.9%
Vulnerable, accessible populations	**2,028,492**	**1.6%**
Pregnant and breastfeeding HIV-positive women	958,405	0.8%
AGYW	124,279	0.1%
Recipients of blood or blood products	121,236	0.1%
Junior high/high school students	50,904	0.0%
Employees	6,970	0.0%
Vulnerable, accessible population ND	766,698	0.6%
General population	**7,842,760**	**6.2%**
Non-targeted interventions	**43,574,825**	**34.5%**
Total Spending	**126,415,269**	**100.0%**

Figure 19 displays how the funding from different financing entities benefitted different beneficiary groups. People living with HIV who were the major beneficiaries received most of their funding from international financing entities, which contributed 42% of the total spending on PLHIV in 2022, followed by domestic private financing entities/ OOPP which contributed 30% and public financing entities, which contributed 28% of the total spending for the PLHIV. The key populations category was fully funded by international financing entities, while the vulnerable and accessible populations services received most of their funding from international financing entities, which contributed 59%, followed by 34% from public financing entities contributed, and the remaining 7% was contributed by the private financing entities/OOPP. The services targeting the general population were mainly funded by international financing entities, with 95% in 2022, while the public financing entities contributed the remaining 5% of the general population spending. Finally, the non-targeted interventions received most of their funding from public financing entities which contributed 72% while the international financing entities contributed 28% in 2022.

Figure 19: Expenditure on beneficiary population by funding entity (%, 2022)

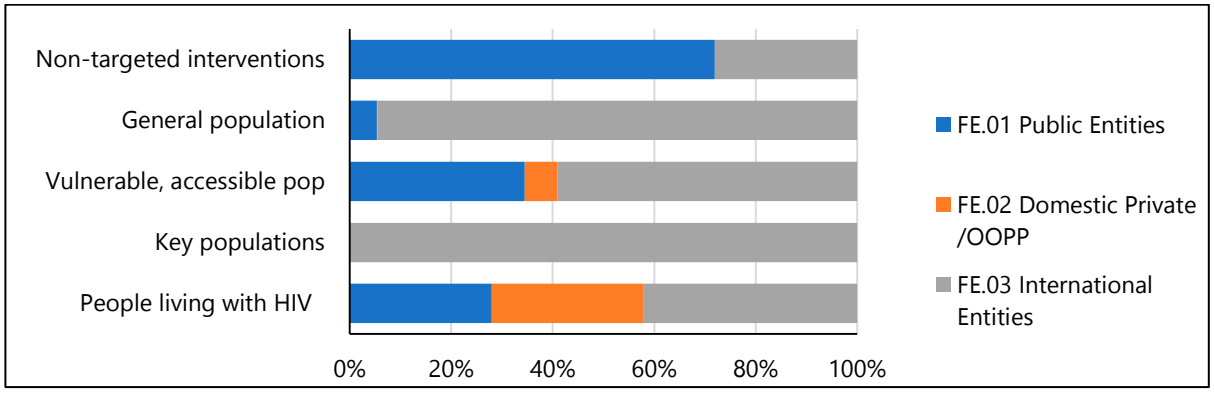
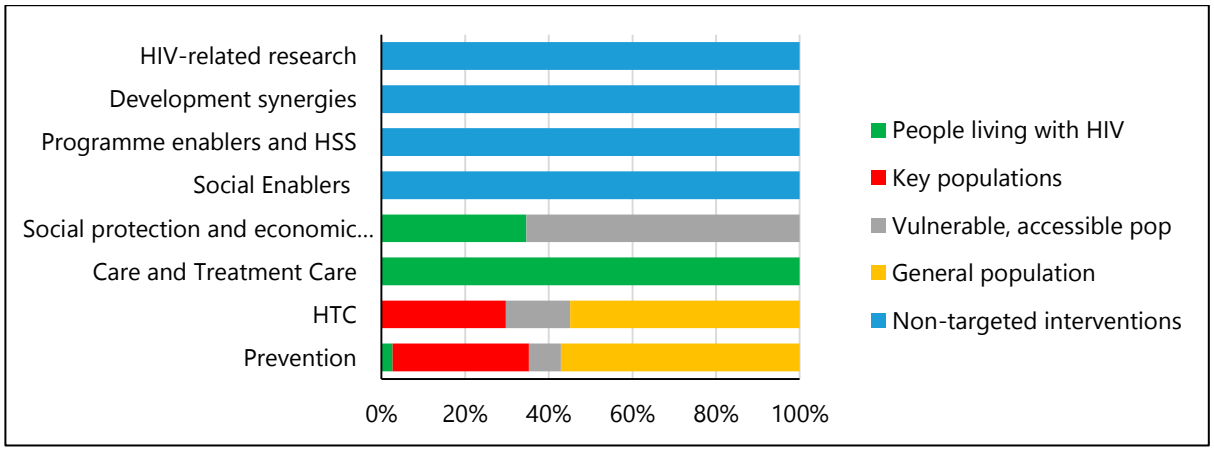


Figure 20 shows the analysis of HIV interventions and their respective beneficiary populations that non-targeted interventions accounted for 100% of the beneficiary population for HIV-related research, development synergies, program enablers, and systems strengthening, as well as social enablers, because these interventions do not have direct service delivery to a beneficiary group. The beneficiaries of social protection and economic support included vulnerable, accessible, and other target populations, along with people living with HIV. In the case of HTS, the beneficiary populations included key populations, general populations, and vulnerable, accessible, and other target populations. Furthermore, prevention interventions were targeted mostly at general populations, key populations, and vulnerable, accessible populations. According to NASA methodology, all beneficiaries receiving HIV care and treatment were considered PLHIV, irrespective of their specific subgroups within the HIV response.

Figure 20: HIV interventions with their beneficiaries (%, 2022)

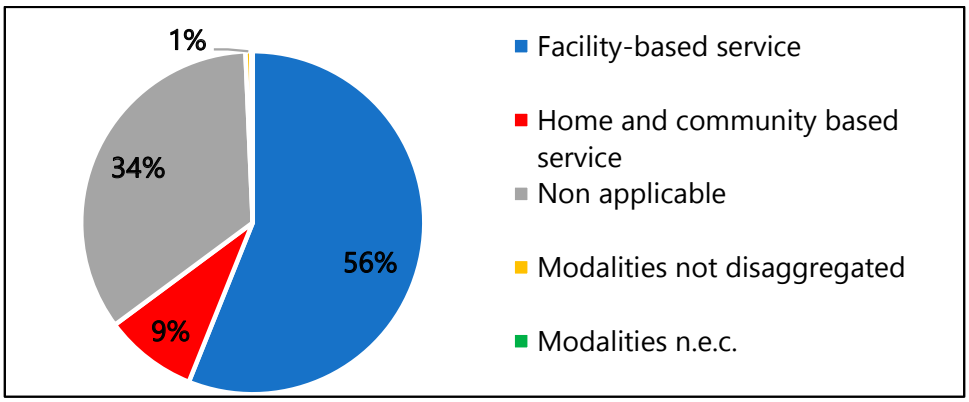


This analysis underscores the diverse range of beneficiary populations across different HIV interventions, highlighting the need for tailored approaches to effectively address the specific needs and vulnerabilities of each group. By understanding the unique demographics and circumstances of these populations, targeted interventions can be developed/enhanced and implemented to maximize the impact of HIV prevention, treatment, and support efforts.

3.8. Service Delivery Modalities (SDM)

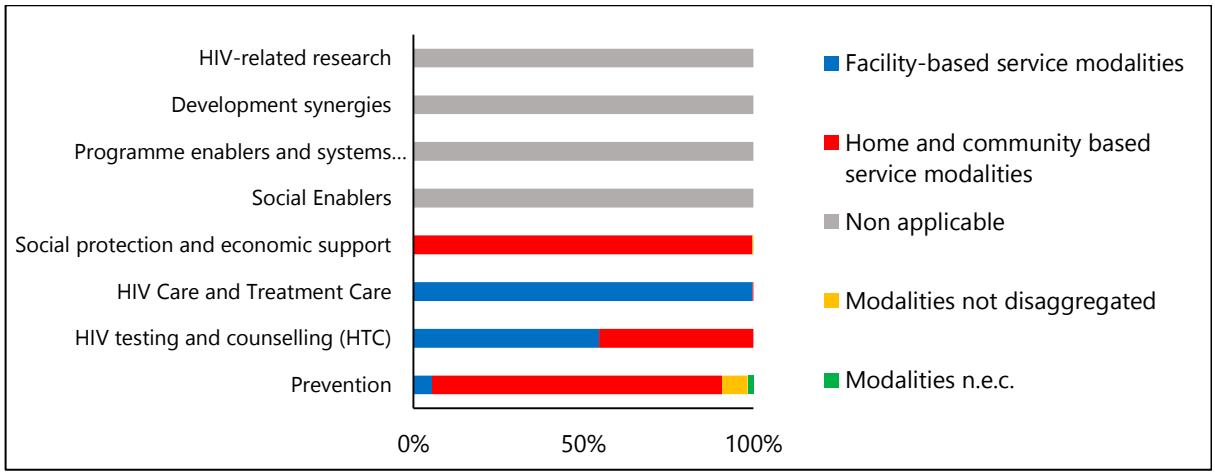
The NASA 2020 framework has included the new service delivery modality vector to identify the different ways in which HIV and AIDS services are delivered. The data provide an opportunity to analyse the efficiency of programmes according to their modes of delivery, provided all expenditures are labelled correctly and comprehensively. In 2022, facility-based services constituted the largest proportion of HIV intervention service delivery modalities, accounting for 56%. This is not surprising given the fact that ART is still largely provided through facility-based services with gradually increasing delivery through home and community-based models. This was followed by the SDM non-applicable which refers to the services that did not have a specific delivery model, such as program enablers and systems strengthening research, and development synergies, which accounted for 34% of the total HIV expenditure, followed by 9% spent on home and community settings. Modalities not disaggregated accounted for 1%. (figure 21)

Figure 21: Service delivery models in Ghana (%, 2022)



Prevention activities were largely provided through home and community-based service delivery models. HIV testing services were split between facility-based services and Home and community-based services. Currently, the NASA SDM categorization does not include some categories for activities such as at the workplace, prevention in school, prison, or university, hence these were coded as modalities not elsewhere classified (N.E.C.) but made up a very small portion of total HIV expenditure as shown in figure 22.

Figure 22: AIDS spending categories by service delivery model (%,2022)



3.9. Providers of HIV Services

The spending distribution among HIV service providers in Ghana reveals interesting patterns of provision. Figure 23 shows Government entities, including hospitals and ambulatory care facilities (clinics), accounted for a significant portion of the total expenditure, with a combined share of approximately 39%, and other government entities spent 27% of the overall HIV spending in 2022. This underscores the pivotal role of the public sector in delivering HIV services and highlights the government's commitment to addressing the epidemic. Non-profit providers also played a substantial role, accounting for a considerable share of the spending at 27%. Their involvement reflects the active participation of civil society organizations and community-based initiatives in delivering HIV services. Multilateral agencies and international NGOs and foundations collectively accounted for only 6% of the spending, while interestingly, profit-making private sector providers consumed only a small fraction to the overall spending, representing approximately 1% of the total. Overall, the distribution of spending among HIV service providers reflects a collaborative effort involving both public and private non-profit entities, with a strong emphasis on government-led initiatives and the active engagement of non-profit organizations.

Figure 23: Providers of services for HIV and AIDS (%, 2022)

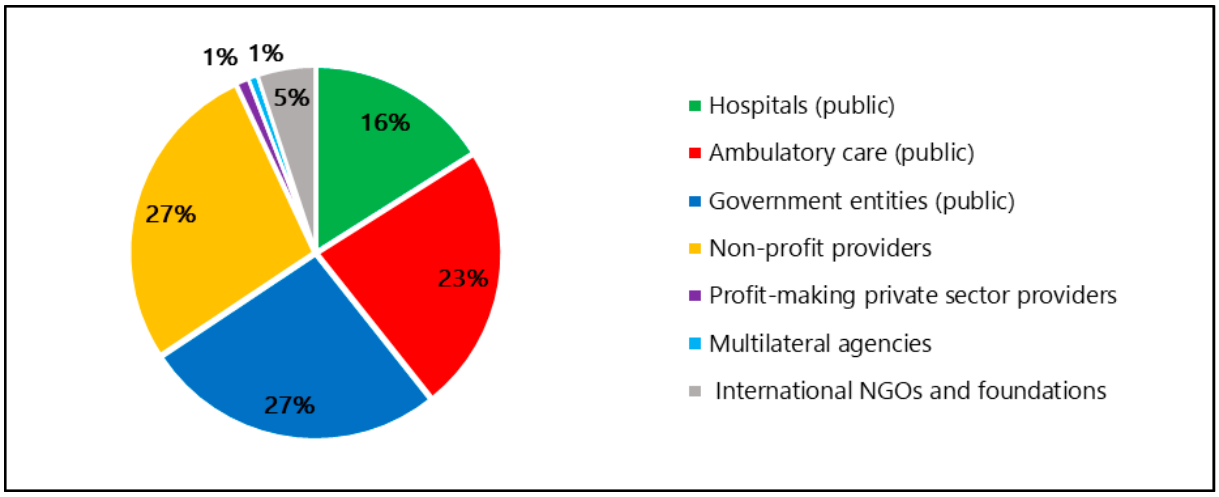
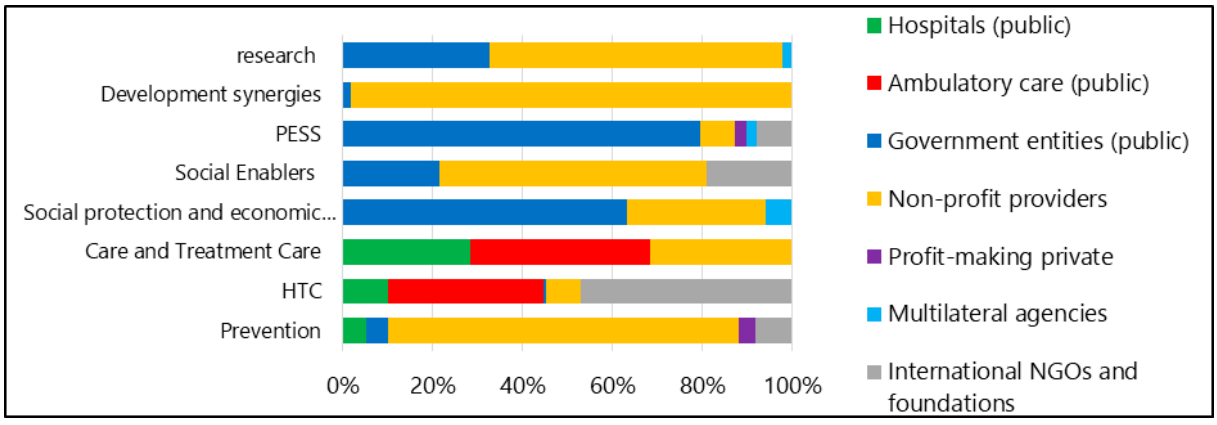


Figure 24 shows the spending on different HIV interventions by providers of services. HIV care and treatment were delivered in almost equal parts by hospitals, clinics, and NGOs. HTS had some delivery in hospitals but were mostly delivered by public clinics and INGOs. Prevention interventions and development synergies were mostly delivered by NGOs, indicating the important role of these organizations in the prevention and multi-sectoral efforts. They were also engaged in research, social enablers and PESS, reflecting their versatile role in HIV services. International NGOs were involved in HTS, and to a lesser degree in prevention, social enablers and PESS efforts. Multilateral agencies were not major providers of services, as would be expected.

Figure 24: Providers of service and their interventions (2022)



3.10 Production Factors of HIV and AIDS Services in Ghana

The analysis of production factors shows that the recurrent expenditure category accounted for almost the full share of the HIV spending in both years, with 99.9% in 2022. Recurrent expenditure is the spending on the day-to-day operations and running of the programme, such as wages, salaries, rent, utilities, and commodities and supplies. On the other hand, Capital expenditure is the spending on the acquisition and improvement of the fixed assets

of the production factors, such as buildings, machinery, equipment, vehicles, and technology. The analysis also shows that the capital expenditure was minimal in 2022.

The different production factors for HIV and AIDS services are displayed in Table 12. The major cost drivers for HIV have been medical products and supplies, accounting for 35% of the total HIV expenditure in 2022. The Medical products and supplies include expenditure on ARVs and other pharmaceuticals, laboratory reagents, and other medical supplies. The ARVs alone consumed about 58% of the share of the medical product and supplies costs, representing 21% of overall spending on HIV in Ghana (Figure 25). Personal costs/salaries constituted the other major cost driver, with US$ 32 million spent on them, representing 26% of the total spending in 2022. Operational and program management expenses were given significant priority, constituting 25% of the overall expenditure in 2022. This was followed by other indirect and recurrent costs, which collectively made up 8% of the total. Additionally, the combined costs for training and logistics of events accounted for 4% of the total spending.

Table 13: Production Factors for HIV and AIDS Services in Ghana (US$, % 2022)

Production factors	2022	
	Amount (US$)	% Share
Current direct and indirect expenditures	**126,090,144**	**99.9%**
Personnel costs	32,389,683	26%
Other operational and programme management	31,528,537	25%
Medical products and supplies	44,675,995	35%
Contracted external services	475,414	0%
Financial support for beneficiaries	892,575	1%
Training- related costs	3,915,116	3%
Logistics of events, including catering services	1,463,218	1%
Indirect costs	6,832,067	5%
Current direct and indirect expenditure ND	3,917,539	3%
Capital expenditures	**170,698**	**0.1%**
Building	23,139	0%
Other capital investment	147,559	0%
Total Spending	**126,260,842**	**100%**

Figure 25: Breakdown of Spending on medical products and supplies (%, 2022)

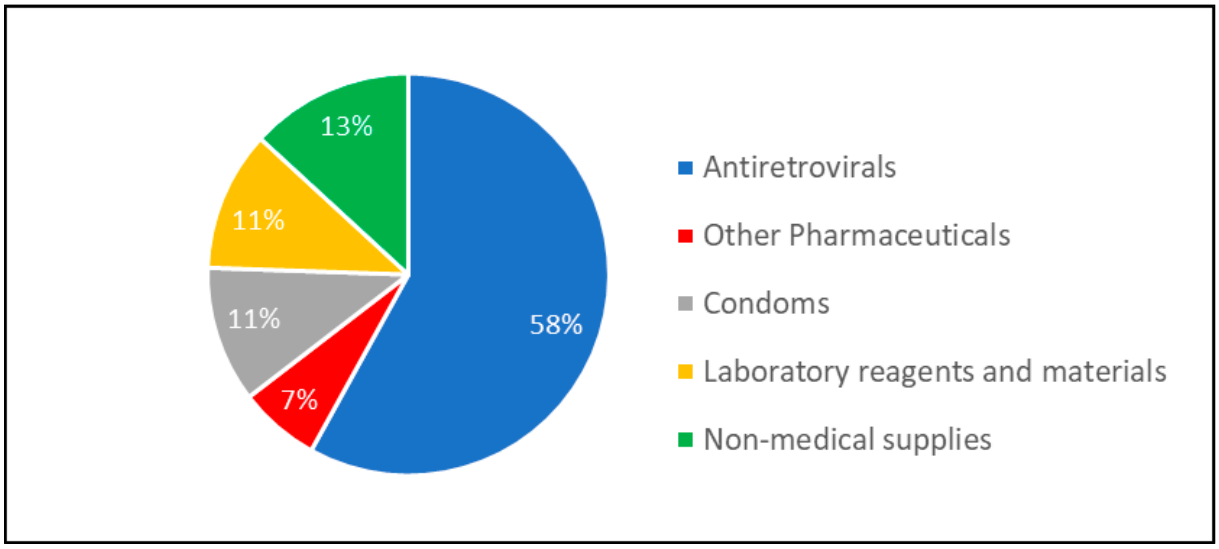
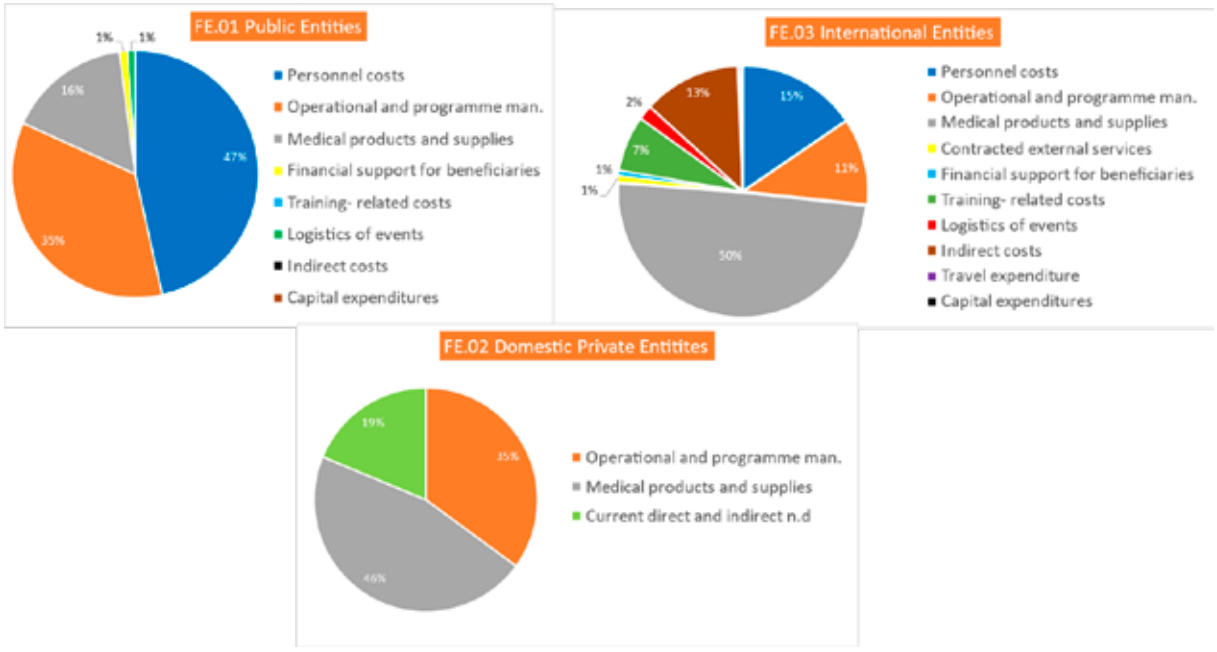


Figure 26 shows the spending on different production factors by financing entities for 2022. The funding from public entities was mainly used for medical supplies and personnel (47%), operational costs (35%), medical products (16%), and the remaining combined accounted for 2% of the total public funding. The domestic private financing entities, mainly the OOPP invested in medical products and supplies (46%), operational and program management (35%) followed by not disaggregated recurrent costs (19%). The funding from international financing entities, on the other hand, was spent on a wide range of production factors, mostly on medical supplies (50%), 15% on personnel costs, operations, and program management (11%), indirect costs (13%), training (7%), and the remaining PFs combined accounted for 5% of the total international funds.

Figure 26: Production factors by funding entities (US$, % 2022)



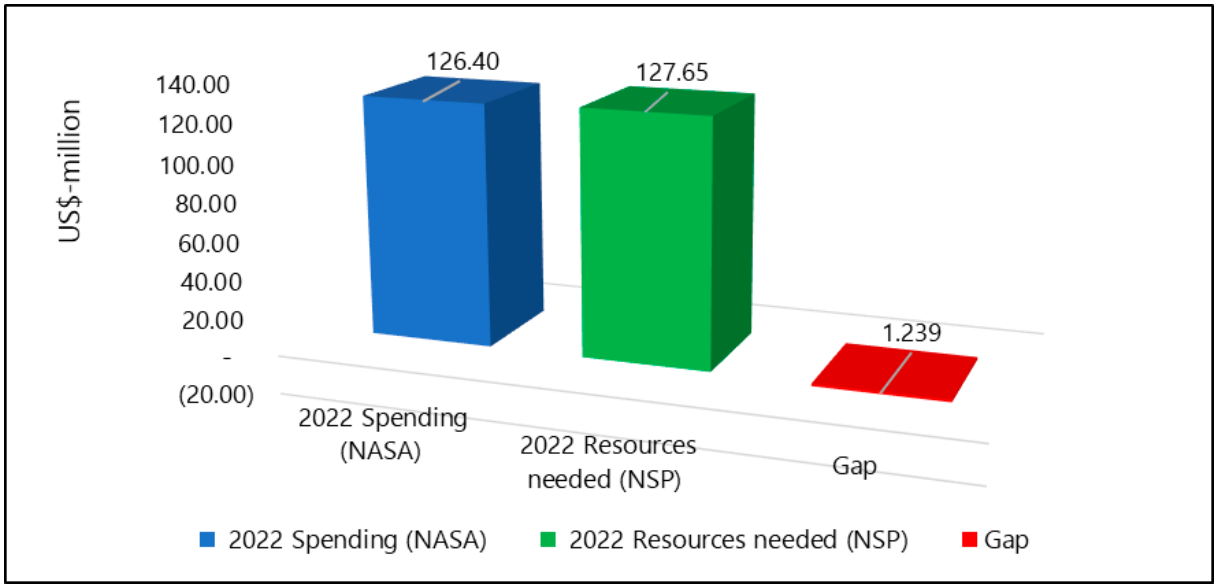
4.0

COMPARISON OF SPENDING VERSUS ESTIMATED COSTS OF THE NSP

4.1. Adequacy and Prioritization of Past Expenditure

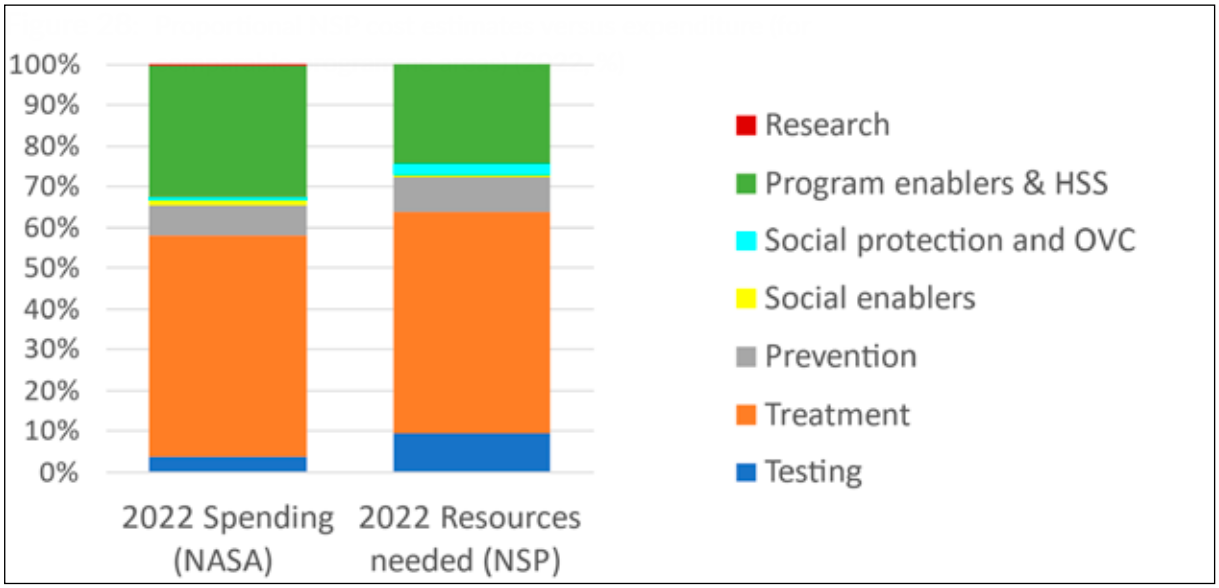
The analysis as shown in figure 27 compares the estimated resources outlined in Ghana's National Strategic Plan (NSP) for the year 2022 with the actual spending documented in the National AIDS Spending Assessment (NASA) for 2022. The objective is to evaluate the sufficiency of HIV funding in Ghana. According to the NSP 2021 - 2025, the total estimated resources needed for HIV in Ghana for 2022 were US$ 127.7 million. In contrast, the actual spending recorded in NASA for the same year amounted to US$ 126,4 million, this resulted in a marginal potential gap of 1% or approximately US$ 1 million in 2022, implying that Ghana's total HIV funding was adequately aligned with the total resources needed for the NSP. However, further examination of spending on specific interventions compared to their estimated costs may be necessary to draw definitive, and nuanced, conclusions regarding the existence of this potential minimal shortfall and identify potential areas for improvement in future resource allocation and budgeting strategies for funding gaps.

Figure 27: Comparison of HIV spending with estimated NSP costs (2022, US$ million)



4.1.1.Alignment and Prioritization of Previous Expenditure

This analysis as shown in figure 28 assesses how well the proportional allocation of HIV spending described by this NASA conformed to the proportional priorities defined in the NSP. It also provides a comparison of interventions for which estimated costs and expenditure data were available *and comparable* for the year 2022. The NSP priorities are categorized into different intervention areas, each with estimated costs for the year 2022. These include Treatment, Prevention, Social Enablers, Social Protection, and Program Enablers & Health System Strengthening (HSS). It's worth noting that HTS was categorized and costed under primary prevention in the NSP. However, for the purpose of comparison, we had to subtract the cost of HTS from the total HIV primary prevention estimate to make a valid comparison with the HTS expenditure reported by NASA. Despite the NSP proposing a balanced allocation across various interventions, the development synergies interventions and HIV-related research were not included in the NSP. If we compare the percentage share of spending with the percentage share of resources required for the NSP as a measure of prioritization, the analysis reveals that some programme areas spending found in the NASA, such as proportional spending on treatment and prevention, were closely aligned with the NSP's proportional priorities for 2022. 'The analysis further indicates that the actual spending of testing was less prioritized than envisaged in the NSP, while spending on Program Enablers & Health System Strengthening may have been over-prioritized in 2022.



Overall, the comparison suggests the proportional spending per HIV programme area in 2022 in Ghana was mostly aligned to the priorities defined in the NSP.

4.1.2 Comparison of HIV Program Areas Spending with Estimated NSP Costs

Figure 29 shows the comparison between the 2022 HIV spending by program areas and their estimated cost according to the NSP. The examination reveals that allocations were mostly close to the required need, although there may have been gaps in funding for HTS, Prevention, care and treatment, and social protection. The largest potential deficit was observed in HTS, where spending was US$ 4.7 million, while the NSP's estimated need was US$ 10.7 million, representing a possible deficit of US$ 6 million (56%). This might indicate a lack of adequate

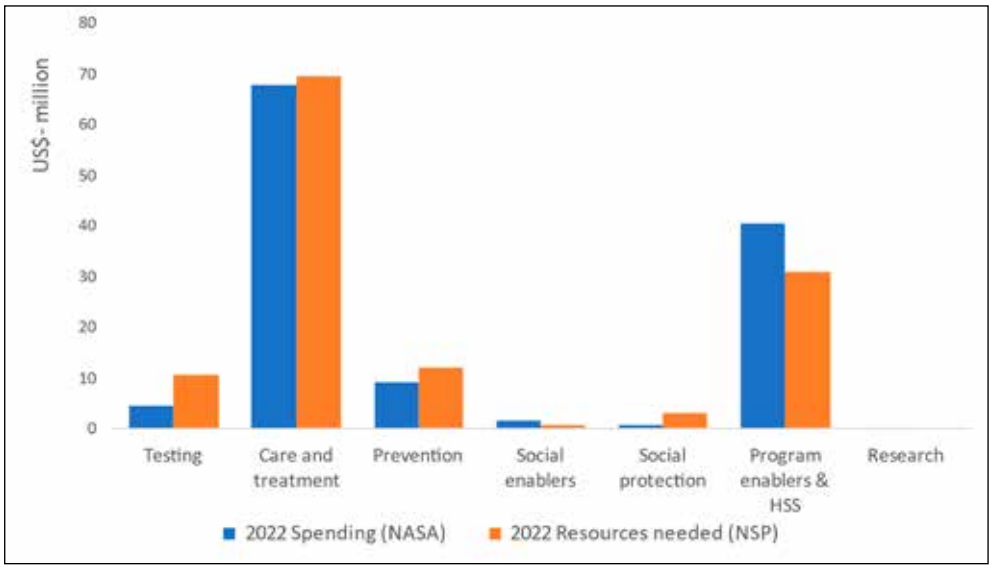
resources for testing services or an overestimation of the required funds for HTS in NSP. However, performance indicators reveal that HTS targets were exceeded by 4% in 2022. This implies that despite the relatively modest investment in this area, progress was made in scaling up and expanding coverage. It could also reflect the change from universal targeting to the targeting of high-risk groups. Consequently, this situation may imply that the spending was efficient in achieving the desired outcomes.

Care and treatment spending (for all C&T interventions, not only ART) was closely aligned with the estimated NSP needed resources, with a slight shortfall (2%) of expenditure at US$68 million against NSP's requirement of US$69.5 million. It is important to note that there was a decrease in the Out-of-Pocket Payments (OOPP) for HIV care and treatment due to differences in estimation methods. This discrepancy partly explains the difference between the actual spending and the resources needed for care and treatment.

However, Ghana employs several strategies for ART services that could have effectively achieved some savings when compared with estimated ART resource needs. Some of these strategies include Task Shifting, Integration of Services, cost-effective ARV regimens as well as optimized differentiated ART delivery modalities. A further insight into achieved treatment coverage versus the NSP target is provided below (Figure 29).

Another misalignment between the resources needed outlined in the NSP and the actual expenditure was noted in the prevention intervention, indicating a potential deficit of about US$3 million (25%). This could pose a risk of reducing new infections, achieving epidemic control, and potentially leading to an increase in HIV transmission rates across all target groups. Similarly, expenditures on social protection amounted to US$913,000, indicating a shortfall of approximately US$2.3 million (70%) compared to the estimated cost stated in the NSP, which was US$3.28 million. However, it's worth noting that NASA may not have fully captured all social protection expenses due to the diverse nature of such activities in the country. However, inadequate funding for social protection initiatives could worsen socio-economic disparities, increase susceptibility to HIV, and hinder progress towards the objectives outlined in the NSP, including mitigating the socio-economic impact of the epidemic.

Figure 29: Comparison of HIV spending with estimated NSP costs (2022, US$ million)



Program Enablers and systems strengthening (PESS) witnessed potential surplus of US$9.57 million (24%). However, accurately costing these interventions is particularly challenging, and this initial comparison highlights the need for a thorough evaluation of which PESS interventions were costed in the NSP and whether the NASA needs to make greater efforts to collect spending on those specifically or to identify other underlying issues. This could involve assessing whether there has been an underestimation/overestimation of required funds or identifying any implementation challenges that hinder the optimal utilization of funds. A closer examination of the ART programme spending, and achievement below offers additional insight into potential technical efficiencies in the HIV response.

4.2 Technical Efficiency of ART and HTS Spending in Ghana

The comparison of projected and actual expenditures on Antiretroviral Therapy (ART) including Viral Load (VL) Testing for 2022 in Ghana reveals that the spending on ART fell slightly short of the estimates outlined in the NSP, which may imply funds were inadequate to scale up treatment coverage or barriers were experienced in accessing ART services. According to the GAC report, Ghana has not yet met the second UNAIDS 95 target, with only 87% of people who know that they are living with HIV to be on antiretroviral treatment by the end of 2022, well below the 95% target set for 2025. Additionally, the report indicates that by the end of 2022, 72% of people who are living with HIV knew their HIV status, and 68%. of people who are on treatment achieved viral suppression.

Figure 30: NSP ART costs and actual expenditure (2022, US$ million)

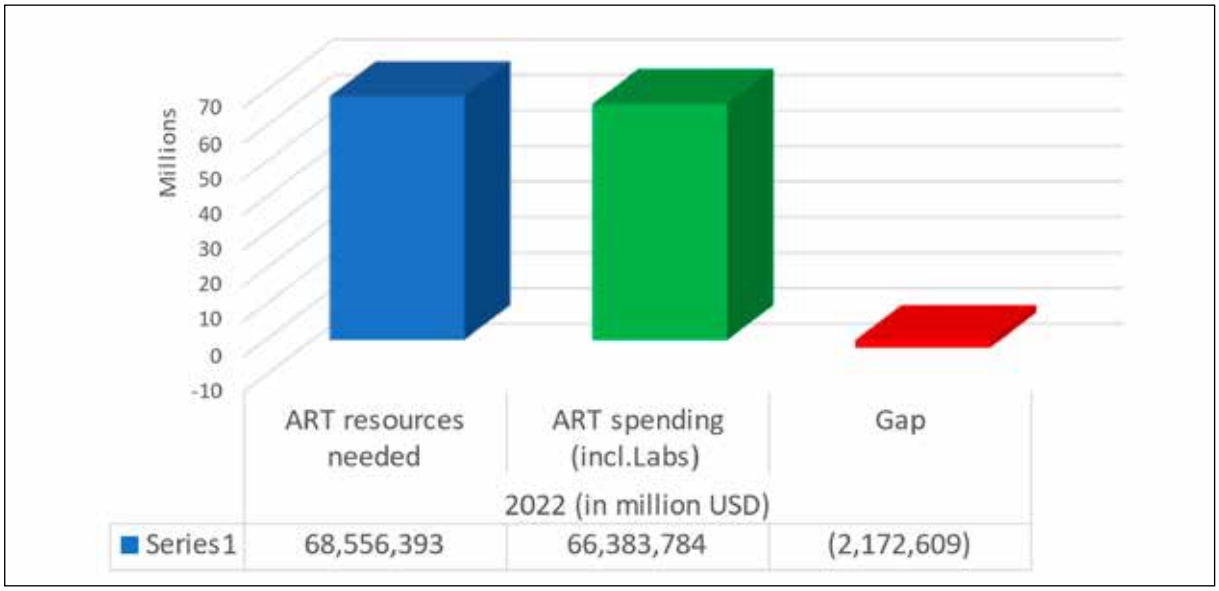
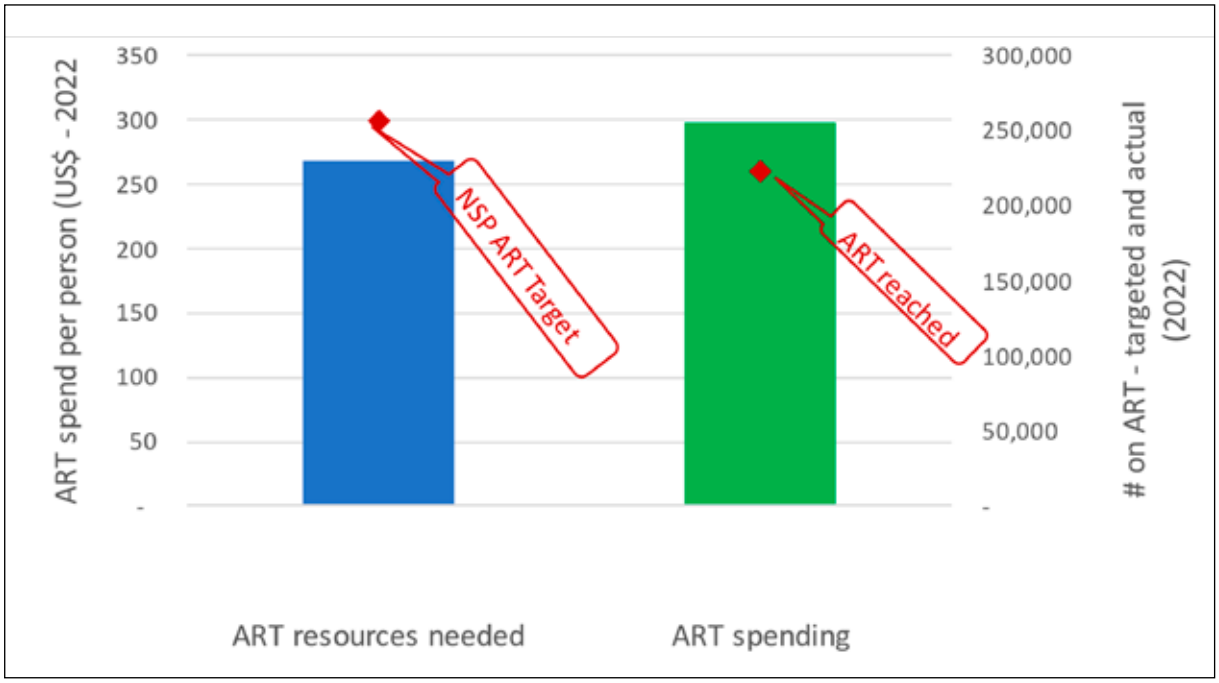


Figure 30 aims to provide insights into the technical efficiency of the ART and HTS programme in Ghana, by examining the unit of expenditure per person on ART and per test performed alongside their performance indicators for 2022, albeit without conducting a full efficiency analysis. However, due to the lack of disaggregated data in the previous NASA report, examining units of spending over time for these interventions was not feasible.

This preliminary examination will offer some indication of any inefficiencies or efficiencies achieved with this intervention, which may warrant further investigation.

Regarding the ART program, the analysis as shown in figure 31 reveals that the unit of expenditure per ART patient in 2022 was 11% higher than the unit cost projected in the NSP estimates. Specifically, the cost per person on ART in NASA was US$298, compared to the estimated NSP cost of US$268. Despite this discrepancy, the actual number of people on ART (222,581) did not quite reach the NSP target of (255,730) patients in 2022 (77% of the target reached). However, it was argued that there were programme data quality issues and the number of clients on ART had to be rebased by 20% in 2022. This could potentially have contributed to Ghana not reaching its target.

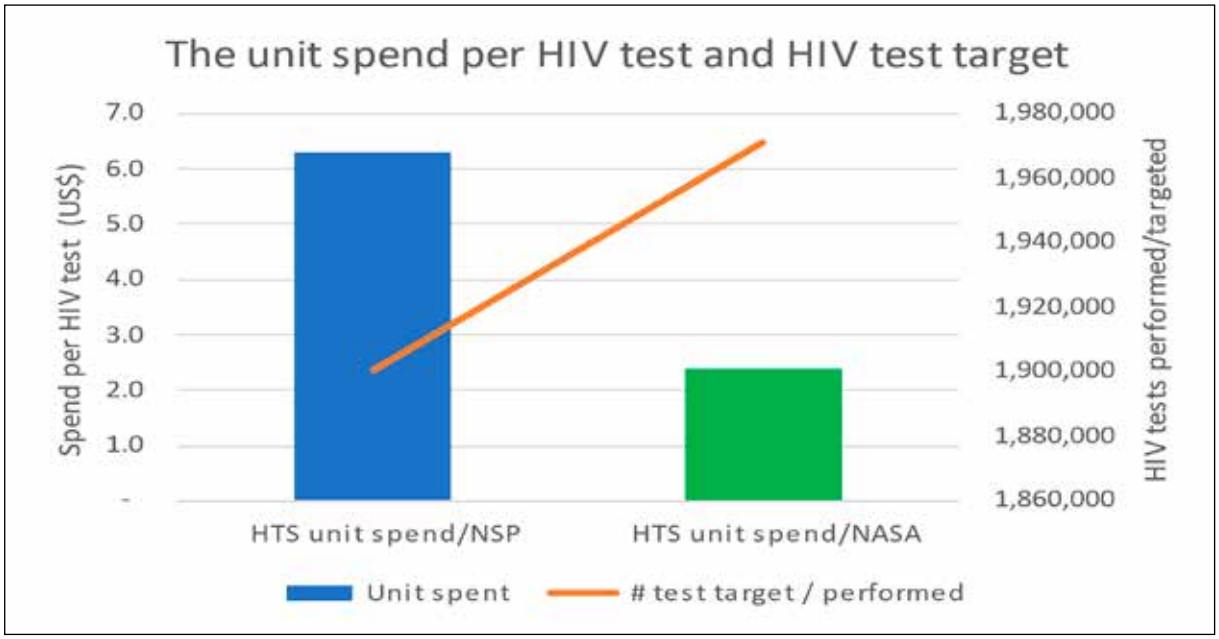
Figure 31: Spending per person on ART per annum (US$), and numbers on treatment (2022)



The increase in the unit of expenditure per ART patient alongside the shortfall (not reaching the target) in the number of people on ART suggests inefficiencies in spending and service delivery. These inefficiencies may stem from factors such as overhead costs, ineffective procurement practices, or suboptimal resource utilization. This comparison underscores the importance of closely examining the factors contributing to spending inefficiency and emphasizes the need to enhance the quality and coverage of ART services. By improving efficiency, more individuals can access and benefit from ART with the same or fewer resources.

In 2022, the cost per HIV test performed was 2.4 US$, while the NSP projected the unit expenditure for HTS at 6.3 US$. The analysis in Figure 32 shows that despite this discrepancy, the actual number of tests performed (1,971,381) surpassed the NSP target of 1,900,620 tests, achieving 104% of the target. This suggests that HTS was cost-efficient, achieving more testing outcomes with lower expenditure per test in 2022. Further analysis could explore why HTS achieved more outcomes with lower costs, potentially identifying best practices that can be applied more broadly.

Figure 32: Spending per HTS testing per annum (US$), and numbers of tests performed (2022)



5.0
DISCUSSION AND CONCLUSION

In conclusion, the financing landscape for HIV-related activities in Ghana saw notable shifts in 2022. While international financing entities slightly increased their contribution by 3% in nominal terms, public financing entities experienced a more significant rise from 34% to 41% of total HIV spending in 2022, reflecting a 19% increase in nominal terms. However, the private sector's share, primarily Out-of-Pocket payments, decreased from 25% to 16%, attributed to adjustments in estimation methods in this NASA, and limited responsiveness from businesses. Although the Global Fund remained the largest contributor, its funding decreased by 10%, alongside a slight decrease in contributions from the US government (5% in nominal terms). Other donors collectively contributed less than 2%, while UN agencies notably increased their funding by over 500%, albeit off a very low base in the previous year. These changes underscore the importance of monitoring funding sources and ensuring efficient allocation to sustain HIV/AIDS response efforts in Ghana.

NASA 2022 reveals a significant role played by the public sector, which emerged as the largest HIV financing agent and purchaser, responsible for 63% of total HIV spending. Particularly noteworthy is the Ministry of Health (MOH), which managed 96% of the public sector's HIV funding. Domestic private entities accounted for 23%, primarily managed by households, with minor contributions from not-for-profit institutions and other corporations. International entities managed 14% of the funds, distributing them through various channels, including central governments, not-for-profit institutions, country offices of bilateral agencies, and multilateral agencies.

The analysis of AIDS spending categories (ASC) in Ghana reveals a substantial allocation towards care and treatment (C&T), comprising 54% of total expenditure, with program enablers and health system strengthening accounting for 32%. Despite a nominal decrease in C&T spending, excluding Out-of-Pocket Payments (OOPP) showed a less pronounced decline. Prevention expenditure slightly decreased (noting that the NASA did not find any VMMC spending, and very low spending on interventions for AGYW), potentially impacting efforts to reduce new infections, while HIV testing and counselling saw a significant increase, although was still less than the NSP costing estimated would be required to meet the testing targets. Other categories received minimal funding. Private financing entities/OOPP primarily directed funds to C&T. International financing entities contributed to all programme areas (although less to social protection and economic support activities), and both they and public financing entities contributed significantly to program enablers and health system strengthening. Overall, these findings underscore the need for continued investment in

prevention and testing services efforts to curb HIV transmission, alongside sustained support for care and treatment services to ensure optimal HIV management in Ghana.

The analysis of service delivery modalities (SDM) and providers of HIV services in Ghana for 2022 highlights significant trends and priorities in HIV delivery. Facility-based services, primarily providing ART, consumed the largest proportion of HIV spending, followed by SDM non-applicable categories encompassing program enablers and systems strengthening. Government entities played a central role in service provision, reflecting a strong commitment to addressing the HIV epidemic, while non-profit providers and civil society organizations also contributed significantly. Interestingly, profit-making private sector providers had minimal involvement, underscoring the predominance of public and non-profit sectors in delivering HIV services in Ghana.

The analysis of production factors in HIV and AIDS spending for 2022 found that medical products and supplies (35%) emerged as the primary cost driver, notably ARVs alone (21%), followed by personnel costs (26%) and operational expenses (25%). These findings highlight the essential investments in medical supplies and human resources necessary for effective HIV intervention, emphasizing the need for continued support and resource allocation in these key areas. The breakdown of beneficiaries of HIV spending in Ghana for 2022 highlights several key trends and the possible need for retargeting in the allocation of resources. People living with HIV (PLHIV) received the largest share of expenditure (54%), reflecting the emphasis on care and treatment programs. Non-targeted interventions, aimed at strengthening healthcare systems and coordination, followed closely behind (34%). However, there's a notable disparity in the allocation towards key populations, which received only 3% of total HIV spending in 2022 suggesting a need for greater focus on addressing their specific vulnerabilities and needs within Ghana's HIV response strategy. Similarly, vulnerable, and accessible populations received minimal attention, signalling a potential area for enhanced prioritization to maximize the effectiveness of HIV prevention and control efforts.

The comparison between the estimated resources outlined in Ghana's National Strategic Plan (NSP) and the actual spending documented in the National AIDS Spending Assessment (NASA) for 2022 reveals a marginal potential gap of 1%, amounting to approximately US$1 million. This suggests that Ghana's HIV funding is closely aligned with the estimates provided in the NSP. Further examination is needed to determine the significance of this minimal shortfall and identify areas for improvement in future resource allocation strategies. Not only in terms of the total resources mobilized for the HIV response in Ghana but also the comparison of the spending per programme area against estimated need also found close proportional and nominal alignment, apart from for HTS. This implies the government and all stakeholders have successfully mobilized and allocated resources according to the intended NPS priorities.

Moving forward, the country must build upon the successes highlighted in this report and address the identified shortcomings with urgency, especially to reach the 95-95-95 targets as well as to reduce new infections. This requires sustained investment in evidence-based interventions, strengthened health systems, and targeted strategies prioritizing equity, inclusion, and community engagement. Furthermore, the findings of this assessment underscore the importance of collaboration across sectors and the need for continued advocacy, resource mobilization, and innovation in our response to HIV and AIDS. By working

together, with a shared commitment to the principles of equity, human rights, and scientific excellence, we can overcome the challenges ahead and move closer to our shared goal of ending the HIV and AIDS epidemic in Ghana by 2030.

6.0
RECOMMENDATIONS

These recommendations are suggestions or proposals that stem directly from the findings of the assessment; and expert opinions, and their primary purpose is to provide guidance on what actions or steps should be taken based on the findings. The recommendations are typically directed towards policy makers, donors and their implementing partners, and all stakeholders who can use the findings and results of this year's assessment to inform decision-making and or take operational adjustments. Since the assessment interrogated and investigated financial spending patterns on the National AIDS Response and analysed HIV spending priorities; the findings and its subsequent recommendations must improve and inform health financing decisions, and future health financial systems and provide the pathway for strategies to sustain and or improve the current level of HIV financing to deal with an increase in demand in the national response.

The findings revealed the need for the following:

a. Redistribution of Resources to Ensure Equity.

It is important to redistribute resources to ensure equity across all intervention areas. Current records indicate that spending in some areas is significantly higher than in others. While implementation science can justify such disparities, the national response must consciously strive to balance expenditures. Allocating resources should not lead to neglecting certain interventions. Equity should be the guiding principle, ensuring that all interventions receive adequate funding to achieve a comprehensive and effective response.

b. Local or Countrywide Resource Mobilization.

A significant portion (43%) of the funds for the country's HIV response comes from external sources. Public sector contributions have been increasing, reaching 40% in 2022. However, it is essential to continue proactive internal resource generation and mobilization to support the national response effectively.

c. Harmonization, Standardization, Integration and Institutionalization of resource data collection and monitoring systems

Setting up one central system as a one-stop-shop for all HIV financial data may be ideal for National HIV financial management. However, the starting point could be assessing and harmonizing all financial systems, agree on a minimum standard that must be integrated into all implementing partners systems and provision of a common

set of classifications (charter of accounts) and a simple platform for all to submit their expenditure records.

d. Integration of NASA processes and procedures in all financial data systems

To ensure ease of information sharing and facilitate transparency it will be prudent for partners to begin reviewing their financial systems to accommodate NASA principles and classifications. Once that is achieved in the interim the harmonization process could be made simple, easy, and fast.

e. Active usage of NASA findings

Stakeholders should actively utilize the National AIDS Spending Assessment (NASA) findings to inform planning and resource allocation. By leveraging this data, stakeholders can ensure that funding is directed towards the most impactful and necessary interventions, improving the overall effectiveness of the HIV response. Regularly incorporating NASA insights into decision-making processes will enhance strategic planning, promote equitable resource distribution, and optimize outcomes in the fight against HIV.

f. Strengthen Financial Monitoring and Evaluation

Tracking financial data is the responsibility of all partners. This assessment revealed the lack of adequate structures for periodic monitoring of spending and relating them to activities and outputs. It is being recommended that besides the periodic auditing, consistent and routine tracking of spending should be done at all levels, and link expenditures to performance indicators. These could take place at the National and Subnational levels.

g. Additional Research

This year's assessment did not include results from an out-of-pocket study conducted recently. Such studies enrich the findings of NASA. The following studies are being recommended to either be conducted as part of subsequent NASA or be done as a stand-alone

- Out-of-pocket payment household survey
- Unit cost study or analysis for more specific interventions
- Assessment of Private-for-profit sector's contribution to the National Response
- Assessment of Hindrances to Local Resource Mobilization
- Correlation between Financing/expenditure and outputs/outcomes
- Regional variation in the cost of basic strategies such as Peer Education

h. Enhanced Domestic Financing for Sustainable HIV Response

The uncertainty surrounding financing from development partners underscores the risks of relying heavily on donor funding for HIV prevention activities. To effectively curb new infections and achieve the National Strategic Plan (NSP) goals and the 95–95–95 targets, it is crucial to secure sustainable funding for HIV prevention, testing, and counselling from domestic sources. This is especially important for supporting the five key pillars of prevention.

The NASA report highlights alarmingly low spending on social enablers and development synergies, both within the health sector and across other sectors. Given

the HIV epidemic's impact and the vulnerability of adolescent girls and young women (AGYW) in Ghana, the assessment strongly recommends increasing resource allocation to integrate HIV and AIDS-related interventions within education, protection, social services, human rights, and gender programs. This strategic reallocation will ensure a more holistic and sustainable approach to combating HIV, addressing the broader social determinants that affect AGYW, and reinforcing the national response to the epidemic.

7.0
APPENDICES

7.1. Appendix 1 – List of Members for the Development of the 2022 NASA

a. Steering Committee

Dr. Kyeremeh Atuahene	GAC
Mr Kwakye Kontor	MOH
Dr. Anthony Ofosu	GHS
Mr James Saakwa Mante	NACP
Mr. Hector Sucilla Perez	UNAIDS
Dr. Kafui Senya	WHO
Mr. Silas Quaye	CDC
Dr. Henry Nagai	JSI
Mrs Comfort Asamoah Adu	WAPCAS
Ms. Elsie Ayeh	NAP+
Prof. Felix Asante	UG
Mr. Isaiah Doe Kwao	GAC

b. GAC NASA Team

Dr. Kyeremeh Atuahene	Director General
Mr. Isaiah Doe Kwao	Director of Research Monitoring and Evaluation
Mr. Abdul Moomen Siddique	Director of Finance and Administration
Mr Emmanuel Larbi	Chairman
Mrs. Jewel Lamptey	Member
Mr. Kwasi Gyimah Okai	Member
Mr. Zakaria Yussif-Nupaya	Member
Mr. Raphael Sackitey	Member
Mr. Daniel Kpogo	Member
Mr. Ellis Dowuona	Member
Mr. Dennis Annang	Member

c. Technical Assistance

Mr. Hector Sucilla Perez	UNAIDS
Ms. Cynthia Adobea Asante	UNAIDS
Mr. Joshua Karume	Consultant

d. Participants for the 2022 NASA Validation Meeting

Morkpokpor Agbeko	PPAG
Samson Awudanjong	MOH
Steve Adobah Arko	MOE
Perpetual Opei-Larbi	PPAG
Frank odame	WUG
Naomi Nako Tawiah	PPAG
Asamoah Boateng	PPAG
Solomon Effah	WAAF
Nana Nyarko Konadu	JSI
David T Nartey	JSI
Kwasi Oppong-Ababio	MOH
Dr. Henry Nagai	JSI
Evans Mensah	WAPCAS
Daniel Obeng	MOE
Theophilus Babae	World Vision
Abiba Diaber	NBS
Lavoe Gifty	GHANET
John Lovelace Kpodoviah	Ministry of Food and Agriculture
Dr.Dilys John-Teye	NBS
Cop. Jones Blantari	Police
Rahael Odame	FHD/GHS
Emmanuel Mwut	MOH
Jewel Kofi Amoah	WAPCAS
Naa Atswei Nee-Okpey	Planned Parenthood Ass. Of Ghana
Stephen Ayisi Addo	GHS-NACP
Beatrice Cudjoe	Prolink
Kadi S. Tetteh	CCG
Samuel Amponsa	Unilever Ghana PLC
Cynthia Adobea Asante	UNAIDS
Tony Ao	US, CDC
Henry Tagoe	JSI
Joshua Karume	Consultant
Jospeh Azuntaaba	Pro-Link
Adjoa Yenyi	UNFPA
Trude Nunoo	FHI360
Paul Dsane -Aidoo	UNICEF
Ben Cheabu	CHAG
Henrietta Ampofo	UNFPA

Kenneth Knack Numana	UNFPA
Emelia Obeng	UNFPA
James Saakwa Mante	NACP
Emma Anaman	WFP
Isaiah Kwao	GAC
Abdul Moomen Siddique	GAC
Dennis Annang	GAC
Daniel Kpogo	GAC
Emmanuel Larbi	GAC
Zakaria Yussif - Nupaya	GAC
Kelvin Odame-Labi	GAC
Albert Tsiquaye Junior	GAC
Ellis Dowuona	GAC
Jewel Lampety	GAC
Cynthia Quist-Arcton	GAC
Kwasi G.Okai	GAC
Rita Afriyie	GAC
Raphael Sackitey	GAC

7.2 Appendix 2 – Tools and Summary Tables

Figure 33: Customized MS excel-based data-collection template.

National AIDS Spending Assessment (NASA) 2022						**Total Expenditure**		**0.00**
Name of Institution								
					Contact person Name			
Currency					**Designation/Title**			
					Phone/Mobile number			
					E - mail			
No	Funding Source	Funding Agent/ Recipient	Activity/ Program Area	Description of the activity	Beneficiary Group	Production Factor (PF)	Service Delivery Mechanism (SDM)	Specify Amount in (Relevant Currency)

Table 14: Revenues of financing schemes (2022, US$)

Revenues of financing schemes	**Amount (US$)**
Internal transfers and grants	51,650,765
Revenues from non-profit institutions	612,040
Revenues from households	19,952,721
Revenue from corporations	24,868
Direct foreign financial transfers	5,4174,875
Total Spending for Revenues of financing schemes	**126,415,269**

Table 15: Spending on care and treatment activities (2022, US$)

Care and Treatment	**Amount (US$**
Anti-retroviral therapy	64,999,666
Adherence and retention on ART	1,044,992
Specific ART-related laboratory monitoring	1,384,118
Co-infections and OIs	564,087
Psychological treatment and support service	18,682
Total Spending for C&T	**68,011,545**

Table 16: Spending on PESS activities (2022, US$)

Programme Enablers and Systems Strengthening (PESS)	Amount (US$)
Strategic planning, coordination and policy development	1,595,516
Building meaningful engagement for representation in key governance	436
Programme administration and management costs	36,253,539
Strategic information	867,850
Public Systems Strengthening	1,583,435
Human resources for health	151,637
Programme enablers and systems strengthening not disaggregated	244,457
Total Spending for PESS	**40,696,870**

Table 17: Spending on Social Protection and Economic Support activities (2022, US$)

Social Protection and Economic Support	Amount (US$)
Social protection through monetary or in-kind benefits	625,940
Social protection through provision of social services	9626
HIV-specific income generation projects	14,102
Social protection services and social services not disaggregated by type	263,810
Total Spending Social Protection and Economic Support	**913,478**

Table 18: Spending on Social Enablers activities (2022, US$)

Social Enablers	Amount (US$)
Advocacy	315,089
Human rights programmes	1,292,089
Social enablers not disaggregated by type	12,761
Total Spending Social Enablers	**1,619,939**

Table 19: Spending on Development Synergies activities (2022, US$)

Development Synergies	Amount (US$)
Formative education to build-up an HIV workforce and other trainings	755,679
Reducing gender based violence	10,1462
Total Spending Development Synergies	**857,141**

Table 20: Spending on HIV-related research activities (2022, US$)

HIV-related research	Amount (US$)
Epidemiological research	304,122
Socio-behavioural research	8,000
HIV and AIDS-related research activities not disaggregated by type	88,753
Total Spending HIV-related research	**400,875**

Table 21: Service Delivery Modalities (2022, US$)

Service Delivery Modalities	Amount (US$)
Facility-based service modalities	70,887,230
Home and community based service modalities	11,096,686
Non applicable	43,574,825
Modalities not disaggregated	699,497
Modalities n.e.c.	15,7031
Total Service Delivery Modalities	**126,415,269**

Table 22: Providers of HIV Services (2022, US$)

Service Delivery Modalities	Amount (US$)
Governmental organizations	83,011,553
Non-profit providers	34,552,718
Profit-making private sector providers	1,415,723
Multilateral agencies	1,016,721
International NGOs and foundations	6,418,554
Total Spending Social Enablers	**126,415,269**

Table 23: Providers of services with their HIV program areas (US$, 2022)

Providers of services with their HIV program areas (US$)	2022	% 2022
PS.01.01.01 Hospitals & Ambulatory Care (public)	**49,013,311**	**39%**
ASC.01 Prevention	485,743	1%
ASC.02 HIV testing and counselling (HTC)	2,186,696	4%
ASC.03 HIV Care and Treatment Care	46,462,108	95%
PS.01.01.13 Government entities (public)	**33,877,006**	**27%**
ASC.01 Prevention	430,691	1%
ASC.02 HIV testing and counselling (HTC)	29,056	0%
ASC.04 Social protection and economic support	577,102	2%
ASC.05 Social Enablers (excluding the efforts for KPs above)	347,228	1%
ASC.06 Programme enablers and systems strengthening	32,346,795	95%
ASC.07 Development synergies	15,663	0%
ASC.08 HIV-related research (paid by earmarked HIV funds)	130,471	0%
PS.02.01 Non-profit providers	**34,552,718**	**27%**
ASC.01 Prevention	7,165,759	21%
ASC.02 HIV testing and counselling (HTC)	358,991	1%
ASC.03 HIV Care and Treatment Care	21,549,437	62%
ASC.04 Social protection and economic support	284,376	1%
ASC.05 Social Enablers (excluding the efforts for KPs above)	963,867	3%
ASC.06 Programme enablers and systems strengthening	3,126,406	9%
ASC.07 Development synergies	841,478	2%
ASC.08 HIV-related research (paid by earmarked HIV funds)	262,404	1%
PS.02.02.13 Consultancy firms (profit-making private)	**1,415,723**	**1%**
ASC.01 Prevention	344,659	24%
ASC.06 Programme enablers and systems strengthening	1,071,064	76%
PS.03.02 Multilateral agencies	**1,016,721**	**1%**
ASC.04 Social protection and economic support	52,000	5%
ASC.06 Programme enablers and systems strengthening	956,721	94%
ASC.08 HIV-related research (paid by earmarked HIV funds)	8,000	1%
PS.03.03 International NGOs and foundations	**6,418,554**	**5%**
ASC.01 Prevention	743,520	12%
ASC.02 HIV testing and counselling (HTC)	2,170,306	34%
ASC.05 Social Enablers (excluding the efforts for KPs above)	308,844	5%
ASC.06 Programme enablers and systems strengthening	3,195,884	50%
Grand Total	**126,415,269**	**100%**

Table 24: Schemes and their Financing Entities (US$, 2022)

SCHEMES and their Financing Entities (US$)	2022
SCH.01.01 Government schemes	**79,536,121**
FE.01 Public Entities	51,587,522
FE.03.01 Governments providing bilateral aid	6,016
FE.03.02 Multilateral Organizations	27,879,340
SCH.02.02.01 Not-for-profit organisation schemes	**9,620,226**
FE.02.03 Domestic not-for-profit institutions	629,808
FE.03.02 Multilateral Organizations	8,454,107
FE.03.03 International not-for-profit organizations and foundations	536,311
SCH.02.02.02 Resident foreign agencies schemes 6,496,744	
FE.03.02 Multilateral Organizations 5,636,591	
FE.03.03 International not-for-profit organizations and foundations	575,315
FE.03.04 International for profit organizations 284,838	
SCH.02.03.01 Enterprises (except health care providers) schemes	**7,100**
FE.02.01 Domestic corporations	7,100
SCH.03.98 Out-of-pocket not dissagregated	**19,952,721**
FE.02.02 Households	19,952,721
SCH.04.02.02 Other Voluntary schemes (non-resident)	**10,802,357**
FE.03.01 Governments providing bilateral aid	10,802,357
Grand Total	**126,415,269**

Table 25: Financing Entities and their Financing Agents/Purchasers (US$, 2022)

Financing entities and their financing agents	2022	
	Amount (USD)	% Share
FE.01 Public Entities	**51,650,765**	**40.9%**
Territorial governments	51,650,765	100.0%
FE.02 Domestic Private Entitites	**20,589,629**	**16.3%**
Private households'	19,952,721	96.9%
Not-for-profit institutions	629,808	3.1%
Corporations other than providers of health services (non-parastatal)	7,100	0.0%
FE.03 International Entities	**54,174,875**	**42.9%**
Territorial governments	27,885,356	51.5%
Not-for-profit institutions	8,990,418	16.6%
Country offices of bilateral agencies	10,802,357	19.9%
Multilateral agencies managing external resources	6,496,744	12.0%
Total Spending	**126,415,269**	**100.0%**

Table 26: Financing Entities and their Beneficiaries (US$, 2022)

Financing Entities with their Beneficiaries	2022 (USD)	% 2022
FE.01 Public Entities	**51,650,765**	**41%**
People living with HIV	19,190,391	37%
Vulnerable, accessible populations	698,988	1%
General population	417,550	1%
Non-targeted interventions	31,343,836	61%
FE.02 Domestic Private Entitites	**20,589,629**	**16%**
People living with HIV	20,446,995	99%
Vulnerable, accessible populations	132,767	1%
General population	9,867	0%
FE.03 International Entities	**54,174,875**	**43%**
People living with HIV	28,934,924	53%
Key populations	4,396,882	8%
Vulnerable, accessible populations	1,196,737	2%
General population	7,415,343	14%
Non-targeted interventions	12,230,989	23%
Grand Total	**126,415,269**	**100%**

Table 27: Schemes and their Financing Entities (US$, 2022)

SCHEMES and their Financing Entities (US$)	2022
SCH.01.01 Government schemes	**79,536,121**
FE.01 Public Entities	51,587,522
FE.03.01 Governments providing bilateral aid	6,016
FE.03.02 Multilateral Organizations	27,879,340
SCH.02.02.01 Not-for-profit organisation schemes	**9,620,226**
FE.02.03 Domestic not-for-profit institutions	629,808
FE.03.02 Multilateral Organizations	8,454,107
FE.03.03 International not-for-profit organizations and foundations	536,311
SCH.02.02.02 Resident foreign agencies schemes	**6,496,744**
FE.03.02 Multilateral Organizations	5,636,591
FE.03.03 International not-for-profit organizations and foundations	575,315
FE.03.04 International for profit organizations	284,838
SCH.02.03.01 Enterprises (except health care providers) schemes	**7,100**
FE.02.01 Domestic corporations	7,100
SCH.03.98 Out-of-pocket not dissagregated	**19,952,721**
FE.02.02 Households	19,952,721
SCH.04.02.02 Other Voluntary schemes (non-resident)	**10,802,357**
FE.03.01 Governments providing bilateral aid	10,802,357
Grand Total	**126,415,269**

Table 28: Financing Entities and their Program Areas (US$, 2022)

Financing Entities and their HIV program areas	FE.01 Public Entities	FE.02 Domestic Private Entitites	FE.03 International Entities	Grand Total
Prevention	389,144	22,838	8,758,390	9,170,372
HIV Testing Services (HTS)	150,292	119,796	4,474,961	4,745,049
HIV Care and Treatment	19,190,391	20,196,721	28,624,433	68,011,545
Social protection and economic support	577,102	250,274	86,102	913,478
Social Enablers	286,611		1,333,328	1,619,939
Programme enablers and HSS	31,047,151		9,649,719	40,696,870
Development synergies	5,425		851,716	857,141
HIV-related research	4,649		396,226	400,875
Grand Total	**51,650,765**	**20,589,629**	**54,174,875**	**126,415,269**

Ghana AIDS Commission

CT 5169, Cantonments, Accra - Ghana
+233 302 919 259 | +233 302 919 260
info@ghanaids.gov.gh | ghanaids.gov.gh
4th Floor, Ghana Olympic Committee Building,
Ridge Accra - Ghana