Under the Office of the President

National HIV and AIDS Monitoring and Evaluation Plan 2016 – 2020

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Acknowledgements

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The Ghana AIDS Commission looks forward to a more successful collaboration driven by stronger partnerships and a sense of common purpose.

Foreword

The Costed National Monitoring and Evaluation Plan 2016 -2020 is a national document that accompanies the National Strategic Plan for 2016-2020. The Monitoring and Evaluation Plan is designed to describe the information system that supports the national response together with the roles and responsibilities of stakeholders.

The plan emphasizes the information needs of the national response and indicates the importance of data generation, collection, processing and its use for decision making. It also documents the different sources and types of information that are of strategic importance in ensuring effective tracking of interventions outlined in the NSP 2016-2020 to show results; and describes actions that would be taken to strengthen the national HIV M and E system.

The GAC recognises the challenges ahead but is confident that the foregoing can be achieved as government works together with development partners and other stakeholders to implement both the National HIV and AIDS Strategic Plan 2016-2020 and its corresponding Costed National HIV and AIDS Monitoring and Evaluation Plan.

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List of Abbreviations & Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Ante Natal Clinic
ART	Anti-Retroviral Therapy
ARV	Anti-Retroviral Drugs
BCC	Behaviour Change Communication
CDC	Centres for Disease Control and Prevention
CHIM	Centre for Health Information Management
CRIS	Country Response Information System
CSO	Civil Society Organisation
CSS	Community Systems Strengthening
CTX	Cotrimoxazole
DAC	District AIDS Committees
DHMIS	District Health Management Information System
DHS	Demographic and Health Survey
EPP	Estimation Projection Package
FBO	Faith Based Organisation
FSWs	Female Sex Workers
GAC	Ghana AIDS Commission
GBCA	Ghana Business Coalition against AIDS
GDHS	Ghana Demographic Health Survey
GFATM	Global Fund for AIDS, TB and Malaria
GHS	Ghana Health Service
GoG	Government of Ghana
GSGDA	Ghana Shared Growth and Development Agenda
HEI	HIV Exposed Infants
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HRH	Human Resources for Health
HSS	Health Systems Strengthening
HTS	HIV Testing Services
IBBSS	Integrated Bio-Behavioural Sentinel Survey
IDSR	Integrated Disease Surveillance and Response
IEC	Information, Education and Communication
KYS	Know Your Status
LEAP	Livelihood Empowerment Against Poverty
M&E	Monitoring and Evaluation
MARP	Most At Risk Populations
MDA	Ministries, Departments and Agencies
MESW	Ministry of Employment and Social Welfare
MICS	Multiple Indicator Cluster Survey
MLGRD	Ministry of Local Government and Rural Development
MMDA	Metropolitan, Municipal and District Assemblies
MoH	Ministry of Health
MSM	Men who have Sex with Men
MTCT	Mother to child transmission

MTEF	Medium Term Expenditure Framework
NACP	National AIDS and STI Control Programme
NASA	National AIDS Spending Assessment
NBTS	National Blood Transfusion Service
NCPI	National Composite Policy Index
NDPC	National Development Planning Commission
NGO	Non-Governmental Organisations
NSF	National Strategic Framework
NSP	National Strategic Plan
OVC	Orphans and Vulnerable Children
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission
PPAG	Planned Parenthood Association of Ghana
PWID	Persons Who Inject Drugs
RAC	Regional AIDS Committees
RME	Research Monitoring and Evaluation
SDGs	Sustainable Development Goals
STI	Sexually Transmitted Infections
TB	Tuberculosis
TSU	Technical Support Units
TWG	Technical Working Group
UNAIDS	United Nations Joint Programme on HIV/AIDS
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
VNRBD	Voluntary Non-Remunerated Blood Donations
WHO	World Health Organisation

CHAPTER 1: Introduction

1.1 Background

According to 2014 GDHS, HIV prevalence in Ghana was 2.0%, having decreased marginally from 2.2% in 2006. In addition, the 2015 HIV Sentinel Survey (HSS) Report indicates that some geographical areas have an HIV prevalence of more than 2% with urban areas having higher prevalence (2.4%) than rural areas (1.4%) (HSS, 2015). By the end of 2015, there were 274,562 Persons Living with HIV (PLHIV), with women constituting about 60% and 89,113 people on antiretroviral treatment (ART). New HIV infections stood at 12,635 persons in 2015. The country recorded total annual AIDS deaths of 10,958 in the same year. HIV testing increased from 21% for women and 14% for men in 2008 to 43% for women and 20% for men in 2014. At the end of 2015, 2,335 testing sites had been set up nationwide.

The estimated number of FSW in the country according to the 2015 FSW IBBSS is 65,053. Even though HIV prevalence among FSWs has been decreasing consistently over the last 15 years, it is still unacceptably high. About 7.0 percent of all the FSWs tested for HIV in 2015 returned positive compared to 11.1 percent in 2011. The prevalence was 5.4 percent among roamers and 13.2 percent among seaters. By region, the Ashanti and Greater Accra regions recorded the highest prevalence of 9.0 percent, followed by the Northern region (8.3%), Central region (8.0%) and Eastern region (7.7%). While the Brong Ahafo and Eastern regions did not record any remarkable change during the period, the Central (4.8% in 2011 to 8.0% in 2015) and Upper West (4.1% in 2011 to 5.9% in 2015) regions recorded an increase in the prevalence of HIV. The Greater Accra (16.3% in 2011 to 9.0% in 2015) and Western (10.5% in 2011 to 5.3% in 2015) regions however recorded significant decline in the proportion of FSWs who tested positive to HIV in 2015.

HIV incidence among the general population in 2015 was 0.08% (Estimates Report) and according to the modes of transmission (MoT) study, the majority of new HIV infections (72.3%) is occurring among the general population. Regular partners of high-risk groups together accounted for nearly one-quarter (23.0%) of new HIV infections in 2009. Sex work accounted for 18.4% of all new infections in 2014 having declined from 27% in 2009 according to the study. This was based on declines in

new HIV infection among the following sub-groups: clients of female sex workers from 14.7% in 2009 to 5.0% in 2014; Sex workers from 5.4% in 2009 to 2.9% in 2014; female partners of clients of sex workers from 19% in 2009 to 10.4% in 2014.

Results from the 2011 IBBSS estimates the total population of MSM to be 30,600 and that 17.5% of MSM are living with HIV. The 2014 modes of transmission (MoT) study indicated that MSM contribute to 3.6% of new infections. In 2013, a study conducted amongst prisoners found HIV prevalence among them to be 2.3%. Very little information is available on the other key populations in Ghana including PWID, transgender persons etc. As with FSWs, further research is needed to estimate a national MSM population size, better delineate sub-populations and their relative risk to HIV.

The Government of Ghana over the years has responded to the threat posed by HIV and AIDS by adopting a multi-sectorial approach to combat the disease. The approach cuts across prevention of new infections to the mitigation of the impact of the disease. To facilitate coordination, effective and efficient use of resources and results-based management, the national response is governed by the Three Ones principles: (i) one agreed HIV and AIDS action framework that provides the basis for coordinating the work of all partners; (ii) one national AIDS coordinating authority, with a broad based multi-sector mandate; (iii) and one agreed country-level monitoring and evaluation system

The Ghana AIDS Commission was set up as the national AIDS coordinating authority (the second of the three ones) with responsibility for coordinating the development and implementation of the two other Ones. The GAC Secretariat is the executive arm of the Ghana AIDS Commission. In this role the Secretariat is expected to mobilise resources for the national response, coordinate planning and implementation of HIV and AIDS activities carried out by partners in the public, private and civil society sectors, and keep track of the status of the epidemic as well as monitor and evaluate whether and how interventions have made a difference to the epidemic.

Since 2001, the national response has been guided by an agreed action framework for periods of five years. The first framework was the National HIV AND AIDS Strategic Framework, 2001-2005 (NSF I) and this was followed by the National HIV AND AIDS Strategic Framework, 2006-2010 (NSF II) with their corresponding M&E frameworks. In April 2010, GAC initiated a new planning process which resulted in a

National HIV and AIDS Strategic Plan (NSP), 2011-2015. A second National HIV and AIDS Strategic Plan (NSP), 2016-2020 has been developed to guide the national response for the next five years.

Robust information would be required during the implementation of the National Strategic Plan 2016–2020 to: measure performance; identify gaps and emerging needs; develop solutions to close gaps and meet needs; ensure accountability to those infected or affected by the disease as well as to those providing financial resources for the HIV response; and continuously assess and refine actions to ensure an effective national response. At the end of this NSP, information based on appropriate, valid, reliable and timely data would also inform the articulation of goals and objectives and guide the selection of appropriate strategies for the next strategic plan. This necessity for robust information is the basis for the preparation of the M&E Plan 2016-2020.

This Monitoring and Evaluation Plan 2016-2020 describes the information system to support the NSP 2016-2020. The plan emphasizes that the NSP 2016-2020 is driven by information; the information collected is to be used; and the different sources of information are all of strategic importance in ensuring effective implementation of the NSP. This plan also describes the actions that would be taken to strengthen the national HIV M&E system.

The term Strategic Information (SI) is used in the NSP 2016-2020 to focus attention on the fact that data generation, analysis and reporting are means to an end, which is the use of the information to ensure that the intended results articulated in the strategic plan are achieved. The intention of the NSP 2016-2020 is to move from data generation for performance reporting to data generation to guide policy, planning, coordination and programmatic decisions and actions to enhance the effectiveness, efficiency and equity of the HIV response in Ghana in a continuous cycle. The HIV M&E system will therefore provide strategic information using data derived from surveillance, surveys, routine programme monitoring, research and evaluation.

1.2 Overview of the NSP 2016-2020

The National HIV and AIDS Strategic Plan 2016-2020 is a five-year strategic document designed to fast track the country's effort towards ending AIDS by 2030. The document is informed by lessons learnt from past interventions and the UNAIDS

90-90-90 targets. This is in line with Sustainable Development Goals (SDGs) and focuses on ensuring healthy lives and promoting wellbeing for all at all ages.

The objective of the NSP 2016-2020 is to fast-track efforts towards the prevention of new HIV infections and AIDS related deaths, as well as to emphasize treatment, care and support interventions by 2020. The plan provides evidence-based and results-oriented strategies for the implementation of the national response to HIV. It focuses on high-impact HIV prevention, treatment, care and support activities and the critical social and programmatic enablers of the national HIV programme. It also builds on synergies with HIV-related activities in key development sectors that have the greatest potential to optimize the national HIV response.

The plan ascribes to the 90-90-90 fast-track targets which are to ensure that by 2020:

- 90% of all people living with HIV will know their HIV status;
- 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy;
- 90% of all people receiving antiretroviral therapy will have viral suppression.

The plan is anchored within the overall vision of the national HIV response which is aimed at eliminating HIV and AIDS in Ghana.

1.3 Purpose and scope of the National HIV M&E System

The overall aim of the M&E system is to provide high quality strategic information to track, guide and assess the implementation of the NSP 2016-2020. This plan therefore seeks to facilitate the tracking of the progress towards the NSP 2016-2020 results to inform evidence-based decision-making at the national, regional and district levels.

The specific objectives of the plan are:

- Define the indicators, data collection and reporting requirements for tracking the progress of the NSP 2016-2020.
- Outline strategies and activities to strengthen the national M&E systems.
- Build the capacity of implementing and coordinating partners to be able to collect, analyze and disseminate HIV data and information at all levels.

- Define the roles and responsibilities of the various organizations involved in the implementation and coordination of the NSP 2016-2020.

The implementation of the plan is expected to contribute to:

- Increased evidence based planning and programming
- Increased implementation of research identified under the research agenda
- Increased capacity to generate strategic information
- Increased availability of strategic information to inform the national response at all levels
- Comprehensive HIV strategic information system institutionalized and functioning.

1.4 The guiding principles of the M&E Plan

Anchored on the “three ones” principle which emphasizes the need for having one Country M&E System for effective coordination, the implementation of the M&E plan will be guided by the following principles:

Alignment of M&E Systems: All MDAs, MMDAs, National level Programmes, Projects and all Implementing partners will aligned their HIV M&E systems with the M&E Plan 2016-2020 to track NSP 2016-2020 results in a harmonized and coordinated manner. This M&E Plan will therefore provide guidance to enable all implementing partners and organizations to harmonize their data and M&E processes and work collaboratively to facilitate an efficient and coordinated process of tracking, monitoring and evaluating NSP 2016-2020 results.

Harmonization of indicators and data collection: All NSP indicators and data collection tools, and methods will be harmonized and standardized to allow all IPs to use the standardized tools for data collection and reporting.

Data demand and use: Data collected at all levels will be made available to both national and decentralized levels for use in decision making and programming of HIV interventions.

Transparency, accountability and feedback: Various innovative Information dissemination mechanisms will be utilised to promote transparency and enhance accountability at national and decentralized levels.

1.5 Process of developing the M&E Plan

The development of this National HIV and AIDS Monitoring and Evaluation Plan was done through participatory and consultative process. The GAC through the Research, Monitoring and Evaluation Technical Working Group (RME TWG), which is an independent technical advisory body of the Commission, provided leadership for the development of the plan. The RME TWG is made up of research and M&E experts drawn from national and multinational institutions in Ghana. A consultant was recruited by GAC to facilitate the development of the plan. Key strategic documents including NSP 2016-2020, M&E Plan 2011-2015, Global Fund M&E Framework, Global Reference List of 100 Core Health Indicators, 2015, and M&E framework/plans of other countries ***(Annex 1.0)*** were reviewed and these largely informed the development of the plan. Key stakeholders at the national and decentralised levels were also consulted throughout the development of the plan. In particular, they provided strategic support in the selection of indicators for tracking the national response and the review of the draft plan. A meeting was also held with key partners (such as the DPs, key programme implementing partners) to also review the indicators. (Annex 2.4) The consultant developed and submitted a draft of the M&E Plan for review by GAC and RME Committee and the resulting comments were then used to further revise the draft M&E Plan. The plan was then validated by a large representative group of stakeholders. Comments from these meetings were used to finalise the M&E Plan. The list of participants for the validation meeting is presented in Annex 2.5.

CHAPTER 2: Situational Analysis of the 2011-2015 M&E Plan

2.1 Introduction

This chapter presents a situational assessment of the current M&E system in the country. The areas of the assessment include the assessment of the strategic information component of the NSP 2011-2015 and its attending M&E system as well as views of the M&E personnel in respect of the current challenges and strengths of the current M&E system.

2.2 End Term Evaluation of the NSP 2011-2015

The assessment of the strategic information component of the NSP 2011-2015 and the previous M&E system during the End Term Evaluation of the NSP 2011-2015 show that the current M&E and strategic information system have improved over the years and provides some support to the national response to HIV. Resources have gradually increased for some levels and in some sectors. Mainstreaming of HIV research, monitoring and evaluation has gained momentum in Ghana Health Service but same cannot be said in other ministries, departments and agencies in the public sector. In addition, some implementing partners continue to operate M&E systems that are partially harmonized with and not fully aligned to the one national M&E system. Analytical skills and capacity for generating strategic information for use is not as strong as expected especially at the decentralized level and as a result most of the basic and operations research conducted in the country are not widely disseminated. In addition, inadequate capacity for M&E across all levels is a challenge to strengthening the M&E system with some implementing partners (IPs) having difficulties in the use of the data collection and reporting tools and CRIS. Furthermore, most implementing partners that are not funded by GAC usually do not report through the national reporting system and as such some of the activities undertaken may go unreported. This is further compounded by the fact that the GAC in their routine monitoring and supporting supervision usually also focused on GAC funded projects without attending to non-GAC funded projects.

As part of efforts to address the inadequate capacity for HIV M&E at national and sub-national levels, a short course in M&E has been established at the School of Public Health, University of Ghana. In collaboration with the school, a standardized

training curriculum in M&E has been developed and training can occur in a scheduled manner once or twice a year. Funding for this has been provided by PEPFAR as part of its technical assistance to GAC to strengthen the national M&E system. However, no training has been conducted for the past two years due to funding challenges for the program.

Furthermore, data is used at the national level in planning and decision making for action. At the sub-national levels data use is poor. This is of particular concern because decisions and actions based on continuous review of evidence are critical requirements for an effective response to HIV and AIDS in keeping up with the decentralization strategy. A number of reasons have been suggested for the limited use of data at sub-national levels. These include weak analytic capacity; high turnover of focal persons; perception that data is collected for reporting purposes only; and the absence of guidelines on how to use data. Furthermore, there is lack of clarity regarding: (a) the decisions that need to be made at sub-national levels in response to available data; (b) what decisions sub-national levels are authorized to make and act on; and (c) the relevance and adequacy of existing data to inform the decisions that need to be made and actions to be undertaken.

The gains made in Strategic Information system during the implementation of NSP 2011-2015 needs to be sustained and increased to ensure the availability of the requisite information to guide policy, support programme planning and implementation, measure performance, identify gaps and emerging needs so as to develop solutions to address gaps and meet needs.

2.3 Current M&E system by components of functional M&E systems

Results of the End Term Evaluation of the strategic information component of the NSP 2011-2015 and stakeholders' consultation on the situation analysis of the current M&E system that were held in Accra and Kumasi provide the basis for improving upon strategic information in the national response. The results are categorized under three broad headings using the 12 components of a functional M&E systems (UNAIDS). These categories are: -

- People, partnership and planning
- Data collection, verification and analysis
- Data use

Under People, partnership and planning, the following results were noted;

- The design of the M&E Plan 2011-2015 somehow met the information needs of the NSP 2011-2015.
- Regional Technical Support Units have contributed to the stability and continuity of the M&E system at the regional level. However, their effectiveness is likely to be affected by delays in release of funds for approved workplans and an embargo on employment in the public sector.
- There are weak M&E structures in some organization with no clearly defined M&E roles and mandate.
- Organizations implementing projects for which funding did not come from GAC usually do not report through the national reporting system for those projects. This includes the use of the data collection tools, and reporting periodically through CRIS for the work done in each district that they work.
- The national HIV and AIDS M&E plan 2011-2015 was not implemented systematically as conceptualized. This compromised the effectiveness of the M&E system in general and the timely availability of high quality data, in particular.
- A standardized systematic approach to M&E capacity strengthening was not implemented as planned and this contributed to some weaknesses in the quality, analysis, presentation, interpretation and use of data.
- Multi-sectoral monitoring is not evident with GAC's monitoring activities focused mainly on its funded implementing partners.

The Review of data collection, verifying and analyzing segment revealed the following;

- Weak data analysis and use at all levels mostly due to inadequate capacity for data analysis across all levels.
- Data quality issues still exist mainly due to the fact that remedial actions after data quality assessments were not taken in key areas in a timely fashion.
- The research and evaluation agenda was not finalized and operationalized. Therefore, utilization of the large body of knowledge emanating from the extensive HIV research going on in Ghana was likely suboptimal.

- There is weak evaluation at the sub-national and the project levels. Most of the evaluations are undertaken at the national level and there is no encouragement of the sub-national and the projects to undertake evaluations.

Findings from assessing implementing partner's ability to use data for decision making indicated;

- Absence of data use and dissemination plan to support implementation.
- The use of data to improve the performance of the national response has most likely been undermined by low quality data, inadequate analysis and interpretation.
- The M&E system did not provide adequate strategic information for tracking and assessing the national response

2.4 Summary of strengths and weaknesses of the current M&E system

The table below summaries the strengths and weaknesses of the current M&E system according to the analysis based on the 3 categories of a functional M&E system.

Table 2.1: summaries the strengths and weaknesses of the M&E system

People, partnerships and planning	
Strengths	**Weaknesses**
The Directorate of Research, Monitoring & Evaluation in GAC has secured its full complement of staff	There are weak M&E structures in some organization with no clearly defined roles and mandate.
Mechanisms & structures (M&E TWG, periodic reviews) to facilitate partnership in planning, coordination and management of the HIV M&E system have been established	Implementing bodies submit their report to their donors and not GAC unless funded by GAC. This make it difficult to have a full picture of the status of the national response
Establishment of Technical Support Units at the regional level have contributed to the stability and continuity of the M&E system at the regional level	Low level of commitment on the part of MMDA M&E Focal Persons.
Planning for M&E is participatory	Inadequate M&E capacities at regional and district levels due to high turnover of personnel. The M&E persons move to other organizations when funding ceases.
A standardized curriculum for training in M&E has been developed and is being implemented	Inadequate capacity of GAC and National level M&E staff in Research, advanced data analysis and scientific writing
The design of the M&E Plan 2011-2015 somehow met the information needs of the NSP 2011-2015.	The national HIV and AIDS M&E plan 2011-2015 was not implemented systematically as conceptualized
	A standardized systematic approach to M&E capacity strengthening was not implemented as planned
Collecting, verifying and analysing data	
Strengths	**Weaknesses**
Sero-prevalence studies in pregnant women conducted annually	Short reporting timelines, resulting in IPs not able to undertake data verification before reporting data to the

	next level.
Bio-behavioural surveys in the general population and KP undertaken regularly	GAC supportive supervision and monitoring, data verification and audit are usually focused on GAC funded project does not include GAC non-funded projects.
Ministry of health is responsible for clinic based M&E as originally intended	Weak data analysis and use at all levels mostly due to inadequate capacity for data analysis across all levels
Existence of data management manuals to guide data collection and data quality assurance	Not all IPs report through Country Response Information System (CRIS)
Piloting of a unique identification system for KPs	There is not exchange of data between CRIS and DHMIS II
There exist a national database system (CRIS) for tracking the indicators across programmes and geographic locations	Some IPs (particularly PEs) have challenges with using the data collection tools
	Absence of research agenda to drive the national response
	No standardized checklist for routine monitoring and supportive supervision to support IPs to undertake monitoring at their levels
	There is weak evaluation at the sub-national and the project levels. Most of the evaluations are undertaken at the national level and there is no encouragement of the sub national and the projects to undertake evaluations
Using data for decision making	
Strengths	**Weaknesses**
The existence of NHARCON for disseminating HIV and AIDS information and research	Dissemination at sub-national levels is inadequate
GAC website include documents that can be downloaded by the public	Inadequate capacity for scientific writing and publication at the GAC and key IPs level
Data is used for planning and decision making at national level	Lack of clarity about the decisions that can be made at decentralized levels using available data
	No regular national bulletin for disseminating HIV information

CHAPTER 3: Stakeholders Analysis

3.1 Introduction

This chapter provides an analysis of the various institutions involved in the national HIV and AIDS M&E system. It shows the needs of the various stakeholders and their roles in coordinating M&E at the national, regional and district levels. These structures are aligned to the overall coordination framework for the NSP 2016-2020.

Table 3.1: Summary of Stakeholder Analysis

Stakeholder	Needs/ Interest	Summary of roles and responsibilities
National Level		
Ghana AIDS Commission	• Policy direction • Overall coordination • Guidelines • Capacity building	• Coordinate, monitor and evaluate the NSP 2016-2020 • Prepare and disseminate reports on the status of the epidemic and the impact of programmatic interventions • Identify financial and technical resource needs • Mobilise of resources to support the national response • Facilitate capacity strengthening based on identified needs • Hold quarterly review meetings with IPs • Develop and operationalize the HIV Dashboard at national and regional level • Ensure that all AIDS committees are established and operationalized at national and regional levels. • Develop and disseminate national level M&E information products. • Ensure effective online data management and information system. • Build the capacity of regions and national level actors in M&E to enable them monitor the NSP at the regional and national levels. • Build the capacity of regions in DQA. • Conduct periodic data audits, develop data quality improvement plans, and monitor their implementation. • Coordinate surveys, evaluations, and statistical modeling and facilitate dissemination of the findings to regions and other stakeholders • Lead the development of the National HIV and AIDS Research & Evaluation Agenda 2016-2020.
Ministry of Health (and its agencies)	• Health policy direction • Guidelines • Capacity building • Data collection and analysis	• Collect, analyse and report all HIV & AIDS data generated by health facilities • Utilise data to guide policy and programme implementation • Ensure effective rollout and overall management of the health sector response M&E system.

	• Programme implementation • Feedback on results	• Provide technical support to regions in data collection, reporting, and analysis for health sector response M&E system. • Review data and provide feedback to regions.
Other Ministries, Departments & Agencies	• HIV and AIDS Data collection • Collaboration at policy and implementation level	• Collect, analyse and report all HIV data generated • Utilise HIV data to strengthen programme implementation
Regional Level		
Regional AIDS Committee	• Technical assistance • Programme implementation • Feedback on results	• Coordinate HIV activities carried out by implementers within the public and private sectors and by civil society organisations operating within the region • Ensure timely and accurate reports are received from CSOs, collated and forwarded as timely and accurately to the national level • Collate work plans and programmatic data • Collate reports from the Municipal, Metropolitan and District Assemblies • Compile and submit quarterly reports on regional HIV activities to GAC • Utilise data generated within region for advocacy and resource mobilization • Organize quarterly performance review meetings with IPs and stakeholders • Share information on HIV with stakeholders at the regional level
Technical Support Unit	• Technical assistance • Programme implementation • Feedback on results	• Strengthen coordination via strong partnership building among key stakeholders at the decentralized level • Facilitate regional and district level planning exercises including operational planning to be in line with the NSP 2016-2020 • Coordinate Technical Assistance/Technical Support and capacity strengthening for implementation of the decentralized response as well as generation of strategic information • Strengthen decentralized M&E arrangements and supervision of implementers and reporting of local HIV activities to the national level • Facilitate resource mobilization at the regional and district levels • Capture data into CRIS 3 on behave of organizations with no internet connection
District Level		
District AIDS Committee	• Technical assistance • Programme implementation • Feedback on results	• Oversee and monitor implementation of HIV activities in the district • Ensure timely and accurate reports are received from CSOs, collated and forwarded as timely and accurately to the regional level. • Collate work plans and programmatic data from CSOs in their jurisdiction • Compile and submit quarterly reports to the RAC on HIV activities undertaken within the district

		• Organize quarterly performance review meetings • Utilise data generated within district for advocacy and resource mobilization • Disseminate information on HIV at the district level
Civil Society & Private Sector		
NGO, FBO, Private Organizations	• Advocacy • Programme implementation • Feedback on results • Data collection	• NGO, FBO and private organizations to ensure timely and accurate reports are received from field staff/smaller CSOs, collated and forwarded as timely and accurately to the district level • Capture data periodically (as agreed) into CRIS 3 software • Collect, analyse and report their data to district, regional and central level • Utilise HIV data to advocate, plan, implement and adapt HIV projects • Support smaller NGOs in implementation of HIV and AIDS activities
Traditional Authorities		
	• Advisory services • Transparency and accountability	• Advocacy in support of *One M&E System* • Encourage entities implementing HIV & AIDS activities in their areas to provide timely & complete reports through the national HIV & AIDS M&E system
Development Partners		

Bilateral & Multilateral Institutions	• Transparency and accountability
	• Financial and material resources
	• Technical assistance
		• Advocacy in support of *One M&E System*
		• Facilitate timely reporting using the national HIV & AIDS M&E system by recipients of their funds
		• Utilise information generated by M&E system for
		  ○ Policy advocacy
		  ○ Resource mobilization
		  ○ Technical support

CHAPTER 4: Strategies to Address Weaknesses in the M&E System

4.1 Introduction

In order to address the weaknesses in the HIV M&E system and meeting the needs of the various stakeholders as described in the previous chapters, the strategies and broad activities outlined below will be undertaken.

4.2 Goal

The goal of the M&E system is to provide high quality strategic information to track and assess the implementation of the NSP 2016-2020

4.3 Strategies:

Strategy 1: *Strengthen M&E capacity to effectively track and assess the interventions implemented under the national response*

Capacities in M&E of implementing partners such as line ministries, departments and agencies in the public sector, civil society organizations including NGOs and FBOs and private sector organizations in the national response will be assessed and strengthened. In institutions where HIV M&E systems do not exist, capacities will be built to integrate HIV into the existing M&E systems.

Broad activities to be implemented under this strategy are: -

- Undertake M&E capacity assessment at all levels
- Develop a national HIV M&E capacity strengthening plan
- Undertake periodic capacity building in M&E at all levels
- Strengthen the capacity of TSUs to undertake periodic monitoring and review meetings with IPs at the regional level.
- Develop the capacity of the TSUs to review reports from IPs.
- Collaborate with training institutions to develop and implement an online M&E capacity building platform to support capacity building.

Strategy 2: *Harmonize comprehensive routine HIV reporting system to provide quality data*

In line with the concept of a multi-sectoral response as indicated by the “three ones principle” the strategy is to harmonize all data management documents and ensure all stakeholders use the standardized tools and manuals at all levels.

Broad activities to be implemented this strategy include:-

- Review and update M&E/Strategic Information guidelines, manuals and tools
- Train implementing partners in the use of the revised guidelines, manuals and tools
- Strengthen data management at national and sub-national level
- Scale up the implementation and use of Country Response Information System (CRIS 3)
- Develop a data exchange platform to facilitate the exchange of data between DHMIS II and CRIS 3
- Develop a mobile application to help peer educators (PEs) in the data collection instead of using paper-based data collection tools
- Support TSU to hold quarterly regional review and stakeholder meetings with all HIV IPs in the region
- Conduct periodic data audit and verification
- Conduct semi-annual routine monitoring of all HIV implementing partners irrespective of whether funded or not funded by GAC
- Implement a performance rating system for all implementing partners

Strategy 3: *Promote the generation and use of strategic information*

At the national level there exist some capacity to generate appropriate strategic information and use data regularly for decision making. However, at the decentralised level data use is limited as a result of inadequate capacity.

This strategy cuts across data generation to planning and programme review processes. Data generation would go beyond measuring performance to also providing information to explain and improve performance since an appreciation of the reasons for observed performance and options for improving performance can

facilitate appropriate decision-making. Integration of information in planning and programme review processes would be strengthened with emphasis on decision-making and action.

A decision-support guideline based on the functions and authority at each sub-national level will be used to promote evidence based decision-making and action sub-nationally.

Broad activities to be implemented are to:-

- Develop and operationalize data use and dissemination plan
- Develop and operationalize/implement a national HIV research agenda
- Collaborate or partner with research institutions to undertake HIV and AIDS research
- Invest in in-country capacity in sound HIV and AIDS research and strategic information
- Co-ordinate and track HIV researches
- Periodically review, synthesize and publish all HIV research results
- Develop guidelines to support data analysis, dissemination and use in decision making for all levels
- Develop and disseminate strategic information products (bulletin, newsletters, also make data available at website etc.)
- Create data demand and use of HIV Strategic Information
- Build national level stakeholders capacity in advance data analysis and scientific writing
- Carry out reviews of the national strategic plan
- Increase the number of staff at the research unit of the GAC

Strategy 4: *Develop a comprehensive tracking and assessment system for the 90-90-90 fast-track treatment strategy.*

The UNAIDS Fast-Track strategy launched in 2014 aims to greatly step up the HIV response in low- and middle-income countries to end the epidemic by 2030. The Fast-Track treatment targets are known as the 90-90-90 targets. The 90-90-90 targets refer to the pathway, by which a person is tested, linked and retained in HIV

care, and initiates and adheres to antiretroviral drugs (ARVs). New evidence around the use of ARVs has now emphasized the importance of achieving 'viral suppression'. This is a point where the viral load reduces to a non-detectable level and a person is unlikely to transmit HIV to someone else.

Ghana has subscribed to the 90-90-90 targets and there is the need to put in place strategies and activities to effectively track and assess the implementation of the 90-90-90 strategy in the country.

Broad activities to be implemented are: -

- *Develop an online reporting system for the first 90-90-90 strategy*
- *Conduct an assessment of the 90-90-90 strategy*
- *Organize quarterly review meeting for the 90-90-90 strategy*
- *Undertake continuous monitoring of the strategy*

Strategy 5: Build national and regional level teams with capacity to undertake research, intermediate and advance data analysis and scientific writing.

RM&E staff of the GAC, NACP and key persons at the regional levels will be trained in research and advanced data analysis (including further analysis of GDHS, IBBSS, MICS etc.), scientific writing and publication. This is expected to facilitate the ability for these teams to develop research questions, undertake data analysis specific to their regions and produce information products to guide the response.

Broad activities to be carried out for national and regional research teams include:

- Conduct periodic trainings for research teams in research, data analysis and scientific writing
- Undertake at the national and sub-national level, further analysis of secondary data (GDHS, IBBSS, MICS etc.) and clinic data to inform sub-national response.
- Writing scientific publications (each team does at least one publication a year)

CHAPTER 5: Core Indicators

5.1 Introduction

This chapter defines the harmonized indicators to be used in monitoring, tracking and evaluating the NSP 2016-2020 at the national, regional and district lev els. It defines the key impact, outcome and output indicators to measure the performance of the NSP in line with set goal and target result for strategic directions. It maps the indicators (as stated in the NSP and those not directly stated in the NSP but are required in measuring the NSP) to the indicator matrix where the periodic targets for the various indicators as well as the disaggregation have been indicated.

5.2 Impact Level Results and Indicators

The following impact results are to be achieved by 2020:

- Reduction of new HIV infections by 80% from an estimated 12,803 in 2015 to 2,560 in 2020.
- Reduction in AIDS-related deaths by 80% from an estimated 12,646 in 2015 to 2,530 in 2020.
- 90% of Ghanaians living with HIV will know their HIV status;
- 90% of those who know their status will receive life-saving antiretroviral medicines;
- 90% of those on treatment will attain viral suppression.

5.3 List of Indicators and data sources

5.3.1 Impact Indicators

Table 5.1: Impact Indicators

No	Indicator as in NSP*	NSP Page #.	Mapped Indicator in M/E Plan	Data source	Indicator Matrix Ref #
1	HIV prevalence among adults 15-49 years	29	HIV prevalence among general population	GDHS / HSS	A1
2	HIV prevalence among young person's 15-24 years	33			
3			HIV prevalence among pregnant women	HSS	
4	HIV Prevalence FSWs- General	36	HIV prevalence among key populations	IBBSS	
5	HIV Prevalence FSWs- Roamers	36			
6	HIV Prevalence FSWs- Seaters	36			
7	HIV Prevalence among MSMs	36/39			
8	HIV Prevalence among PWID	36			
9	HIV Prevalence among Prisoners	36			
10	Estimated number of new HIV Infections in general population 15-49 years	20/29	Estimated number of new HIV Infections per 1,000 uninfected population	Spectrum	A2
11	Estimated number of new HIV Infections in young people 15-24 year	33			
12	Estimated number of new HIV infections in children (0-14 years)	20/52			
13	Total AIDS-related deaths (All)	20/57	Estimated number of AIDS-related deaths	Spectrum	A3
14	Number of AIDS-related deaths - Adult (disaggregated by sex)	20/57			
15	Number of AIDS-related deaths in children (disaggregated by sex)	20/57			
16	Estimated number of people living with HIV	47	Estimated number of people living with HIV		A4

17	Antiretroviral therapy (ART) coverage (%)	58	Proportion of people living with HIV receiving ART	NACP ART Database	A5
18			Number of adults and children receiving ART		
19			Number and Percentage of Key Populations on ART		
20	Proportion of persons living with HIV who are on ART with undetectable viral load	62	Proportion of PLHIV who are on ART with suppressed viral load in the past 12 months		A6
21	Percentage of adults known to be on ART 12 months after initiation of treatment (disaggregated by age and sex)	57	Percentage of adults and children known to be on ART 6/12/24/36 months after initiation of treatment		A7
22	Percentage of children known to be on ART 12 months after initiation of treatment (disaggregated by sex)	57			
23			Percentage of key population who are living with HIV and received ART		A5
24			Percentage of individuals seropositive for syphilis	NACP	A8
25			TB/HIV Mortality rate per 100,000 population	NACP/ NTBCP	A9

* Blank spaces show the indicators were not directly stated in the NSP

5.3.2 Outcome Indicators

Table 5.2: Outcome indicators

Target Group	No	Indicator as in NSP*	NSP Page #	Mapped Indicator	Indicator Matrix Ref #	Data source
General Population	1	Percentage of Women & Men age 15-49 years who had sexual intercourse with a non-marital, non-cohabiting partner in the past 12 months reporting the use of a condom during their last sexual intercourse with that partner	30	Percentage of Women & Men age 15-49 years who had sexual intercourse with a non-marital, non-cohabiting partner in the past 12 months reporting the use of a condom during their last sexual intercourse with that partner	B3	GDHS
	2	Percentage of people in the general population who have received HIV test in last twelve months and know their results (disaggregated by sex and age)	30	Percentage of people in the general population who have received HIV test in last twelve months and know their results (disaggregated by sex and age)	B6	
	3	Percentage of women and men with comprehensive knowledge of HIV and AIDS	30	Percentage of women and men with comprehensive knowledge of HIV and AIDS	B5	
	4			Percentage of Women & Men age 15-49 years who report acceptable attitude towards PLHIV	B1	
	5			Proportion of ever-married or partnered women aged 15-49 who experienced physical or sexual violence from a male partner in the last 12 months.	B23	
Young persons	6	Percentage who reported using a condom during their last sexual intercourse among young women and men aged 15-24 years who had sexual intercourse with a non-marital, non-cohabiting partner.	33	Percentage who reported using a condom during their last sexual intercourse among young women and men aged 15-24 years who had sexual intercourse with a non-marital, non-cohabiting partner.	B3	

	7	Percentage who reported using a condom during last sexual intercourse among young women and men 15-24 years who had 2+ sexual partners in last 12 months	33	Percentage who reported using a condom during last sexual intercourse among young women and men 15-24 years who had 2+ sexual partners in last 12 months	B4	
	8	Percentage of young women and men 15-24 years ever tested for HIV and received results	33	Percentage of young women and men 15-24 years ever tested for HIV and received results	B7	
	9			Percentage of young women and men 15-24 years who have received HIV test in last twelve months and know their results (disaggregated by sex)	B6	
	10			Percentage of young women and men (15-24 years)with comprehensive knowledge of HIV and AIDS	B5	
	11			Percentage of young Women & Men age 15-24 years who have acceptable attitude towards PLHIV	B1	
PLHIV	12			Percentage of PLHIV who report having experienced discriminatory attitudes	B2	Survey
	13		47	Percentage of PLHIV who have been tested HIV-positive.	B8	Survey
FSWs	14	Percentage of FSWs reporting use of condom with their most recent client	37	Percentage of FSWs reporting use of condom with their most recent client	B3	
	15	Percentage of FSWs reporting use of condom with their most recent non-paying partner	37	Percentage of FSWs reporting use of condom with their most recent non-paying partner	B3	
	16			Percentage of FSW with comprehensive knowledge of HIV and AIDS	B5	
	17	Percentage of FSW who received HIV test in the last twelve months and know their status	39	Percentage of FSW who received HIV test in the last twelve months and know their status	B6	
	18			Percentage of FSW who report accepting	B1	IBBSS

				attitudes toward PLHIV		
	19			Percentage of sex workers who avoided seeking HIV services because of stigma and discrimination	B24	
	20			Proportion of FSW who experienced physical or sexual violence from a male partner in the last 12 months.	B23	
MSMs	21			Percentage of MSM who avoided seeking HIV services because of stigma and discrimination	B24	IBBSS
	22	Percentage of MSM reporting of use of condom the last time they had anal sex with a partner	40	Percentage of MSM reporting of use of condom the last time they had anal sex with a partner	B3	
	23			Percentage of MSM with comprehensive knowledge of HIV and AIDS	B5	
	24	Percentage of MSM who received HIV test in the last twelve months and know their status	41	Percentage of MSM who received HIV test in the last twelve months and know their status	B6	
	25			Percentage of MSM who report accepting attitudes toward PLHIV	B1	
PWID	26			Proportion of FSW/MSM/NPP who injected illicit drugs within the past 6 months	B9	
HTS	27	Percentage of people receiving HTS (cumulative)	48	Percentage of people receiving HTS	C1	NACP
PMTCT	28	Percentage of child HIV infections from HIV positive women.	53		B11	
	29			Percentage of pregnant women living with HIV who received ART to reduce the risk of mother-to-child-transmission (MTCT) during pregnancy (newly diagnosed,	B20	

				known)		
	30			Percentage of infants born to women living with HIV receiving a virologic test for HIV within 2, and 12 months of birth	B22	
	30			Percentage of antenatal care attendees tested for syphilis	B26	
	31	Percentage of TB/HIV co-infected patients on ARV treatment	63	Percentage of estimated HIV-positive incident tuberculosis (TB) cases (new and relapse TB patients) that received treatment for both TB and HIV	B12	
	32	Percentage of HIV-positive patients who were screened for TB in HIV care or treatment settings.		Percentage of HIV-positive patients who were screened for TB in HIV care or treatment settings.	B13	
	33	Proportion of HIV+TB patients who receive CPT during TB treatment.		Proportion of HIV+TB patients who receive CPT during TB treatment.	B14	
	34	Proportion (%) of ART centers providing DOTS		Proportion (%) of ART centers providing DOTS	B15	
	35	Proportion (%) of DOTS centers providing ART services		Proportion (%) of DOTS centers providing ART services	B16	
	36	Percentage of HIV-positive registered TB patients given ART during TB treatment.		Percentage of HIV-positive registered TB patients given ART during TB treatment.	B17	
TB/HIV	37	Percentage of TB/HIV patient receiving HTS	65	Percentage of TB/HIV patient receiving HTS	C1	NACP/ NTBCP
	38			Percentage of storage sites where commodities are stocked according to plan, by level in supply system	B18	
	39			Percentage of treatment sites that had a stock-out of one or more required antiretroviral medicines during a defined period (General clinic, maternal and child, TB site)	B19	

	40			Number and percentage of orphaned and vulnerable children aged 0 – 17 whose households received free basic external support in caring for the child (disaggregated by age, HIV and sex)	B21	

* Blank spaces show the indicators were not directly stated in the NSP

5.3.3 Output Indicators

Table 5.3: Output indicators

Target Group	No	**Indicator as in NSP***	**P #**	**Mapped Indicator**	**Indicator Matrix Ref #**	**Data source**
General Population	1			Number of adults reached with the defined package of services	C2	
Youth	2			Number of youth reached with HIV prevention programs –defined package of services	C2	
	3			Percentage of young people aged 10–24 years reached by life skills–based HIV education in schools	C2	
FSWs	4	Percentage / Number of FSW reached with individual end and /small group level interventions that are based on evidence end or meet the minimum standard	39	Percentage / Number of FSW reached with HIV prevention programs – defined package of services	B10/C2	
	5			Number of people receiving post gender based violence care	C24	
MSMs	6	Percentage / Number of MSM reached with individual and/or small group level	40	Percentage / Number of MSM reached with HIV prevention programs – defined	B10/C2	RHIS

		interventions that are based on evidence and/or meet the minimum standards		package of services		
Prisoners	7			Percentage / Number of prisoners reached with HIV prevention programs – defined package of services	C2	
Condom and Lubricant	8	# Male Condoms Annual Requirements	43	# Male Condoms Annual Requirements	C4	
	9	# Female condoms Annual Requirements		# Female condoms Annual Requirements		
	10	# Lubricants Annual Requirements		# Lubricants Annual Requirements		
	11			# Condoms distributed	C5	
	12			# Lubricants distributed		
HTS	13	Number of people tested, counseled for HIV and received results	51	Number of people tested, counseled for HIV and received results	C1	
	14			Number of HTS self-test kits distributed	C6	
PMTCT						
	15	Number HIV+ pregnant women receiving ARVs-Option B+		Number HIV+ pregnant women receiving ARVs	C9	
	16	Number (%) HEI receiving ARV prophylaxis	56	Number (%) HEI receiving ARV prophylaxis	C10	
	17	Number (%) HEI receiving CTX prophylaxis		Number (%) HEI receiving CTX prophylaxis	C11	
	18	Number (%) HEI that have virological test within 2 months of birth		Number (%) HEI that have virological test within 2 months of birth	C12	
	19	MTCT Rate at 18 months		MTCT Rate at 18 months	C13	
ART Programmes	20	Number of health facilities providing ARTs	62	Number of health facilities providing ARTs	C14	
	21			Number of service providers trained to provide ART	C18	
	22			Number of service providers trained to provide PMTCT	C18	
	23	Number of adults newly initiated on ART		Number of adults newly initiated on ART	C15	NACP

	24	Number of children newly initiated on ART		Number of children newly initiated on ART	C15	
	25	Number of facilities that carry out HIV viral load testing (cumulative)		Number of facilities that carry out HIV viral load testing (cumulative)	C17	
	26	Cumulative Number of Children 0-14 years on ART	58	Cumulative Number of Children 0-14 years on ART	A5	
	29	Cumulative Number of Adults 15+ years on ART	58	Cumulative Number of Adults 15+ years on ART	A5	
MDAs and Workplace	30	Percentage of funding for the HIV response coming from the government	100	Percentage of funding for the HIV response coming from the government	C19	NASA
	31	Number of Enterprises with HIV workplace programmes aligned to NSP	32/96	Number of Enterprises with HIV workplace programmes aligned to NSP	C22	GAC
	34			Number of laboratories and blood centers/banks: A. Engaged in Continuous Quality Improvement (CQI) activities B. Audited and achieved accreditation C. Performing an HIV-related test and participating in and passing Proficiency Testing (PT)	C23	
	35			Number of people receiving post-gender based violence (GBV) clinical care based on the minimum package	C24	
	36			Number of beneficiaries served by OVC programs for children and families affected by HIV	C25	
	37			Number of people who received post exposure prophylaxis	C26	
	38			Proportion of women living with HIV 30−49 years old who report being screened for cervical cancer	C28	Program Data

	39			Proportion of people coinfected with HIV, HBV, HCV starting HCV treatment	C29	
	40			Proportion of people starting antiretroviral therapy who were tested for hepatitis B	C30	
	41			Rate of laboratory-diagnosed gonorrhoea among men in countries with laboratory capacity for diagnosis	C31	
	42			Number of KPs and vulnerable groups enrolled on National Health Insurance Scheme (NHIS)	C7	RHIS
	43			Number and percentage of adults and children living with HIV who receive care and support services outside health facilities during the reporting period	C8	RHIS

* Blank spaces show the indicators were not directly stated in the NSP

5.4 Indicator matrix with targets and disaggregation

Table 5.4: Impact indicator results matrix

Ref#	Indicator	Dimensions				Baseline			Target Results				
		Target Group	Disaggregation			Data	Year	Data Source	2016	2017	2018	2019	2020
Impact (A)													
A1	HIV prevalence	General Population	Age / Sex	0 -14									
				15 -24		F+M= 0.8% F=1.5% M=0.2%	2014	GDHS	F+M =0.70%	F+M= 0.65%	F+MI 0.6%	F+M = 0.50%	F+M=0.5%
				15-49		F = 2.8% M = 1.1%	2014	GDHS	F = 2.6% M = 1.1%	F = 2.4% M = 1.05%	F = 2.4% M =1.0%	F = 2.2% M = 0.9%	F = 2.0% M = 0.8%
				20-24		F =2.6% M = 0.1%	2014	GDHS	F = 2.4% M = 0.08%	F = 2.3% M = 0.05%	F = 2.2% M =0.04%	F = 2.1% M = 0.02%	F = 1.8% M = 0.01%
		Pregnant Women	Age	10-19		0.7% (15-19)	2015	HSS	0.6%	0.55%	0.50%	0.45%	0.4%
				15-24		1.1%	2015	HSS	1.05%	1.0%	0.8%	0.6%	0.4%
				15-49		1.8%	2015	HSS	1.7%	1.6%	1.5%	1.4%	1.2%
		FSW	General	All		6.9%	2015	IBBSS	9.0%	8.3%	7.0%	6.5%	5.6%
				15-24		2.9%	2015	IBBSS	2.5%	2.0%	1.8%	1.5%	1.0%
				15-49		6.9%	2015	IBBSS	6.5%	6.0%	5.5%	5.0%	4.5%
				15+		6.9%	2015	IBBSS	6.6%	6.5%	6.3%	6.2%	6.1%
			Seaters			13.2%	2015	IBBSS	13.0%	12.5%	12.0%	11.0%	10.7%
			Roamers			5.4%%	2015	IBBSS	5.3%	5.2%	5.10%	4.5%	3.40%
		MSM	Age	15-49		17.50%	2011	IBBSS	16.0%	13.5%	13.10%	10.0%	8.80%
				15–24				IBBSS					

				25+				IBBSS					
				15+				IBBSS					
		PWID	Age	15-49				IBBSS					
				15−24				IBBSS					
				15+				IBBSS					
		Prisoners		18+		2.3%	2014	IBBSS	2.2%	2.0%	1.8%	1.6%	1.4%
				18-49		2.3%	2014	IBBSS	2.2%	2.9%	1.8%	1.6%	1.4%
A2	New HIV infection per 1,000 uninfected population	General Population	Age	All		12,803	2015	Spectrum	10,000	8,000	6,660	4,000	2,560
				0 -14		2,197	2015	Spectrum	1,800	1,200	1140	800	440
				15−24		3,250	2015	Spectrum	2,400	2,000	1650	1,000	650
				15-49		10,606	2015	Spectrum	8,800	7,800	5,520	3,500	2,120
		FSW	Age	All		2.92%	2014	MOT	2.90%	2.85%	2.84%	2.80%	2.75%
				15−24				MOT					
				25+				MOT					
		MSM	Age	All		3.6%	2014	MOT	3.9%	4%%	3%	2.5%	2%
				15−24				MOT					
				25+				MOT					
		PWID	Age	All		3.6%	2014	MOT	3.4%	3.2%	3.1%	3%	2%
				15−24				MOT					
				25+				MOT					
		Prisoners		All				MOT					
A3	AIDS-related death	General Population	Age	All		12,646	2015	Spectrum	10,000	8,000	6,580	4,000	2,530
				15 -49		11,223	2015	Spectrum	9,000	7,000	5,840	3,000	2,240
				0 -14		1,423	2015	Spectrum	1,200	900	740	400	290
A4	Number of people	General	Age	All		274,560	2015	Spectrum	272,090	269,620	268,260	266,650	264,660

	living with HIV	Population		0 -14		18,577	2015	Spectrum	17,033	16,006	14,994	14,009	12.954
				15-19		7,298	2015	Spectrum	7,210	7,033	6,873	6,660	6,457
				20-24		16,151	2015	Spectrum	15,581	14,758	13,859	12,791	11,783
				15 -49		215,970	2015	Spectrum	212,263	207,941	204,374	200,328	195,910
A5	Antiretroviral therapy (ART) coverage (%)	General Population	Age	15 -49		84,179	2015	NACP	80% (156,440)	85% (161,959)	90% (209,758)	90% (213,360)	95% (216,620)
				0 -14		4,934	2015	NACP	80% (17,585)	85% (16,251)	90% (15,066)	90% (13,882)	95% (13,300)
		TB Patient				11%	2014	HIV-TB Guidelines	40%	60%	85%	100%	100%
		Pregnant women				64%	2015	NACP	68%	70%	75%	80%	90%
		Key populations						NACP					
		Newly Enrolled	Age	0-4				NACP					
				5-9				NACP					
				10-14				NACP					
				15-19				NACP					
				20-24				NACP					
				25-49				NACP					
				50+				NACP					
		Currently receiving	Age	0-4				NACP					
				5-9				NACP					
				10-14				NACP					

				15-19				NACP					
				20-24				NACP					
				25-49				NACP					
				50+				NACP					
A6	Proportion of persons living with HIV who are on ART with suppressed viral load in the past 12 months	General Population	Age	0-4				NACP	80%	85%	90%	90%	95%
				5-9				NACP	80%	85%	90%	90%	95%
				10-14				NACP					
				15-19				NACP					
				20-24				NACP					
				25-49				NACP					
				50+				NACP					
A7	Percentage of adults and children known to be on ART 12 months after initiation of treatment (can also be disaggregated by 6/12/24/36 months)	General Population	Female	15-49		74% (Preliminary data from Cohort Analysis)	2015	NACP	80%	83%	85%	90%	>90%
				0 -14			2015	NACP	80%	83%	85%	90%	>90%
			Male	15-49			2015	NACP	80%	83%	85%	90%	>90%
				0 -14			2015	NACP	80%	83%	85%	90%	>90%
A8	Percentage of individuals seropositive for syphilis	General population						NACP					
		FSW						IBBSS					
		MSM						IBBSS					
A9	TB/HIV Mortality rate per 100,000 population							NACP/ NTCP					

Table 5.5: Outcome indicator results matrix

Outcomes (B)												
		Dimensions			Baseline			Target Results				
Ref#	Indicator	Target Group	Disaggregation		Data	Year	Data Source	2016	2017	2018	2019	2020
%B1	Proportion of people who report acceptable attitudes toward PLHIV	General Population		Male	14.6%	2014	GDHS	20%	25%	30%	35%	45%
				Female	8%	2014	GDHS	10%	15%	20%	25%	30%
		Youth		Male	10.4%	2014	GDHS	15%	20%	25%	30%	35%
				Female	8.1%	2014	GDHS	10%	15%	20%	25%	30%
		FSW			4.5%	2015	IBBSS	9%	13%	19%	24%	30%
		MSM					IBBSS					
B2	Percent of PLHIV who report having experienced discriminatory attitudes		Male				Survey					
			Female				Survey					
		At health facilities	Male				Survey					
			Female				Survey					
B3	Condom use at last sex with high-risk partner	General Population	Male	15–24	46.40%	2014	GDHS	50%	70%	80%	85%	95%
				15-49	45.1%	2008	GDHS	50%	55%	60%	65%	70%
			Female	15–24	28.2%	2014	GDHS	35%	45%	70%	80%	90%
				15-49	25.4%	2008	GDHS	28%	30%	35%	40%	45%

		FSW		All	92.%	2011	IBBSS	98%	99%	99%	99%	99%
				Non-PP	20.1%	2011	IBBSS	30%	35%	45%	60%	100%
		MSM		All	60%	2011	IBBSS	80%	98%	99%	99%	99%
		PWID		All			IBBSS					
B4	Condom use at last sex among those who had 2+ partners	Youth	Sex	Male	34.2%	2014	GDHS	45%	70%	80%	90%	95%
				Female	14.9%	2014	GDHS	50%	60%	70%	80%	90%
B5	Comprehensive knowledge	General Population	sex	Male	29.9%	2014	GDHS	40%	50%	40%	60%	70%
				Female	17.7%	2014	GDHS	30%	40%	50%	60%	70%
		Youth	sex	Male	27.2%	2014	GDHS	50%	55%	60%	65%	75%
				Female	19.9%	2014	GDHS	35%	45%	55%	60%	70%
		FSW	[redacted]		62%	2015	IBBSS	65%	70%	75%	78%	80%
		MSM			55.5%	2011	IBBSS	65%	70%	75%	78%	80%
B6	Percent who received HIV test in the last twelve months and know their status	General Population	Female	15-49	13%	2014	GDHS	18%	23%	28%	32%	38%
				15–24		2014	GDHS					
			Male	15-49	6%	2014	GDHS	12%	18%	21%	26%	31%
				15–24		2014	GDHS					
		FSW	[redacted]	All	66.7%	2011	IBBSS	75%	80%	80%	90%	90%
				15–24		2011	IBBSS					
				25+		2011	IBBSS					
				Non-PP		2011	IBBSS					
		MSM		All	26.30%	2011	IBBSS	60%	70%	80%	85%	90%
				15–24		2011	IBBSS					
				25+		2011	IBBSS					
		PWID		All			IBBSS					

B7	Ever tested for HIV	General Population	Female	All	32%	2014	GDHS	45%	55%	65%	75%	90%
				15 -49	42.8%	2014	GDHS	60%	75%	80%	85%	90%
				15−24	26.4%	2014	GDHS	30%	45%	59%	75%	90%
			Male	15 -49	20.5%	2014	GDHS	40%	65%	70%	80%	90%
				15−24	8.6%	2014	GDHS	11%	30%	59%	70%	90%
		FSW	Age	15−24	72%	2015	IBBSS	80%	85%	90%	95%	99%
				25+	72%	2015	IBBSS	80%	85%	90%	95%	99%
		MSM	Age	15−24	35.4%	2011	IBBSS	45%	55%	65%	75%	85%
				25+	35.4%	2011	IBBSS	45%	55%	65%	75%	85%
		PWID	Age	15−24			IBBSS					
				25+			IBBSS					
B8	Percentage of People living with HIV who tested and know their HIV Status.	General Population	Sex	Male	50%	2015	Survey	60%	70%	85%	90%	90%
				Female	50%	2015	Survey	60%	70%	85%	90%	90%
		FSW			50%	2015	Survey	60%	70%	85%	90%	90%
		MSM			50%	2015	Survey	60%	70%	85%	90%	90%
B9	Proportion of FSW/MSM/Non-PP who injected illicit drugs within the past 6 months	FSW			2% (Cocaine)	2015	IBBSS	2%	1.8%	1.5%	1%	0.5%
		MSM			0.4% (Cape Coast / Takoradi	2011	IBBSS	0.7%	1.0%	1.0%	1.0%	1.0%
		Non-PP			4.2%	2015	IBBSS	4.8%	5%	5%	4.5%	4.5%
B10	Proportion of KPs reached with HIV prevention programs – defined package of services	FSW			56.30%	2011	IBBSS	70%	75%	88%	90%	95%
		MSM			54.70%	2011	IBBSS	99%	99%	99%	99%	99%
		Non-PP			30%	2015	IBBSS	45%	50%	60%	80%	95%
B11	Percentage of child HIV infections from HIV positive women				15.90%	2015	NACP	14%	12%	10%	7%	<5%

B12	Percentage of estimated HIV-positive incident tuberculosis (TB) cases (new and relapse TB patients) that received treatment for both TB and HIV		32.80%	2015	NACP/ NTBCP	55%	85%	100%	100%	100%
B13	Percentage of HIV-positive patients who were screened for TB in HIV care or treatment settings.		56% of 185,261	2015	NACP/ NTBCP	64% of 244,880	70% of 242,660	80% of 241,140	85% of 239,990	90% of 238,190
B14	Proportion of HIV+TB patients who receive CPT during TB treatment.		85%	2015	NACP/ NTBCP	90%	95%	100%	100%	100%
B15	Proportion (%) of ART Centers providing DOTS		10%	2015	NACP/ NTBCP	30%	50%	75%	100%	100%
B16	Proportion (%) of DOTS centers providing ART services		10%	2015	NACP/ NTBCP	40%	60%	85%	100%	100%
B17	Percentage of HIV-positive registered TB patients given ART during TB treatment.		11% (2,084 of 18,522)	2015	NACP/ NTBCP	40%	60%	85%	100%	100%
B18	Percentage of storage sites where commodities are stocked according to plan, by level in		50%	2015	Facility Survey	65%	70%	80%	90%	90%

	supply system												
B19	Percentage of treatment sites that had a stock-out of one or more required antiretroviral medicines during a defined period (General clinic, maternal, and child, TB site				50%	2015	NACP/GAC monitoring report	35%	30%	20%	10%	10%
B20	Percentage of HIV-positive pregnant women who received ART to reduce the risk of mother-to-child-transmission (MTCT) during pregnancy	Newly Diagnosed			64%	2015	NACP	68%	72%	78%	80%	82%
		Known										
B21	Number and percentage of orphaned and vulnerable children aged 0 – 17 whose households received free basic external support in caring for the child		Sex	Male			DSW/LEAP					
			Sex	Female			DSW/LEAP					
B22	Percentage of infants born to women living with	Within 2 months of birth			9%	2015	NACP	12%	15%	18%	18%	18%

	HIV receiving a virologic test for HIV within 2, and 12 months of birth	Within 12 months of birth		9%	2015	NACP	12%	15%	18%	18%	18%
B23	Proportion of women who experienced physical or sexual violence from a male partner in the last 12 months.	All women		27.7%	2015	Survey	25%	23%	22%	21%	20%
		FSW		9.6%	2015	IBBSS	8.0%	7.0%	6.5%	5.0%	4.0%
B24	Percentage of Key Populations who avoided seeking HIV services because of stigma and discrimination	FSW			2015	IBBSS					
		MSM			2011	IBBSS					
		Non-PP			2015	IBBSS					
B26	Percentage of antenatal care attendees tested for syphilis			67.8%	2015	NACP	80%	85%	90%	95%	100%

Table 5.6: Output indicator results matrix

Output Indicators (C)												
		Dimensions			**Baseline**			**Target Results**				
Ref#	**Indicator**	**Target Group**	**Disaggregation**		**Data**	**Year**	**Data Source**	**2016**	**2017**	**2018**	**2019**	**2020**
C1	Number of people who received HTS and know their status	All		All	955,674	2015	NACP	2,576,060 (19%)	2,635,050 (20%)	2,694,910 (20%)	2,755,550 (20%)	2,816,920 (21%)

							NACP					
				HIV Positive			NACP					
		General Population	Male	15-49			NACP					
				15-19			NACP					
				20-24			NACP					
			Female	15-49			NACP					
				15-19			NACP					
				20-24			NACP					
		PMTCT			1,106,807	2015	NACP	1,132,332	1,158,263	1,184,573	1,211,232	1,238,208
		TB			17,364 of 77,175 (23%)	2015	NACP/ NTCP	20,182 of 74,887 (27%)	23,096 of 72,175 (32%)	26,740 of 71,594 (37%)	29,528 of 69,478 43%)	33,572 of 67,821 (50%)
		FSW				2015	GAC					
		MSM				2015	GAC					
C2	Percentage/ Number of people reached with HIV prevention programs - defined package of HIV Services	General Population			228,322	2015	GAC	250,000	300,000	350,000	380,000	400,000
		Youth			282,624	2015	GAC	300,000	350,000	370,000	390,000	410,000
		In-School Youth					GAC					
		FSW			56.30%	2011	IBBSS	70%	75%	88%	90%	95%
		MSM			54.70%	2011	IBBSS	99%	99%	99%	99%	99%
		Prisoners			9,980	2015	GAC	11,000	11,500	12,000	12,200	12,500
C3	Number of people	General	Male	15-24		2015	GAC					

	reached with anti- stigma and discrimination messages	Population		15-49	100,601	2015	GAC	110,600	112,000	112,500	112,800	113,000
				15-24		2015	GAC					
			Female	15-49	85,060	2015	GAC	86,100	86,400	87,200	87,800	88,00
C4	Condoms and lubricant purchased	Male Condoms			62,353,712	2015	MOH	64,070,813	65,806,869	67,563,873	69,590,789	71,678,513
		Female Condoms			247,074	2015	MOH	1,281,416	1,316,137	1,351,227	1,391,815	1,433,570
		Lubricants			550,368	2015	MOH	660,442	759,508	865,839	969,740	1,086,108
C5	Number of condoms and lubricants distributed (that reached the end user)	General Population	Adults	15-49			MOH					
			Youth	15-24			MOH					
		FSW					GAC					
		MSM					GAC					
		Female condoms					GAC					
		Vending Machines					GAC					
		Lubricants					GAC					
C6	Number of HTS self-test kits distributed	General Population	Adults	15-49			NACP					
			Youth	15-24			NACP					
		FSW					NACP					
		MSM					NACP					
C7	Number of KPs and vulnerable groups enrolled on National Health Insurance Scheme (NHIS)	KPs			500	2015	GAC	1,500	2,000	2,300	2,500	2,700
		PLHIV			11,000	2015	GAC	12,000	13,500	13,700	13,800	14,000

C8	Number and percentage of adults and children living with HIV who receive care and support services outside health facilities during the reporting period	Adults				GAC					
		Children				GAC					
C9	Number HIV+ pregnant women receiving ARVs-Option B+			7,813	2015	NACP	22,647	23,165	23,691	24,225	24,764
C10	Number (%) HEI receiving ARV prophylaxis			3,733	2015	NACP	12,456 (55%)	15,057 (65%)	17,769 (75%)	20,591 (85%)	23,526 (95%)
C11	Number (%) HEI receiving CTX prophylaxis			3,733	2015	NACP	12,456 (55%)	15,057 (65%)	17,769 (75%)	20,591 (85%)	23,526 (95%)
C12	Number (%) HEI that have virological test within 2 months of birth			3,733	2015	NACP	12,456 (55%)	15,057 (65%)	17,769 (75%)	20,591 (85%)	23,526 (95%)
C13	MTCT Rate at 18 months			15.9%	2015	NACP	12%	9%	7%	5%	<5%
C14	Number of health facilities providing ARTs			197	2015	NACP	237	247	267	287	307
C15	Number of people newly initiated on ART	Adults	15-49	15,875	2015	NACP	20,582	23,400	24,782	26,500	30,713
		Children	0-14	1,093	2015	NACP	1,417	1,600	1,694	1,760	2,100
C16	Number of children living with HIV who are on ART with suppressed viral load in the past 12 months					NACP					

C17	Number of facilities that carry out HIV viral load testing (cumulative)				9	2015	NACP	10	10	25	70	115
C18	Number of service providers trained to provide, PMTCT, and ART services	ART					NACP					
		PMTCT					NACP					
C19	Percentage of funding for the national response	GOG			7%	2014	NASA	6.5%	7.8%	29%	30%	32%
		Global Fund			42%	2014	NASA	38%	35%	25%	20%	16%
		PEPFAR			21%	2014	NASA	25.5%	23%	11%	10%	10%
		Others			30%	2014	NASA	30%	34%	36%	40%	42%
C22	Number of Enterprises with HIV workplace programmes aligned to NSP						GAC					
C23	Number of laboratories and blood centres/banks: A. Engaged in Continuous Quality Improvement (CQI) activities B. Audited and achieved accreditation C. Performing an HIV-related test and participating in and passing Proficiency Testing (PT)						NACP					
C24	Number of people	General	Female				DSW					

	receiving post-gender based violence (GBV) clinical care based on the minimum package	Population	Male				DSW					
		Key Population	FSW				GAC					
			MSM				GAC					
C25	Number of beneficiaries served by OVC programs for children and families affected by HIV	Children	[redacted]	Male			DSW					
				Female			DSW					
		Families		Male			DSW					
				Female			DSW					
C26	Number of people receiving post exposure prophylaxis	Health Workers					NACP					
		Others					NACP					
C28	Proportion of women living with HIV 30–49 years old who report being screened for cervical cancer	[redacted]					GAC					
C29	Proportion of people co-infected with HIV, HBV, HCV starting HCV treatment						NACP					
C30	Proportion of people starting antiretroviral therapy who were tested for hepatitis B						NACP					
C31	Rate of laboratory-diagnosed gonorrhoea among men in countries with laboratory capacity for diagnosis						NACP					

CHAPTER 6: Routine Data Collection and Reporting

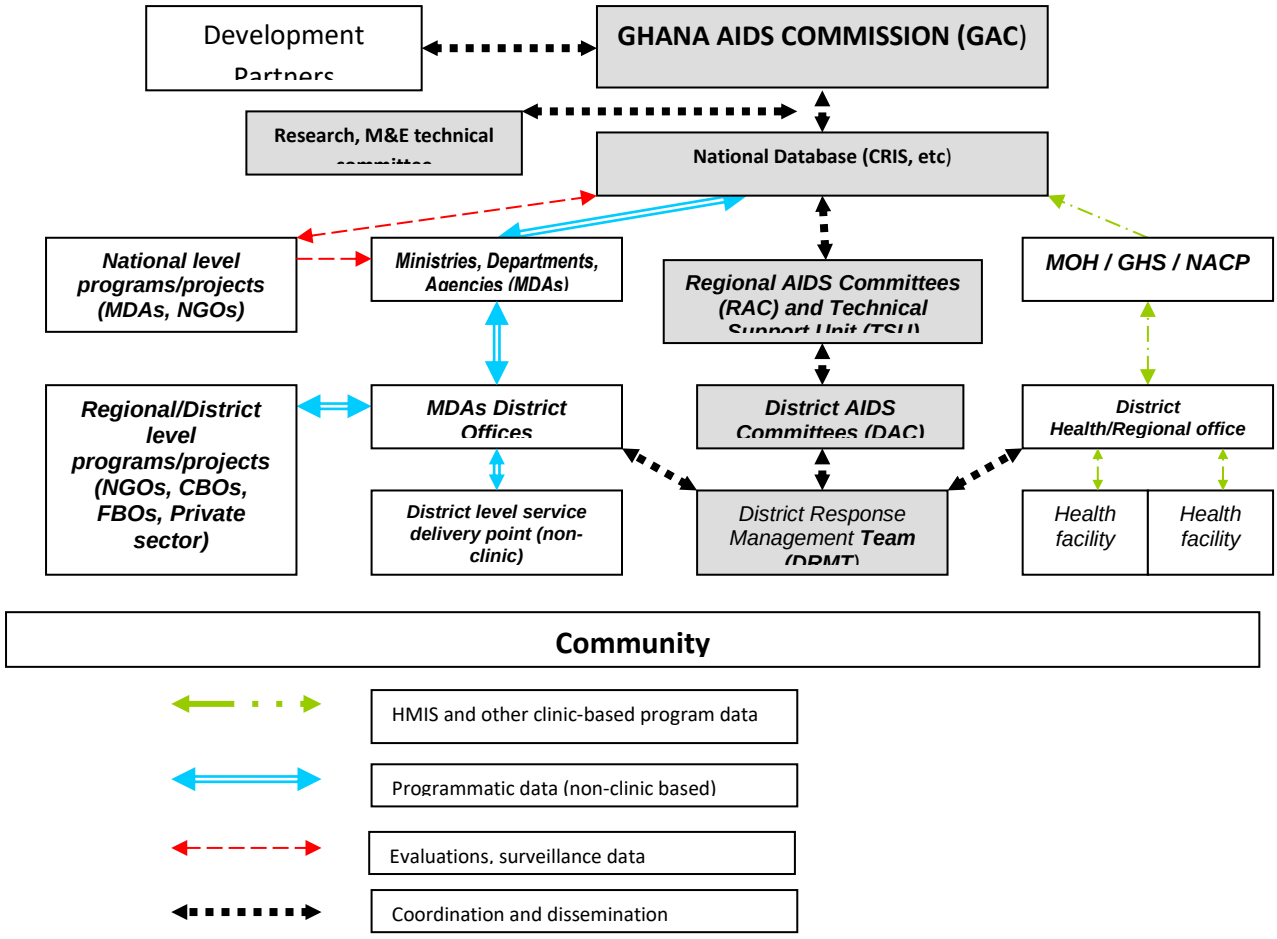
6.1 Data collection and reporting framework

The existing national monitoring and evaluation system for HIV & AIDS is based on the national decentralization strategy, which allows regions and districts to take responsibility for actions in their geographic area. This institutional framework was first developed under the M&E Framework 2001 – 2005 linked to the NSF I (2001 – 2005).[1] In keeping with the *Three Ones* principles, it was designed with the Ghana AIDS Commission as the overall coordinating body with coordination achieved sub-nationally through the decentralized structures (**Figure 6.1**).

The diagram (**Figure 6.1**) indicates that the sectors (Ministries and their respective Departments and Agencies) would be responsible for collecting and reporting programmatic data, which is consistent with the concept of a multi-sectoral response. Thus, the Ministry of Health is expected to collect and report clinic-based programme data (green lines) while the other Ministries collect and report non-clinic based programmatic data (blue lines). The diagram further indicates that the DACs, RACs and GAC are not expected to be involved in collecting and reporting programmatic data. Their role is coordination and dissemination (black lines).

Ghana AIDS Commission: National Strategic Framework (NSF) I 2001-2005

Figure 6.1: Simplified institutional framework for monitoring and evaluation of HIV and AIDS in Ghana



6.2 Comprehensive HIV Response Information System

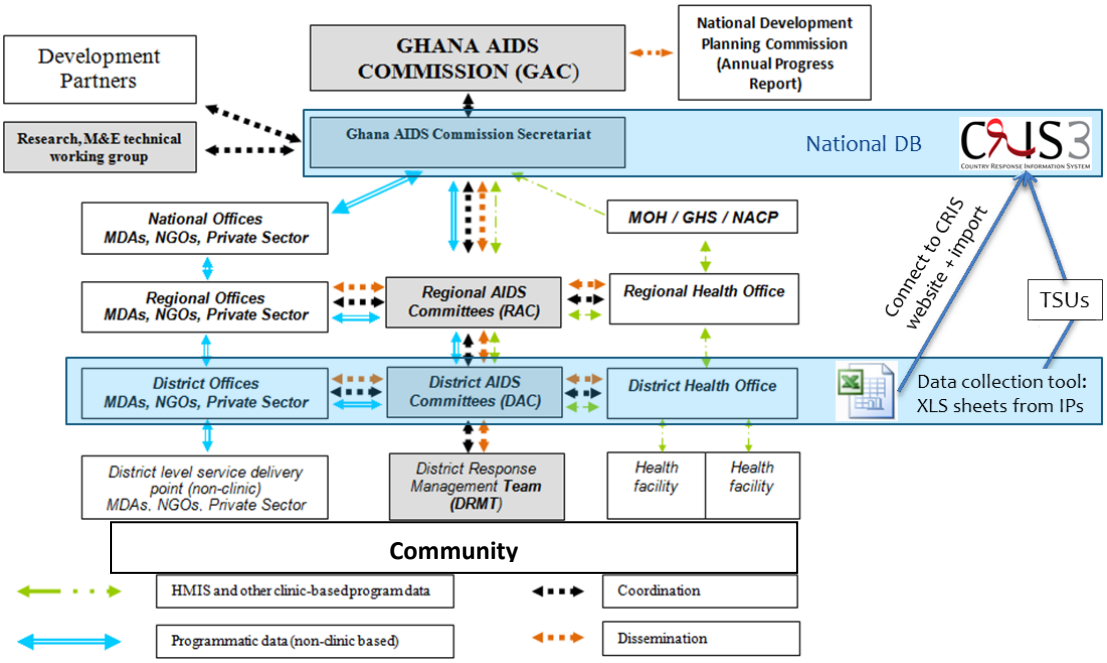
Three different data collection and information systems will be used for the data collection and reporting across the country. These include the Country Response Information System version 3 (CRIS 3), the District Health Information Management System version 2 (DHIMS II) and the Ghana Key Population Unique Identification System (GKPUIS). GKPUIS is a mobile application that will be used by implementing partners working with key populations. It tracks the services provided to each KP irrespective of the location of the KP. Various indicators from the GKPUIS will be extracted periodically and loaded into the CRIS3. The DHIMS II will be used by the Ministry of Health and its implementing partners to report the indicators on the various services provided through the various health facilities in the country. The Country Response Information System is an information system developed by the Joint United

Nations Programme on HIV and AIDS' (UNAIDS) Evidence, Monitoring and Policy Department. It facilitates the collection, reporting and analysis of programme or projects' indicator and financial data. Originally designed to support UNGASS reporting, the system has evolved to provide country monitoring infra-structure, serving best the needs of the national AIDS authorities to track progress on national response to HIV and AIDS and in reaching Universal Access. The CRIS3 system will be the main system for tracking all the indicators in the M&E Plan. It will be linked with the two other systems and indicators will be extracted and loaded to the CRIS3 periodically.

Ghana as part of the national response collects primary indicator and financial data from the source of implementation. This is required to avoid double-counting: implementing partners are co-funded by various donors and perform activities in across several districts. District or regional aggregated reports thus bear the risk of double-counting outputs hence compromising on data quality.

The figure 6.2 is the modified institutional framework for HIV and AIDS data collection flow in Ghana. Implementing partners will continue to collect primary data from the source of the implementation using the National HIV Data Collection tools for NSP 2016-2020. For institutions not using the GKPUIS or DHIMS II, they will directly import the data into the CRIS3 national database which is available online. For the districts / organizations where connection to the national CRIS3 database website is not feasible (e.g. lack of internet connectivity), the alternative way to report the data to CRIS3 will be to send a soft copy of the Excel files to the Technical Support Units at regional level, the TSU will upload the data unto the system on behalf of the organization. The CRIS3 database will thus contain indicator and financial data from the source of implementation and aggregate data will not be re-entered in the database. Rollup of data at district, regional and national levels will be done via reports. At the national level, GAC will periodically capture the data from Surveys, Surveillance and Evaluations such as GDHS, IBBSS, MICS etc. and other yearly reported indicators into the CRIS3 database.

Figure 6.2: modified institutional framework for HIV and AIDS data collection



6.3 Data Management

Data management is a critical component of the HIV and AIDS Monitoring and Evaluation system in Ghana. The Data Management System generates and manages the data that is needed to answer critical questions about the scope and reach of HIV and AIDS services, the extent to which planned interventions are actually implemented, and the outcomes for the targeted populations.

The national response to HIV and AIDS is implemented through a broad range of interventions and services to prevent HIV, treat, care and support people living with HIV, and mitigate the social and economic impacts of the disease. The progress and actual results of these services are assessed through the national Monitoring and Evaluation (M&E) system.

Both monitoring and evaluation rely on quality data that are collected, aggregated, reported, and managed through a data management system. The data management system is the “engine” that drives both the routine monitoring and the periodic evaluations of the national response to HIV and AIDS. The data management manuals developed for the national response will continue to be used to guide the collection, reporting and management of HIV monitoring data in the country.

6.4 Data quality assurance

Quality Assurance (QA) is the “systematic monitoring and evaluation of various aspects of a production process in order to maximize the probability that standards of quality are being attained”. Quality Assurance for producing HIV and AIDS data includes all the steps needed to regulate the processes of data collection, collation, analysis, and reporting (including all related management and inspection functions). The main criteria for data quality – validity, timeliness, relevance, completeness, integrity, and precision/accuracy – apply to each step of the production process. The final product – HIV and AIDS data reported to the national M&E system – will be as good, reliable, and precise as the data management systems that produced it.

The national data quality assurance manual developed by GAC would be used to guide data quality assurance through the M&E system. The data quality assurance (DQA) will be guided by the following three overarching principles:

- **Error Prevention**: preventing errors from occurring in the first place and identifying and resolving data quality issues that arise;
- **On-going Quality Control**: Putting measures and systematic checks into data collection, entry, and reporting procedures to ensure that data captured in the system are accurate and reliable; and
- **Quality Assessments:** Periodic in-depth retrospective data quality assessments of over- and/or under-reporting.

6.5 Quality Improvement in Service Delivery

"Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."*(Institute of Medicine, 1990)*

Quality improvement (QI) is an important strategy to improve systems and reduce variation in delivery of care and services so that patients receive the right care every time they visit clinic, increasing the likelihood of their achieving the expected benefits and outcomes of care[2]. As Ghana moves towards the goal of the 90-90-90 strategy, QI becomes an even more important methodology to be implemented.

[2] Aids Education & Training Center Program: National Coordinating Resource Center - https://aidsetc.org/guide/quality-improvement

6.5.1 Core Principles of Quality Improvement[2]

- **Emphasis on systems of care**: improve processes that link to desired outcomes
- **Focus on the customer**: understanding patients' experience in the clinic will identify areas that are important for improving care
- **Measurement**: collect and use data to improve care
- **Involvement of participants**: encourage direct participation in teams by those individuals who implement the processes being evaluated

As part of the QI measures, Ghana will focus on measuring the following to determine quality improvement in services delivery: rates of virologic suppression, screening for adverse effects of antiretroviral medications, resistance testing, linkage to care, and retention in care. In addition, measures will also be put in place to solicit inputs from patients who attend the clinic and staff of health facilities. Also routine service delivery data would be periodically reviewed to determine which components of care would need improvement.

CHAPTER 7: Surveys, Surveillance and Evaluations

7.1 Introduction

HIV Research and Evaluation for 2016-2020 will be based upon the National Strategic Plan (NSP) and guided nationally by the National HIV and AIDS Research & Evaluation Agenda 2016-2020. This agenda sets out the direction and strategy for research and evaluation over the next five years as a result of consultation with implementing partners, government agencies, donors and stakeholders.

The guiding principle for research over the next 5 years is to ensure that there is a direct linkage with the national response. As such, it is expected that research questions will be developed based on the objectives of the national response and information emanating from the national HIV and AIDS M&E system. Similarly, it is expected that research findings feed directly into programme and policy development. The National HIV and AIDS Research & Evaluation Agenda 2016-2020 will be reviewed and revised/updated as appropriate in response to emerging concerns.

7.2 Evaluation

This M&E Plan provides for a number of evaluations – including one mid-term in 2018 and end-term in 2020. The evaluations will be independent reviews of the NSP 2016-2020 and will include a review of the national HIV and AIDS M&E system.

The evaluation strategy for the NSP would use a before-and-after design to objectively assess programme achievements based on the indicator matrix contained in this M&E Plan (tables 4.4 – 4.6).

A mixed method approach would be adopted such that both quantitative and qualitative data would be collected and analyzed. The data that has already been collected as outlined in this M&E Plan would form the main source of information for the evaluation. It is anticipated that additional data would be collected during the evaluation but it is envisaged that this would be limited.

The evaluation criteria would be based on relevance, effectiveness, impact, efficiency and sustainability. Specific evaluation questions would be developed to provide information on the evaluation criteria. These questions will be based on the following broad review questions:

1. What was expected to happen?
2. What has actually happened and to what extent does this differ from what was expected?
3. What are the likely reasons for these differences and what can we learn from this?
4. Do expectations need to be changed, or is there a need to review the options going forward?
5. What additional specific questions do these raise?

The Table 7.1 provides examples of evaluation questions related to evaluation criteria.

Table 7.1: Examples of specific evaluation questions

Evaluation criteria	Specific Evaluation Questions
Relevance/validity of design	What evidence base was used to design the NSP? Are the strategies still relevant to the goal of reducing the burden of HIV & AIDS in the country?
Effectiveness	To what extent were the objectives of the NSP achieved? What are the reasons for the achievement or non-achievement of outputs/outcomes?
Efficiency	To what extent was the work plan implemented as outlined in the NSP? Could activities have been carried out in better, more cost-effective or quicker ways?

7.3 Timeframes for the Surveys, Evaluations, and Surveillance

As part of the implementation of the M&E Plan 2016-2020, a number of key studies will be undertaken to track the implementation of the NSP 2016-2020. Table 7.2 shows the timeframe for the key studies that will be undertaken.

Table 7.2: timeframe for the key studies for the NSP 2016-2020

Timeframes for Surveys, Surveillance, and Evaluations							
		Time Frame					Leading Institution
		2016	2017	2018	2019	2020	
Surveys							
1	Ghana Demographic and Health Survey				X		GSS
2	AIDS Indicators Survey			X			
3	IBBSS among KPs (FSW, MSM, PWID and Non-PP)			X		X	GAC
4	PLHIV stigma and discrimination survey		X			X	GAC
5	Size estimation of KPs (FSW, MSM, PWID and Non-PP)			X		X	
6	National AIDS Spending Assessment	X	X	X	X	X	GAC
7	HIV Vulnerabilities study among priority groups (migrants, refugees, kayayei, PWD, Uniformed services personnel, etc)		X	X			GAC
8	HTS Study (1st 90)			X			GAC
9	PLHIV and KP Stigma Index Study				X		
Surveillance							
10	HIV Sentinel Surveillance	X	X	X	X	X	NACP
11	Surveillance for HIV drug resistance	X	X	X	X	X	
12	Cohort Study for MSM and FSW			X	X	X	
13	Cohort studies on survival of patients on ART at 6,12, 24, 36 and 60 months			X	X	X	
14	Retention of PLHIV in care at 1, 3 and 5 years after initiation of treatment		X				
15	ARV sensitivity studies					X	
HIV Epidemic Modeling for Estimation							
16	HIV estimation through Spectrum	X	X	X	X	X	GAC
17	Modes of transmission study		X		X		GAC
Evaluations							
18	M&E capacity assessment of MDAs and key IPs		X	X			
19	Mid-term evaluation of NSP			X			GAC
20	Mid-term evaluation of NSP					X	GAC
21	Assessment of self-testing and peer-led testing pilot programme			X			

Further details may be found in the National HIV and AIDS Research & Evaluation Agenda 2016-2020. The Research, Monitoring and Evaluation Technical Working Group will oversee the development of terms of reference for the evaluation; selection of the evaluation team; design, implementation and completion of the evaluation; and dissemination of the findings.

CHAPTER 8: Information Dissemination and Use

8.1 Introduction

This chapter outlines the strategic information products that will be developed and how they will be disseminated to inform decision-making. The GAC will be primarily responsible for the dissemination of data on the national HIV programme. Dissemination of information will occur in two broad ways – during meetings and through written reports. The meetings provide an opportunity to also review and discuss data derived from the national HIV and AIDS M&E system. At the central level, GAC will organize quarterly review meetings to discuss data generated with the RM&E Technical Working Group/Committee. Line ministries, CSOs and private sector organisations will also hold quarterly review meetings to discuss the data they have generated. At the decentralised levels, the regional TSUs will facilitate and support similar review meetings at regional and district levels. Once a year, GAC will organise a national meeting with stakeholders to review and discuss performance.

A number of information products will be produced periodically to meet information needs of the various stakeholders. These include but not limited to:

1. Annual Progress Report on HIV (Status Report)
2. National HIV and AIDS Research and Evaluation Reports
3. HSS and HIV estimates Reports
4. Global AIDs response progress reports
5. Evaluation and survey reports
6. Data Quality Audit Reports
7. Survey and study reports
8. National and Regional Dashboards

8.2 M&E Data Use

Having generated data, analysed and having it presented, the next challenge will be how to use the data to inform decisions relating to HIV and AIDS. It is clear that the decisions that need to be made and that can be made to strengthen the national response vary according to sector (public, civil society, private), institutional role (GAC, Ministry of Health, other ministries) and level (national, regional, district). In addition, there are decisions that need to be made nationally based on consensus of stakeholders. The information products and the M&E data generated will be used at

various levels to facilitate the use of information derived from the national HIV and AIDS M&E system. A data use and dissemination plan will therefore be developed. The guidelines will outline the type of decisions that can and may need to be made in the various scenarios presented above to strengthen the national response. The data that is relevant for each decision will be identified and guiding questions articulated to facilitate critical reflection. Three broad guiding questions will be: i) how have we performed; (ii) what is responsible for this performance; and (iii) what more can we do to improve performance. Stakeholders will be expected to reflect on the third question taking into consideration what decisions they are authorised to make and act on based on their circumstance (sector, institutional role and institutional hierarchy).

Levels of use of data:

1. **Implementing Partners:** The first level of data use will be at the implementing partner (organization) level. These organizations will review and analyse the data generated internally, identify programming bottlenecks, and make adjustments to improve performance.
2. **District and Regional Level:** consolidated HIV strategic information and M&E reports will be used by the TSU and the regional/district AIDS Committees to review progress in NSP implementation and make recommendations to improve the Regional/districts implementation of the NSP.
3. **RME-TWG:** All M&E products produced at the national level will be reviewed by this committee to assess progress in the NSP implementation, identify bottlenecks and challenges, and develop possible solutions. The committee will advise the GAC on steps to be taken to improve the implementation of the response.
4. **National HIV and AIDS research conference**: GAC will continue to organise a national HIV and AIDS research conference every three years to review and disseminate the findings of research studies on HIV and AIDS. An important aspect of discussions during this conference would be the applicability of the research findings to the national response.

8.3 Feedback Mechanisms

Feedback will be provided to all NSP implementing and coordination partner to improve HIV services delivery and NSP implementation. The platforms and processes for providing feedback will include:

1. **Supportive supervision:** TSU as well as other regional level actors will provide feedback to implementers during supportive supervision visits. The supervision visits will be informed by findings from the reports submitted by the implementing partners, and issues identified in these reports will be addressed during the supervision visits.

2. **Review meetings:** GAC and TSUs will periodically hold review meeting with implementing partners at the regional and national level. At these meetings, implementing partners will present progress report of their work and will be reviewed by their peers and the GAC/TSU.

3. **Annual GAC Fora:** GAC will provide a forum (partnership forum) for providing feedback to implementing partners and stakeholders on success and challenges in NSP implementation, emerging issues, and possible solutions. The NACP/GHS will present health sector HIV status reports during these stakeholder meetings.

4. **Supportive supervision and data verification visits by GAC, NACP and other national level institutions:** During these visits, feedback on progress in NSP implementation will be provided to regions and implementing partners and possible solutions to bottlenecks in service delivery developed.

CHAPTER 9: M&E Capacity Strengthening

9.1 Introduction

A key strategy in this M&E Plan is the institutionalisation of M&E capacity strengthening. M&E capacity strengthening will extend to MDAs, the decentralised structures, civil society and private sector.

At present, M&E capacity is particularly limited among smaller NGOs, FBOs and other civil society organisations at the districts and community levels. These groups are implementing partners at the community levels but do not benefit from capacity building activities at the national level. They play a critical role in achieving the results of the NSP 2016-2020 and will receive special attention.

Currently, there are only two standardised M&E and data analysis training short courses run by the School of Public Health, University of Ghana in collaboration with Ghana AIDS Commission. These courses are designed to equip participants with basic knowledge and skills in M&E and data analysis. In recognition of the need for more advanced capacity development preferably at an advanced degree level, the School of Public Health, University of Ghana is developing a curriculum and tools for a MSc in Public Health M&E. The course will offer opportunities for M&E personnels who seek to specialise in M&E.

However, these courses are insufficient to meet the varied needs at different levels of the national M&E system due to both content and location. To guide further M&E capacity strengthening, GAC will take three steps: (1) determine the minimum M&E knowledge and skills required at each level of the national HIV and AIDS M&E system; (2) conduct M&E training needs assessments at central, regional and district levels guided by these minimum standards. The assessments will cover line ministries, decentralised structures, civil society and the private sector; and (3) develop a capacity strengthening plan based on the needs assessment. The plan will provide for variation in content and training approach depending on the specific needs at different levels.

As a result of the foregoing, M&E training undertaken by the School of Public Health will be one of a variety of standardised training packages. The Technical Support Units at the regional level will also undertake capacity strengthening at district level using a

standardised training package that will be developed following the needs assessments. A training package consists of both the content and mode of delivery of the training.

9.2 M&E Capacity Strengthening Matrix

In Table 9.1 below learning objectives to strengthen M&E capacities have been articulated. Four broad areas for training have been identified namely: (i) use of data collection and reporting tools; (ii) monitoring and evaluation; (iii) data quality; (iv) operational research; and (v) use of spread sheet and presentation software. These have taken into consideration the weaknesses articulated in Chapter 2 of this Plan. However, the matrix will be revised after determining the minimum M&E knowledge and skills required at each level of the M&E system. The revised matrix will then be modified to reflect this as well as the learning objectives linked to each knowledge/skill item at each level.

Table 9.1: M&E capacity strengthening matrix

Knowledge & skills to be strengthened	Target group	Content of training/ learning objective	Responsible
Data collection & reporting			
Use of data collection and reporting tools	All service providers	• Interpret indicators (operational definition), practise filling out of Monitoring Forms • Storage of records	GAC/TSU NACP/GHS
Monitoring & Evaluation			
Introduction to M&E concepts	GAC MDA TSU CSO Private sector	• Differentiate between monitoring and evaluation • Explain the different components of the project cycle	GAC/School of Public Health
Selecting goals, objectives, indicators and targets		• Distinguish between the concepts of goal, objective, impact, outcome and output • Identify proper indicators for project monitoring	
Developing a logical framework matrix		• Develop a logical framework matrix for project management, monitoring and evaluation	
Developing an M&E Plan		• Explain the role of project M&E in project management • Explain the structure and contents of a Project M&E Plan • Explain how the Project M&E relates to the Project Implementation Plan • Develop an M&E Plan	
Tool development, data analysis & report		• All of the above • Develop data collection & reporting tools • Establish & manage a data quality assurance system	

Knowledge & skills to be strengthened	Target group	Content of training/ learning objective	Responsible
writing		• Analyse and interpret data • Write reports for variety of audiences	
Evaluation		• Distinguish between monitoring and evaluation • Explain the relationship between the concepts of evaluation objectives, evaluation criteria, and evaluation questions • Explain how to plan and manage an evaluation • Describe how to organise the content of an evaluation report •	
Data quality			
Assessing data quality	GAC MDA TSU CSO Private sector	• Describe dimensions of data quality • Describe components of a data quality assurance system	GAC/MoH/SPH
Interpretation & use of M&E data/ Information		• Critically assess and explain how to use M&E data	
Presentation of M&E findings		• Present M&E findings orally, graphically and in tabular form	
Operational research			
Introduction to concept of operational research	GAC MoH CSO Private sector	• Understand the concept of operational research • Explain the contents of a research protocol	GAC/School of Public Health
Conceptualization of research protocol		• Describe linkages between problem, aim, objectives, research questions and methods	
Quantitative & qualitative methods		• Describe the characteristics of various quantitative & qualitative data collection methods • Explain the design of a semi-structured questionnaire and an interview/focus group guide	
Research ethics		• Identify critical ethical considerations in conducting research and collecting data	
Data analysis		• Analyse a quantitative dataset • Analyse qualitative data	
Information Technology (IT)			
Improving IT skills in Microsoft Excel and Power Point	GAC MDA TSU CSO Private sector	• Improve use of MS Excel & Power Point to process and present data	GAC

CHAPTER 10: M&E Workplan and Budget

Workplan and budget						
		Cost (Ghana Cedis)				
Strategies and Activities	**Responsible**	**2016**	**2017**	**2018**	**2019**	**2020**
Strategy 1: Strengthen M&E capacity to effectively track and assess the interventions implemented under the national response						
Activity 1.1						
M&E capacity assessment at all levels	GAC	**1,516,000**	**0**	**0**	**0**	**0**
Activity1.2						
Training of MDAs and MMDAs in HIV M&E	GAC	**0**	**1,632,980**	**0**	**0**	**0**
Activity 1.3						
Develop costed capacity strengthening plan to address identified M&E capacity gaps needs of both public and private sector institutions	GAC	**0**	**45,500**	**0**	**0**	**0**
Activity 1.4						
Implement costed capacity strengthening plan to address identified M&E capacity needs of both public and private sector institutions	GAC	**0**	**300,500**		**450,000**	**0**
Activity 1.5						
Conduct Ghana HIV and AIDS Monitoring and Evaluation (GHAME) Training	GAC/SPH	**0**	**0**	**100,000**	**100,000**	**100,000**
Activity 1.6						
Routine Monitoring and Supportive Supervisions	GAC	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**
Activity 1.7						
Conduct online monitoring and evaluation training	GAC	**0**	**0**	**50,500**	**30,000**	**27,000**

Strategy 2:Harmonize comprehensive routine HIV reporting system to provide quality data						
Activity 2.1						
Review and update M&E/Strategic Information guidelines, manuals and tools.	GAC	**0**	**150,000**	**0**	**0**	**0**
Activity 2.2						
Train implementing partners in the use of the revised guidelines, manuals and tools	GAC	**0**	**300,000**	**0**	**0**	**0**
Activity 2.3						
Strengthen data management at national and sub-national level	GAC	**0**	**46,500**	**75,450**	**20,000**	**10,000**
Activity 2.4						
Scale up the implementation and use of Country Response Information System (CRIS 3)	GAC	**0**	**100,000**	**100,000**	**45,000**	**20,000**
Activity 2.5						
Develop a data exchange platform to facilitate the exchange of data between DHMIS II and CRIS 3	GAC/GHS	**30,000**	**50,000**	**10,000**	**0**	**0**
Activity 2.6						
Develop a mobile application to help peer educators (PEs) in the data collection instead of using paper-based data collection tools	GAC/CSOs		**45,500**	**62,000**	**0**	**0**
Activity 2.7						
Periodic Review meetings	GAC	**25,000**	**120,000**	**120,000**	**120,000**	**120,000**
Activity 2.8						
Data Audit and Verification	GAC		**200,000**	**250,000**	**250,000**	**250,000**
Strategy 3: Promote the generation and use of strategic information						
Activity 3.1						
Training in data use	GAC	**0**	**150,000**	**0**	**20,000**	**0**

Activity 3.2						
Organise National HIV and AIDS Research Conference (NHARCON)	GAC	**0**	**200,000**	**1,600,000**	**0**	**0**
Activity 3.3						
Integrated Bio-Behavioural Survillance Survey for Persons with Disabilities	GAC	**0**	**0**	**400,000**	**0**	**0**
Activity 3.4						
Integrated Bio-Behavioural Surveillance Survey for Prison inmates and Officers	GAC	**0**	**0**		**345,000**	**0**
Activity 3.5						
Integrated Bio-Behavoiral Surveillance among Female Sex workers	GAB	**0**	**0**	**1,000,000**	**0**	**0**
Activity 3.6						
Integrated Bio-behavioural Surveillance Study among Men who have Sex with Men	GAC	**0**	**0**	**0**	**1,000,000**	**0**
Activity 3.7						
Develop guidelines to support analysis, dissemination and use in decision making for all levels	GAC	**0**	**45,000**	**20,000**	**0**	**0**
Activity 3.8						
Create data demand and use of HIV Strategic Information	GAC	**0**	**10,000**	**30,000**	**25,000**	**0**
Activity 3.9						
Scientific Writing Workshops	GAC	**0**	**56,000**	**0**	**70,000**	**0**
Activity 3.10						
Mid Term Evaluation of NSP 2016-2020	GAC	**0**	**0**	**500,000**	**0**	**0**
Activity 3.11						
End Term Evaluation of NSP 2016-2020	GAC	**0**	**0**	**0**	**0**	**700,000**
Activity 3.12						
Periodic Assessment of Program interventions	GAC	**60,000**	**50,000**	**0**	**50,000**	**0**
Activity 3.13						
Conduct AIDS Indicator Survey	GAC/GSS	**0**	**0**	**5,000,000**	**0**	**0**

Strategy 4:Develop a comprehensive tracking and assessment system for the 90-90-90 fast-track treatment strategy						
Activity 4.1						
Develop an online reporting system for the first 90	GAC	**0**	**15,000**	**0**	**0**	**0**
Activity 4.2						
Conduct an assessment of the 90-90-90 strategy	GAC/NACP	**0**	**0**	**35,000**	**0**	**0**
Strategy 5: Build national and regional level teams with capacity to undertake research, intermediate and advance data analysis and scientific writing.						
Activity 5.1						
Train young researchers in data analysis and scientific writing	GAC	**25,000**	**15,000**	**12,000**	**10,000**	**0**
Activity 5.2						
Undertake further analysis of Secondary data	GAC	**13,000**	**25,000**	**15,000**	**20,000**	**10,000**
Activity 5.3						
Update Research Agenda	GAC	**0**	**20,000**	**0**	**0**	**0**
Activity 5.4						
Write Scientific Publication	GAC	**35,000**	**24,000**	**14,000**	**16,000**	**10,000**

Appendices

Annex 1.0: List of Documents Consulted

1. National HIV and AIDS Strategic Plan 2016-2020, Ghana AIDS Commission
2. National HIV and AIDS Monitoring and Evaluation Plan 2011-2015, Ghana AIDS Commission
3. End Term Evaluation of NSP 2011-2015 Draft Consolidated Report, Ghana AIDS Commission
4. The Global Fund. Modular Framework Handbook: Introduction to the modular approach, 2017
5. Global AIDS response progress reporting 2013: Construction of core indicators for monitoring the 2011 UN Political Declaration on HIV/AIDS. Joint United Nations Programme on HIV/AIDS (UNAIDS), 2013
6. Kenya Aids Strategic Framework - M&E Framework | 2014/15–2018/19
7. PEPFAR Monitoring, Evaluation, and Reporting (MER 2.0) Indicator Reference Guide Version 2.1, January 2017
8. World Health Organization 2015, Global Reference List of 100 Core Health Indicators
9. Ghana AIDS Commission. Data Quality Assurance Manual
10. Ghana AIDS Commission. Data Management Manuals
11. Ghana Statistical Service (GSS), Ghana Health Service (GHS), and ICF Macro. 2015. *Ghana Demographic and Health Survey 2014*. Accra, Ghana: GSS, GHS, and ICF Macro.
12. Ghana AIDS Commission. Integrated Bio-Behavioral Surveillance Survey Reports, 2015

Annex 2: List of Participants

Annex 2.1: Inception Meeting

1.	Abraham Nyarko	-	Consultant
2.	Kyeremeh Atuahene	-	GAC
3.	Emmanuel Larbi	-	GAC
4.	Micheal Gold	-	GAC
5.	Isaiah Doe Kwao	-	GAC
6.	Paul Ayamah	-	GAC
7.	Joyce Borquaye	-	GAC
8.	Patricia Anum Dorhuso	-	GAC
9.	Anita Kwao	-	GAC
10.	Victoria Oddoi	-	GAC
11.	Romeo Senah	-	GAC
12.	Dinah Akukumah	-	GAC
13.	Margaret Appiah	-	GAC
14.	Margaret Yamoah	-	GAC
15.	Josephine Oppong Adusah	-	GAC
16.	Maxwell Nkrumah-Buadii	-	GAC
17.	Anthony Nana Boateng	-	GAC
18.	Jewel Lamptey	-	GAC
19.	Samuel Dery	-	SPH, UG/ Consultant
20.	Lily Ogyiri	-	GAC

Annex 2.2: Southern Zone Consultative Meeting - Accra

1.	Abraham Nyarko	-	Consultant
2.	Samuel Dery	-	SPH, UG/ Consultant
3.	Richard Solodzi	-	Socioserve-Gh
4.	Edem Kawuba Hini	-	GHANET
5.	Morkeh Theophilus	-	NECPAD
6.	Micheal Aggrey	-	CENCOSAD
7.	Paul Sono	-	ADRA Ghana
8.	Abdul Badi Sayibu	-	NAP+ Ghana
9.	Sophia Nmai	-	PRS&D (Presby)
10.	Edem Assafo	-	EPDRA
11.	Gershon Adjei	-	Hope Care Foundation
12.	Twumasi Ankrah	-	PPAG
13.	Mobeya Nicholas	-	HCF
14.	Margaret K. Doku	-	YOWE
15.	Jacob Sackey	-	GAC
16.	Kyeremeh Atuahene	-	GAC
17.	Emmanuel Larbi	-	GAC

18.	Nii Ayi Tetteh	-	GAC
19.	Margaret Appiah	-	GAC
20.	Cynthia Adobea Asante	-	GAC
21.	Isaiah Doe Kwao	-	GAC
22.	Jewel Lamptey	-	GAC
23.	Dennis Annang	-	GAC
24.	Daniel Narh	-	GAC
25.	Elorm Adawudu	-	GAC
26.	Joana Mensah	-	GAC
27.	Anthonio Francis	-	GAC
28.	Kwasi Gyima Okai	-	GAC
29.	Ebenezer Abrokwah	-	GAC
30.	Anita Kwao	-	GAC

Annex 2.3: Northern Zone Consultative Meeting - Kumasi

1.	Abubakari Fuseini	Simli Aid
2.	John Awumbila	ADDRO
3.	Akuka Yakubu B.	Action Aid Ghana
4.	Philip Norgbordzi	Methodist Church Ghana
5.	Monalisa Obo- Mends	Ghana NGO Coalition on the Rights of the Child
6.	Patrick Appiah	JSI- Care Continuum Project
7.	K. D Ninsau	AHEFS
8.	Pinamang Boateng	OICI
9.	Abraham Nyarko	Consultant
10.	Samuel Dery	SPH, UG/ Consultant
11.	Emmanuel Larbi	GAC
12.	Nii Ayi Tetteh	GAC
13.	Margaret Appiah	GAC
14.	Nuhu Musah	GAC
15.	A- abida Abu Ahmed	GAC
16.	Samuel Opoku Twumasi	GAC
17.	James Adu Ofosuhene	GAC
18.	Terra Nyarko	GAC
19.	Baaba Yedua Bannerman	GAC
20.	Erica Adisenu	GAC
21.	Joseph Nortey	GAC

Annex 2.4: Indicator Review Workshop

1.	Kyeremeh Atuahene	-	GAC
2.	Dr. Anthony Ofosu	-	GHS-PPMED
3.	Kenneth Danso	-	NACP
4.	Abraham Nyarko	-	Consultant
5.	Kofi M. Diaba	-	WAPCAS

6. Dr. Stephen Ayisi Addo - NACP
7. Patricia Adjei - ADRA-Gh
8. Hellen Odido - UNAIDS
9. Ariella Bock - JSI
10. Twumasi Ankrah - PPAG
11. Samuel Dery - SPH,UG/ Consultant
12. Charity Assem - SPH, UG
13. Blay Quaye - CDC
14. Cosmos Ohene-Adjei - GAC
15. Dr. Fred Nana Poku - GAC
16. Cynthia Adobea Asante - GAC
17. Isaiah Kwao - GAC
18. Raphael Sackitey - GAC
19. Kwasi G. Okai - GAC
20. Ellis Dowuona - GAC
21. Dennis Annang - GAC
22. Fauzia Masaudu - GAC
23. Emmanuel Taylor - GAC

Annex 2.5: Validation Meeting

1. Dr. Mokowa Blay Adu-Gyamfi - GAC
2. Rev. Abraham Nyako Jnr. - Consultant
3. Mr. Silas Quaye - CDC
4. Dr. Anthony Fosu - GHS/PPMED
5. Mr. Peter T. Peprah - GSS
6. Ms. Gertrude Akpalu - CCM
7. Mr. Samuel Dery - SPH, UG/ Consultant
8. Ms. Patricia Agyei - ADRA Ghana
9. Mr. Benjamin Kwarteng - ADRA Ghana
10. Mr. Lawrence Obeng Asomaning - WAPCAS
11. Mr. Edem Hini - GHANET
12. Mr. Godwin Asare - GHANET
13. Mr. Emmanuel Adjei Addo - WFP
14. Mr. John Lovelace Kpodoviah - MOFA
15. Mr. Emmanuel Adiku - Pro-Link
16. Ms. Charity Assem - SPH
17. Mr. Asamoah Boateng - PPAG
18. Mr. Kwasi Adu Manu - PPAG
19. Mr. DOI Charles Addo - GNFS
20. Mr. Patrick Banafo - GES/SHEP
21. Mr. Samuel Korsah - Min. of Youth & Sports

22. Rev. Frank Lartey Jnr.	-	NYA
23. Mr. Ansong Richard	-	GHS/ER
24. Ms. Juliana Sifah	-	GHS
25. Mr. David Tetteh Nartey	-	JSI/Care Continuum
26. Mr. Patrick Senagah	-	VRCC
27. Ms. Helen Odido	-	UNAIDS
28. Ms. Lisa Otoo	-	UNAIDS
29. Mr. Abdallah Yussif	-	UNAIDS
30. Mr. Kyeremeh Atuahene	-	GAC
31. Mr. Anthony Obeng	-	GAC
32. Mr. Jacob Sackey	-	GAC
33. Rev. Emmanuel Ackom	-	GAC
34. Mr. Anthony Boateng	-	GAC
35. Mr. Emmanuel Larbi	-	GAC
36. Ms. Cynthia Adobea Asante	-	GAC
37. Ms. Jewel Lamptey	-	GAC
38. Ms. Margaret Yamoah	-	GAC
39. Ms. Rita Afriyie	-	GAC
40. Ms. Golda Asante	-	GAC
41. Ms. Mary Anyomi	-	GAC
42. Mr. Michael Gold	-	GAC
43. Mr. William K. Yeboah	-	GAC
44. Mr. Raphael Sackitey	-	GAC
45. Ms. Gladys Semefa Agbenyo	-	GAC
46. Mr. Kester Boateng	-	GAC
47. Mr. Ebenezer Abrokwah	-	GAC
48. Ms. Fauzia Masaudu	-	GAC
49. Ms. Joana Mensah	-	GAC
50. Mr. Elorm Kwasi Adawudu	-	GAC
51. Ms. Baaba Yedua Bannerman	-	GAC

11.1 Indicator Reference Sheets

Indicator No	Code: A-1
Abbreviated name	HIV Prevalence rate
Indicator name	HIV prevalence rate
Level of Indicator	Impact
Description	
Definition	Percentage of people living with HIV. Prevalence measures the frequency of existing disease in a defined population at a specific time.
Numerator	Total number of infections.
Denominator	Total population.
Disaggregation/ additional dimension	General population age groups: 0−14, 15-24, 15-49 Key population: types (men who have sex with men, female sex workers, people who inject drugs, prisoners, age: 14-24, 15-49, 25+ Pregnant women age groups: 10−19, 15-24, 15-49
Data Collection	
Method of measurement	General population surveys with HIV-testing, sample surveys with HIV-testing in key populations, surveillance systems among pregnant women, key populations, key population subnational estimates. HIV prevalence can also be modelled using the Spectrum software.
Method of estimation	Modelling is often needed for both numerator and denominator, using data from surveys, surveillance and research studies.
Measurement frequency	Survey schedule; Spectrum model estimates updated every year
Data sources	HSS, GDHS, IBBSS, Spectrum
Data Quality Issues	
Known data limitations	Pregnant women have unprotected sex and are more likely to higher risk of exposure to HIV than the general population. Thus ANC data tend to over-estimate HIV prevalence

	Code: A-2
Abbreviated name	HIV incidence rate
Indicator name	HIV incidence
Level of Indicator	Impact
Description	
Definition	Number of new HIV infections per 1000 uninfected population. The incidence rate is the number of new cases per population at risk in a given time period
Numerator	Number of new HIV infections.
Denominator	Uninfected population (which is the total population minus people living with HIV).x 1000
Disaggregation/ additional dimension	General population age groups: 0−14, 15-24, 15-49 Key population: types (men who have sex with men, female sex workers, people who inject drugs, prisoners. Mode of transmission for children (including mother-to-child transmission), geographic location, sex
Data Collection	
Method of measurement	Longitudinal data on individuals are the best source of data but are rarely available for large populations. Special diagnostic tests in surveys or from health facilities can be used to obtain data on HIV incidence. In generalized epidemics, prevalence among very young age groups can be reviewed as a proxy for or a data source for triangulating incidence. HIV incidence can also be modelled (e.g. using the Spectrum software).
Method of estimation	Modelling is often used to obtain an estimate of new infections. Prevalence data are the main input data.
Measurement frequency	Survey schedule; Spectrum model estimates updated every year
Data sources	HSS, GDHS, IBBSS
Data Quality Issues	
Known data limitations	The quality and accuracy of the estimates depend on the quality and accuracy of the data used for the models. Where little information is available on HIV prevalence the model relies heavily on assumptions. On the other hand, where there is routine surveillance of groups most important to the epidemic, the projections will be based on substantial data resulting in high quality estimates and projections.

	Code: A-3
Abbreviated name	AIDS-related mortality rate
Indicator name	AIDS-related mortality rate (AIDS related deaths)
Level of Indicator	Impact
Description	
Definition	Estimated number of adults and children who have died due to AIDS-related causes in a specific year, expressed as a rate per 100 000 population
Numerator	Number of deaths due to AIDS x 100 000.
Denominator	Estimated population in the reporting year
Disaggregation/ additional dimension	General population age groups: 0−14, 15-49 Key population: types (men who have sex with men, female sex workers, people who inject drugs, transgender people, prisoners
Data Collection	
Method of measurement	Death registration data using ICD; verbal autopsy-based results are also used. The number of AIDs-related deaths can also be modelled using the Spectrum software.
Method of estimation	Empirical data from different HIV surveillance sources are consolidated to obtain estimates of the level and trend of HIV infection and of mortality in adults and children. Standard methods and tools for HIV estimates that are appropriate to the pattern of the HIV epidemic are used. However, to obtain the best possible estimates, judgement must be used as to the quality of the data and how representative it is of the population. Adjustments are often needed because of underreporting /misclassification of HIV/AIDS deaths. UNAIDS and WHO produce country-specific estimates of mortality due to AIDS every year. To calculate mortality rates, the total population is derived from the latest estimates produced by the United Nations Population Division. Predominant type of statistics: predicted
Measurement frequency	Annual if based on civil registration data or United Nations estimates
Data sources	Death and Birth Register, DHIMS
Data Quality Issues	
Known data limitations	Not all deaths due to AIDS may be reported or recorded.

	Code A-4
Abbreviated name	People Living with HIV (PLHIV)
Indicator name	Estimated number of people living with HIV
Level of Indicator	Impact
Description	
Definition	Estimated number of people living with HIV
Numerator	Estimated number of people living with HIV
Denominator	N/A
Disaggregation/ additional dimension	Age: 0-14, 15-19. 20-24, 15-49
Data Collection	
Method of measurement	Through spectrum modelling
Method of estimation	Modelling (spectrum) is often used to obtain an estimate of new infections. Prevalence data are the main input data.
Measurement frequency	Annually
Data sources	Spectrum modelling
Data Quality Issues	
Known data limitations	

	Code A-5
Abbreviated name	Antiretroviral therapy (ART) coverage
Indicator name	Antiretroviral therapy (ART) coverage (%)
Level of Indicator	Impact
Description	
Definition	Percentage of people living with HIV currently receiving ART among the estimated number of adults and children living with HIV.
Numerator	Number of adults and children who are currently receiving ART at the end of the reporting period.
Denominator	Estimated number of adults and children living with HIV.
Disaggregation/ additional dimension	Minimum for paper-based (routine): <15, 15+; Sex Key populations: types (TB patient, pregnant women) Newly enrolled (0-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+ Currently receiving (0-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+)
Data Collection	
Method of measurement	Numerator: The numerator can be generated by counting the number of adults and children who received antiretroviral combination therapy at the end of the reporting period. Data can be collected from facility-based ART registers or drug supply management systems. These are then tallied and transferred to cross-sectional monthly or quarterly reports, which can then be aggregated for national totals. Patients receiving ART in the private sector and public sector should be included in the numerator where data are available. Denominator: The denominator is generated by estimating the number of people with advanced HIV infection requiring (in need of/eligible for) ART. This estimation must take into consideration a variety of factors, including, but not limited to, the current number of people with HIV, the current number of patients on ART and the natural history of HIV from infection to enrolment on ART. A standard modelling HIV estimation method, such as in the Spectrum model, is recommended
Method of estimation	N/A
Measurement frequency	Annual
Data sources	NACP Routine facility information systems Cross-sectional population-based survey
Data Quality Issues	
Known data limitations	The reported results may include some people who have recently died, dropped out, transferred out, or been lost to follow-up as well as overestimate the true number of clients at the end of the reporting period.

	Code: A-6
Abbreviated name	HIV viral load suppression
Indicator name	HIV viral load suppression
Level of Indicator	Impact
Description	
Definition	Percentage of people on ART who are virologically suppressed (VL level ≤ 1000 copies/mL).
Numerator	Number of adults and children living with HIV and on ART who have a suppressed viral load (< 1000 copies/mL).
Denominator	Total number of adults on ART in the past 12 months.
Disaggregation/ additional dimension	Minimum for paper-based (routine): 0-4. 5-9, 10-14, 15-19, 20-24, 25-49, 50+
Data Collection	
Method of measurement	Viral load data recorded in patient records and reported through facilities. If there are representative surveys collecting viral load data among people living with HIV and those on ART, the survey values can be used. Nationally representative surveys of acquired drug resistance also provide information on viral suppression.
Method of estimation	If a viral load measure is not available from a sufficiently representative sample of people living with HIV who are on ART, the level of viral load suppression among those on ART but without a viral load measurement in the past 12 months needs to be estimated. Estimates can be derived on the basis of characteristics among those without a viral load measure and their expected viral load suppression.
Measurement frequency	Annual
Data sources	NACP Routine facility information systems Cross-sectional population-based survey
Data Quality Issues	
Known data limitations	

	Code A-7
Abbreviated name	HIV retention
Indicator name	% People with HIV known to be on ART 12 months after initiation of treatment
Level of Indicator	Impact
Description	
Definition	The reporting period is defined as any continuous 12-month period that has ended within a pre-defined number of months from the submission of the report. A 12-month outcome is defined as the outcome (i.e., whether the patient is still alive and on ART, dead or lost to follow-up) at 12 months after starting therapy.
Numerator	Number of adults and children who are still alive and on antiretroviral therapy at 12 months after initiating treatment
Denominator	Total number of adults and children who initiated antiretroviral therapy and who were expected to achieve 12-month outcomes within the reporting period, including those who have died since starting therapy, those who have stopped therapy, and those recorded as lost to follow-up at month 12.
Disaggregation/ additional dimension	By Age:0-14, 15-49 By Sex: Male / Female
Data Collection	
Method of measurement	To assess progress in increasing survival among infected adults and children by maintaining them on ART. The indicator is essential to assess levels of ART adherence and the potential impact ART is having on PLHIV. It measures patient currently on ART and reported through facilities.
Method of estimation	N/A
Measurement frequency	Annually
Data sources	Location: At health facility level (ART sites) Tools: Patient Folders , Antiretroviral therapy registers and ART cohort analysis report form
Data Quality Issues	
Known data limitations	The denominator may underestimate true “survival”, since some of those lost to follow-up are alive. In addition, retention on ART at 12 months needs to be interpreted in view of the baseline characteristics of the cohort of patients at the start of ART: mortality will be higher in sites where patients accessed ART at a later stage of infection. Therefore, collection and reporting of survival over longer durations of treatment outcomes provides a better picture of the long-term effectiveness of ART

	Code A-8
Abbreviated name	Percentage of individuals seropositive for syphilis
Indicator name	Percentage of individuals who were screened for syphilis, tested positive and treated
Level of Indicator	Impact
Description	
Definition	
Numerator	Number of people testing seropositive for syphilis within the reporting period
Denominator	Number of individuals tested for syphilis within the past 12 month
Disaggregation/ additional dimension	Age: <15, 15+ Sex: Male, Female Key population: FSW, MSM
Purpose	A. Testing pregnant women for syphilis early in pregnancy is important for their health and that of the fetus. This contributes to monitoring the quality of antenatal care services and services to prevent HIV among pregnant women. It is also a process indicator for assessing the validation of eliminating the mother-to-child transmission of syphilis. B. Syphilis infection in hospital attendees can be used to guide programmes for preventing sexually transmitted infections and may provide early warning of potential changes in HIV transmission in the general population. C. Treating antenatal care attendees who test positive for syphilis directly measures the programme for eliminating the mother-to-child transmission of syphilis and efforts to strengthen primary HIV prevention. It is also a process indicator for validating the elimination of mother-to-child transmission of syphilis.
Data Collection	
Method of measurement	Syphilis positivity can be measured using either nontreponemal tests (for example, RPR or VDRL) or treponemal tests (TPHA, TPPA, enzyme immunoassay or a variety of available rapid tests) or, ideally, a combination of both. A reactive nontreponemal test, especially if the titre is high, suggests active infection, whereas positivity with a treponemal test indicates any previous infection even if treated successfully. For the purposes of this indicator (intended to measure seropositivity), reporting positivity based on a single test result is acceptable. If both treponemal and nontreponemal test results on an individual person are available, then syphilis positivity should be defined as having positive results in both tests.
Method of estimation	N/A
Measurement	Annual

frequency	
Data sources	Program records, sentinel surveillance, special surveys
Data Quality Issues	
Known data limitations	Differences in the test type used or changes in testing practices may affect data. Knowledge of testing practices within the country (such as the proportion of treponemal versus non-treponemal testing used) should be used to interpret disease trends.

	Code A-9
Abbreviated name	TB/HIV Mortality Rate
Indicator name	TB/HIV Mortality rate per 100,000 population
Level of Indicator	Impact
Description	
Definition	Estimated number of adults and children who have died due to TB/AIDS-related causes in a specific year, expressed as a rate per 100 000 population
Numerator	Number of HIV positive people who die of HIV with TB as a contributory cause of death
Denominator	Number of people in the population x 100,000
Disaggregation/ additional dimension	Sex: female, male Age: 0-14; 15+ Duration of treatment: -24, 36 and 60 months
Data Collection	
Method of measurement	Death registration data using ICD; verbal autopsy-based results are also used. The number of TB/AIDs-related deaths can also be modelled using the Spectrum software.
Method of estimation	Spectrum software
Measurement frequency	Annual
Data sources	NTBCP
Data Quality Issues	
Known data limitations	TB/HIV mortality is estimated and not measured directly (e.g. from national vital registration systems), so particular care is needed when making interpretations as the estimated TBHIV mortality may change as a result of updates in the underlying model implemented in Spectrum

	Code: B-1
Abbreviated name	Anti-stigma
Indicator name	Percentage of women and men age 15-49 expressing accepting attitudes toward people living with HIV
Level of Indicator	Outcome
Description	
Definition	Proportion of respondents who had heard of HIV and AIDS and who expressed accepting attitudes for all of the following (1) would be willing to care for a family member with AIDS virus in their home, (2) would buy fresh vegetables from a shopkeeper who has the AIDS virus, (3) thought a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and (4) would not want to keep secret that a family member has the AIDS virus.
Numerator	Proportion of respondents who had heard of AIDS and who expressed accepting attitudes for all acceptance assessment questions
Denominator	Number of all respondents who have heard of HIV and AIDS
Disaggregation/ additional dimension	By Sex: Male / Female By Age: <15 / 15-19 / 20-24 / 25-29 / 30-34 / 35-39 / 40-44 / 45-49 / 50+ / 15-24 By region
Purpose	This indicator provides a measure of HIV-related stigma, although it is not a perfect measure of HIV-related stigma as people can provide the answers that they know they should. .
Data Collection	
Method of measurement	Through survey
Method of estimation	N/A
Measurement frequency	Every 5 years
Data sources	Primary source: Demographic and Health Survey (DHS) Survey tools, MICS Tertiary source: Ghana DHS Report
Data Quality Issues	
Known data limitations	One limitation is that there is no direct relationship between attitudes and actual behaviour

	Code: B-2
Abbreviated name	
Indicator name	Percent of PLHIV who report having experienced discriminatory attitudes
Level of Indicator	Outcome
Description	
Definition	Proportion of PLHIV who report having experienced any form of discriminatory attitudes toward them.
Numerator	Number of PLHIV who experienced discriminatory actions towards them
Denominator	Number of PLHIV surveyed
Disaggregation/ additional dimension	Sex, Age
Data Collection	
Method of measurement	Measures discrimination against people living with HIV, which may inhibit future use services and discourage people's participation in program activities.
Method of estimation	N/A
Measurement frequency	3-5 years
Data sources	Population survey data (e.g., GDHS)
Data Quality Issues	
Known data limitations	None

	Code: B-3
Abbreviated name	Condom use at last sex with high-risk partner
Indicator name	Percentage of Women and Men aged 15-49 reporting use of condoms during last high risk sex
Level of Indicator	Outcome
Description	
Definition	This indicator shows the extent to which condoms are used by those who engage in non-regular sexual relationships. High Risk Sex with a non-cohabiting, non-marital partner
Numerator	The number of respondents aged 15-49 years who had sex with a non-cohabiting, non-marital partner in the preceding 12 months and used a condom the last time they had sex with such a partner.
Denominator	Number of respondents age 15-49 years who had high risk sex
Disaggregation/ additional dimension	By Sex: Male / Female By Age: 15-24/ 15-49 Key population: FSW (all /Non PP), MSM, PWID
Data Collection	
Method of measurement	Population-based surveys for general population; Surveys targeting key populations such as IBBSS.
Method of estimation	N/A
Measurement frequency	Every 3- 5 years
Data sources	Primary source: Demographic and Health Survey (DHS) Survey tools and MICS Tertiary source: Ghana DHS Report
Data Quality Issues	
Known data limitations	Condom use at last sex provides no measure of the consistency of condom use. Increases in the prevalence of condom use at last sex, therefore, while a positive sign, do not mean that the people reporting condom use have not placed themselves at risk of acquiring HIV infection at any time in the preceding 12 months.

	Code:B-4
Abbreviated name	Condom use at last sex among those who had 2+ partners
Indicator name	Percentage of women and men aged 15-49 who had more than one partner in the past 12 months who used a condom during their last sexual intercourse
Level of Indicator	Outcome
Description	
Definition	The proportion of Women and Men aged 15-49 who had sexual intercourse with more than one partner who reports using a condom on the last occasion when they had either male-to-male or male to female sex with partner in the preceding 12 months.
Numerator	Number of respondents (aged 15–49) who reported having had more than one sexual partner in the last 12 months who also reported that a condom was used the last time they had sex.
Denominator	Number of respondents (15–49) who reported having had more than one sexual partner in the last 12 months.
Disaggregation/ additional dimension	By Sex: Male / Female By Age: <15 / 15-19 / 20-24 /25 -29 / 30 -34 / 35-39 / 40-44 / 45-49 / 15 -24 By Region
Data Collection	
Method of measurement	Population-based surveys for general population; Surveys targeting key populations such as IBBSS.
Method of estimation	N/A
Measurement frequency	Every 3- 5 years
Data sources	Primary source: Demographic and Health Survey (DHS) Survey tools Tertiary source: Ghana DHS Report and MICS
Data Quality Issues	
Known data limitations	None to date

	Code B-5
Abbreviated name	Comprehensive Knowledge on HIV and AIDS
Indicator name	Percentage of people, 15-49 years, who both correctly identify ways of preventing sexually transmission of HIV and who reject major misconceptions about HIV transmission
Level of Indicator	Outcome
Description	
Definition	This indicator measures progress towards universal knowledge of the essential facts about HIV transmission
Numerator	Number of respondents aged 15–49 years who gave the correct answer to all five questions: 1. Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners? 2. Can a person reduce the risk of getting HIV by using a condom every time they have sex? 3. Can a healthy-looking person have HIV? 4. Can a person get HIV from mosquito bites? 5. Can a person get HIV by sharing food with someone who is infected? Explanation of Numerator: The first three questions should not be altered. Questions 4 and 5 ask about local misconceptions and may be replaced by the most common misconceptions in the country. Examples include: “Can a person get HIV by hugging or shaking hands with a person who is infected?” and “Can a person get HIV through supernatural means?”
Denominator	All respondents aged 15–49 years who are surveyed
Disaggregation/ additional dimension	By Sex: Male / Female By Age: <15 / 15-19 / 20-24/ 25-29 / 30-39 / 40-49 / 50+ /15-24
Data Collection	
Method of measurement	Population-based surveys for general population; Surveys targeting key populations such as IBBSS.
Method of estimation	N/A
Measurement frequency	Every 3- 5 years
Data sources	GDHS Multiple Indicator Cluster Survey (MICS)
Data Quality Issues	
Known data limitations	None

	Code: B-6
Abbreviated name	HIV testing and counselling services
Indicator name	Percentage of women and men aged 15–49 years who received a HIV test in last 12 months and who know their results
Level of Indicator	Outcome
Description	
Definition	Proportion of women and men aged 15–49 years who received an HIV test in the last 12 months and who know their results.
Numerator	Number of respondents aged 15–49 years who have been tested for HIV during the last 12 months and who know their results
Denominator	Number of all respondents aged 15–49 years
Disaggregation/ additional dimension	By Sex: Male / Female By Age: 15-49/ 15-24
Data Collection	
Method of measurement	The numerator captures the number of individuals who received HIV Testing Services (HTS) and received their test results. At a minimum this means the person was tested for HIV and received their HIV test results. Existing HTS registers, log books, and reporting forms already in use to capture HTS can be revised to include the updated disaggregation categories. Examples of data collection forms include client intake forms, activity report forms, or health registers such as HTS registers, health information systems and non-governmental organization records. Data for the numerator should be generated by counting the total number of individuals who received HTS and their test results.
Method of estimation	
Measurement frequency	Every 3-5 years
Data sources	Primary source: DHS Survey tools Tertiary source: Ghana DHS Report, MICS
Data Quality Issues	
Known data limitations	Respondents who have not tested in the last 12 months may feel pressured to tell the interviewer that they have tested

	Code: B-7
Abbreviated name	HIV Testing and Counseling
Indicator name	Number of people who have ever received an HIV test and who know their results
Level of Indicator	Outcome
Description	
Definition	This indicator measures the number of clients that received testing and counseling services at sites such as hospitals, clinics, stand-alone centres and through mobile/outreach units.
Numerator	Number of people who have been tested for HIV and who received their results (disaggregated by age and sex)
Denominator	N/A
Disaggregation/ additional dimension	By Sex : Male / Female By Age : 15-49/15-24 Key population: FSW/MSM/PWID
Data Collection	
Method of measurement	This indicator measures the number of people receiving HIV tests during the reporting periods.
Method of estimation	Population based survey may also be used to estimate this indicator.
Measurement frequency	Routine monthly and quarterly data
Data sources	Tools: HTC Register (HTC 2)
Data Quality Issues	
Known data limitations	Failure to keep track of retests within the reporting period

	Code: B-8
Abbreviated name	PLHIV who know their status
Indicator name	Percentage of PLHIV who have been tested HIV-positive
Level of Indicator	Outcome
Description	
Definition	The proportion of people living with HIV who have been diagnosed with HIV and received their results
Numerator	Number of people living with HIV who have been diagnosed with HIV and received their results
Denominator	Estimated number of people living with HIV
Disaggregation/ additional dimension	General population age groups: 0−14, 15-24, 15-49 Key population: types (men who have sex with men, female sex workers, people who inject drugs, prisoners, age: 14-24, 15-49, 25+
Data Collection	
Method of measurement	Survey, routine data from the health information system
Method of estimation	
Measurement frequency	Annual
Data sources	Population-based surveys, HIV Case reports
Data Quality Issues	
Known data limitations	The absence of a unique identification system for PLHIV may make it difficult to accurately estimate this indicator from routine data.

	Code: B-9
Abbreviated name	Proportion of KPs who injected illicit drugs
Indicator name	Proportion of key populations who injected illicit drugs within the past 6 months
Level of Indicator	Outcome
Description	
Definition	Proportion of key populations who injected illicit drugs within the past 6 months
Numerator	Number of key populations who injected illicit drugs within the past 6 months
Denominator	Number of key populations surveyed
Disaggregation/ additional dimension	FSW, MSM, Prisoner, NPP
Data Collection	
Method of measurement	Through a survey
Method of estimation	N/A
Measurement frequency	Every 2-3 years
Data sources	Survey (IBBSS)
Data Quality Issues	
Known data limitations	Identification of PWID is difficult

	Code: B-10
Abbreviated name	KP Reached
Indicator name	Proportion of KPs reached with HIV prevention programs – defined package of services
Level of Indicator	Outcome
Description	
Definition	Comprehensive prevention programmes for key populations
Numerator	Number of key populations who have received a defined package of HIV prevention services
Denominator	Estimated number of KPs in the specified area
Disaggregation/ additional dimension	FSW/MSM/ Non-PP
Data Collection	
Method of measurement	"1. These indicators aim to monitor coverage of HIV prevention programs using program data and population size estimates. Where size estimations are not available, countries will be required to undertake estimation exercise as soon as possible. Until the revised estimates are provided, available estimates will be used as denominators. 2. Data is generated by counting people who receive a defined package of services that includes the minimum specified components- BCC; provision of consumables (condoms; lubricants, needles and syringes as needed); referral to another service such as STI diagnosis and treatment, HIV testing and counseling, etc. In addition, it could include other interventions from the comprehensive package of services. 3. The components of the package of HIV prevention interventions should be defined at country level and tailored to the needs of the target population. Refer to the comprehensive package of services recommended by technical partners- Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations: supplement to the 2014 consolidated guidelines for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (http://www.who.int/hiv/pub/toolkits/kpp-monitoring-tools/en). 4. Data collection requires reliable tracking systems that are designed to count the number of individual ""clients served"" at the same service or across services as opposed to the ""client visits"". This can be ensured through implementation of Unique Identification Codes (UIC). In the absence of UIC, report on the number of contacts until the time when a system to avoid double counting is set up. Agree on a timeframe for setting up such system and ensure adequate funds are available. 5. The coverage data from routine reporting will be triangulated with

	the coverage from survey data for overall impact assessment. 6. When targeting ""other vulnerable populations"" specify in the comments column of the performance framework which populations are being targeted."
Method of estimation	
Measurement frequency	Bi-annual
Data sources	Numerator: Program records Denominator: Estimated population size
Data Quality Issues	
Known data limitations	

	Code B-11
Abbreviated name	Mother to Child Transmission of HIV
Indicator name	Percentage of child HIV infections from HIV positive women
Level of Indicator	Outcome
Description	
Definition	Percentage of child HIV infections from HIV positive women
Numerator	The numerator is the estimated number of children who will be newly infected with HIV due to mother-to-child transmission among children born in the previous 12 months to HIV-positive women.
Denominator	Estimated number of HIV positive women who delivered in the previous 12 months
Disaggregation/ additional dimension	None
Purpose	Efforts have been made to increase access to interventions that can significantly reduce mother-to-child transmission, including combination antiretroviral prophylactic and treatment regimens and strengthened infant-feeding counselling. It is important to assess the impact of PMTCT interventions in reducing new paediatric HIV infections through mother-to-child transmission. The percentage of children who are HIV-positive should decrease as the coverage of interventions for PMTCT and the use of more effective regimens increases.
Data Collection	
Method of measurement	The mother-to-child transmission probability differs with the antiretroviral drug regimen received and infant-feeding practices. The transmission can be calculated by using the Spectrum model. The Spectrum12 computer programme uses the information on: a. The distribution of HIV-positive pregnant women receiving different antiretroviral regimens prior to and during delivery (peripartum) by CD4 category of the mother b. The distribution of women and children receiving antiretrovirals after delivery (postpartum) by CD4 category of the mother c. The percent of infants who are not breastfeeding in PMTCT programmes by age of the child d. Mother-to-child transmission of HIV probabilities based on various categories of antiretroviral drug regimen and infant feeding practices The estimated national transmission rate is reported in the Children 0-14 summary display in Spectrum. This variable can also be calculated using the variables in Spectrum on “New HIV infections” for children 0-14 years14 and dividing this by the variable “Women in need of PMTCT” There is not enough information available about other HIV

	transmission routes for children to include such infections in the model. In addition other modes of transmission are believed to be a small fraction of the overall infections among children. The Spectrum output variable “New HIV infections for children 0-1 years” is not used because some infections due to breastfeeding will take place after age 1 year
Method of estimation	
Measurement frequency	Annual
Data sources	PMTCT Register
Data Quality Issues	
Known data limitations	This indicator focuses on prevention of mother-to-child transmission of HIV through increased provision of antiretroviral medicines. The Spectrum HIV estimation modelling software takes into consideration the type of antiretroviral regimen as well as additional factors that influence HIV transmission rates such as infant feeding practices. Incorrect assumptions on some of these variables may affect the calculation in the model. For example, If an infant becomes positive, the indicator cannot distinguish between different pathways of infection (i.e., ARV treatment failure or infection during breastfeeding). Therefore, the indicator may underestimate the rates of MTCT in countries where long periods of breastfeeding are common. Consequently, trends in this indicator may not reflect overall trends in MTCT of HIV. It is difficult to follow-up on mother-infant pairs, particularly at the national level, due to the time lag in reporting and the number and range of health facility sites.

	Code: B-12
Abbreviated name	TB/HIV patients on ART
Indicator name	Percentage of estimated HIV-positive incident tuberculosis (TB) cases (new and relapse TB patients) that received treatment for both TB and HIV
Level of Indicator	Outcome
Description	
Definition	The number of HIV-positive new and relapsed TB cases on ART during TB treatment
Numerator	Number of HIV-positive new and relapsed TB patients started on TB treatment during the reporting period who are already on ART or who start on ART during TB treatment
Denominator	Number of HIV-positive new and relapsed TB patients registered during the reporting period.
Disaggregation/ additional dimension	Sex, age
Data Collection	
Method of measurement	Number of HIV positive TB patients reported from the health facilities
Method of estimation	
Measurement frequency	Every six months
Data sources	NACP and NTBCP
Data Quality Issues	
Known data limitations	None

	Code: B-13
Abbreviated name	HIV-positive patients screened for TB
Indicator name	Percentage of HIV-positive patients who were screened for TB in HIV care or treatment settings.
Level of Indicator	Outcome
Description	
Definition	
Numerator	Number of PLHIV in care (including PMTCT) whose TB status was assessed and recorded at their last visit during the reporting period
Denominator	Number of PLHIV enrolled in HIV care (including PMTCT) during the reporting period
Disaggregation/ additional dimension	Age, Sex
Data Collection	
Method of measurement	Number of HIV positive persons screened for TB and reported from the health facilities
Method of estimation	N/A
Measurement frequency	Monthly
Data sources	Routine Health Information System
Data Quality Issues	
Known data limitations	None

	Code: B-14
Abbreviated name	HIV+TB patients receiving CPT
Indicator name	Proportion of HIV+TB patients who receive CPT during TB treatment.
Level of Indicator	Outcome
Description	
Definition	Proportion of HIV+TB patients who receive CPT during TB treatment.
Numerator	Number of HIV+TB patients who receive CPT during TB treatment.
Denominator	Number of HIV+TB patients.
Disaggregation/ additional dimension	Sex
Data Collection	
Method of measurement	Number of HIV positive TB patients who receive CPT reported from the health facilities
Method of estimation	N/A
Measurement frequency	Monthly
Data sources	Routine Health Information System
Data Quality Issues	
Known data limitations	None

	Code: B-15
Abbreviated name	ART Centers providing DOTS
Indicator name	Proportion (%) of ART Centers providing DOTS
Level of Indicator	Output
Description	
Definition	Proportion (%) of ART Centers providing DOTS
Numerator	Number of ART Centers providing DOTS
Denominator	Number of ART Centers
Disaggregation/ additional dimension	Region
Data Collection	
Method of measurement	Facility data
Method of estimation	N/A
Measurement frequency	Annually
Data sources	NACP and NTBCP
Data Quality Issues	
Known data limitations	None

	Code: B-16
Abbreviated name	DOTS Centers providing ART
Indicator name	Proportion (%) of DOTS centers providing ART services
Level of Indicator	Output
Description	
Definition	Proportion (%) of DOTS centers providing ART services
Numerator	Number of DOTS centers providing ART services
Denominator	Number of DOTS centers
Disaggregation/ additional dimension	Region
Data Collection	
Method of measurement	Facility Data
Method of estimation	N/A
Measurement frequency	Annually
Data sources	NACP and NTBCP
Data Quality Issues	
Known data limitations	None

	Code: B-17
Abbreviated name	Co-management of tuberculosis and HIV treatment
Indicator name	Percentage of HIV-positive registered TB patients given ART during TB treatment.
Level of Indicator	Outcome
Description	
Definition	It measures progress in detecting and treating TB in people living with HIV.
Numerator	Number of HIV-positive registered TB patients given ART during TB treatment.
Denominator	Number of HIV-positive registered TB patients.
Disaggregation/ additional dimension	
Data Collection	
Method of measurement	Facility antiretroviral therapy registers and reports; programme monitoring tools Programme data and estimates of incident TB cases in people living with HIV
Method of estimation	
Measurement frequency	Monthly
Data sources	NACP/NTBCP
Data Quality Issues	
Known data limitations	This indicator provides a measure of the extent to which collaboration between the national TB and HIV programmes is ensuring that people with HIV and TB disease are able to access appropriate treatment for both diseases. However, this indicator will also be affected by low uptake of HIV testing, poor access to HIV care services and ART, and poor access to TB diagnosis and treatment. Separate indicators exist for each of these factors and should be referred to when interpreting the results of this indicator.

	Code: B-18
Abbreviated name	
Indicator name	Percentage of storage sites where commodities are stocked according to plan, by level in supply system
Level of Indicator	Outcome
Description	
Definition	Proportion of storage sites where commodities are stocked according to plan, by level in supply system
Numerator	Number of storage sites where commodities are stocked according to plan
Denominator	The total number of storage sites
Disaggregation/ additional dimension	Level in supply system
Data Collection	
Method of measurement	Quarterly monitoring report
Method of estimation	N/A
Measurement frequency	Quarterly
Data sources	NACP
Data Quality Issues	
Known data limitations	None

	Code: B-19
Abbreviated name	ART stock-out
Indicator name	Percentage of treatment sites that had a stock-out of one or more required antiretroviral medicines during a defined period (General clinic, maternal and child, TB site)
Level of Indicator	Outcome
Description	
Definition	Proportion of health facilities dispensing ARVs that experienced one or more stock-outs of at least one required ARV drug during the quarter. A stock-out is defined as the complete absence of a required ARV drug at a delivery point for at least one day. Health facilities include public and private facilities, health centre and clinics as well as health facilities that are ran by faith-based or non-governmental organizations.
Numerator	Number of ART sties that had a stock-out of any ARV drugs during the reporting period
Denominator	Total number of ART sites
Disaggregation/ additional dimension	By Type : Public / Private / Mission / NGO / Quasi-government By Site Type : Hospital /Clinic / Health Centre / Health Post /CHPS compound By District By Region
Data Collection	
Method of measurement	The country's supply chain standard operating procedures should outline the min and max levels for each level of the system. These levels were defined by the needed throughput (the amount of pharmaceuticals intended to flow through the system in a given period), the space available and the frequency of distribution. Observations of storage site and level-specific quantity of stock should be available through one or several of the following: the Procurement Planning and Monitoring Report for HIV and FP commodities (for condoms), a warehouse monitoring system, regular program monitoring reports, an existing logistics management information system, stock status reports/stock keeping records/regular physical counts, order forms from the central/regional/district/other levels, or regular supervision visits. For the required central level and at least one intermediate level, there may be numerous observations (through physical counts performed or spot checks) of stock status for the products of interest annually, or there may be monthly counts, either way, the stock status will be monitored closely and updated with each transaction. These observations should be analyzed in this fashion: · Document

	observations for each product of interest. · Sort observations for each product into “quantities between maximum and minimum quantities/months of stock” and quantities above or below maximum and minimum. · Number of observations where quantities are between maximum and minimum are the numerator. · Total observations available are the denominator. Example 1: if the Central Medical Store (CMS) has monthly stock observations for RTKs, and nine of which are within max and min levels but the remaining three represent a stockout then for the CMS the resulting measurement would be 9/12 or 75% Example 2: If there are ten regions in a country and the regional medical stores report to the CMS quarterly, then ideally there should be 40 observations. Of these observations 25 are stocked according to plan for ARVs. In this scenario the resulting measurement for ARVs at the regional level is 25/40 or 62.5%.
Method of estimation	N/A
Measurement frequency	Routinely, monthly or quarterly
Data sources	Program records, LMIS, Health facility survey reports, site visit reports
Data Quality Issues	
Known data limitations	Some facilities that experience stock outs may not be counted leading to an underestimation of facilities experiencing stock outs.

	Code: B-20
Abbreviated name	Prevention of Mother to Child Transmissions
Indicator name	Percentage of HIV-positive pregnant women who received ART to reduce the risk of mother-to-child-transmission (MTCT) during pregnancy
Level of Indicator	Outcome
Description	
Definition	The number of HIV-infected pregnant women who received anti-retrovirals (ARVs) to reduce the risk of mother-to-child transmission during the last 12 months.
Numerator	Number of HIV-infected pregnant women who received antiretroviral drugs to reduce the risk of mother-to-child transmission in the last 12 months
Denominator	Estimated number of HIV-infected pregnant women in the last 12 months
Disaggregation/ additional dimension	By Stage of HIV: Newly diagnosed / Known positive at entry
Data Collection	
Method of measurement	Health facility level using the PMTCT register
Method of estimation	N/A
Measurement frequency	Routine data is collected continuously as part of service provision Monthly/Quarterly/Annually
Data sources	PMTCT – ARV Register (Mother) at Treatment sites/health facility
Data Quality Issues	
Known data limitations	Failure to add up numbers of women provided with ART prophylaxis at all three service points – ANC, Labour and delivery, and post-natal. Inclusion of women who become pregnant while on ART and those provided with life-long ART The indicator measures ARV's dispensed and not ARV's consumed, thus it is not possible to determine adherence to ARV regimen. It also excludes mother-infant pairs who only received infant prophylaxis. There is a risk of double counting as a pregnant woman receiving ART at ANC should have multiple visits for each pregnancy therefore partners should ensure a data collection and reporting system is in place to minimize double counting of the same pregnant women across visits including a paper based longitudinal ANC or PMTCT register (meaning a register that is able to record all information about 1 pregnancy in one location, with rows or columns

	that allow for recording information on multiple visits during that pregnancy) or an electronic medical record/patient tracking system.

	Code: B-21
Abbreviated name	External economic support to affected households
Indicator name	Number and percentage of orphaned and vulnerable children aged 0 – 17 whose households received free basic external support in caring for the child
Level of Indicator	Outcome
Description	
Definition	1. External support is defined as help free of charge coming from a source other than friends, family or neighbours unless they are working for a community-based group or organization. Ideally, this support should be designed along the national guidelines for OV C support where these exist. It includes- medical support, school related assistance, psychological and other socio-economic support. 2. For the purposes of this indicator, an orphan is defined as a child younger than 18 years who has lost both parents. A child made vulnerable by HIV is younger than 18 years and fulfills any of the following: ▪ Has lost one or both parents; ▪ Has a chronically ill parent; ▪ Lives in a household where, in the last 12 months, at least one adult died and was sick for three of the four months before he or she died; ▪ Lives in a household where at least one adult was seriously ill for at least three of the past 12 months; ▪ Lives with a guardian who is 65 years or older; or ▪ Lives with guardian(s) who are physically impaired. 3. Implementers need to devise reliable tracking mechanisms that capture accurate data to avoid double counting. Ensure that clients served (as opposed to client visits) for the same service or across services are counted. 4. Compliance with national guidelines should be measured periodically through supervision, assessments and the survey methods proposed. 5. Population based surveys (DHS, AIS, MICS) provide complementary validation methods
Numerator	Number of orphaned and vulnerable children aged 0–17 years who live in households that received at least one of the four types of support for each child
Denominator	Total number of orphaned and vulnerable children aged 0–17
Disaggregation/ additional dimension	Sex, Regions
Data Collection	

Method of measurement	Population-based surveys such as Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other nationally representative survey An assessment of the household's wealth (through an assessment of asset ownership) is completed at the data analysis stage using the wealth quintile to identify the poorest 20% of households. However, since it is not possible to identify the poorest households at the time of data collection, questions on economic support should be asked to all households. Only those who fall in the lowest wealth quintile will be included in the indicator As part of a household survey, a household roster should be used to list all members of the household together with their ages, and identify all households with children less than 18 years of age, and with orphans, in the last year before the survey. Questions are then asked for each such household about the types of economic support received in the last 3 months, and the primary source of the help The household heads or respondents are asked the following questions about the type of external economic support they have received in the last 3 months Has your household received any of the following forms of external economic support in the last 3 months: a) Cash transfer (e.g., pensions, disability grant, child grant, to be adapted according to country context) b) Assistance for school fees c) Material support for education (e.g., uniforms, school books etc) d) Income generation support in cash or kind e.g. agricultural inputs e) Food assistance provided at the household or external institution (e.g., at school) f) Material or financial support for shelter g) Other form of economic support (specify) An assessment of the household's wealth (through an assessment of asset ownership) is completed at the data analysis stage using the wealth quintile at which point it will possible to assess the extent to which the poorest households are receiving external support
Method of estimation	
Measurement frequency	Annually
Data sources	Program reports
Data Quality Issues	
Known data limitations	Proxy indicators of AIDS affectedness (such as "chronic illness") have often been poorly associated with HIV, have weak associations

	with adverse developmental outcomes, and have proven difficult to define in household questionnaires

	Code: B-22
Abbreviated name	Early Infant Diagnosis
Indicator name	Percentage of infants born to women living with HIV receiving a virologic test for HIV within 2, and 12 months of birth
Level of Indicator	Outcome
Description	
Definition	This indicator measures HIV-exposed infants (born to HIV-infected women) who were tested for HIV within 12 months of birth
Numerator	Number of infants who received an HIV test within 2, 12 months of birth, during the reporting period. Infants tested should only be counted once
Denominator	Number of HIV-positive pregnant women giving birth in the last 12 months
Disaggregation/ additional dimension	By timing: within 2 months/ 12 months
Data Collection	
Method of measurement	"The denominator is a proxy measure for the number of infants born to HIV-infected women.Data should be aggregated from the laboratory databases. This information should only include the most recent test result for an infant tested in the first two months of life. To ensure comparability, the Spectrum output is used for the denominator for global analysis. This is a proxy measure for the number of infants born to women living with HIV. "
Method of estimation	N/A
Measurement frequency	Routine data (collated monthly, quarterly and annually)
Data sources	PMTCT - Infant Register
Data Quality Issues	
Known data limitations	This indicator can be under-reported because children born outside health facilities or lost to follow up may not be captured

	Code: B-23
Abbreviated name	Prevalence of recent intimate partner violence
Indicator name	Proportion of women who experienced physical or sexual violence from a male intimate partner in the last 12 months
Level of Indicator	Outcome
Description	
Definition	An intimate partner is defined as a cohabiting partner, whether or not they had been married at the time. The violence could have occurred after they had separated.
Numerator	Women 15–49 years old who have or have ever had an intimate partner and report experiencing physical or sexual violence from at least one of these partners in the past 12 months.
Denominator	Total number of women 15–49 years old surveyed who currently have or have had an intimate partner
Disaggregation/ additional dimension	By all women/ FSW
Data Collection	
Method of measurement	Data collection on violence against women requires special methodologies that adhere to the ethical and safety standards to ensure that information is gathered in an ethical manner that does not pose a risk to study subjects, and in a way that maximizes data validity and reliability. These women are asked if they experienced physical or sexual violence from a male intimate partner in the past 12 months. Physical or sexual violence is determined by asking women if their partner did any of the following: • Slapped her or threw something at her that could hurt her • Pushed her or shoved her • Hit her with a fist or something else that could hurt • Kicked her, dragged her or beat her up • Choked or burned her • Threatened her with or used a gun, knife or other weapon against her • Physically forced her to have sexual intercourse against her will • Forced her to do something sexual she found degrading or humiliating • Made her afraid of what he would do if she did not have sexual intercourse with him Those reporting at least one incident corresponding to any one of these items the last 12 months are included in the numerator.
Method of estimation	
Measurement frequency	3-5 years
Data sources	Population-based surveys, such as WHO multi-country surveys, Demographic and Health Surveys or AIDS Indicator Surveys (domestic violence module) and the International Violence against Women Surveys.

Data Quality Issues	
Known data limitations	The indicator focuses on recent IPV, rather than ever experience of IPV, in order to enable monitoring and evaluating progress over time. Ever experience of IPV would show little change over time, no matter what the level of programming, since the numerator would include the same women for as long as they fell into the target age group. Sustained reductions in IPV are not possible without fundamental changes in unequal gender norms, gender relations at the household and community level, women's legal and customary rights, gender inequalities in access to health care, education, and economic and social resources, and male involvement in reproductive and child health. Thus, changes in this one IPV indicator will be a bellwether for changes in the status and treatment of women in all the different societal domains, which in turn directly and indirectly contributes to reduced risk of HIV. Even after adhering to the WHO ethical and safety guidelines and providing a good setting in which to conduct interviews, there will always be some women who will not disclose this information. This means that estimates will likely be more conservative than the actual level of violence which has taken place in the surveyed population.

	Code: B-24
Abbreviated name	
Indicator name	Percentage of Key Populations who avoided seeking HIV services because of stigma and discrimination
Level of Indicator	
Description	
Definition	Proportion of Key Populations who avoided seeking HIV services because of stigma and discrimination
Numerator	Number of Key Populations surveyed who report avoiding seeking HIV services because of stigma and discrimination
Denominator	Number of Key Populations surveyed
Disaggregation/ additional dimension	Type of key population
Data Collection	
Method of measurement	Survey
Method of estimation	
Measurement frequency	3-5 years
Data sources	Survey
Data Quality Issues	
Known data limitations	None

	Code C-1
Abbreviated name	HTS
Indicator name	Number of people who received HTS and know their status
Level of Indicator	Output
Description	
Definition	Number of people who have been tested for HIV during the reporting period and who know their results
Numerator	Number of people who received HTS and know their status
Denominator	NA
Disaggregation/ additional dimension	Sex: Age: 15-19, 20-24, 15-49: Test Results: positive and negative PMTCT, TB, FSW, MSM
Data Collection	
Method of measurement	Routine data collection (monthly and quarterly)
Method of estimation	
Measurement frequency	Monthly
Data sources	RHIS
Data Quality Issues	
Known data limitations	Multiple counting because of the absence of unique identification system

	Code C-2
Abbreviated name	
Indicator name	Percentage/ Number of people reached with HIV prevention programs - defined package of HIV Services
Level of Indicator	Output
Description	
Definition	Proportion of people reached with HIV prevention defined package of HIV Services
Numerator	Number of people who have received a defined package of HIV prevention services
Denominator	Estimated number of people with the defined group
Disaggregation/ additional dimension	General population, youth, In-school youth, FSW, MSM, Prisoners
Data Collection	
Method of measurement	1. Data is generated by counting the number of unique individuals who receive a defined package of services that includes the minimum specified components- BCC; provision of consumables (condoms; lubricants, needles and syringes as needed); referral to another service such as STI diagnosis and treatment, HIV testing and counseling, etc. In addition, it could include other interventions from the comprehensive package of services. 2. The components of the package of HIV prevention interventions should be defined at country level and tailored to the needs of the target population. Refer to the comprehensive package of services recommended by technical partners- *Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations: supplement to the 2014 consolidated guidelines for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015* (http://www.who.int/hiv/pub/toolkits/kpp-monitoring-tools/en). 3. Data collection requires reliable tracking systems that are designed to count the number of individual "clients served" at the same service or across services as opposed to the "client visits". This can be ensured through implementation of Unique Identification Codes (UIC). In the absence of UIC, report on the number of contacts until the time when a system to avoid double counting is set up. Agree on a timeframe for setting up such system and ensure adequate funds are available. 4. The coverage data from routine reporting will be triangulated with the coverage from survey data for overall impact assessment.
Method of estimation	
Measurement frequency	Monthly

Data sources	Routine data from implementing partners
Data Quality Issues	Multiple counting because of the absence of unique identification system
Known data limitations	

	Code C-3
Abbreviated name	
Indicator name	Number of people reached with anti stigma and discrimination messages
Level of Indicator	Output
Description	
Definition	Number of people reached with anti stigma and discrimination messages
Numerator	Number of people reached with anti stigma and discrimination messages
Denominator	N/A
Disaggregation/ additional dimension	Sex: male, Female
Purpose	
Data Collection	
Method of measurement	Routine data reported from implementing partners
Method of estimation	
Measurement frequency	Monthly
Data sources	Routine data from implementing partners
Data Quality Issues	
Known data limitations	Multiple counting because of the absence of unique identification system

	Code C-4
Abbreviated name	
Indicator name	Condoms and lubricant purchased
Level of Indicator	Output
Description	
Definition	This indicator measures the annual requirements of condoms and lubricants that have been purchased
Numerator	Condoms and lubricant purchased
Denominator	N/A
Disaggregation/ additional dimension	Type: male / female condoms, lubricants
Data Collection	
Method of measurement	Procurement record from the MoH
Method of estimation	
Measurement frequency	Annually
Data sources	MOH
Data Quality Issues	
Known data limitations	None

	Code: C-5
Abbreviated name	Number of condoms and lubricants distributed
Indicator name	Number of condoms and lubricants distributed (that reached the end user)
Level of Indicator	Output
Description	
Definition	The indicator measures the number of condoms and lubricants actually distributed to **end users of condoms** among the general and key populations
Numerator	Number of male and female condoms distributed to general and key populations
Denominator	N/A
Disaggregation/ additional dimension	By type : male / female condoms, lubricants By Target population: General Population, FSW, MSM, PWID By Source: clinic and non-clinic based, vending machines
Data Collection	
Method of measurement	Routine distribution data from implementing partners
Method of estimation	
Measurement frequency	Data for this indicator is collected continuously as condoms are distributed to end user
Data sources	Tools at service delivery level: Programme monitoring tool (Commodity Stock Management Sheet (SCT 6) At district, region, and national: Programme monitoring report
Data Quality Issues	
Known data limitations	All sources of condoms may not be covered

	Code C-6
Abbreviated name	HTS self-test kits
Indicator name	Number of HTS self-test kits distributed
Level of Indicator	
Description	
Definition	This indicator is a proxy to measure self testing for HTS
Numerator	Number of HTS self-test kits distributed
Denominator	N/A
Disaggregation/ additional dimension	Regions
Data Collection	
Method of measurement	Routine distribution data from implementing partners
Method of estimation	
Measurement frequency	Monthly
Data sources	Implementing partners
Data Quality Issues	
Known data limitations	None

	Code C-7
Abbreviated name	
Indicator name	Number of KPs and vulnerable groups enrolled on National Health Insurance Scheme (NHIS)
Level of Indicator	Output
Description	
Definition	
Numerator	Number of KPs and vulnerable groups enrolled on National Health Insurance Scheme (NHIS)
Denominator	*N/A*
Disaggregation/ additional dimension	*KP Type, PLHIV*
Purpose	*Measure the enrolment of KP and* vulnerable groups such as PLHIV on health insurance to provide financial access to care
Data Collection	
Method of measurement	*Routine information system*
Method of estimation	
Measurement frequency	*Quarterly*
Data sources	*Health facilities and GAC*
Data Quality Issues	
Known data limitations	

	Code C-8
Abbreviated name	
Indicator name	Number and percentage of adults and children living with HIV who receive care and support services outside health facilities during the reporting period
Level of Indicator	Output
Description	
Definition	
Numerator	Number of adults and children living with HIV who received at least one service from the essential package (regardless of the number of service provision episodes) outside a health facility during the reporting period
Denominator	*N/A*
Disaggregation/ additional dimension	Sex, age, service provider and location
Purpose	This indicator tracks information on the level of coverage and care and support provided outside facilities (at the household and community levels) to people living with HIV.
Data Collection	
Method of measurement	To ensure quality care, all people living with HIV should receive health care support for their illness regardless of whether that support takes place within a facility or outside of a facility. There may be country-specific approaches to grouping services into the major care and support categories. However, to be counted in this numerator, a person living with HIV must receive at least one service from the essential package of services, and that service must take place outside a health facility. For the purposes of reporting on this indicator, “outside a facility” may refer to community gatherings, mobile units or home-based care settings. Services provided in primary, secondary or tertiary health facilities or hospitals should not be counted here. An essential package of services for people living with HIV is recommended to include: • Health care and home-based care, such as counseling on and monitoring of adherence to antiretroviral therapy; pain management; and referral of people suspected of having TB; • Spiritual and psychosocial support, such as participation in self-help groups and peer counseling related to hopes, fears, meaning, guilt, etc.; mental health; succession planning; and preparing for and coping with the process of dying; • Socioeconomic support, such as nutritional support; social

	and health insurance; social patronage; and financial support; • Legal and human rights, such as legal aid; protection against violence and discrimination; stigma; and child protection services; and • Integrated disease prevention services with care, such as HIV risk reduction messaging and counseling. Data can be obtained from all HIV care and support service providers
Method of estimation	
Measurement frequency	*Quarterly*
Data sources	*Implementing Partners*
Data Quality Issues	
Known data limitations	

	Code C-9
Abbreviated name	Number HIV+ pregnant women receiving ARVs-Option B+
Indicator name	Number and percentage of HIV-positive pregnant women who received anti-retrovirals to reduce the risk of mother-to-child transmission
Level of Indicator	Output
Description	
Definition	The number of HIV-infected pregnant women who received anti-retrovirals (ARVs) to reduce the risk of mother-to-child transmission during the last 12 months.
Numerator	Number of HIV-infected pregnant women who received antiretroviral drugs to reduce the risk of mother-to-child transmission in the last 12 months
Denominator	Estimated number of HIV-infected pregnant women in the last 12 months
Disaggregation/ additional dimension	By Stage of HIV: Newly tested / Known positive at entry By Regimen Type: prophylactic regimens using combination of 3 ARVsART for HIV+ pregnant women eligible for treatment By Region
Data Collection	
Method of measurement	For the numerator: national programme records aggregated from programme monitoring tools, such as patient registers and summary reporting forms For the denominator: estimation models such as Spectrum, or antenatal clinic surveillance surveys in combination with demographic data and appropriate adjustments related to coverage of ANC surveys Programme monitoring and HIV surveillance
Method of estimation	
Measurement frequency	Routine data is collected continuously as part of service provision Monthly/Quarterly/Annually
Data sources	PMTCT – ARV Register (Mother) at Treatment sites/health facility
Data Quality Issues	
Known data limitations	Failure to add up numbers of women provided with ART prophylaxis at all three service points – ANC, Labour and delivery, and post-natal. Inclusion of women who become pregnant while on ART and those provided with life-long ART The indicator measures ARV's dispensed and not ARV's consumed, thus it is not possible to determine adherence to ARV regimen.

	It also excludes mother-infant pairs who only received infant prophylaxis.

	Code C-10
Abbreviated name	Number (%) HEI receiving ARV prophylaxis
Indicator name	Number and percentage of infants born to HIV positive mothers who received anti-retrovirals to reduce the risk of mother-to-child transmission of HIV
Level of Indicator	Output
Description	
Definition	This indicator measures HIV-exposed infants provided with anti-retrovirals to prevent mother to child transmission of HIV.
Numerator	Number of infants born to HIV positive mothers who received anti-retroviral drugs to reduce the risk of mother-to-child transmission
Denominator	Total number of infants born to HIV-positive women in the last 12 months
Disaggregation/ additional dimension	By Region
Data Collection	
Method of measurement	Routine data reported through health facilities
Method of estimation	
Measurement frequency	Routine monthly and quarterly data
Data sources	PMTCT - Infant Register
Data Quality Issues	
Known data limitations	None to date

	Code C-11
Abbreviated name	
Indicator name	Number (%) HEI receiving CTX prophylaxis
Level of Indicator	
Description	
Definition	Proportion of HEI receiving CTX prophylaxis
Numerator	Number (%) HEI receiving CTX prophylaxis
Denominator	Number of HEI
Disaggregation/ additional dimension	Region
Data Collection	
Method of measurement	Routine data reported through health facilities
Method of estimation	
Measurement frequency	Routine monthly and quarterly data
Data sources	PMTCT - Infant Register
Data Quality Issues	
Known data limitations	None

	Code: C-12
Abbreviated name	Number (%) HEI that have virological test within 2 months of birth
Indicator name	Number and percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth
Level of Indicator	Output
Description	
Definition	This indicator measures HIV-exposed infants (born to HIV-infected women) who were tested for HIV within 12 months of birth
Numerator	Number of infants who received an HIV test within 2 months of birth, during the reporting period. Infants tested should only be counted once
Denominator	Number of HIV-positive pregnant women giving birth in the last 12 months
Disaggregation/ additional dimension	By timing at 6-14 weeks By Test Type : PCR / ELISA By HIV serostatus
Data Collection	
Method of measurement	Early Infant Diagnosis (EID) testing laboratories for the numerator, and Spectrum estimates, central statistical offices, and/or sentinel surveillance for the denominator
Method of estimation	
Measurement frequency	Routine data (collated monthly, quarterly and annually)
Data sources	PMTCT - Infant Register
Data Quality Issues	
Known data limitations	This indicator can be under-reported because children born outside health facilities or lost to follow up may not be captured.

	Code C-13
Abbreviated name	
Indicator name	MTCT Rate at 18 months
Level of Indicator	Outcome
Description	
Definition	Proportion of HEI infected with HIV at 18 months
Numerator	Number of HEI infected with HIV at 18 months
Denominator	Number of HEI infected at 18 months
Disaggregation/ additional dimension	Region
Data Collection	
Method of measurement	Routine data reported through health facilities
Method of estimation	
Measurement frequency	Routine data (collated monthly, quarterly and annually)
Data sources	PMTCT - Infant Register
Data Quality Issues	
Known data limitations	None

	Code: C-14
Abbreviated name	Number of health facilities providing ARTs
Indicator name	Number and percentage of health facilities that offer antiretroviral therapy (prescribe and/or provide clinical follow-up)
Level of Indicator	Output
Description	
Definition	A health facility refers to the lowest level of service delivery providing ART including public and private hospitals, clinics, and mobile units. Antiretroviral therapy services are activities including the provision of antiretroviral drugs and clinical monitoring for antiretroviral therapy among those with HIV infection.
Numerator	Number of accredited health facilities that offer antiretroviral therapy (that is, prescribe and/or provide clinical follow-up)
Denominator	Total number of health facilities, excluding specialized facilities where antiretroviral therapy services are or will never be relevant and provide ART.
Disaggregation/ additional dimension	By Type Facility : Public / Private / Mission / NGO / Quasi-government By site type : hospital /clinic / health centre / health post /CHPS compound By District By Region
Data Collection	
Method of measurement	Through routine facility data
Method of estimation	
Measurement frequency	Routinely, monthly or quarterly
Data sources	Routine Health Information System
Data Quality Issues	
Known data limitations	This is purely an output measure. This indicator does not describe the geographic location or distribution of service outlets. This indicator does not consider the quality of service provision, which would require more in-depth evaluation efforts like facility surveys. This is not a complete measure of coverage.

	Code C-15
Abbreviated name	
Indicator name	Number of people newly initiated on ART
Level of Indicator	Output
Description	
Definition	The number f PLHIV who are newly initiated on ART
Numerator	Number of people newly initiated on ART
Denominator	N/A
Disaggregation/ additional dimension	Age: 0-14/ 15-49
Data Collection	
Method of measurement	Through routine facility data
Method of estimation	
Measurement frequency	Monthly/Quarterly
Data sources	NACP ART database
Data Quality Issues	
Known data limitations	None

	Code C-16
Abbreviated name	HIV viral load suppression - Children
Indicator name	Number of children living with HIV who are on ART with suppressed viral load in the past 12 months
Level of Indicator	Output
Description	
Definition	Percentage of children on ART who are virologically suppressed (VL level ≤ 1000 copies/mL)
Numerator	Number of children living with HIV who are on ART with suppressed viral load in the past 12 months
Denominator	Number of children on ART
Disaggregation/ additional dimension	
Data Collection	
Method of measurement	Through routine facility data
Method of estimation	
Measurement frequency	Monthly/quarterly
Data sources	NACP database
Data Quality Issues	
Known data limitations	None

	Code C-17
Abbreviated name	Percentage of facilities that carry out HIV viral load testing (cumulative)
Indicator name	Percentage of facilities providing antiretroviral therapy using CD4 monitoring in accordance with national guidelines or policies, on site or through referral
Level of Indicator	Output
Description	
Definition	This indicator is an output indicator that indicates the proportion of health facilities that provide regular monitoring of CD4 counts for patients on ART. Monitoring of CD4 counts can be done on-site or through referrals.
Numerator	Number of health facilities providing antiretroviral therapy using CD4 monitoring in accordance with national guidelines or policies, either on site or through referral
Denominator	Total number of health facilities providing antiretroviral therapy
Disaggregation/ additional dimension	By Type of Facility : Public / Private / Mission / NGO / Quasi-government By Site Type : Hospital /Clinic / Health Centre / Health Post /CHPS compound By District By Region
Data Collection	
Method of measurement	Routine facility monitoring data
Method of estimation	
Measurement frequency	Routinely (monthly or quarterly)
Data sources	Programme monitoring Checklist /Report NACP database
Data Quality Issues	
Known data limitations	The mere availability of a CD4 machine at a facility is sufficient for patient monitoring

	Code C-18
Abbreviated name	
Indicator name	Number of service providers trained to provide PMTCT and ART services
Level of Indicator	Output
Description	
Definition	Number of service providers trained to provide PMTCT and ART services
Numerator	Number of service providers trained to provide PMTCT and ART services
Denominator	
Disaggregation/ additional dimension	Service type: ART/ PMTCT
Data Collection	
Method of measurement	Routine training report
Method of estimation	
Measurement frequency	Yearly
Data sources	NACP
Data Quality Issues	
Known data limitations	None

	Code C-19
Abbreviated name	Percentage of funding for the HIV response
Indicator name	Percentage of Funding for activities in the National Strategic Plan provided by the Government of Ghana and other funding sources
Level of Indicator	Output
Description	
Definition	The indicator measures the sum total amount of money spent in the past year by the Government of Ghana in any of the eight key intervention areas. The amount summed up must be actual expenditures, not budgets or commitments.
Numerator	Total amount of money spent by Government of Ghana on HIV and AIDS interventions.
Denominator	The total of money from all sources (Domestic public, Domestic private and International) spent on HIV and AIDS
Disaggregation/ additional dimension	By Source of Funding: GoG, Global Fund, PEPFAR, Others
Purpose	As the national and international response to AIDS continues to scale up, it is increasingly important to accurately track in detail: (i) how funds are spent at the national level and (ii) where the funds originate. The data are used to measure national commitment and action, which is an important component of the Global AIDS Response Progress *on HIV & AIDS*. In addition, the data help national-level decision- makers monitor the scope and effectiveness of their programmes
Data Collection	
Method of measurement	NASA
Method of estimation	
Measurement frequency	Annually
Data sources	National AIDS Spending Assessment (NASA) tool
Data Quality Issues	
Known data limitations	Tracking of expenditures may not be comprehensive and/or accurate. For example, HIV and AIDS expenditures may be part of broader systems of service provision. In such a situation, the diagnosis and treatment of opportunistic infections would require a special costing estimate to track the specific resources allocated to AIDS-related diagnosis and treatment. Also HIV and AIDS expenditures might occur outside the health system given the nature

	of expanded responses to AIDS.

	Code C-22
Abbreviated name	
Indicator name	Number of Enterprises with HIV workplace programmes aligned to NSP
Level of Indicator	Output
Description	
Definition	Number of Enterprises with HIV workplace programmes aligned to NSP
Numerator	Number of Enterprises with HIV workplace programmes aligned to NSP
Denominator	
Disaggregation/ additional dimension	*N/A*
Data Collection	
Method of measurement	*Monitoring by report from GAC*
Method of estimation	
Measurement frequency	*Annually*
Data sources	*GAC*
Data Quality Issues	
Known data limitations	*None*

	Code C-23
Abbreviated name	
Indicator name	Number of laboratories and blood centers/banks: A. Engaged in Continuous Quality Improvement (CQI) activities B. Audited and achieved accreditation C. Performing an HIV-related test and participating in and passing Proficiency Testing (PT)
Level of Indicator	Output
Description	
Definition	
Numerator	Number of laboratories and blood centers/banks: A. Engaged in Continuous Quality Improvement (CQI) activities B. Audited and achieved accreditation C. Performing an HIV-related test and participating in and passing Proficiency Testing (PT)
Denominator	
Disaggregation/ additional dimension	
Data Collection	
Method of measurement	*Lab survey*
Method of estimation	
Measurement frequency	*Annually*
Data sources	*NACP*
Data Quality Issues	
Known data limitations	

	Code C-24
Abbreviated name	
Indicator name	Number of people receiving post-gender based violence (GBV) clinical care based on the minimum package
NSP Results	
Level of Indicator	Output
Description	
Definition	This indicator uses the number of people receiving post-GBV clinical services to measure service uptake. An increase in the number of people receiving post GBV care will indicate that more patients are disclosing violence to providers and using the available services. GBV is defined as any form of violence that is directed at an individual based on his or her biological sex, gender identity or expression, or his or her perceived adherence to socially-defined expectations of what it means to be a man or woman, boy or girl. It includes physical, sexual, and psychological abuse; threats; coercion; arbitrary deprivation of liberty; and economic deprivation, whether occurring in public or private life. It can affect women and girls, men and boys, and other gender identities This indicator measures delivery of a basic package of post-GBV clinical services (including PEP and EC). NOTE: This indicator DOES NOT include GBV Prevention activities or nonclinical community-based GBV response (e.g., shelter programs, case management).
Numerator	Number of people receiving post gender based violence (GBV) clinical care based on the minimum package
Denominator	*N/A*
Disaggregation/ additional dimension	Target population, age group and sex
Purpose	This indicator will enable the country to: • To determine the number of individuals that are suffering from GBV and reporting to clinical partners • To assess whether post-GBV clinical services are being used. • Gain an understanding of the uptake of post-GBV clinical services offered. • Provide important information to key stakeholders about programs that mitigate women and girls' and other marginalized populations' vulnerability to HIV and AIDS. • Support efforts to assess the impact of post-GBV clinical services

	by correlating the reach (i.e., number of people served) of these services over time with outcomes related to GBV (and HIV and AIDS), as described through other data collection efforts such as survey data (DHS/PHIA/VACS). • Identify programmatic gaps by analyzing the number and ages of people receiving services, as well as the reach of services in particular geographic areas.
Data Collection	
Method of measurement	Data sources are standard program monitoring tools, such as forms, log books, spreadsheets and databases that national programs and /or partners develop or already use. Data should be collected continuously at the point of service delivery (i.e., ANC, PMTCT, ART, etc.) and aggregated in time for PEPFAR/Country reporting cycles. The indicator can be generated by counting the number of persons receiving post-GBV clinical care, disaggregated by the age group and sex of the client receiving the service, as well as the type of service (sexual violence or emotional/physical violence) and PEP provision (see below for disaggregation information). To adequately capture the provision of these services, logs and monitoring forms will need to be used wherever the services are offered. These forms will need to track both the outcome of the initial assessment and the provision of referrals or services. For PEP specifically, registries should collect both the administration of the PEP as well as its completion and the patient's adherence. **Special considerations:** As outlined in the Program Guide for Integrating GBV Prevention and Response in PEPFAR Programs all programs seeking to address GBV must first and foremost protect the dignity, rights, and well-being of those at risk for, and survivors of, GBV. There are four fundamental principles for integrating a GBV response into existing programs and specific actions for putting these principles into practice. These principles are as follows: • Do no harm • Privacy, confidentiality, and informed consent • Meaningful engagement of people living with HIV (PLHIV) and GBV survivors • Accountability and M&E

Method of estimation	
Measurement frequency	
Data sources	
Data Quality Issues	
Known data limitations	Because of the challenges associated with ascertaining whether a person who experienced sexual violence did so because of their biological sex, gender identity, or his or her perceived adherence to socially defined norms of masculinity and femininity, ALL persons who experience sexual violence and present for care, independent of the cause, or of age and sex, should be counted under this indicator. Note: DO NOT report other who has accompanied the individual seeking services (including perpetrators who receive GBV prevention activities).

	Code C-25
Abbreviated name	
Indicator name	Number of beneficiaries served by OVC programs for children and families affected by HIV
NSP Results	
Level of Indicator	Output
Description	
Definition	The numerator is the sum of the following Program participation disaggregations: 1. Active beneficiaries 2. Graduated beneficiaries 3. Transferred beneficiaries 4. Exited without graduation in the reporting period, from the OVC Program This indicator is a direct (output) measure of the number of individuals receiving PEPFAR OVC program services for children and families affected by HIV/AIDS. This indicator tracks progress on the number of OVC graduating from OVC programs and also tracks “exited without graduation” (such as loss-to-follow up, aging out without transition plan, moved, or died). Transferred to existing host-country programs, where the host-country program provides a sustainable response to OVC needs. Graduation will vary based on local criteria for achieving stability in the household.
Numerator	Number of beneficiaries served by OVC programs for children and families affected by HIV
Denominator	N/A
Disaggregation/ additional dimension	
Purpose	The goal of OVC programs is to build stability and resiliency in children and families-exposed, living with or affected by HIV/AIDS through rigorous case management and provision and access to health and socio-economic interventions
Data Collection	
Method of measurement	To calculate data for annual results: Active beneficiaries Graduated beneficiaries Transferred beneficiaries Exited beneficiaries

	In sum, the annual results for OVC_SERV age 0-17 = Total beneficiaries served in FY = Active in Q4 + All exited in Q4 + All exited in Q2 (All exited in Q4 = Graduated in Q4 + Transferred in Q4 + Otherwise exited in Q4) (All exited in Q2 = Graduated in Q2 + Transferred in Q2 + Otherwise exited in Q2) The indicator is generated by counting the number of active beneficiaries who received at least one service from facilities and/or community -based organizations (see definition of an 'active beneficiary' below) and by counting the number of beneficiaries who graduated from the OVC program successfully and by counting the number of beneficiaries who were "transferred" to existing host-country programs and by counting the number of beneficiaries who have "exited without graduation" from the OVC program. This reporting period's Active = (Last reporting period's Active + Newly enrolled in this reporting period) – (this reporting period's Graduated + transferred+ this reporting period's Exited)
Method of estimation	
Measurement frequency	6 months
Data sources	Program register
Data Quality Issues	
Known data limitations	

	Code C-26
Abbreviated name	
Indicator name	Number of people receiving post exposure prophylaxis
NSP Results	
Level of Indicator	Output
Description	
Definition	
Numerator	Number of people receiving post exposure prophylaxis
Denominator	
Disaggregation/ additional dimension	*Health worker, KP Type*
Purpose	
Data Collection	
Method of measurement	*Routine Data collection*
Method of estimation	
Measurement frequency	*Quarterly*
Data sources	*Health facilities*
Data Quality Issues	
Known data limitations	

	Code C-28
Abbreviated name	Cervical cancer screening among women living with HIV
Indicator name	Proportion of women living with HIV 30−49 years old who report being screened for cervical cancer using any of the following methods: visual inspection with acetic acid or vinegar (VIA), Pap smear or human papillomavirus (HPV) test (disaggregated by urban, rural)
Level of Indicator	Output
Description	
Definition	Proportion of women living with HIV screened for cervical cancer
Numerator	Number of women living with HIV 30−49 years old who report ever having had a screening test for cervical cancer using any of these methods: VIA, pap smear and HPV test.
Denominator	All women respondents living with HIV 30−49 years old.
Disaggregation/ additional dimension	• Age: 30–49 years old (or according to national guidelines) • Place of residence (urban or rural)
Purpose	Cervical cancer is the second most common type of cancer among women living in low- and middle-income countries, with an estimated 530 000 new cases in 2012 (84% of the new cases worldwide). In high-income countries, programmes are in place that enable women to get screened, making most precancerous lesions identifiable at stages when they can easily be treated and cured. Achieving high coverage of screening of women and treatment of precancerous lesions detected by screening can ensure a low incidence of invasive cervical cancer in high-income countries. Women living with HIV are more vulnerable than HIV-negative women to being affected by cervical cancer and to developing invasive cancer. Invasive cervical cancer is an AIDS-defining condition. For this reason, screening women living with HIV is important. This can prevent up to 80% of the cases of cervical cancer in these countries.
Data Collection	
Method of measurement	Nationally representative population-based surveys
Method of estimation	
Measurement frequency	Every 5 years
Data sources	
Data Quality Issues	
Known data limitations	Potential limitations include bias through self-report, including mistakenly assuming that any pelvic exam was a test for cervical cancer, and the limited validity of survey instruments.

	Code C-29
Abbreviated name	
Indicator name	Proportion of people coinfected with HIV ,HBV , HCV starting HCV treatment
NSP Results	
Level of Indicator	Output
Description	
Definition	Initiation of HCV treatment for people coinfected with HIV and HCV among people enrolled in HIV care
Numerator	Number of people diagnosed with HIV and HCV coinfection starting treatment for HCV during a specified time frame (such as 12 months)
Denominator	Number of people diagnosed with HIV and HCV coinfection enrolled in HIV care during a specified time period (such as 12 months)
Disaggregation/ additional dimension	
Purpose	
Data Collection	
Method of measurement	The numerator and denominator are calculated from clinical records of health-care facilities providing HIV treatment and care.
Method of estimation	
Measurement frequency	Annual
Data sources	NACP
Data Quality Issues	
Known data limitations	One limitation is that it reflects only one year of activity. Describing the cumulated effect of people co-infected with HIV and HCV starting treatment, requires compiling cumulative data on the people starting treatment and accounting for people newly infected with HCV and re-infected with HCV in the denominator.

	Code C-30
Abbreviated name	Hepatitis B testing
Indicator name	Proportion of people starting antiretroviral therapy who were tested for hepatitis B
NSP Results	
Level of Indicator	Output
Description	
Definition	It monitors trends in hepatitis B testing among people starting antiretroviral therapy, a critical intervention to ensure that they receive a drug combination that treats hepatitis B. The presence of hepatitis B surface antigen indicates chronic infection with hepatitis B virus (HBV). Knowing people's HIV and hepatitis B status enables antiretroviral medicines to be prescribed that are effective against HBV and HIV infection.
Numerator	Number of people started on antiretroviral therapy who were tested for hepatitis B during the reporting period using hepatitis B surface antigen tests
Denominator	Number of people starting antiretroviral therapy during the reporting period
Disaggregation/ additional dimension	• Sex • Age (<15 and 15+ years) • People who inject drugs
Purpose	Testing for hepatitis B identifies coinfection to adapt treatment
Data Collection	
Method of measurement	Clinical and/or laboratory records
Method of estimation	
Measurement frequency	Annual
Data sources	
Data Quality Issues	
Known data limitations	This indicator monitors progress in hepatitis B testing activities on a regular basis but does not reflect the overall proportion of people coinfected with HIV and HBV in HIV care who are aware of their hepatitis B coinfection. This would be reflected by indicator C.6 of the 2016 WHO viral hepatitis monitoring and evaluation framework, disaggregated by HIV status.

	Code C-31
Abbreviated name	
Indicator name	Rate of laboratory-diagnosed gonorrhoea among men in countries with laboratory capacity for diagnosis
Level of Indicator	Output
Description	
Definition/Rationale	Infection with an acute bacterial sexually transmitted infection such as gonorrhoea is a marker of unprotected sexual intercourse and facilitates HIV transmission and acquisition. Surveillance for gonorrhoea therefore contributes to second-generation HIV surveillance by providing early warning of the epidemic potential of HIV from sexual transmission and ongoing high-risk sexual activity that may require more aggressive programme interventions to reduce risk. Further, untreated gonorrhoea can result in pelvic inflammatory disease, ectopic pregnancy, infertility, blindness and disseminated disease. Increasing resistance to currently recommended treatment options may render this infection untreatable.
Numerator	Number of men reported with laboratory-diagnosed gonorrhoea in the past 12 months
Denominator	Number of men 15 years and older
Disaggregation/ additional dimension	*None*
Purpose	It measure progress in reducing the number of men engaging in unprotected sex
Data Collection	
Method of measurement	Routine health information systems
Method of estimation	
Measurement frequency	*Annually*
Data sources	Routine health information systems
Data Quality Issues	
Known data limitations	Although WHO has provided a global case definition, the actual case definition may vary between and within countries. Further, diagnostic capacity may vary between and within countries. Although this indicator may be underreported, in the absence of changes in case

	definition or major changes in screening practices, these data can generally be used for following trends over time within a country.