COUNTRY AIDS RESPONSE PROGRESS REPORT - GHANA

REPORTING PERIOD

JANUARY 2013 – DECEMBER 2014

SUBMISSION DATE: 31ST MARCH 2015

Prepared by:

GHANA AIDS COMMISSION

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ACRONYMS

ADRA	Adventist Relief Association
AIDS	Acquired Immune Deficiency Syndrome
AIS	AIDS Indicator Survey
ANC	Antenatal Clinic
APOW	Annual Programme of Work
ART	Anti-retroviral Therapy
ARVs	Antiretroviral Drugs
BCC	Behavior Change Communication
BSS	Behaviour Surveillance Survey
CBOs	Community Based Organizations
CCE	Community Capacity Enhancement
CCM	Country Coordinating Mechanism
CD 4	Cluster of differentiation Four
CDC	Centre for Disease Control and Prevention
CDD	Center for Democracy and Development-Ghana
CEPEHRG	Centre of Popular Education and Human Rights
CHAG	Christian Health Association of Ghana
CHPS	Community Health Planning System
CHRAJ	Commission for Human Rights and Administrative Justice
CRIS	Country Response Information System
CSO	Civil Society Organizations
CSW	Commercial Sex Workers
CT	Counselling and Testing
CTX	Cotrimoxazole
DA	District Assembly
DACF	District Assemblies Common Fund
DANIDA	Danish International Development Agency
DFID	Department for International Development
DHMT	District Health Management Team
DHS	Demographic and Health Survey
DICs	Drop-In-centers
DNA	Deoxyribose Nucleic Acid
DOTS	Direct Observed Strategy Short course
DP	Development Partners
DSW	Department of Social Welfare
EID	Early Infant Diagnosis
EKN	Embassy of the Kingdom of Netherlands
eMTCT	Elimination of Mother to Child Transmission of HIV

e-SHEP	Enhanced School Health Program
ETWG	Extended Technical Working Group
FBOs	Faith Based Organizations
FHD	Family Health Division
FHI 360	Family Health International 360
FIDA	International Federation of Women Lawyers
FP	Family Planning
FSW	Female Sex Workers
GAC	Ghana AIDS Commission
GBCEW	Ghana Business Coalition on Employee Wellbeing
GDHS	Ghana Demographic and Health Survey
GEA	Ghana Employers Association
GES	Ghana Education Service
GFATM	Global Fund for AIDS TB and Malaria
GHANET	Ghana HIV and AIDS Network
GHS	Ghana Health Service
GIZ	German International Cooperation
GRMA	Ghana Registered Midwives Association
GRSP	Ghana Poverty Reduction Strategy
H2H	Heart to Heart
HIV	Human Immunodeficiency Virus
HRAC	Human Rights Advocacy Center
HSS	HIV Sentinel Survey
HTC	HIV Testing and Counseling
IBBSS	Integrated Bio-Behavioral Surveillance Survey
ICT	Information Communication Technology
IDU	Injecting Drug Users
IEC	Information, Education, and Communication
IGA	Income Generating Activities
ILO	International Labour Organization
INGO	International Non-Governmental Organization
JHS	Junior Secondary School
JPR	Joint Programme Review
JUTA	Joint UN Team on HIV and AIDS
KPs	Key Populations
LEAP	Livelihood empowerment against Poverty
M&E	Monitoring and Evaluation
MARPS	Most-at-Risk-Populations
MCH	Maternal and Child health
MDAs	Ministries, Departments, and Agencies
MDG	Millennium Development Goals

MICS	Multiple Indicator Cluster Survey
MLGRD	Ministry of Local Government and Rural Development
MMDAs	Metropolitan, Municipal, and District Assemblies
MoE	Ministry of Education
MoH	Ministry of Health
MOT	Modes of Transmission
MOGCSP	Ministry of Gender, Children and Social Protection
MSM	Men who have Sex with Men
MTCT	Mother to Child Transmission
MTE	Mid-Term Evaluation
NACP	National AIDS and STI Control Program
NAP+	Network of Persons Living with HIV
NASA	National AIDS Spending Assessment
NBTS	National Blood Transfusion Service
NCPI	National Composite Policy Index
NGOs	Non-Governmental Organizations
NHIS	National Health Insurance Scheme
NMIMR	Noguchi Memorial Institute for Medical Research
NPP	Non-Paying Partner
NSF	National Strategic Framework
NSP	National Strategic Plan
NSPS	National Social Protection Strategy
OVC	Orphans and Vulnerable Children
OAFLA	Organization of African First Ladies against AIDS
PCR	Polymerase Chain Reaction
PEP	Post Exposure Prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PITC	Provider Initiated Testing and Counseling
PLHIV	People Living with HIV
eMTCT	Prevention of Mother to Child Transmission of HIV
POW	Programme of Work
PPAG	Planned Parenthood Association of Ghana
PPP	Public Private Partnerships
PWID	People Who Inject Drugs
RCC	Regional Coordinating Council
RCH	Reproductive and Child Health Services
RH	Reproductive Health
RME	Research, Monitoring, and Evaluation
RTKs	Rapid Test Kits
RTS	RTS. Resource Tracking System
SGBV	Sexual and Gender-Based Violence

SHARPER	Strengthening HIV/AIDS Response with Evidence based Results
SHEP	School Health Education Program
SMS	Short Message Service
SOPs	Standard Operating Procedures
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infections
SWAA	Society for Women and AIDs in Africa
TAP	Treatment Acceleration Project
TB	Tuberculosis
TOT	Training of Trainers
TSUs	Technical Support Units
TWG	Technical Working Group
UA	Universal Access
UN	United Nations
UNAIDS	Joint United Nations Program on HIV and AIDS
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNESCO	United Nations Education, Scientific, and Cultural Organization
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	United States Government
VCT	Voluntary Counseling and Testing
VNRBD	Voluntary Non-Remunerated Blood Donation
WAPCAS	West Africa Project to Combat HIV and STI
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization

1 STATUS AT A GLANCE

1.1 Introduction

In 2001, one hundred and eighty-nine (189) Member States of the United Nations adopted the Declaration of Commitment on HIV and AIDS at a UN Special General Assembly Session on HIV and AIDS (UNGASS). The Declaration of Commitment represents a global consensus on a comprehensive framework to achieve the Millennium Development Goal (MDG) of halting and beginning to reverse the HIV epidemic by 2015. To facilitate the tracking of progress of implementation of the commitments, the UNAIDS developed core indicators to measure country and global level responses to the HIV epidemic. The UNAIDS has since 2001, collated and compiled country level reports into a global report of the HIV epidemic and response every other year.

This report is a national progress report. An interim review of advancement towards the UNGASS targets took place in 2003, 2005, 2007 and 2009. Ten years after the landmark UN General Assembly Special Session on HIV/AIDS (UNGASS), progress was reviewed at the 2011 UN General Assembly High Level Meeting on AIDS. A new Political Declaration on HIV/AIDS with new commitments and bold new targets was adopted.

The 2011 declaration builds on two previous political declarations: the 2001 Declaration of Commitment on HIV and AIDS and the 2006 Political Declaration on HIV and AIDS. At UNGASS, in 2001, Member States unanimously adopted the Declaration of Commitment on HIV/AIDS. This declaration reflected global consensus on a comprehensive framework to achieve Millennium Development Goal Six-: halting and beginning to reverse the HIV epidemic by 2015. It recognized the need for multisectoral action on a range of fronts and addressed global, regional and country-level responses to prevent new HIV infections, expand health care access and mitigate the epidemic’s impact. The 2006 Political Declaration recognized the urgent need to achieve universal access to HIV treatment, prevention, care and support.

While these three declarations have been adopted only by governments, their vision extends far beyond the governmental sector to private industry and labour groups, faith-based organizations, nongovernmental organizations and other civil society entities, including organizations representing people living with HIV.

This report covers the period of 2011 and 2012 and represents a comprehensive set of standardized data on the status of the epidemic and progress in the response. This exercise is underpinned by Ghana’s National Monitoring and Evaluation framework indicators which encompass most of the indicators utilised in this Country AIDS Response Progress Report.

The Objective of this document is to provide key constituents involved in the national response to HIV with essential information on core indicators that measure the effectiveness of the national response.

1.2 Methodology

The following methodologies were used in the compilation of this report

1. **Desk review**: Background documents on the HIV epidemic and response in Ghana and relevant international documents were reviewed. Documents included:
    a. Strategic documents; National Strategic Plan 2011 – 2015.
    b. Programmatic Reports: Ghana AIDS Commission's Monitoring and Evaluation Reports, National AIDS Control Programme, Annual reports,
    c. Population based survey reports: Ghana Demographic and Health Survey 2003 and 2008, An update of the GDHS was conducted in 2014, prelimary results have been officially released.
    d. Mid-Term Evaluation report of the National HIV & AIDS Strategic Plan 2011 - 2015
    e. Sub-populations survey reports; HIV Sentinel Surveillance Report 2012 through to 2014, Multiple Indicator Cluster Survey (MICS) 2011, Modes of Transmission Study Report 2014. Behavioral Surveillance Survey 2006, The Men's Study and the Integrated Bio-behavioural Surveillance Survey (IBBSS) 2011.
    f. Specialized surveys in specific population groups, programmatic data, National AIDS Spending Assessment Report, 2012 - 2013
    g. People Living With HIV (PLHIV) Stigma Index Study, Ghana. 2014
    h. Prison Survey Report - Revised Version Nov 2013
    i. STIs, HIV and AIDS Integrated Biological and Behavioral Surveillance Survey in Apapa, Cotonou, Lome, Tema and Abidjan ports. 2013
    j. HIV Data Quality and Quality of Service Assessment in Ghana: ART and eMTCT. 2014
    k. Epidemic and response synthesis, programme data and other relevant data sources.
2. **Key Informant Interviews** were conducted with Ghana AIDS Commission (GAC), National AIDS Control Programme (NACP), Key Ministries Departments and Agencies, NGOs, UN agencies, Bilateral Partners, other development partners, CCM, private sector organizations among others.
3. **Data collection** was facilitated by relevant data collection tools including the guidelines on construction of core indicators by NACP, CSOs and other stakeholders..
4. A draft Country AIDS Response Progress report was prepared and presented at a stakeholder **validation forum** on 25th March 2015 for validation and consensus building under the leadership of the GAC Research, Monitoring and Evaluation (RM&E) Division. Feedback from the consultative forum was used to finalize the report.

1.3 Status of the Epidemic

The HIV epidemic in Ghana continues to be a generalised epidemic with a prevalence of more than 1% in the general population. (WHO definition for a generalised epidemic is when the prevalence is 1% or greater in the general population). According to the annual HIV sentinel surveys conducted among antenatal attendants, the median HIV prevalence (as determined by the HIV Sentinel Survey (HSS)) in the country appears to be on a downward trend from 3.6% in 2003, to 2.7% in 2005, increased to 3.2% in 2006, reduced to 2.2% in 2008 (95% CI 2.18-2.22) and increased to 2.9% (95% CI 2.49 -3.31) in 2009. The HIV prevalence from the sentinel survey was 2.0% (CI 1.6-2.4) and 2.1% (CI 1.48 – 2.72) in 2010 and 2011 respectively. The prevalence was 2.1% in 2012[1] and 1.9% (CI 1.26 – 2.51) in 2013.

In 2014 the median HIV prevalence as determined by the HSS is 1.6 (CI 1.42 – 1.81).

Using the EPP modelling for HIV prevalence, the National HIV prevalence in 2009 was 1.9%. This dropped further to 1.5% in 2010 and remianed so for 2011, and fell to 1.37% for 2012 and 1.3% in 2013. **In 2014 estimated adult national HIV prevalence is 1.47%.**

Knowledge and behaviour affect an individual's risk of acquiring HIV infection. HIV transmission is dependent on a number of behavioural and physical factors these include the number and nature of unprotected sex acts, and the number of sexual partners. Individuals who have multiple partners concurrently or sequentially have a higher risk of HIV transmission than individuals who have fewer links to a wider sexual network.

The latest DHS conducted was in 2014. The Ghana DHS scheduled for 2013 could not be held. It was executed in 2014 and the final report is yet to be written. However preliminary results for the GDHS 2014 have been released. In the general population, though awareness of HIV is almost universal (98% for women and 99% for men) (DHS 2008), this has not translated into comprehensive knowledge and safe sexual behaviour. In the 2006 MICS, 25% of females and 33% of males aged 15 - 24 years had comprehensive knowledge of HIV compared with 28.3% of females and 34.2% of males in 2008. The 2014 GDHS measured Percentage of young women and young men age 15-24 with knowledge about HIV prevention (Knowledge about HIV prevention means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV i.e. that HIV can be transmitted by supernatural means and that HIV can be transmitted by mosquito bites) was 19.9% for females and 27.2% for males.

Though data on comprehensive knowledge for sex workers is not available, according the 1BBSS 2011, compared to the general population, female sex workers had a greater knowledge of HIV prevention and had fewer misconceptions. A greater proportion of FSW used condoms than the general population.

A major goal is to delay the age of sexual debut and premarital sexual activity because it reduces their potential exposure to HIV. From the GDHS 2008 7.8% and 4.3% of young women and men aged 15-24 respectively had sexual intercourse before the age of 15.

[1] GHS 2012 *NACP Annual Statistics 2012*

The number of individuals with more than one partner in the past 12 months is monitored as a proxy to a reduction in sexual partners. In 2008, 11.3% of male and 1% of female respondents aged 15 – 49 years had more than one sexual partner in the past 12 months. Thus the males are more likely to have more than one sexual partner than the females. This indicator increased with age; 3.1% for males 15- 19 years, 9.6% for 20 -24 years and 44.6% in respondents 25 - 49 years. In the 2014 GDHS, 14.5% of male and 1.3% of female respondents aged 15 – 49 years had more than one sexual partner in the past 12 months. Thus the males are more likely to have more than one sexual partner than the females. Once again This indicator increased with age; 3.9% for males 15- 19 years, 13.7% for 20 -24 years and 53.8% in respondents 25 - 49 years.

Condom use is an important measure of protection against HIV. The extent to which condoms are used by people who are likely to have high risk sex is a measure of risk reduction measures being taken by such persons. In 2008, 26.2% of male respondents aged 15–49 who had more than one sexual partner in the past 12 months reported the use of a condom during their last intercourse. The same indicator was not measured for females, but was measured for high risk sex (defined as sexual intercourse with a non-marital, non-cohabiting partner). This showed 25.4% of females using a condom at their last sexual intercourse of risk. This indicator for men showed a gradual increase till age 25 and drops dramatically thereafter. In 2014 17.3% of male respondents aged 15–49 who had more than one sexual partner in the past 12 months reported the use of a condom during their last intercourse. TRhis shows a reduction compared to the 2008 figure. For females 11.3% of those who had more than one sexual partner in the past 12 months reported the use of a condom during their last intercourse, again showing a reduction in this protective behaviour.

In order to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment. The proportion of persons aged 15 – 49 who received an HIV test in the past 12 months and know the results were 6.8% and 4.1% for females and males respectively.

A summary of the HIV and ART situationis given in the table below according to the to the latest estimates[9].

Table 1 Summary of HIV and ART situation

Year	HIV Population		New Infections	Need for ART (15+)	Need for ART (0-14)	Annual AIDS Deaths	
	Total	Children				Total	Children
2008	254,368	25,910	16,945	95,020	11,203	17,442	2,368
2009	252,728	25,787	16,264	97,989	10,970	16,016	2325
2010	251,093	25,435	15,216	101,432	10,221	14,753	2,164
2011	249,403	24,186	13,272	105,826	9,192	12,841	1,753
2012	249,570	23,067	12,213	112,132	8,841	9,999	1,438
2013	250,341	22,295	12,039	118,574	8,732	9,174	1,402
2014	250,232	21,223	11,356	133,582	8,582	9,248	1,295

The National HIV Prevalence and AIDS Estimates Reports for 2014 to 2020 show the national HIV response has plataeud somewhat. In 2013 and 2014, 250,341 and 250,232 people respectively would be living with HIV. In 2013 this comprised of 102,878 males and 147,463 females, representing 41% and 59% respectively. In 2014 the numbers were estimated at 101,995 males and 148,237 females, representing the same proportions.

The number of new HIV infections has reduced from 13,272 in 2011 to 11,356 in 2014; adults contributed 83% and children 17% of new HIV infections in 2014 and young people 15-24 years of age contributed 26% of new HIV infections in 2014.

The estimated number of patients needing Anti Retroviral Therapy (ART) also increased from 127,306 in 2013 to 142,164 in 2014. Of these 8,732 and 8,582 respectively were children. It is estimated that of the 133,582 adults needing ART in 2014, 49,267are males and 84,315 are females.

In 2013 the overall mean and median prevalence in urban areas exceeded the rural prevalence (2.2% versus 1.3%). There were increases in prevalence all regions but the Central, Eastern, and the Brong-Ahafo regions. The Eastern and Brong-Ahafo regional prevalence remained the same, whilst the huge rise in Central regional prevalence observed in 2011 reversed. Agomanya has re-established its position as the site with the highest HIV prevalence (8.5%) in the 2014 survey following its momentary displacement by the Cape Coast site in 2011. This with a prevalence of 3.7%, the Eastern region has regained the top position from the Central region which currently occupies the 8th position with a position with a prevalence of 1.4%. Regional prevalence therefore ranged from 3.7% in the Eastern region to 0.6% in the Northern region. In 2014 the median prevalence in urban areas is 2.8% as against 1.4% in rural areas.

In 2013 the highest prevalence was recorded within the 45-49 year age group (3.3%) followed by the 35-39 year age group (3.2%), and the least prevalence of 0.8% was in the 15-19 year age group. Prevalence among young people 15-24 years, which is used a proxy for new infections, was 1.2%. In 2014 the highest prevalence was in the 30–39 year age group (3.2%) folowed by the 30–34 year age group (2.8%), and the least prevalence of 0.9% was in the 15-19 year age group.

HIV prevalence in Key Populations (KPs) has been consistently higher than the general population. In 2009, the HIV prevalence among sex workers was 25.1% which is a decline from the 34% in 2006. (The modes of transmission study[2] has indicated that low risk heterosexual sexual activity (30.2%), Casual heterosexual sex, (15.5%) and sex with partners of clients of sex workers (23.0%) contributed to most of HIV incidence in 2008). The recent studies (The Men's study and the IBBS, 2011)[3] in key affected populations show that prevalence among FSW is 11.1% overall and for MSM 17.5%.

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[2] Ghana AIDS Commission, Bosu W, Yeboah K, Rangalyan G, Atuahene K, Lowndes C, Stover J, et al. 2009; *Modes of HIV transmission in West Africa: analysis of the distribution of new HIV infections in Ghana and recommendations for prevention. Accra.*

[3] Ghana AIDS Commission, PEPFAR, US CDC, UCSF Global Health Services. 2013 *The Ghana Men's Study: Integrated Biological-Behavioral Surveillance Surveys and Population Size Estimation among Men who have Sex with Men in Ghana..*

The estimated number of mothers in need of Prevention of Mother to Child Transmission of HIV (eMTCT) reduced from 10,869 in 2011 10,226 in 2014. PMTCT coverage has increased from 74.1% in 2011 to 81.2% in 2014. The estimated final transmission rate has reduced from 20.3% in 2011 to 18.5% in 2014.

1.4. The Policy And Coordination Environment

The Ghana AIDS Commission was established by an Act of Parliament as a supra–ministerial body with multi-sectoral representation [44]. It is a national coordination body with well-defined terms of reference and has active Government participation. It is chaired by the President of the Republic of Ghana. It has a defined membership with the Ministers of State from the Ministry of Finance, Ministry of Health, Ministry of Education, Ministry of Local Government & Rural Development, Ministry of Transport, Ministry for Food and Agriculture, Ministry of Defence, Ministry of Interior, Ministry of Trade & Industries, Ministry of Employment & Labour Relations, Ministry of Information & Media Relations, Ministry of Youth & Sports, Ministry for Tourism, Culture & Creative Arts, Minster for Gender, Children & Social Protection, MP Lower West Akim, MP Nkwanta North, National AIDS Control Programme, Noguchi Memorial Institute for Medical Research, Ghana Statistical Service, National Population Council, Trades Union Congress, Ghana Employers Association, Ghana Medical Association, Ghana Registered Nurses Association, Ghana Registered Midwives Association, National Union of Ghana Students, Christian Health Association of Ghana, National Catholic Secretariat, Christian Council of Ghana, Council of Independent Churches, Ghana Pentecostal Council, Federation of Muslim Councils, Ahmaddiyya Muslim Mission, National House of Chiefs, Federation of International Women Lawyers, Ghana Association of Traditional Medicine Practitioners, Ghana HIV and AIDS Network, Ghana Network of Persons Living with HIV and AIDS, Ghana AIDS Foundation, Tema Polyclinic, Korle-Bu Teaching Hospital, Manna Mission, Director-General, Ghana AIDS Commission. The Commission has four technical committees including the steering committee, programme committee resource mobilization and Research Monitoring and Evaluation committees and each of these committees have broad representation from MDAs, private sector, development partners, civil society including PLHIV [36]

The GAC has a functional secretariat responsible for the day-to-day coordination, management of funds and supervision of HIV and AIDS related activities. Through various institutional arrangements such as the Partnership forum, Technical Working Groups and decentralised structures such as the regional and District AIDS Committees the GAC interacts with all stakeholders and receives inputs and feedback towards the HIV and AIDS response and modifies priorities and interventions. A Partnership forum is organized annually with MDAs, Bi-laterals and Multi-lateral institution as well as the civil society organizations including PLHIV. These meetings review progress of implementation each year and reviewed the annual program of work for the ensuing year. In 2012 these partnership fora created the avenue for partners to pledge their commitment to support the national response and the Annual Programme of work of the ensuing year. In 2012 the funding challenges facing the program were prominent in discussions.

HIV and AIDS activities have over the years received strong political support. This includes government and political leaders who include HIV and AIDS messages in their public speeches.

The President, Vice President and Ministers spoke publicly about HIV and AIDS on a number of occasions. In June 2011, the Vice President now President, H.E. John Dramani Mahama led a government delegation to the UN General Assembly High Level Meeting on AIDS. The session, which marked thirty years into the fight against the AIDS epidemic, reviewed progress and chart the future course of the global AIDS response. At the meeting the Vice President said that in Ghana, HIV/AIDS is a visible and key component of Ghana's Shared Growth and Development Agenda and is therefore accorded a high level of political commitment, with leadership of the Ghana AIDS Commission placed directly under the Office of the President.

Harmonization and Coordination of national HIV response

In keeping with the 'Three Ones' principle, the GAC has strengthened coordination and partnerships with public, civil society, private sector institutions, and development partners through personal contacts at official functions and events, improved communications, and in different technical working groups of the national HIV response. The GAC is working to improve the coordination of HIV response through regular convening of the annual Partnership Forum and Business Meeting and the quarterly ETWG and Regional and District AIDS Coordinating Committees meetings and active participation as a member of the Global Fund Country Coordination Mechanism (CCM Ghana).

The GAC is also improving coordination of the national HIV response through collaborating with the NDPC that ensured Metropolitan, Municipal and District Assemblies mainstreamed HIV and AIDS in their 2010-2013 Medium Term Development Plans. Through the TSUs, GAC is coordinating joint Annual Program Review meetings at the regional level and the annual conference of all regional HIV Focal Persons from the Ghana Health Service and the MDAs.

Key challenges facing partnership coordination, harmonization and management of the national HIV response include but are not restricted to delays in the release of pledged funds from both the development partners and the Ministry of Finance, which hinder program implementation. There is also incomplete disclosure of funds from some development partners to implementing partners at the decentralized level for HIV and AIDS activities to the coordinating structures at the decentralized level, which undermines the coordination function of the decentralized structures. The high attrition rate of experienced HIV and AIDS staff in the MDAs and the MMDAs, particularly the District Focal Persons, impedes effective program coordination.

1.5. The policy and programmatic response

Ghana has a positive policy, advocacy and enabling socio-political environment for implementing a comprehensive multi-sectoral programme to combat the HIV epidemic. Ghana subscribes to the "Three-Ones principles". The Ghana AIDS Commission was established by an ACT of Parliament as a supra-Ministerial Body with multi-sectoral representation[10]. It coordinates the national response with the involvement of key Ministries, the private sector, traditional and religious leaders and civil society in the design, planning, implementation, monitoring and evaluation of programmes.

Through various institutional arrangements such as the Partnership Forum, Technical Working Groups and decentralised structures such as the Regional and District AIDS Committees, Technical Support Units and District Response Management Teams, the GAC interacts with all stakeholders and receives input and feedback towards the HIV and AIDS response and modifies

priorities and interventions. The oversight and support function at the sub-national levels has been enhanced with the introduction of technical support units in all ten regions.

The NSP 2011-2015 is the result of over a year of preparatory work, starting with the development of Ghana United Nations General Assembly Special Session (UNGASS) Report 2010; reviews of the 2008 Ghana Demographic and Health Survey (GDHS) 2008, HIV Sentinel Surveillance (HSS) Surveys covering seven years, Estimation Projection Package (EPP) and SPECTRUM modeling; a Joint Review of the National HIV&AIDS Strategic Framework 2006-2010 and an epidemic synthesis and response analysis, in order to anchor the NSP on evidence.

These plans have been operationalised with stakeholder involvement and through various mechanisms such as:

- Technical Working Groups (TWG): TWG on Key Populations (KP), ART, , Expanded TWG and Communication, National Anti-Stigma TWGs.
- Task teams such on Gender and HIV, Stigma Reduction, eMTCT, World AIDS Day Planning Committees, Research, Monitoring and Evaluation committee and the Partnership Forum.
- The Partnership Forum
- Technical review meetings with implementing partners and stakeholders

These working groups and task teams have been institutionalised and hold regular planned meetings and provide a platform from which GAC engages its stakeholders from all sectors to provide input and disseminate information for the national response. A broad stakeholder base is involved in these groups and it is ensured that all key areas from the public, private and civil society (including religious, traditional leaders and PLHIV) are involved in all areas of planning and decision making. This arrangement engages the Bilateral missions such as the USG and their its implementing agencies, and the UN system.

The Government of Ghana through institutions such as GAC, National Development Planning Commission (NDPC)[13], Ministries, Departments and Agencies (MDAs), in collaboration with Civil Society including the Private Sector, UN Agencies, other Multi–lateral and Bi-lateral Development Partners developed a number of Policies ,Guidelines, Strategic frameworks, Acts and related legal instruments to create an enabling environment to respond to the HIV epidemic in Ghana.

Within this reporting period, key guidelines and polices were developed or updated to guide implementation and other already developed policies or were made operational for implementation of the national response. Significant among these were:

1. National HIV/AIDS and STI Policy regional and national dissemination undertaken
2. Workplace HIV Policy launched in 2013 and still being disseminated
3. NationalCommunity Home Based Care Guidelines published in 2012 and regional and national dissemination undertaken
4. Policy on User-Fees for services at ART Centres discontinued in 2012

5. National Nutrition Policy was revised in 2012
6. National Gender Policy revised in 2012
7. National Health Promotion Policy revised in 2012
8. Affirmative Action Bill Drafted
9. National Social Protection Policy - rationalization work commenced in 2012
10. Condom and Lubricant Strategy developed 2014

Priority Programs

Key affected populations (KAPs)

Key populations (FSWs, MSM, prisoners, and PWIDs) are identified in the NSP as key drivers of the epidemic. A complementary Key Populations Strategy 2012-15 was developed to reach at least 80% of identified KPs with HIV prevention information and services. Funding for the KPs interventions was provided by PEPFAR Global Fund, and the GoG. HIV prevention information and services were provided for FSWs, MSM, and prisoners but not for PWIDs during the period under review. Key activities implemented during the review period to reach about 50,000 - 60,000 KPs (FSWs and MSM) include targeted behavior change communication and interventions through provision of HIV prevention information and services (psychosocial support, HTC, diagnosis treatment for STIs, condom and lubricant promotion and distribution, and appropriate referrals). In 2014, GAC collaborated with the University of Cape Coast, and CDC to execute Formative Studies to assess the situation of drug use including Injecting Drug Users (IDUs) in Accra, Tema, Sekondi-Takoradi, Cape Coast and also with Kwame Nkrumah the Unversity of Science and Technology, the Boston University and PEPAR in Kumasi to implement a study on HIV Vulnerability of Men and Women Who Inject Drugs in Kumasi.. In addition SOPs were developed and M&E Officers together with project managers from selected CSOs were trained with support of FHI360 in 2014.

eMTCT (Elimination of Mother to Child Transmission of HIV

An HIV prevalence of 1.6% (Confidence limits: 1.42-1.81) in pregnant women (HIV Sentinel Survey 2014) versus 1.47% in the general population in 2014 reflects the weakness in performance in implementing eMTCT prongs 1 and 2, although there has been improvement over 2012 and 2013 figures. The NSP has adopted elimination of mother to child transmission of HIV (eMTCT) as the preferred strategy to achieving overall reduction of new HIV infections in children. The main outcome is to reduce MTCT of HIV from 30% in 2010 to less than 5% by 2015. To achieve this outcome, Ghana committed to implementing all 4 prongs of the comprehensive eMTCT approach and rapidly scaled up its eMTCT program by increasing facilities providing services from 793 in 2009 to 863 in 2012. NACP data indicates that in 2013 69% of HIV infected pregnant women received ARVs prophylaxis to prevent mother to child transmission of HIV. This figure rose to 81.2% against the NSP target of 70% in 2014..

The more efficacious Option B+ regimen is the current one in use. To further enhance the success of the eMTCT program Ghana is on the verge of adopting the efficacious and more effective Option B+. The prevalence of HIV amongst HIV exposed babies decreased from a presumed prevalence of 30% in 2010 (because there was virtually no eMTCT program at that time) to an estimated MTCT rate of 3.8% and 6.39% at 6 weeks in 2012 and 2013 respectively reflects the good performance of implementing eMTCT prong 3. In the 2014 the rate is estimated at 4.26%.

The target of providing HIV exposed infants with ARVs to prevent mother to child transmission has not been met in both 2011 and 2012. It is was not met in 2013 also. Thus far, the result of providing ARVs to HIV exposed babies to prevent MTCT of HIV has been 20% in 2012. Part of the reason for this performance is the frequent stock-out of paediatric ARV formulations that occurred during the period under review (and continues to occur thereafter) and low male involvement in eMTCT program.
Her Excellency the First Lady Mrs. Lordina Dramani Mahama joined her First Lady colleagues from Africa Union member states as an HIV and AIDS Ambassador in the Organization of African First Ladies for AIDS (OAFLA).
The main objectives of OAFLA are to:

- Mobilize effective prevention responses to HIV and AIDS for vulnerable and most at risk populations
- Provide support to national efforts for impact mitigation of AIDS. (This includes but is not limited to the following: prevention, treatment, care and support, reducing or addressing stigma and discrimination, increased participation of People living With HIV (PLHIV) and Orphans and Vulnerable Children (OVC) support)
- Mobilize human and financial resources at the local, regional and national level for an expanded and effective response to the HIV and AIDS epidemic

Besides, in her capacity as the UNAIDS Premier Ambassador in Ghana and the First Vice President of OAFLA , the First Lady has chosen to advocate for the full implementation of the UNAIDS "Global Plan to eliminate Mother-to Child Transmission of HIV by the year 2015, and Keeping Mothers Alive". This commitment is also in line with the vision of Ghana to achieve a "Generation of Children free of HIV" and to ensure that no child is orphaned or rendered even more vulnerable by the death of a mother from AIDS.

ART program
Ghana has rapidly scaled up its ART program by increasing the number of ART sites from 79 in 2010 to 160 in 2012, 175 in 2013 and 179 in 2014, whiles training a significant number of ART service providers to provide quality services.

The target number of patients has increased from a baseline of about 38,000 in 2010 to about 56,000 in 2011 and to about 97,494 in 2014 Nearly 100% of all patients targeted to receive ART services did receive treatment in both years, as adequate funding was available to meet the treatment cost for this group. A similar outcome was achieved for 90,756 patients of those that were eligible (83,712 clients) to receive treatment in 2014. However, based on total need for ART services only 49% of all patients eligible for ART in 2011 received the treatment, this figure increased to only 55% in 2012, and was 69% in 2013. This is primarily because of inadequate funding for the ART program.

Other programs
Major activities carried out to reduce sexual transmission of HIV in the general population include behavior change communication interventions on abstinence, mutual fidelity, avoiding concurrent multiple sexual partnerships, and correct and consistent condom use in high-risk sex.

Community mobilization including community capacity enhancement, mass media, and Heart to Heart (H2H) campaigns played pivotal roles in sensitizing and creating demand for HIV prevention services including HTC, the gateway to other HIV and AIDS services.

Following the successful orientation of relevant school officials to ensure the successful roll out of the newly reviewed e-SHEP programme consisting of a module in sexuality education, refresher training was held for head teachers, district trainers and SHEP Coordinators in the 11 UNFPA districts to facilitate the upscale of the e-SHEP in schools. To enhance efforts at delivering as one and improve reach of the e-SHEP nationwide, the UNFPA collaborated with UNICEF, to train teachers and peer educators in schools to administer the revised HIV Alert module curriculum, e-SHEP.

CSOs are providing BCC interventions to young people in all the regions in Ghana. The UN System through ILO has interventions for some categories of youths often neglected by mainstream HIV programs including young workers and employees in the informal sector including artisans and UNAIDS is also reaching the youth through the “Protect the goal” football campaign through mass media campaigns and working with the national male and female football teams as campaign ambassadors. The Ghana Business Coalition on Employee Wellbeing has interventions for the formal sector employees mainly in the Greater Accra Region and in mining communities in the Western Region. The Vice President HE Paa Kwesi Amissah Arthur had a consultation with leaders of Faith Based organizations to advocate for the mobilization of revenue for the National Response. This has had some positive outcomes.

HTC is the key entry point to HIV treatment, care and support services. Therefore, as many people as possible are expected to access the HTC services for early detection and access to treatment for HIV. Two key strategies were used to recruit clients for HTC: the country implemented a very successful nationwide Know Your Status campaign incorporating outreach HTC services during the years under review and the provider-initiated testing and counseling (PITC) at all health facilities and outreach programs.

The NACP scaled up the HTC program by increasing the number of sites providing HTC services from 1,178 in 2009 to 2,335 in 2014 and reaching about 1.15 million clients in 2011, 857,000 clients in 2012, 668,929 in 2013 and 798,763 in 2014 with HTC services. The 2013 target was 1,600,000. Stock-outs of HIV test kits in 2012 and 2013 have contributed to the inability of the program meeting its 2012 target of providing HTC services to clients and the failure to meet its 2014 target of providing 1.6 million clients with services. Between 2011 and mid-2013, more women than men accessed the HTC services by a ratio of about 4:1 by 2014 this ratio has increased to almost 9:1. This is due to current policy of prioritising e-MTCT services over HTC in the general population,

The National Blood Transfusion Service (NBTS) is expected to collect and screen 25,000 units of blood each year. The NBTS has been able to collect about 75% of this target in any year even including blood donation from paid and family donors. Donated blood at all the transfusion centers is screened for HIV. Peripheral blood screening centers may not use the Ag-Ab Combo method that reduces the window period for HIV infection and therefore puts patients at risk.

All ART and eMTCT sites have the capacity to provide PEP services primarily for occupational incidents among health workers and survivors of rape or defilement. Some police stations are aware of the PEP program and do keep comprehensive list and contact details of ART and eMTCT sites where they can refer rape and defilement survivors. Service statistics show very few people are accessing PEP services.

National Guidelines for STI Diagnosis and Management, in use for a number of years now, was reviewed in 2013 and health workers have been oriented on its use. The NSP requires 50% of cases of STIs should be managed according to the national guidelines by 2015, up from 7% in 2010.

Due to insufficient funds and challenges with access to ARVs, HTC, eMTCT, care and treatment suffered a slight setback in 2012, despite the immense efforts of implementers in 2011 and 2012. In 2011, 51% of HIV positive pregnant women and 51.6% of adults and children with advanced HIV received ART services. In 2012, 55% of adults and children with advanced HIV are estimated to have received ART services. Care services for the general population still lag behind the needs and the targets the country set for itself. 69% of eligible PLHIV are receiving ART against the NSP target of 80% in 2013. Stock out of HIV test kits and ARVs have significantly hampered optimal access to HCT, eMTCT, and ART services.

The aim of HIV/TB collaborative services as outlined in the NSP is to reduce the burden of TB amongst PLHIV and vice versa by increasing the proportion of TB/HIV co-infected patients accessing ART from 24% in 2009 to at least 50% by 2015. All PLHIV are clinically screened for TB at every clinic appointment. Guidelines for HIV treatment were updated to accommodate the new treatment regime for PLHIV who have TB infection. This is ensuring that all PLHIV with TB infections receive treatment without delay. Data sharing between the two programs was put in place during the period under review. In 2012, the HIV prevalence in general population in Ghana was 1.37% but HIV prevalence was 14.5% among TB patients. 46% of of estimated HIV-positive incident TB cases received treatment for both TB and HIV in 2014.

Even though there are normative laws and policies that protect the human rights of all Ghanaians, the human rights KAPs and PLHIV are often violated or abused by others. Many CSOs have been spearheading the fight to protect the human rights of KAPs and PLHIV including their right to access HIV and AIDS services: these include NAP+ Ghana, GHANET, SWAA-Ghana, FIDA, WAPCAS, HRAC, FHI360, CDD-Ghana, Maritime Life Precious Foundation, and ActionAid Ghana. To reduce stigma and discrimination, some implementing partners including CDD-Ghana, HRAC, and the SHARPER project with funding support from PEPFAR and the UN system have jointly and severally built the capacity of CHRAJ, the criminal justice system, and the police among many others to better understand HIV and KP-related stigma and discrimination in the hope that PLHIV and KAPs whose human and legal rights are abused or violated can have access to justice. GAC, CDD-Ghana, and other stakeholders have held sensitization and advocacy meetings and interactions with senior government officials and parliamentarians on key HIV and AIDS issues including the need for HIV-specific legislation.

The Livelihood Empowerment Against Poverty (LEAP) program is the flagship of the national social protection strategy. Among other things, the LEAP program made conditional cash transfer to OVC caregivers (including AIDS-related OVC) during the review period. The program is currently operating in 100 districts and benefitting a total 73,000 households. The cash transfer conditions for OVC caregivers (capped at GHC15 per OVC for a maximum of 3 OVC/household) are that the OVC must be registered with the Births and Deaths Registry, have access to healthcare including immunization, young children must be in school, and children must not be engaged in the worst forms of child labor or be trafficked. Other important programs that benefit AIDS-affected households include the WFP-supported food assistance to food-insecure households where patients on ART and with a BMI of less than 18% and up to 4 household members in Northern, Upper East, Upper West, and Eastern Regions are provided with food rations. This nutritional support is to assist in the nutritional recovery of beneficiaries Additionally, the recent removal by the GoG of GHC5.00 surcharge when patients collect their monthly ARVs, which was a deterrent to ART adherence in poor AIDS-affected households that are unable to pay.

LEAP Programming and OVC

In 2014 the programme disbursed cash grants to approximately 30,802 orphaned and vulnerable children (OVC) in the country. Table 2 below shows the number of OVC who received cash grants in relation to other vulnerable members of the community who received similar support from the LEAP programme.

Table 2 Vulnerability of population

Vulnerable Criteria	Number of people benefitting as at December 2014
Orphans and Vulnerable Children	**30,802**
Disabled	**160 172**
Elderly	**117 049**
Total Beneficiaries	**308 023**

Taking a regional perspective, Ashanti region has the largest number of OVC whilst Western Region has the lowest number of OVC under the LEAP program. Table 3 below shows the distribution of OVC being supported across the country's ten regions.

Table 3 OVC reached by Region

Region	Total Number of OVC at Dec 2014
1. Ashanti	3,060
2. Brong-Ahafo	2,837
3. Central	2,848
4. Eastern	3,302

5. Greater Accra	2,255
6. Northern	4,787
7. Upper East	3,012
8. Upper West	3,421
9. Volta	3,198
10. Western	2,082
National	**30,802**

Health Systems Strengthening

Evidence from the Mid Term Evaluation showed that the National HIV and AIDS and STI Program (NACP) is contributing significantly to systematically improve and strengthen the chronically under-resourced and under-performing public health systems within which the health sector response to HIV is struggling to operate. HIV and AIDS program resources are richly benefitting the general public health systems including, for example, the provision of better health physical infrastructure and improved human resources development opportunities, and crucial technical and logistical support to the critical but troubled procurement and supply chain system, and the weak and uncoordinated health information management system. It is noteworthy that the limitations and risks of the public health systems are slowing down the health sector response to HIV and AIDS. To sustain the gains made under the currently heavily ring-fenced funding resources for the NACP, all stakeholders agree the HIV and AIDS program must be integrated into strong public health systems sooner rather than later.

During the period under review, three important health systems that are critical for effective health sector response to HIV and AIDS enjoyed much investment of resources. These systems are procurement and supply chain management, leadership and management of the health sector, and public health infrastructure.

i. Procurement and supply chain management (PSCM)

Major challenges persist including chronic underfunding and other systemic challenges related to procurement of health commodities. These have limited the benefits of the various intervention efforts carried out within the period. The HIV and AIDS program still grapples with commodity procurement delays mainly due to inadequate funding in addition to some internal bureaucratic bottlenecks. These have resulted in preventable stock out of key HIV commodities including ARVs, RTKs, and lab reagents.

The available evidence within the period under review, points to greater efforts geared towards strengthening and creating a viable supply chain in order to strengthen health commodity security including HIV and AIDS Commodity Security (HACS) in Ghana. These efforts have included capacity building, attempts to improve data visibility, early warning systems, and most importantly the development of a roadmap for supply chain system strengthening program Supply Chain Master Plan (SCMP) within the whole public health sector. A steering committee was inaugrated in June 2014 to oversee the implementation of the master plan. The steering committee was tasked to advocate and

engage stakeholders to immediately review the SCMP and coordinate all on-going supply chain technical activities funded by GF and USAID.

The Ministry of Health and partners have recently established a quantification working group, whose Terms of Reference were approved. In addition, National Forecasting and Quantification Guidelines were developed in 2014. These guidelines describe quantification strategies. The quantification, M&E and programme groups now meet each semester to review numbers that inform nationwide quantification

ii. Leadership and management of the public health sector

Leadership and management of the public health sector response to HIV are weakest at the district and sub-district levels. The GHS is strengthening its sub-district level management system to improve management capacity at the lower levels in the areas of service delivery, planning, administration, procurement, finance and auditing. However, much more needs to be done and sustained thereafter to ensure the gains made are not eroded.

The on-going USG-funded Leadership Development Program that includes the multisectoral District AIDS Coordination Committees and implemented by Management Sciences for Health (MSH) covering all 216 districts in the country will strengthen governance of the decentralized HIV and AIDS response.

iii. Improving public health infrastructures

The increased number of trained staff and the geographic accessibility to HIV and AIDS services physical infrastructure for HTC, eMTCT, and ART services improved significantly during the period under review. Staffs have received in-service, pre-service, on the job, and mentorship training, which is assisting with the provision of quality services. Physical infrastructure improvements include the construction of new and refurbishment of old health facilities including clinics, CHPS compounds, labs, and pharmacies have increased in number and improved in quality; the provision of new lab equipment including CD4 count and PCR DNA machines and reagents to health facilities intensified greatly during the period under review; and provision ICT equipment for better health data management including that of HIV and AIDS also improved. In order to bridge the north-south divide and rural-urban differentials in the distribution of the human and physical resources, staffing norms are being developed and plans for redistribution of staff has been developed to ensure equitable distribution of health staff.

Community Systems Strengthening

The number and types of capacity strengthening activities undertaken during the review period is difficult to quantify and assess, as no central systems exist to collect information on all CSOs in the country. Therefore the number of small community level organizations that benefitted from capacity building support during the period under review is not known. However, many community level organizations have had some capacities strengthened (very small in relation to the need) often through training and sometimes through funding and material and technical assistance. Organizations providing significant funding support for community level organizations' capacity strengthening are GAC, UNAIDS, USG-PEPFAR, and GFATM.

The efforts of NAP+ Ghana and other CSOs have kept key advocacy and discourse on HIV issues in the national limelight. The growing enabling environment and the support from key public sector stakeholders and development partners are increasing the advocacy zeal of CSOs. Some important advocacy issues on which CSOs have played or are playing critical roles during the period under review include the withdrawal of the tax on condoms by the government, the removal of the GHC5.00 surcharge patients pay each month to collect their ARVs, and on-going advocacy on ARVs stock out, the development of HIV legislation, and the establishment of the AIDS Fund.

Most of the key umbrella CSOs and their affiliates are not functioning optimally. For example, NAP+ Ghana and its affiliates are not living up to their potential. The major challenge has been inadequate sustainable capacity for NAP+ Ghana including leadership, technical, financial, organizational, advocacy, and monitoring credentials. But the potential of NAP+ Ghana and its affiliates to influence HIV and AIDS prevention, care and support services especially at the community level is massive. The successful Models of Hope is an example of what NAP+ Ghana and other large CSOs can achieve, given adequate leadership and resources. Similar parallels can be drawn with the Ghana Business Coalition on Employee Wellbeing and its potential to influence HIV and AIDS prevention at the workplace.

Capacity Building and Technical Support

Many of the capacity development of the human resources needed for the implementation of the programmatic response were implemented and included pre-service, in-service, on-the-job, and workshop training programs. In the health sector, which has perennially experienced shortage of qualified human resources for the provision of quality HIV and AIDS services, task shifting and task sharing approaches are used to deliver the services. GHS/NACP provided training in the public health sector whilst a number of big CSOs built the capacity of smaller NGOs including CBOs and FBOs. CDD-Ghana, HRAC, and the SHARPER project provided capacity building training for CHRAJ, the judiciary, and the police on KP and PLHIV related stigma and discrimination and associated human rights violations and abuses. The GES, with help from the UN System, provided training for teachers and pupil peer educators to spearhead the school-based HIV School Alert Project whilst ILO has been instrumental in supporting HIV training for the informal sector of the economy and the Judiciary. GIZ, Ghana Business Coalition for Employee Wellbeing (GBCEW), and the Ghana Employers Association (GEA) supported the Workplace HIV Policy development and implementation in the hospitality industry and member firms in the private sector. Technical support provided by the National Development Planning Commission (NDPC) has enabled government Ministries, Departments, and Agencies (MDAs) to mainstream HIV into their medium term plans.

Under the SHARE Project, South-South collaboration and staff of Ghana AIDS Commission and other institutions were sponsored to Brazil to gain experience to gain expereince in their local production of ARVs and how Ghana can benefit from such interventions. Other learning points were private sector involvement in HIV prevention, media involvement, work that was done with major transport unions in HIV prevention.

Under Bridge Project – Guided Exposure on M & E Exchange Programme and PWID, staff of Ghana AIDS Commission and other institutions were sponsored to India to learnt the best practices on M & E and study interventions on injecting drug users.

The UN sponsored selected staff of the commission and regional data officers of Ghana Health Services to participate in the subnational training in the use of the SPECTRUM software to generate regional HIV Estimates. As part of efforts to strengthen the Data Quality Assessment of key indicators with particular emphasis on PMTCT at the decentralized level, Data managers of NACP and regional information health officers and GAC TSU and M & E officers were brought together and trained in DQA of the national response. This was sponsored by the UN.

After the training, participants undertook a field exercise under the supervision of GAC after which the results were disseminated at Kumasi. An action plan was developed to address the key challenges identified during the assessment.

Most of the infrastructural needs for the delivery of HIV and AIDS services were met for the period under review. More than 80% of the new or refurbished health facilities including labs needed for the provision of HTC, eMTCT, and ART services were completed and used in providing services and all district, regional, and teaching hospitals were provided with CD4 count machines. The 8 PCR DNA machines for virology required during the period were procured and delivered to all teaching and regional hospitals except Wa and Bolgatanga Regional Hospitals. Stock-outs of CD4 count reagents, rapid test kits for HTC, and ARVs for eMTCT and ART were the major challenges that negatively affected HIV and AIDS services during the period under review.

A document has been developed to provide standard operating procedures (SOPs) to effectively design, manage, implement and monitor quality, evidence-informed, rights-based, and community-owned HIV interventions in Ghana with female sex workers (FSW) and men who have sex with men (MSM) in a harmonized and coordinated manner. Although people who inject drugs (PWID) and prisoners are defined as key populations in Ghana, interventions are limited and there is not enough on the ground experience to informdetailed SOPs. M & E Officers and project managers from selected CSOs were trained with support of FHI360.

Frameworks and guidelines to standardize and improve service delivery quality were developed and are in use in all clinical and laboratory settings. Similarly guidelines to standardize and improve the quality of M&E have been developed by GAC and NACP/GHS and are in use. The MoH/GHS has also developed a roadmap for the supply chain system-strengthening program (SCMP) within the whole public health sector.. The Ministry of Health and partners have recently established a quantification working group, whose Terms of Reference were approved. In addition, National Forecasting and Quantification Guidelines were developed in 2014.
Many technical support activities in the Technical Support Plan of the GAC were not implemented due to lack of funding. These include development of national condom promotion and distribution strategy and guidelines; development of manual on Positive Health Dignity and Prevention {previously called Prevention with Positives} manual for use at the facility level,

development of Monitoring tools for KP peer educators, and development of Guidelines for HIV services for and related study on people with disability.

The Ghana AIDS Commission held a first consultative meeting with persons with disabilities in February 2014 to among others, engage them on specific issues that affect them and to discuss and agree on ways to address them.

In 8 of 10 regions where the TSUs are functional, there has been noticeable improvement in Enhanced HIV and AIDS coordination activities at the decentralized level through regular quarterly RAC meetings; quarterly Focal Persons Meetings, and quarterly review meetings with CSOs. Additionally, there is strengthened partnership and collaboration at the decentralized level through improved monitoring of HIV and AIDS activities of key stakeholders; improved HIV and AIDS reporting by CSOs, metropolitan, municipal, and district assemblies (MMDAs), and GHS; and improved data quality management.

1.5. GARP Indicators 2013 - 2014

Table 4 Indicator Data

Name of Indicator	Indicator value pre-2012	Indicator value 2013	Indicator value 2014	Comments (Data Source)
Target 1. Reduce sexual transmission of HIV by 50 per cent by 2015				
Indicators for the general population				
1.1 Percentage of young women and men aged 15–24 who correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission*	Females 15- 24 yrs 28.3% 15 -19 yrs 27.2% 20 -24 yrs 29.0% Males 15- 24 yrs 34.2% 15 -19 yrs 30.4% 20 – 24 yrs 39.1%	DHS conducted in 2014	Females 15-19 yrs 18.1% 18-19 yrs 19.5% 20-24 yrs 21.8% 20-22 yrs 22.2% 23-24 yrs 21.1% Males 15-19 yrs 24.5% 18-19 yrs 25.1% 20-24 yrs 31.1% 20-22 yrs 30.6% 23-24 yrs 32.0%	Ghana Demographic and Health Survey
1.2 Percentage of young women and men aged 15-24 who have had sexual intercourse before age of 15	Males 15- 24 yrs 4.3% 15–19 yrs 3.6% 20–24 yrs 5.2% Females 15- 24 yrs 7.8% 15 – 19 yrs 8.2% 20 – 24 yrs 7.2%	DHS conducted in 2014		Ghana Demographic and Health Survey
1.3 Percentage of adults aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months	Females 15- 49 yrs 1.0% 15 - 19 yrs 1.2% 20 - 24 yrs 1.6% 25 - 49 yrs 2.4% Males 15- 49 yrs 11.3% 15 - 19 yrs 3.1% 20 - 24 yrs 9.6% 25 - 49 yrs 44.6%	DHS conducted in 2014	Females 5-24 yrs 2.2% 15-19 yrs 2.0% 20-24 yrs 2.4% 25-29 yrs 1.5% 30-39 yrs 0.6% 40-49 yrs 0.4% Males 15-24 yrs 7.9% 15-19 yrs 3.9% 20-24 yrs 13.7% 25-29 yrs 18.1% 30-39 yrs 17.4% 40-49 yrs 18.3%	Ghana Demographic and Health Survey

Name of Indicator	Indicator value pre-2012	Indicator value 2013	Indicator value 2014	Comments (Data Source)
1.4 Percentage of adults aged 15–49 who had more than one sexual partner in the past 12 months and who report the use of a condom during their last intercourse*	Females Males 15 - 49 yrs 26.2% 15 - 19 yrs 24.4% 20 - 24 yrs 49.2% 25 -29 yrs 42.8% 30 -39 yrs 19.6% 40 -49 yrs 3.5% 25 -49 yrs 22.07%	DHS conducted in 2014	Females 15-24 yrs 14.9% 15-19 yrs 21.6% 20-24 yrs 9.4% 25-29 yrs * 30-39 yrs * 40-49 yrs * Males 15-24 yrs 34.2% 15-19 yrs * 20-24 yrs 35.4% 25-29 yrs 18.4% 30-39 yrs 15.0% 40-49 yrs 12.3%	In 2008 GDHS Data not available for females. Only higher risk sex is available * fewer than 25 unweighted cases and has been suppressed.
1.5 Percentage of women and men aged 15-49 who received an HIV test in the past 12 months and know their results.	Females 15 – 49 yrs 6.8% 15-19 yrs 2.6% 20-24 yrs 7.6% 25-49 yrs 24.2% Males 15 – 49 yrs 4.1% 15-19 yrs 1.6% 20-24 yrs 5.7% 25-49 yrs 13.3%	DHS conducted in 2014	Females 15-24 yrs 9.9% 15-19 yrs 4.5% 20-24 yrs 15.3% 25-29 yrs 19.4% 30-39 yrs 17.0% 40-49 yrs 6.8% Males 15-24 yrs 2.5% 15-19 yrs 1.3% 20-24 yrs 4.3% 25-29 yrs 8.3% 30-39 yrs 9.1% 40-49 yrs 6.9%	Ghana Demographic and Health Survey
1.6 Percentage of young people aged 15-24 who are living with HIV	1.9% (HSS 2008) 2.1% (HSS 2009)	1.2%	1.8%	Source NACP Annual Statistics
Indicators for sex workers				
1.7 Percentage of sex-workers reached with HIV prevention programmes	56.3%	IBBSS conducted in 2014		Source IBBSS 2011
1.8 Percentage of sex workers reporting the use of a condom with their most recent client	92.0%	IBBSS conducted in 2014		Source IBBSS 2011

Name of Indicator	Indicator value pre-2012	Indicator value 2013	Indicator value 2014	Comments (Data Source)
1.9 Percentage of sex workers who have received an HIV test in the past 12 months and know their results	66.7%	IBBSS conducted in 2014		The result does not indicate whether those tested knew their results. Source IBBSS 2011
1.10 Percentage of sex workers who are living with HIV	Overall 11.1% Roamers 6.6% Seaters 21.4%	IBBSS conducted in 2014		Only 77% consented to the test. Source IBBSS 2011
Indicators for men who have sex with men				
1.11 Percentage of men who have sex with men reached with HIV prevention programmes	95.70%	IBBSS conducted in 2014		Source IBBSS 2011
1.12 Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	60%	IBBSS conducted in 2014		Source IBBSS 2011
1.13 Percentage of men who have sex with men that have received an HIV test in the past 12 months and know their results	26.30%	IBBSS conducted in 2014		Source IBBSS 2011
1.14 Percentage of men who have sex with men who are living with HIV	17.50%	IBBSS conducted in 2014		Source IBBSS 2011
Target 2.Reduce transmission of HIV among people who inject drugs by 50 per cent by 2015				
Indicators				
2.1 Number of syringes distributed per person who injects drugs per year by needle and syringe programmes	PWID Study to be conducted in 2014	PWID Study conducted in 2014		
2.2 Percentage of people who inject drugs who report the use of a condom at last sexual intercourse	PWID Study to be conducted in 2014	PWID Study conducted in 2014		
2.3 Percentage of people who inject drugs who reported using sterile injecting equipment the last time they injected	PWID Study to be conducted in 2014	PWID Study conducted in 2014		
2.4 Percentage of people who inject drugs that have received an HIV test in the past 12 months and know their results	PWID Study to be conducted in 2014	PWID Study conducted in 2014		

Name of Indicator	Indicator value pre-2012	Indicator value 2013	Indicator value 2014	Comments (Data Source)
2.5 Percentage of people who inject drugs who are living with HIV	PWID Study to be conducted in 2014	PWID Study conducted in 2014		
Target 3. Eliminate mother-to-child transmission of HIV by 2015 and substantially reduce AIDS-related maternal deaths				
Indicators				
3.1 Percentage of HIV-positive pregnant women who receive antiretrovirals to reduce the risk of mother-to-child transmission	82.9% (2008) 54.9% (2009) 74% (2011)		81	
3.1a Percentage of women living with HIV receiving antiretroviral medicines for themselves or their infants during breastfeeding			81	
3.2 Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth	18% (2011)		23%	
3.3 Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months	9% (2011)		18.5%	
Target 4. Have 15 million people living with HIV on antiretroviral treatment by 2015				
Indicators				
4.1 Percentage of adults and children currently receiving antiretroviral therapy among all adults and children living with HIV (2014 definition)		32.8%	33.45%	
4.2 Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	71% (2011)			
Target 5. Reduce tuberculosis deaths in people living with HIV by 50 per cent by 2015				
Indicators				
5.1 Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV	24% (2009)		46.6%	

II. OVERVIEW OF THE HIV AND AIDS EPIDEMIC

The first case of HIV in Ghana was reported in March 1986. Since then HIV has been endemic in the country and has been classified as a generalized epidemic. (WHO definition of a generalized epidemic is when the prevalence is greater than 1% in the general population) By definition, the HIV prevalence among pregnant women has been consistently above 1% but has not exceeded 4%.

The last population-based survey on HIV prevalence carried out in Ghana was through the Ghana Demographic Health Survey (GDHS) of 2003. Results of the DHS 2003 indicated that 2% of adults aged 15-49 were HIV positive (2.7% women and 1.5% men)[4]. Since then, HIV Prevalence in Ghana has been estimated based on sentinel surveillance of pregnant women attending in ANC and most recently through the Estimation and Projection Package (EPP) Modeling.

The EPP modeling (2008) estimated the national HIV prevalence among adults for 2007 to be 1.9% (range 1.7% - 2.2%) and urban and rural prevalence estimated at 2.3% and 1.7% respectively. In 2008, the estimated adult national prevalence was 1.7%. This rose to 1.9% in 2009 and dropped to 1.5% in 2010 and 2011. In 2012, the estimated national HIV prevalence is 1.37% (CI: 1.17 – 1.60). HIV prevalence in 2013 in Ghana was estimated at 1.3% in the adult population.

The National HIV prevalence as per the most recent 2014 EPP modeling estimates is 1.47%.

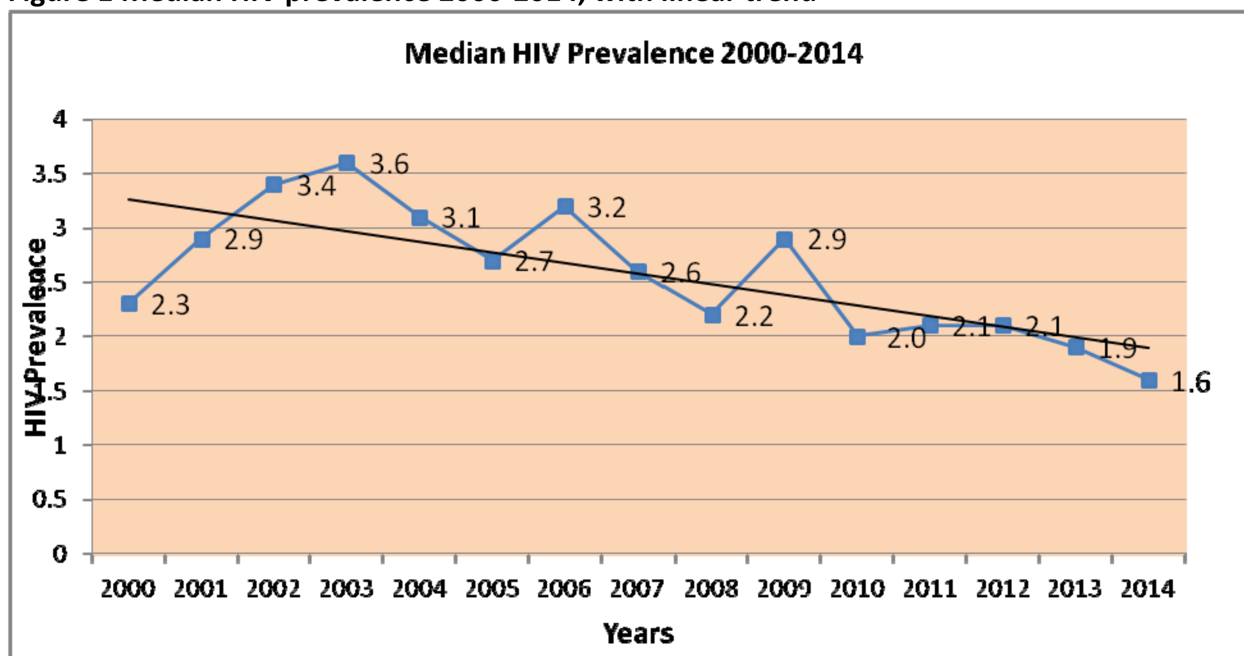
Prevalence varies considerably across the country and populations, and is highest in densely populated areas, mining towns, and towns along borders and main transportation routes.

Data on the HIV prevalence among pregnant women is obtained from the HIV Sentinel Surveillance Survey (HSS). HSS data has been collected from antenatal clinic attendants at 40 sentinel sites across regions of Ghana since 1992. The sentinel sites increased from 8 sites in 1992 to 40 sites in 2005, which have been maintained since then [1]. In all, 24 surveys have been conducted to monitor the trend and provide information on the HIV prevalence in Ghana. Over the last decade the median prevalence has stabilized.

The sentinel surveillance at ANC sites in 2011 indicated a median HIV prevalence of 2.1% (Confidence Interval 1.48-2.72). In 2012 the median HIV prevalence was determined to be 2.1% (Confidence Interval 1.55-2.59). The trend in the median HIV prevalence from sentinel sites since 2003 shows three peaks: 2003 (3.6%), 2006 (3.2%) and 2009 (2.9%). Despite the increase of HIV prevalence from 2007 to 2009, a linear trend analysis shows that prevalence since 2000 is on a downward trend.

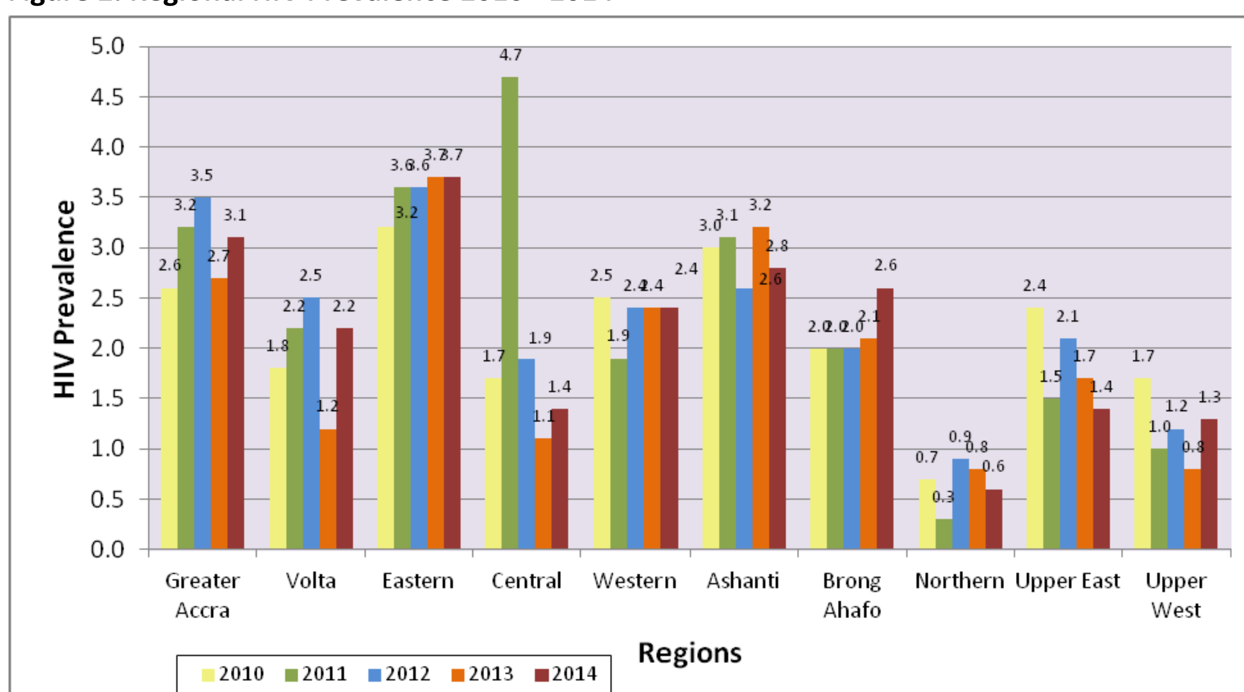
[4] GSS and ORC Macro, 2004

Figure 1 Median HIV prevalence 2000-2014, with linear trend



Source: HIV Sentinel Surveillance Report, 2014

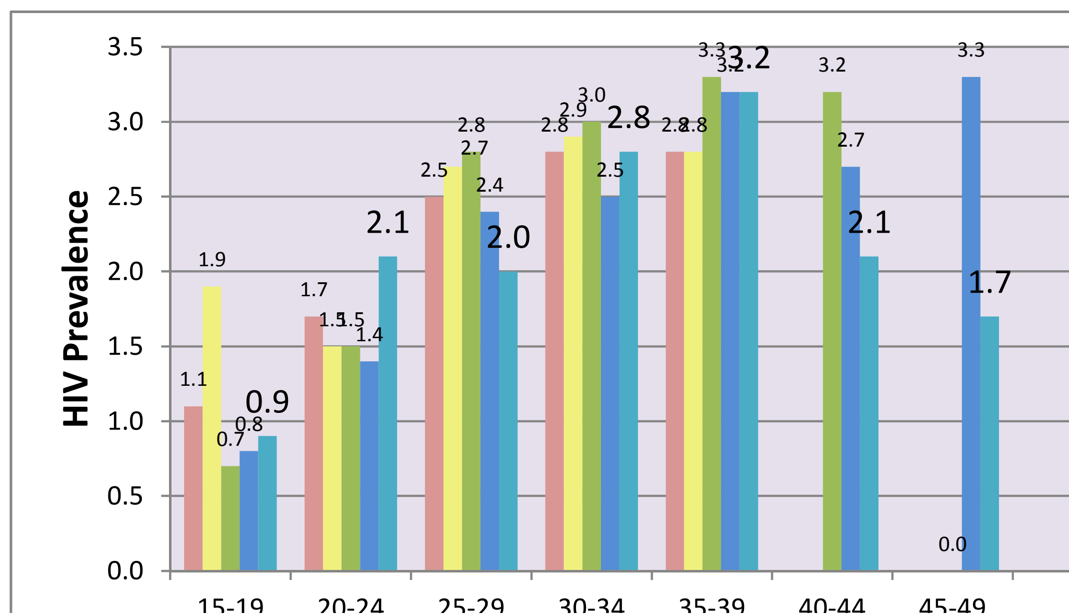
Figure 2. Regional HIV Prevalence 2010 - 2014



Source: HIV Sentinel Surveillance Report, 2014

In the 2012 survey, seven regions, namely Greater Accra, Western, Volta, Western, Volta, Northern, Upper East and Upper West regions recorded an increase in HIV prevalence, the Brong-Ahafo and Eastern regional prevalence remained the same and only Central region recorded a decrease from 2011. The Eastern region has regained has regained its position as the region with the highest prevalence following the significant decline in the Central regional prevalence. Prevalence has increased in the Greater Accra, Volta, Upper West and Central Regionas after a drop in 2013. The Ashanti, Northern and Upper East Regions have experienced a drop in prevalence, whiles the Western and Eastern regions seem to be static.

Figure 3 HIV Prevalence by Age Group and Year 2010 - 2014



Source: 2014 HIV Sentinel Survey Report

HIV prevalence varies across age groups. In 2011, the prevalence was highest (2.9%) in 30 – 34 age group and lowest (1.5%) in the 20 - 24 age group. The prevalence in youth aged 15 – 24 years which is an indicator of new infections was 1.7% in 2011. The HIV prevalence in this age group has also seems to be stable. The prevalence in youth aged 15-24 years rose to 1.7% in 2011 [3], dropped to 1.2% in 2013 and rose again to 1.8% in 2014. In 2012, the highest prevalence was recorded within the age group 35-39 years (3.3%) followed by the 40-44 age group (3.2%), and the least prevalence of zero percent was within the 45-49 age group. Prevalence for age group 15-19 years was 0.7% and that among young persons 15 to 24 years which is used as a proxy for new infections was 1.3%. In 2013, however, the highest prevalence was in the 45-49 age group (3.3%) followed closely by the 35-39 age group (3.2%). The least prevalence was recorded in the 15-19 age group 0.8%, and that among young persons (15-24 years) was 1.2%.

In 2014 the highest prevalence (3.2%) was recorded in the 35-39 age group followed by the 30-34 age group (2.8%). The lowest prevalence (0.9%) was recorded in the 15-19 age group. The rise in the 15-24 age group is worth monitoring in the coming years.

Table 1 above and **Table 9** below illustrate the trends of the current National HIV Estimates 2014, with respect to persons were living with HIV by gender, new HIV infections for adults and children) and Annual AIDS deaths.

HIV epidemic among Key Affected Populations (KAPs)

In Ghana, it is estimated that 80% of HIV infections are through sexual transmission[5]. A debate on the contribution of FSW and other Key affected populations (KAPs) to HIV incidence occurred after a study conducted by Cote *et al.* which estimated that 84% of infections were attributable to sexual intercourse with FSWs [34]. The most at risk populations in Ghana include Sex Workers, clients of Sex Workers, Men Who Have Sex with Men (MSM) and Injecting Drug Users (IDUs) and Prisoners. These populations are highly

exposed to HIV infection due to their risky sexual behaviour and tend to contribute a significant proportion of new HIV infections[5].

Female Sex Workers (FSWs)
FSWs and their clients accounted for 8% of the total new infections. The incidence among the FSWs was 0.4%. Female partners of clients accounted for 10.5% of all new infections (compared with 19% in 2009). Thus, sex work accounted for 18.5% of all new infections over a one-year period. Over a longer time period this figure would be considerably higher, since a significant proportion of HIV infections in men in the low-risk and CHS groups are likely to have been contracted from FSW among men who used to be clients of FSW.

The contribution of FSWs and their clients to total HIV infections is much less than previous estimates and may indicate greater awareness of HIV, in addition to the effectiveness of targeted interventions in this KP. Previous studies among FSW reached by interventions report high levels of condom use by FSWs with paying clients.

Men Who Have Sex with Men (MSM):
Recognition of the increasing presence of MSM, particularly in large cities may have, in part contributed to lowering high prevalence of HIV and STIs in this group, increasing protective acts, and reducing the number of infections and incidence rate. Interventions led by WAPCAS and AED/SHARP over the past decade have improved access to this risk group. Besides the communication strategy with leaflets, SMS messages, and peer education, lubricants and condoms and clinical care have been provided.

Injecting Drug Users (IDUs)
Data available on IDUs in Ghana is from prisons. The 2013 prisons survey found very low prevalence of injecting drug use and hence low HIV prevalence rates in this population.

The formative study: *Assessing the Situation of drug use including Injecting Drug Users (IDUs) in Accra, Tema, Sekondi-Takoradi and Cape Coast*, confirms that such drugs as heroin and cocaine, as well as psychotropic substances, are now consumed locally. This conclusion is based on a qualitative study conducted among current drug users in the greater Accra, Tema, Cape Coast and Sekondi Takoradi areas. The portrait of the typical drug user that emerges from this study is a 30-year old, working class. The drug users are males consuming mainly Cocaine, Heroin, Alcohol and smoke Cigarette or Crake Cocaine. Injectable drugs include Pethidine, Heroin,Valium, Rophynol, Methamphetamine, Methadone Syrup, Benzodiazepines and the non-injectable drugs includes Heroin, Marijuana, Pure and Crack Cocaine, Alcohol, Blue-blue, Ecstasy, Diazepam, Harshish, Datura, Madala, (Petro-carbon), Cocktail of wee, and Glue.
Among the reasons the participants gave for using illicit drugs were: peer influence, coping mechanism, family influence, to be feared in the schools as a sign of respect, as a morale booster, and curiosity. Some of them admitted to acquiring the habit while outside the country.

At 95 percent confidence interval the drug users' population was estimated as follows 2,971-1,829for Accra, 1623-838 for Tema, 1826-1007 for Cape coast and 1584-949 for Secondi Takoradi as shown in the table below

[5] HIV Epidemic Analysis report, 2010 Page8

Table 5 Estimated Population of Drug Users

CITY	ESTIMATED POPULATION	95% CI
Accra	2,400	2,971 – 1,829
Tema	1,231	1623 - 838
Cape Coast	1,416	1826 - 1007
Sekondi-Tarkoradi	1,267	1584 - 949

Source: Assessing the Situation of drug use including Injecting Drug Users (IDUs) in Accra, Tema, Sekondi-Takoradi and Cape Coast

Prisoners

A survey carried out among prison inmates in 2013 found that the HIV prevalence among prisoners in was 2.3 percent (95% confidence interval of 1.7%-2.9%). There is a substantial variation by sex. The prevalence is 1.5% among male inmates and 11.8% among females. Prevalence was highest in the 40-49 years age group (4.4%) and lowest in the 20-29 age group (1.3%).

Men and women engaging in casual heterosexual sex

Men and women engaging in casual heterosexual sex are characterized by having sex with a non-marital and non-cohabiting partner. Reduction of multiple and concurrent partnerships have been shown to be effective measures in generalized epidemics. Sex behaviour practices were improving in Ghana since 1998, as indicated by the persons involved in multiple sex partnerships, age at sexual debut and abstinence up to 2003. It would appear that current educational measures havec ceased to have effect as shown in the tables below, and so need to be reassessed and intensified.

Table 6 Percentage of women & menage 15 – 49 with more than one sex partner in last 12 months

	% women with 2 or more partners in last 12 months (all women)		% men with 2 or more partners in last 12 months (all men)	
Region	**2008 DHS**	**2014 DHS**	**2008 DHS**	**2014 DHS**
Western	0.9	1.3	11.6	20.3
Central	0.5	1.6	7.1	21.6
Greater Accra	0.8	1.5	15.1	18.6
Volta	0.5	1.4	10.9	13.5
Eastern	2.4	0.7	11.7	12.9
Ashanti	0.2	1.4	15	5.2
Brong Ahafo	0.7	2.0	8.3	10.9
Northern	0.5	0.3	6.6	13.3
Upper East	1.1	0.7	9.1	9.5
Upper West	1.5	0.9	6.7	8.2
National	1.0	1.3	11.4	14.5

Table 7 Percentage of women & men age 15 – 49 mean lifetime sex partners

	Women: Mean # of lifetime partners		Men: Mean # of lifetime partners	
Region	**2008 DHS**	**2014 FDHS**	**2008 DHS**	**2014DHS**
Western	1.9	2.2	5.7	9.6
Central	2.1	2.3	5.6	7.4
Greater Accra	2.2	2.5	5.3	8.5
Volta	2	2.5	5.3	6.1
Eastern	2.3	2.4	6.7	7.3
Ashanti	2.3	2.4	5.9	8.0
Brong Ahafo	1.9	2.3	5	6.1

Northern	1.3	1.6	3	3.0
Upper East	1.2	1.6	3.7	2.6
Upper West	1.4	1.4	4	4.3
National	2.0	2.3	5.6	7.3

There was an increase in the proportion of men with multiple partners between 2003 and 2008 across most regions except in Central, Brong-Ahafo and Northern Regions. Between 2008 and 2014 a similar trend is seen except in the Ashanti Region. Lifetime partners have increased marginally for women but markedly for men.

High-risk sexual behaviour
Table 8 shows data on levels of sexual activity across regions. These include the DHS reports on persons who had first sex before age 18.

Table 8 Percentage of men and women age 15 24 who have had sex disaggregated by age

	% who had sex in the last 4 weeks		Sex before aged 18 years (18-24 yrs)		% never married youth (15-24) sex in past 12 months	% never married youth (15-24) sex in past 12 months
Region	2008 DHS (Men)	2008 DHS (Women)	2008 DHS (Men)	2008 DHS (Women)	2008 DHS (Men)	2008 DHS (Women)
Western	41.1	42.8	26	39.4	22.3	24.3
Central	44.1	37	24.5	45.4	28.4	41.3
Greater Accra	44.2	37.6	26.7	32.1	31.7	33.1
Volta	32.9	41.6	31.6	44.7	20.4	22
Eastern	41.8	41.2	32.8	55.1	35.8	43.3
Ashanti	43.5	44.2	35.2	45.8	33.4	42.9
Brong Ahafo	46.1	46.4	46.9	51.7	47.9	39.9
Northern	26.9	29.9	7.2	41.8	16.8	19.7
Upper East	28.2	36.7	10.7	50.8	28.9	20.3
Upper West	27.4	32.2	18.2	51.1	19.8	32.6
National	41.4	39.9	27.7	43.9	29.5	34.2

Extent of HIV infection and its impact on various populations
The total estimated number of people living with HIV in Ghana by 2012 is estimated at 235,982, comprising about 101,759 males and 134,223 females. This figure is projected to decrease to 216,763 by 2017. It is also estimated that about 7,991 new infections occurred in 2012 with a projected decrease in annual new infections to 2,621 in 2017. The estimated number of AIDS related deaths in 2012 was 11,655 with a projected decrease to about 2,396 deaths in 2017. It was also estimated that 852 children were newly infected with HIV in 2012. The number of children infected by HIV annually is expected to decrease to 512 in 2017[6]. Table 9 shows the summary of the projected estimates of new HIV estimates up to 2017 based on the SPECTRUM modeling.

[6] National HIV Prevalence and AIDS Estimates Report 2013 NACP, 2014

Table 9 Summary of HIV estimates up to 2017

Summary of HIV population					
HIV/AIDS Summary					
	2013	**2014**	**2015**	**2016**	**2017**
HIV population					
Total	250,341	250,232	251,897	253,301	254,987
Male	102,878	101,995	102,023	102,019	102,228
Female	147,463	148,237	149,874	151,282	152,759
Prevalence (15-49)	1.52	1.47	1.44	1.4	1.37
New HIV infections					
Total	12,039	11,356	10,624	9,002	8,333
Male	5,222	4,913	4,586	3,843	3,556
Female	6,817	6,444	6,038	5,159	4,777
Children 0-14	2,216	1,889	1,605	859	745
Annual AIDS deaths					
Total	9,174	9,248	6,814	5,316	4,483
Male	4,618	4,754	3,531	2,760	2,327
Female	4,556	4,493	3,283	2,556	2,156
Children 0-14	1,402	1,295	1,108	919	820

Source: National HIV Prevalence and AIDS Estimates Report 2014, NACP, 2015

According to the DHS 2008, less than 1% of children under 18 years have both parents dead while 8% have one or both parents dead. AIDS contributes about 12% of the total orphans. Table 10 shows the projected number of AIDS orphans up to 2017 based on SPECTRUM modeling.

Table 10 Projected number of orphans due to AIDS 2013 to 2017

	2013	**2014**	**2015**	**2016**	**2017**
Maternal orphans					
AIDS	65,598	61,080	56,840	51,533	46,314
Non-AIDS	348,884	354,733	360,572	366,228	371,041
Total	414,482	415,813	417,411	417,762	417,355
Paternal orphans					
AIDS	97,242	93,387	89,810	83,518	76,945
Non-AIDS	557,449	567,319	578,186	589,421	600,399
Total	654,690	660,706	667,996	672,939	677,344
Double Orphans					
AIDS	37,710	35,649	33,633	30,856	28,039
Non-AIDS	93,544	95,244	96,965	98,748	100,432
Total	131,255	130,893	130,598	129,605	128,472
Total Orphans	937,918	945,626	954,810	961,096	966,227
All AIDS Orphans	131,425	124,784	118,678	109,413	99,979
% of AIDS Orphans	14%	13%	12%	11%	10%

Source: National HIV Prevalence and AIDS Estimates Report 2014 NACP, 2015

Orphaned children are at a greater risk of dropping out of school due to lack of money or the need to take care of a sick relative. DHS 2008 found out that the proportion of children 0-14 attending school who have lost both parents is 67%. The ratio of orphans to non-orphans attending school is 0.76.

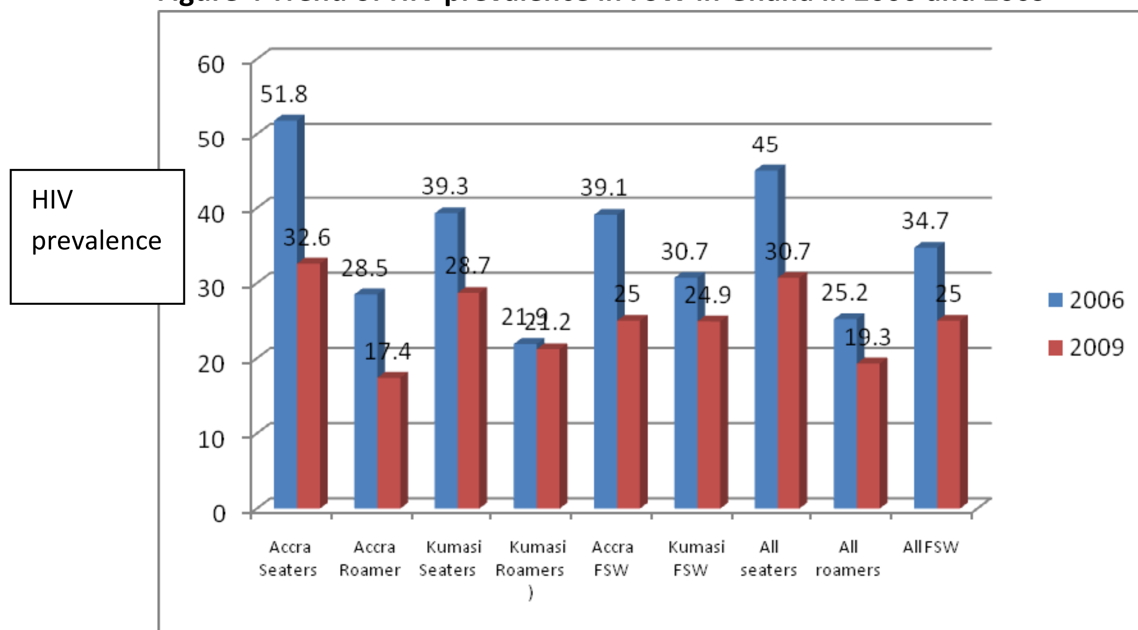
Determinants of spread of HIV in Ghana

The studies that have informed the identification of key determinants of HIV in Ghana include the Ghana DHS 2008, Modes of Transmission Study (2009 and 2014) and the HIV epidemic analysis of 2014. The key determinants of HIV include the following:

1. ***Marginalization of Key Populations (KPs)***

KPs (FSWs, MSM, and IDUs) have difficulties accessing HIV prevention services due to stigma and discrimination, social hostility, fear of losing jobs and families and even verbal and physical violence. Legal barriers also hinder service providers from reaching these groups given the criminalization of KPs activities. The size of these populations is also not known and services may not be reaching a significant number of them. As a result the KPs continue to contribute a significant proportion of new HIV infections.

Figure 4 Trend of HIV prevalence in FSW in Ghana in 2006 and 2009



Source: Bio-behavioural Surveillance Survey 2008 [8]

The National Prevalence Estimates and Projections for 2012 to 2016 are based on the prevalence of HIV in the country. With the declining HIV prevalence the total number requiring ART is slightly reduced with each ensuing year.

2. ***Low condom use***

Although the awareness of HIV prevention among the general and most at risk populations is high, this knowledge has not adequately been translated to behaviour change. The DHS 2008 indicated that only 25% and 45% of females and males respectively reported using condoms during high risk sex behaviour.

3. ***Multiple concurrent partners***
DHS 2008 data shows that men tend to have more multiple sexual partners than women. 1% of women reported having more than 2 partners in the last 12 months during DHS 2008 compared to 1.1% during DHS 2003. On the other hand, the percentage of men reporting having more than 2 partners increased from 9.9% (DHS 2003) to 11.4% (DHS 2008). Secondly, the average lifetime partners among men are significantly higher among men (5.6) than women (2). This is partly attributed to the polygamous culture among some of the communities in Ghana. However, the practice exposes the partners, including older people who are more likely to be in polygamous relationship, to HIV infection.

4. ***Stigma and discrimination***
HIV stigma and discrimination can be a hindrance to access to HIV prevention services resulting in exposure to HIV infection. HIV stigma and discrimination is a significant factor in Ghana. DHS 2008 shows that only 32% of women and 43% of men would buy fresh food from a shopkeeper living with HIV while 62% of women and 66% of men reported that an HIV positive teacher should be allowed to continue teaching. The percentage expressing accepting attitudes on all four measures of stigma and discrimination is just 11% of women and 19% of men aged 15-49. HIV related stigma hinders access to HIV services and consequently contributes to further new HIV infections.

5. ***Gender***
Women are disproportionately affected by HIV. Men who are clients of sex workers and those with multiple sex partners act as a bridge populations spreading HIV infection to their female partners. Men involvement in critical interventions such as consistent condom use and prevention of mother to child transmission of HIV is also limited. There is need to empower among women.

A Modes of Transmission (MOT) study was undertaken in 2008 to determine the contributions of various population groups (aged 15–49 years) to HIV transmission. The findings of that survey were revised in 2010 based on an updatd model and to address missing data in the 2008 data set.

This survey was redone in 2014 to update the modes of transmission study (2008) and to identify populations at risk of HIV infection. The key findings of the modelling study were as follows:

1. With the inputs used the model estimated 6,704 new HIV infections among adults (15-49) in Ghana in 2014). This can be compared with an estimate of 14,744 new HIV infections in Ghana in 2008 from the previous MOT study and 5,970 (2014) as estimated by the SPECTRUM.

2. The majority of infections (72.3%) occurred among the general low risk population. Stable heterosexual couples constituted (24.2% in 2014 compared to 24.7% in 2008) and persons involved in casual heterosexual sex (CHS with non-regular partners) and their regular partners (48.1% compared to 12.3% in 2008).

3. Clients of female sex workers (FSW) accounted for 5.0% and sex workers for 2.9% of all new infections (compared to 14.7% and 5.4%, respectively, in 2008). Female partners of clients accounted for 10.5% of new infections (compared to 19% in 2008). Thus, taken

together sex work accounted for 18.4% (compared to 27% in 2008) of all new infections.

4. Overall, 27.5% (compared to 43% in 2008) of new infections occurred in high-risk groups--people who inject drugs (PWID), men who have sex with men (MSM), FSW, and their regular partners.

5. Data from 2011 Integrated Bio-Behavioral Surveillance Survey (IBBSS) shows that MSM are responsible for only 3.5% of all new infections (compared to an estimate of 13.1% in 2008).

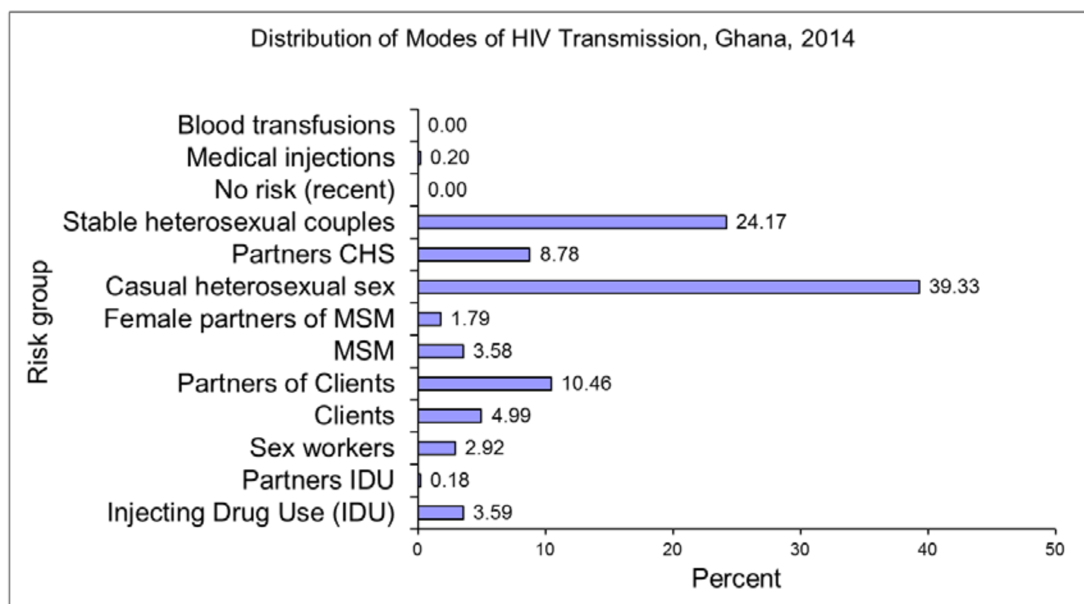
6. Medical injections and blood transfusions together accounted for only 0.2% (compared with less than 0.4% in 2008) of all new infections.

7. The groups with the highest incidence of HIV in 2014 were PWID (3,543 per 100,000) and MSM (696 per 100,000) with their partners (753 per 100,000). This can be compared with 2008: MSM (9,585 per 100,000), their partners (2,439 per 100,000), and PWID (4,996 per 100,000). However, data for PWID were taken from 2013 Prison Study, and thus may be an overestimation population level values.

These findings suggest that intervention efforts in Ghana since 2008 among key populations have resulted in reduced transmission among these groups. Transmission among the general population (persons having casual heterosexual sex, their partners, and couples in stable heterosexual relationships) is becoming a more important driver of the HIV epidemic in Ghana.

Fig 5 gives an overview of the estimated proportion of new infections and their sources.

Figure 5 Distribution of new infections by modes of exposures[7]



Source: Ghana - Modes of HIV Transmission in West Africa Study, 2014

[7] Clients refer to persons engaged in sex with female and male sex workers. Partners of clients are the spouses of clients of female or male sex workers.

The relatively low number of new infections is due partly to the fact that 24% of men and 16% of women had either never engaged in sex or had abstained from sex for one year (20,). The high rates of condom use among female sex workers and their clients also contributed to the relatively low number of infections. On the other hand, the use of Syphilis as a proxy for STI infection may have underestimated number of new HIV infections.

It is not entirely surprising that the highest proportion (39.3% compared to 28.4% in 2009) of new infections occur among those having casual heterosexual sex. Condom use among this group is typically low (18.1%) and is also difficult to promote. The GDHS (2003) findings suggest that there is a wide scope for transmission within couples. Among PLHIVs, only 13.5% had never been married; 76.5% were currently married or in union. Compared with women who have never been married or in union, women in monogamous marriage were 1.4 times more likely to be HIV-positive. While most (95.8%) co-habiting couples in Ghana were both negative, 77.9% of infected couples are discordant. Further, most of the concordant positive couples were likely discordant at some point during their union. With most (88.3%) of cohabiting couples being unaware of their HIV status, condom use and other risk reduction behaviour will probably remain low.

The results of the 2014 MOT study suggest that HIV intervention efforts in Ghana since 2008 have resulted in reduced transmission among key populations. However, transmission among the general population (persons having casual heterosexual sex, their partners, and couples in stable heterosexual relationships) is becoming a more important driver of the HIV epidemic in Ghana.

III NATIONAL RESPONSE TO THE HIV AND AIDS EPIDEMIC

In 2000, the establishment of the Ghana AIDS Commission (GAC) and its enactment into law in 2002, marked the era of multi-sectoral response to HIV and AIDS. GAC, a supra-ministerial body was mandated to formulate a national comprehensive HIV/AIDS policy, provide high level advocacy, effective leadership, direct and co-ordinate the national response to HIV and AIDS response. Since its inception, the GAC has made considerable progress in its functions of advocacy, policy formulation, resource mobilization, monitoring and evaluation and research as well as coordination of HIV/AIDS interventions.

National Strategic Plan

Ghana subscribes to the "three ones principles" (One National Coordinating Authority, (the GAC (established through the enactment of law-ACT 613, 2002)), One National HIV and AIDS Framework, (NSF) and One National level monitoring and evaluation system coordinated by the GAC.

The National Strategic Framework 2001-2005 (NSF I) was developed and used to guide the implementation of the HIV and AIDS response. Following a Joint Programme Review (JPR) of the National Response in 2004 and other reviews, which indicated that, the implementation of the NSF I (2001-2005) focused mainly on prevention as against the other components, the NSF II (2006-2010) was designed to focus on wider areas of interventions. The NSF II was developed within the context of the Ghana Growth and Poverty Reduction Strategy 2006 – 2010, Universal Access to Prevention, Treatment, Care and Support by 2010 and the achievements of the Millennium Development Goals by 2015. The framework was premised on the 1992 Constitution of Ghana, Ghana Government's Medium term Strategy document, Ghana Poverty Reduction Strategy, the revised Population Policy and the Millennium Development Goals.

The Ghana National Strategic Plan for HIV and AIDS1 (NSP) 2011-2015 was developed during 2010 to continue and strengthen the national response to HIV and to build on the efforts of the two five year National HIV & AIDS Strategic Frameworks of 2001-2005 and 2006-2010 respectively. This NSP has been prepared on the premise that HIV is both a development issue and also a public health challenge.

The HIV & AIDS National Strategic Plan 2011-2015 (NSP) and its supporting documentation (including the Operational Plan for 2011 – 2013 and the draft M&E Plan) include a detailed analysis of available epidemiological data and a comprehensive description of the contextual and operating framework in Ghana.

The NSP is aligned with the overarching national development plan, the Ghana Shared Growth and Development Agenda (GSGDA) 2010-2013. In addition, the NSP fits into existing institutional arrangements for the oversight and implementation of a multi-sectoral HIV and AIDS response. The NSP identifies and takes into account the relevant socio-cultural, regulatory, policy and organizational issues that affect the multi-sectoral HIV response.

The NSP is aligned with broad health sector policy and relevant strategic plans. Furthermore, the NSP documentation is informed by a detailed HIV response analysis, including, but not limited to, a health system gap analysis which addresses some of the recommendations of the Health Sector JANS carried out in November 2010.

This strategic plan has been structured into 14 sections.

Section 1: Details the rationale for this strategic plan and the process through which the plan was developed.

Section 2: Describes the epidemic and response analysis, the determinants of the epidemic and priorities for the NSP 2011-2015.

Section 3: This section outlines the priorities for the NSP 2011-2015, the key principles that will guide all stakeholders implementing the strategic plan and the impact expected from this strategic plan.

Section 4: This part summarises the modes of prevention of new infections. This section details the HIV prevention strategy for the next five years. It lays out the outcomes, outputs and strategies to be implemented to reduce HIV infections by half by 2015.

Section 5: HIV treatment, care and support segment. In this section, the scale up plan for HIV treatment is presented in which the strategic plan targets 85 percent of PLHIV eligible for ART being provided with the services.

Section 6: Mitigation of Social and Economic Impact of HIV section. The strategies to mitigate the social and economic impact of HIV are laid out in this section. The strategies focus on addressing HIV related stigma, protection of rights of PLHIV, supporting OVC and empowering PLHIV economically to enable them access basic services.

Section 7: Health Systems Strengthening part. The section outlines strategies for strengthening the health system with a view to improving HIV services delivery.

Section 8: Community systems strengthening section. The capacity development of the community system is critical for effective delivery of community based services such as Home Based Care (HBC), Condom Promotion, HIV awareness and advocacy, HIV Testing and Counselling (HTC) and in creating demand for HIV treatment and care services are laid out here.

Section 9: Public Sector Response. The section outlines the public sector role in the NSP with a focus on the mainstreaming (internal and external) of HIV.

Section 10: Funding Mechanisms. The section identifies the strategies for resource mobilisation for the NSP and how the accountability for the funding can be strengthened.

Section 11: This section is about the policy and advocacy strategies. It identifies the gaps in the policy framework for the national response and proposes how these policies can be developed and advocacy for disseminating the policies implemented.

Section 12: Coordination and Management segment. The section identifies how coordination and management of the national response will be strengthened to improve implementation.

Section 13: Strategic Information. It lays out the strategies for generating and using strategic information to support planning and implementation of the national response.

Section 14: Costing the NSP 2011-2015. The section provides a summary of the costing of the strategic plan. This section shows the estimated financial resources needed to implement this strategic plan and the likely financial gap based on current funding commitments from all main sources.

The challenges and recommendations from assessments of the legal and policy frameworks that affect the HIV and AIDS response in Ghana are addressed in the NSP.

International best practice and global thinking on the HIV and AIDS pandemic inform the guiding principles of the NSP. Equity, human rights and gender-sensitive approaches, supported by evidence and a focus on results, underpin the NSP. The key goal of the NSP to reduce new HIV infections by 50% by 2015 upholds the country's commitment towards MDGs 4, 5 and 6.

Although there is a paucity of robust data on Most-at-Risk-Populations (MARPs), a reasonable rationale for the prioritization of Female Sex Workers (FSW); Men who have Sex with Men (MSM) and Injecting Drug Users (IDU) is provided and over the years more data has been obtained. In addition, the NSP targets pregnant women, so as to virtually eliminate mother to child transmission (MTCT) of HIV and reduce MTCT rates to less than 5% by 2015. The NSP also targets the youth who are seen as being particular vulnerable to new infection of HIV.

The activities planned for the 5 years were costed using the NSP Operational Plan (OP) for 2011 -2013. The estimated costs of the first 3 years OP were then used as a basis to inform the extrapolation of the costing for 2014 and 2015. The details of the costed NSP 2011-2015 are shown in Table 11.

For Prevention of New Infections and Treatment, Care and Support the cost data is disaggregated by intervention area. The total cost estimated for the NSP for the period 2011 to 2015 is US$ 443,863,268, increasing from US$ 59.7 million in 2011 to US$ 104.3 million in 2015. In all, Prevention of new HIV infections makes up the largest share of the estimate, representing 46.5 percent of the entire NSP budget driven mainly by the Most at Risk Populations (MARP) intervention area.

Treatment, Care and Support makes up 17.8 percent of the overall NSP budget with treatment taking 88 percent of total resources in this priority area. Mitigation of Social and Economic effects of AIDS accounts for 3.3 percent of all the resources needed by the NSP. Programme support areas - Health Systems Strengthening, Public Sector Response, Policy and Advocacy, Coordination and Management, and Strategic Information accounted for the remaining 32.7 percent of the total resources needed.

The proportional distribution of total fund allocations for 2012 and 2013 are captured in Figures 6 and 7 respectively. Prevention is expected to account for 42 percent and 52 percent of the total HIV and AIDS related expenditure in 2012 and 2013 respectively whereas Treatment, Care and Support would account for 16 percent each of the total expenditure in both years. 18 percent and 9 percent of the total HIV and AIDS related expenditure in 2012 and 2013 respectively is budgeted to go into Strategic Information with 7 percent and 8 percent going into Coordination and Management within these periods respectively. Health System Strengthening is expected to account for 6 percent of the total resources in 2012 and this is supposed to reduce to 3 percent in 2013.

Table 11 Costing of National Strategic Plan for HIV and AIDS, 2011-2015

GHANA: COSTING OF NATIONAL HIV AND AIDS STRATEGIC PLAN (NSP) 2011 - 2015

PRIORITY AREAS	COST IN U.S. DOLLARS					TOTAL
	2011	2012	2013	2014	2015	
TOTAL ESTIMATED RESOURCES	59,674,037	84,694,045	98,881,829	96,296,739	104,316,618	443,863,268
PREVENTION	19,610,307	35,708,282	51,535,486	46,119,122	52,001,429	204,974,626
Intervention Area: PMTCT	5,895,500	6,051,368	6,137,842	6,228,406	6,247,769	30,560,885
Intervention Area: HTC	6,175,000	9,100,000	10,400,000	10,400,000	11,310,000	47,385,000
Intervention Area: Blood Safety	1,225,000	1,225,000	1,225,000	1,225,000	1,225,000	6,125,000
Intervention Area: High Risk Sexual Behaviour	3,726,000	4,657,500	5,868,450	7,327,800	8,787,150	30,366,900
Intervention Area: Sexually Transmitted Infections (STIs)	1,430,000	1,522,700	1,622,930	1,729,660	1,837,630	8,142,920
Intervention Area: Most at Risk Populations	1,158,807	13,151,714	26,281,264	19,208,256	22,593,880	82,393,921
TREATMENT, CARE AND SUPPORT	10,210,849	13,098,897	15,805,104	18,533,982	21,321,945	78,970,776
Intervention Area: Treatment	9,111,283	11,511,759	13,869,143	16,256,251	18,782,168	69,530,603
Intervention Area: Care and Support	1,099,566	1,587,138	1,935,961	2,277,731	2,539,777	9,440,173
MITIGATION OF SOCIAL AND ECONOMIC EFFECTS	2,686,828	2,821,143	2,962,207	3,110,284	3,265,904	14,846,367
HEALTH SYSTEMS STRENGTHENING (HSS)	2,815,543	4,726,728	3,231,034	3,264,615	3,294,767	17,332,687
PUBLIC SECTOR RESPONSE	2,519,430	2,727,727	2,546,695	2,597,951	2,597,951	12,989,753
POLICY AND ADVOCACY	2,600,639	4,130,266	5,624,224	5,421,071	6,127,142	23,903,342
COORDINATION AND MANAGEMENT	4,010,803	6,230,964	8,454,396	8,018,108	8,988,956	35,703,228
STRATEGIC INFORMATION	15,219,638	15,250,038	8,722,683	9,231,606	6,718,523	55,142,488

Source: GAC (2011). National Strategic Plan, 2011-2015.

Figure 6 National Response Budget by Intervention Areas, 2012

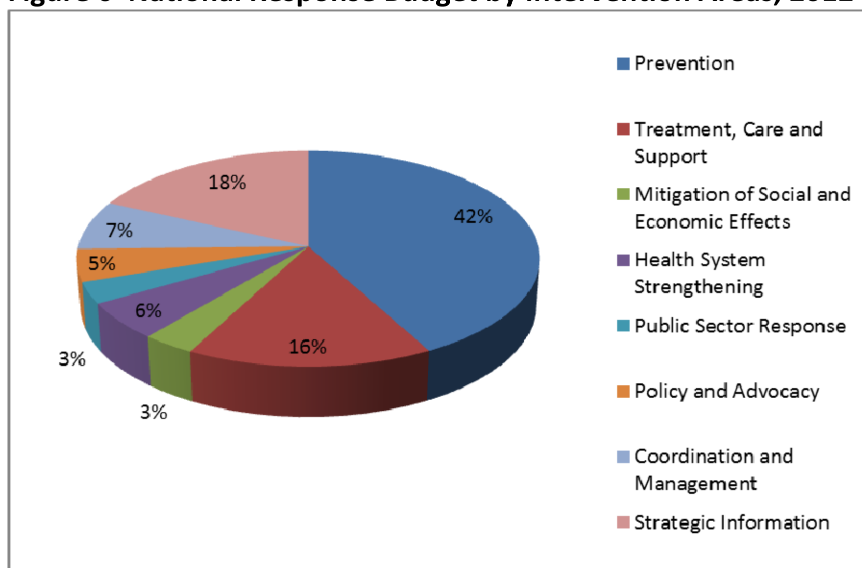
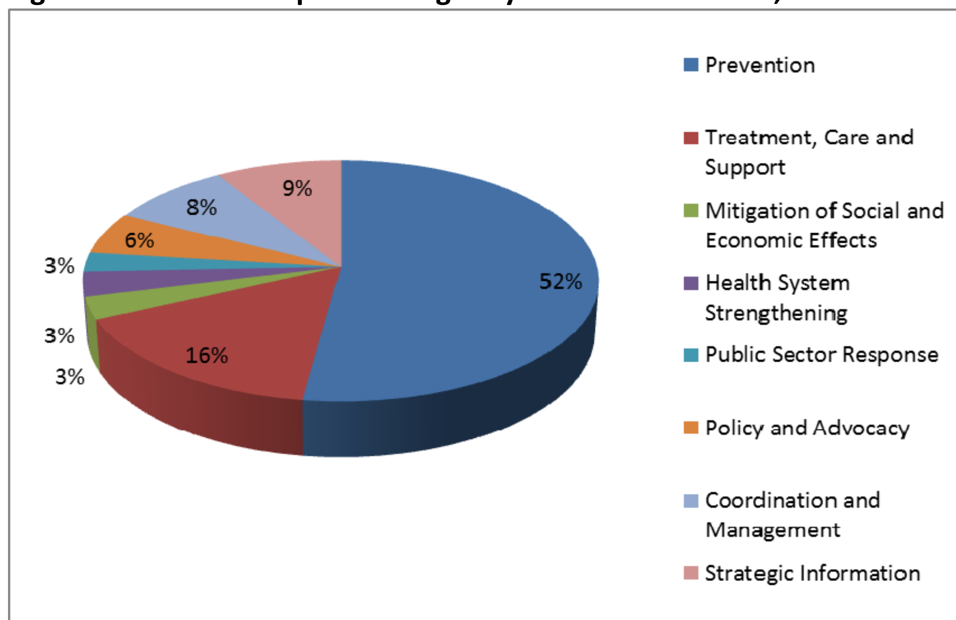


Figure 7 National Response Budget by Intervention Areas, 2013



Trend analysis of funding, funding Gap analysis, 2014 Budget and actuals and 2015 budget estimates and strategies for mobilizing resources for the NSP (Operational Plan) 2014-2015 and beyond have been presented at the National Partnership Forum as follows:

Table 12 HIV 2014-2017 Gap Analysis and Counterpart Financing Table (000 USD)

	2014	2015	2016	2017
Resource Needs of NSP	100,420	107,176	124,527	144,687
Total Domestic Resources	31,924	48,280	46,261	47,794
Gov't of Ghana	12,186	28,542	26,523	28,056
Private Sector	19,738	19,738	19,738	19,738

Total External Resources	20,417	55,243	50,642	48,961
UN System	6’860	6,123	6,123	6,123
Bilateral Agencies(USG)	9,982	10,000	10,000	8,000
TGF	3,575	33,120	34,519	34,838
Total Current & Anticipated Resources	52,341	103,523	96,903	96,755
Resource Gap for NSP	48,079	3,653	27,624	47,932
% Annual Funding Gap	47.8%	3.4%	22.2%	33.1%

Funding Gaps 2015-2017

	Funding Gap (US$’000)
2015	3,653
2016	27,624
2017	47,932
Total	**79,209**

Domestic sources identified for additional resource mobilization for the national response include Government of Ghana and the private sector. External sources include strengthening existing donor partnerships and intensifying engagement with Brazil, India and China (BRIC) sources.

Non-Clinical HIV Prevention

Background

A key component of the National Strategic Plan is the prevention of new HIV infections. The plan sets the targets for prevention strategies and outputs to halve HIV infections by year 2015 relative 2010 baseline figure of about 25,000. This section of the report details the non-clinical HIV prevention interventions undertaken between January 2011 and June 2013. Non-clinical HIV prevention interventions that were implemented include Behavior Change Communication (BCC), Awareness Campaigns, HIV Testing and Counseling (HTC), Prevention of Mother to Child Transmission of HIV (eMTCT) and Condom Promotion and Distribution. Currently, HIV prevention activities in Ghana are funded primarily by USAID followed by Global Fund and the GoG. Other sources of funding include DANIDA, the UN system, and GIZ.

Prevention programmes continue to be the main stay of the HIV response in Ghana. With a National prevalence below 1.4%, the majority of the population still remains HIV negative and needs to be maintained as such. Prevention must therefore remain the cornerstone of Ghana’s response to halt and reverse the HIV epidemic in the long term. Combination of evidence-informed and targeted interventions in HIV programmes is the key for effective HIV prevention. Prevention and Behavioural Change Communication is one of the key intervention areas in the NSP.

TARGET 1. HALVE SEXUAL TRANSMISSION OF HIV BY 2015

Comprehensive knowledge on HIV is the first step in the adoption of behaviour that reduces the risk of HIV transmission. The knowledge and behaviour of most at-risk populations and other at-risk populations such as the youth play an important role in the contribution of the HIV epidemic in Ghana. Monitoring the knowledge and behaviour of young people is key to attaining Ghana's goals. This has traditionally been done through the DHS and MICS Surveys. The last DHS was done in 2008 and this has been reported on in the previous round. It is therefore omitted from this report.

Though awareness of HIV and AIDS have been high since 2003, where 98% of women and 99% of men were reportedly aware of HIV, comprehensive knowledge on HIV and AIDS, prevention and non-stigmatizing behaviour is relatively low.

In the period under review Ghana was a beneficiary of the Global Fund Round 8 HIV Grant (Phase I). This grant addresses gaps in the national response such as 1) Addressing Stigma and Discrimination; 2) insufficient targeting of MARPs and vulnerable groups; 3) Prevention of Mother to Child Transmission of HIV (eMTCT); 4) shortfalls in institutional and community capacities to rapidly scale-up care and treatment services. Workplace and School based programs continue to suffer as a result of the shortfall in funds from the Global Fund, leading to the dropping of a number of Sub-recipients of the grant.

Recognizing that clients and partners of Key Affected Populations serve as a bridge between KAPs and the general population in HIV transmission, this Program targets MARPs, vulnerable groups and the general population. As part of health system strengthening measures directly related to HIV services, this Program targets blood safety, prevention of mother-to-child transmission (eMTCT), early infant diagnosis, and integration of HIV and sexually transmitted infections (STI) services.

As a part of strengthening the national health system in its response to HIV epidemic and emphasizing the need of stronger partnerships between the public health sector, civil society and the private sector, this Program is being implemented by multiple Principal Recipients, namely, the Ministry of Health, Ghana AIDS Commission, Planned Parenthood Association of Ghana, Adventist Development and Relief Agency of Ghana.

The goal is to reduce new HIV infections in the general population. The target Groups are:

- People living with HIV & AIDS (PLHIV);
- KPs: MSM and their female partners, FSWs,

- Vulnerable groups: young people (aged 15-24), female porters; At-risk workers, Prison inmates, most-at-risk youth (15-24 years);
- Pregnant women; and Infants born to HIV-positive pregnant women; and
- The general population

The strategies are:
- To promote the adoption of safer sexual practices in the general population;
- To promote healthy behaviors and the adoption of safer sexual practices among PLHIV, MARPs and vulnerable groups;
- To promote the integration of SRH and HIV & AIDS services with emphasis on eMTCT and safe blood transfusions; and
- To strengthen the institutional capacity and community systems for scaling-up HIV & AIDS, STI and TB prevention services.

HIV Prevention among Key Populations (KPs)

An important public health principle applicable to many diseases, including HIV, is that different populations have an unequal risk of acquiring disease, and that those groups at higher risk require specific services. These services, by necessity, must differ in intensity and type from services that target groups at lower risk.

Key populations are populations that are highly exposed to HIV infection due to their risky sexual behavior and tend to contribute a significant proportion to new HIV infections. According to the NSP, the KPs (previously called most-at-risk populations) in Ghana include female sex workers (FSWs), clients of female sex workers, men who have sex with men (MSM), and persons who inject drugs (PWIDs) previously known as injecting drug users (IDUs). The New HIV Infections by Mode of Transmission in West Africa in 2010 study states that about half of new HIV infections in Ghana are attributable to key populations.

Female Sex Workers (FSWs)

According to the GAC 2011 IBBSS and Population Size Estimates amongst FSW in Ghana, FSWs remain a critical key population with HIV prevalence of 11.1%; this is several times higher than the national average but a significant reduction from the 2009 prevalence of 25%. Sex work contributes a significant proportion of new HIV infections: 2.4% among sex workers, 6.5% among clients of sex workers and 22.2% among partners of clients of sex workers. The clients of sex workers, including non-paying partners (NPPs), constitute a bridging population spreading HIV to the general population. Currently the main funders of FSW interventions in Ghana (prevention and care) are the USAID funded SHARPER project managed by FHI360, and the Global Fund.

Unprotected vaginal sex may be common among FSW. STI prevalence has been high among FSW, especially HSV-2 in 2011, although the condom use was reported to be above 90% in most of the survey sites. There may be social desirability bias during the survey, leading to artificially high condom use rates.

Men who have sex with men (MSM)

There is evidence that HIV infection amongst MSM is high. For example, HIV prevalence among MSM in Accra and Tema was 34.3% in 2011.[8]There appears to be challenges in

[8] Ghana AIDS Commission (2011) IBBSS and Population Size Estimation amongst MSM in Ghana 2010-2011- The Ghana Men's Study, Summary of Key Findings

MSM interventions in Ghana. Firstly, the stigma, criminalization and the gender-based violence reported by MSM have compelled some to go underground, hence making them difficult to reach with interventions. Secondly, MSM interventions that are based primarily on the peer education approach reach only a limited group of MSM who congregate in venues. There is evidence that a large number of MSM can only be reached outside of traditional face-to-face peer meetings. SHARPER project is currently piloting the use of social networks testing (SNT) to reach middle class MSM not readily reached by conventional approaches. Preliminary SNT results show that MSM reached online are often fundamentally different in characteristics from those reached via peer education and seems to be an effective tool for increasing uptake of HIV testing and counseling amongst MSM with high-risk behaviors and who are not already aware of their HIV status.

Unprotected anal sex is common among MSM. In 2006 survey in Accra/Tema, only 25% MSM consistently used a condom during the past 12 months when having penetrative sex. This figure reduced to 19.3% in 2011. In 2011 survey, consistent condom use was low across different survey sites, 38.4% in Kumasi, 17.2% in Koforidua, 29.9% in Cape Coast/Takoradi.

Prisoners as key populations

The NSP considers prisoners as KAP. This may have been based on research done some years ago based on a small sample of prisons. A recent study[9] however shows different results depicting a general substantial decline in HIV prevalence among prison populations in Ghana. 1n 2013, the national HIV prevalence among prisoners in Ghana is 2.3% as compared to 5.9% in 2004-2005[10]. However prevalence varies significantly by sex. The prevalence of male prisoners is almost similar with the general population at 1.5%. The prevalence stands at 11.8% among female inmates. This suggests relatively successful interventions in Ghana's prisons particularly among male inmates. Based on this evidence, the continuing inclusion of all prisoners, as KAPs is not ideal. While female prisoners may continue to be KAPs, male prisoners should be declassified as KPs but still be considered a vulnerable population considering their confinement and the easiness of spread of communicable diseases. These may be attributed to their being incarcerated and institutionalized. Considering the vulnerability of the prison population, it is recommended that HIV interventions in prisons be sustained to ensure achieving a zero infection among males. For example, the continued supply of razor blades, HIV prevention messages and interventions aimed at stigma reduction should continue.

Currently PPAG has succeeded in introducing HIV prevention interventions and HCT for inmates of 35 prisons out of 44 prisons nationwide. 29,865 inmates were reached in 2014.They also distribute kits containing personal hygiene products to inmates on a quarterly basis. The number of prisons with HIV interventions (35) far exceeds the targeted number of 20.

In a Prisons seurvey carried out in November 2013 it was established that 5.1% of prosiners had ever had STIs whiles in prison whiles 12.4% and 9.6% reporeted pauin on urination and unusual genital discahrge respectively. 68.5% of males and 42.5% of female reported they did not treat symptoms of STI in a designated facility. Only 14.3% of males and 35% of

[9] Ghana AIDS Commission et al. (2013: National Health and HIV Survey of Prison Inmates in Ghana- Report.

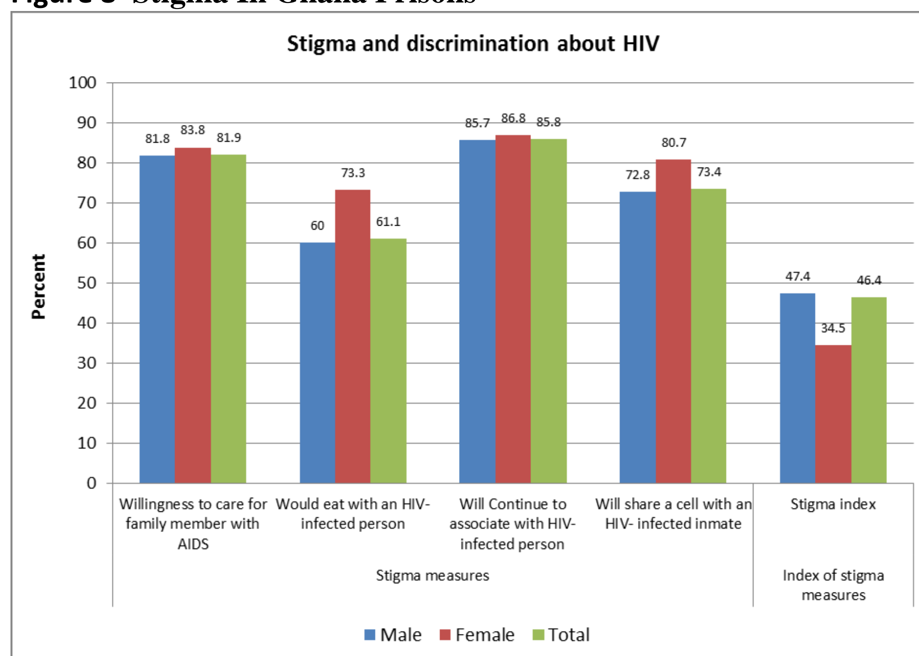
[10] A.A. Adjei et al. (2008) Correlates of HIV, HBV, HCV and syphilis infections among prison inmates and officers in Ghana: A national multicenter study; *BMC Infectious Diseases* 2008, 8:33; http://www.biomedcentral.com/1471-2334/8/33

females sought hospital treatment. 22.5% of female inmates who reported STI symptoms resorted to self-medication.

Awareness about HIV/AIDS is almost universal among Ghanaian prison inmates (99%). Both male and female inmates reported high awareness (99% vs. 98% respectively). 96% of male and 97% of female inmates reported that a person can reduce the chances of getting HIV by having only one uninfected sexual partner. Additionally, 91% of inmates know that a person can reduce the chance of being infected with HIV by using condoms all the time. Similar knowledge was established for sharing needles, tatooing and blood covenant but not for sharing of razor blades.
Unlike food-related and other misconceptions, a high proportion (61%) of inmates maintained that HIV could be transmitted through witchcraft or supernatural means.

A stigma index was constructed with four questions with scores ranging from 4 to 8. The index was dichotomized, where all those who responded yes to all the 4 questions were coded "no stigma" and all the remaining scores were coded "stigma". Nearly half (46.4%) of inmates stigmatize against HIV-infected persons. Male prisoners were significantly less likely to stigmatize HIV-infected persons than their female counterparts (47.4% vs. 34.5%, $p<0.001$).

Figure 8 Stigma In Ghana Prisons



National Health and HIV Survey of Prison Inmates in Ghana Nov 2013

In African male prisons, homosexual activity is not uncommon, though the reported numbers is likely to be much lower than the actual figures for the same reasons as pertains globally, including denial, fear of being exposed and the criminalization of homosexuality in our environment (Gear and Ngubeni, 2002). Sex with other male inmates was reported among one percent of inmates. Less than one percent of inmates (0.4%) reported having had anal sex with other inmates. Although over one-half of male prisoners (57.7%), and 7.5 percent of female prisoners reported having heard of inmates being forced to have penetrative sex, less than one percent (0.6%) reported having been forced to engage in anal sex while 0.5% have

been forced to have oral sex while 0.4% have forced another inmate to have oral sex. Two male inmates (0.1%) reported forcing another male inmate to have anal sex.

In total 36.0% of inmates in Ghana's prisons (35.0% males and 47.8% females) have tested for HIV some time in the past. Of those who have ever tested, about half (50.7%) tested with the last 2 years, of which 30.5 percent did so in the last 12 months. There is an overwhelming desire among inmates to get tested and know their status. **The HIV prevalence among prisoners in Ghana obtained in the 2013 survey was 2.3 percent** (95% confidence interval of 1.7%-2.9%). There is a substantial variation by sex. The prevalence is 1.5% among male inmates and 11.8% among females. Prevalence was highest in the 40-49 years age group (4.4%) and lowest in the 20-29 age group (1.3%).

Nearly all respondents (96.3%) mentioned that health services are provided in their prisons, while slightly less than one-quarter (23.5%) reported that HIV-related services are offered in prisons. For inmates who reported that HIV services are provided, 91.9 percent mentioned HIV education, whereas 55.3% indicated that there are HIV support groups in prison. Overall, 85.3%of inmates who reported that the prisons offer HIV services said that all the HIV services accessible to inmates. **When asked whether condoms should be made available in the prisons, only 5.8% agreed to it.**

Persons who inject drugs (PWIDs)
To date, there is extremely limited data on HIV prevalence amongst PWID or other drug-abusing populations in Ghana. There are on-going studies but with no major results yet. In fact The NSP mentions that GIZ and others are supporting research to map hotspots, conduct size estimations, and measure risk behaviors. USAID is supporting a study in Kumasi that is almost complete and CDC is to support studies in Accra and Cape Coast. Consequently there is as yet no credible data on HIV prevalence among PWIDs or the linkage between drug use and HIV in Ghana.

Analysis of sub-sample of male populations in Ghana surveyed in 2011 (BSS, High-Risk Men) show that 467 out of 5,848 (8%) reported injecting drugs in past 12 months. Due to the limitations of this study and analysis, these findings could not be extrapolated to give estimates of this population in Ghana. However, this study reveals the existence of significant size of networks of PWIDs across different male populations in Ghana. Networks of PWIDs are also linked with other key populations such as FSWs and to lesser extent with MSM, and general population, combined with high-risk sexual behaviors.

In 2013 survey among prison inmates, slightly over one-half (55.0%) of male inmates and 20 percent of female inmates reported using drugs before their arrival in prison, but only 0.6% inmates admitted they injected drugs prior to incarceration. The proportion of inmates who inject drug was 0.1%. Out of the three inmates who reported injecting drugs, two share needles.

In 2014 a qualitative study that aimed to understand the social, economic and behavioral vulnerability to HIV of PWID was conducted in Kumasi and to inform the development and implementation of HIV prevention programs for this population. The research was conducted by a collaborative team comprised of researchers from Boston University's Center for Global and Health and Development (CGHD) and the Kwame Nkrumah University of Science and Technology (KNUST) School of Medical Sciences. It is one of nine studies under the Operations Research on Key Populations project funded by the United States Agency for

International Development (USAID). The study was designed and carried out in collaboration with the Ghana AIDS Commission (GAC).

A formative assessment, *Mapping and Population Size Estimation of drug users including Injecting Drug Users (IDU) in Accra, Tema, Cape Coast and Sekondi Takoradi*, was funded by the Ghana AIDS Commission (GAC) and carried out by University of Cape Coast School of Medical Sciences Department of Community Medicine.

These studies found high levels of HIV vulnerability due to behavioral, structural and social factors. The profile of the typical drug user that emerges from these studies is a 30-year old, working class individual. The drug users are usually males consuming mainly Cocaine, Heroin, Alcohol and smoke Cigarette or Crake Cocaine. Injectable drugs include Pethidine, Heroin,Valium, Rophynol, Methamphetamine, Methadone Syrup, Benzodiazepines.

Female Head Porters

In the Northern Region, discussions with HIV and AIDS service providers revealed that young nubile Female Head Porters (15-30 years) are increasingly seen at health facilities with advanced HIV infection often in association with severe genital warts. Many of these young women die from AIDS related complications. They believe that Female Head Porters who have returned from southern Ghana, as a group, have a higher HIV prevalence than the general population, are hard to reach, do not utilize health services, and do not test for HIV. They described Female Head Porters as a new group of KPs and regarded them as key drivers of the HIV epidemic in Northern Region. Health care providers in the Northern Region want assistance to study the Female Head Porters and HIV infection phenomenon further.

In 2011 with funding from UNFPA, SWAA Ghana supported the provision of HTC services for 316 Female Head Porters and 14 (4.4%) tested of them were infected with HIV. In 2011, the HIV prevalence was 1.5% in the general population.

Preliminary findings in a study funded by USAID and CDC and implemented by employees and agents of Ghana-based institutions including SWAA-Ghana and the Noguchi Memorial Institute for Medical Research (NMIMR) in 2012 indicate only one of 300 (0.3%) Female Head Porters who tested for HIV was found to be positive. The Female Head Porters study participants were drawn from all the 10 recognized Female Head Porters' sites in Greater Accra Region. In 2012, the HIV prevalence was 1.34% in the general population. For young persons, in 2012 among 15-24 year olds, the prevalence was 1.3%. Another study in 2012 among 183 Female Head Porters in Accra obtained a prevalence of 1.0%[11]. Current evidence from three small-scale studies seems to be conflicting.

Strategies and Activities for KAPs

HIV prevention strategies in sub-Saharan Africa are rapidly changing and efforts are being made to reflect this in Ghana. There are two key strategies, one of which is the use of combination prevention package which consists of three main components: behavioral change, testing and treating STIs, and using treatment as prevention strategy by enrolling PLHIV, treating and encouraging adherence. The other is the continuum of prevention care, which concentrates on community to facility linkages with emphasis on the role of PLHIV and key populations in defining and delivering care.

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[11] HH Habib (2012) Prevalence of HIV in female head porters in the Tema Station area, Accra, BSc Project Works; Department of Medical Laboratory Sciences, School of Allied Health Sciences, University of Ghana, Legon, Accra

The main behavior change intervention activities among key populations in Ghana consist of peer education and outreach. Condom and lubricant sales and distribution often accompany these interventions to promote behavior change A few other implementing partners in addition also utilize ICT to deliver interventions. These include 'Helplines' 'Lifeline', SMS HealthyLiving. In terms of service delivery for key populations, there are referrals from the community to health services, HCT, drop-in-centers, counseling and referrals for reproductive health services including family planning. Other services are HIV care, which also includes tracing and re-enrollment.

Achievements

The achievements based on each of the Strategic objectives of the KPs (MARPs) Strategy are presented below.

HIV prevention, protection, treatment, care, and support services for KAPs

Baseline behavior outcome indicators for key populations (e.g. condom use) were obtained through IBBSS in 2011, a similar study was expected in 2014. Since there is no nationwide behavior study among key populations, the report is based on the aggregation of routinely collected program data for output monitoring to assess FSW and MSM program coverage,

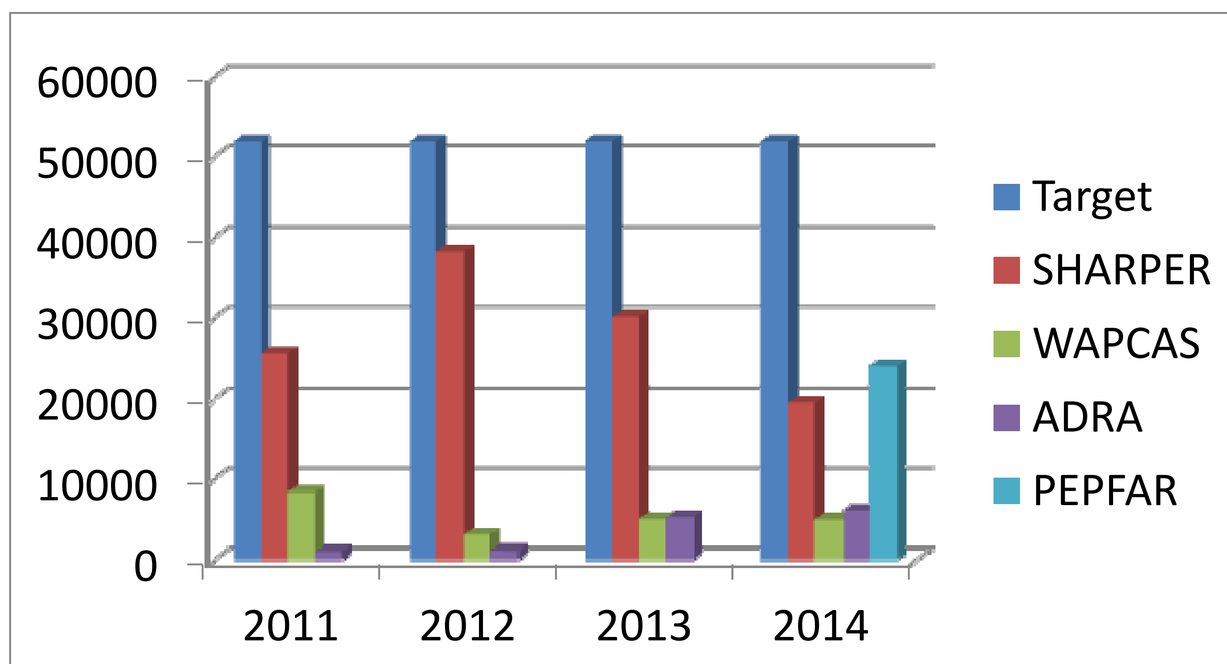
The goal of the key population strategy in Ghana is to 'provide evidence-based prevention, protection, treatment, care and support services to 80% of all identified key population groups by 2015. The recent mid-term evaluation of the NSP observed that more than eight out of ten FSWs in Ghana has been reached with some form of intervention.

There are two broad groups of FSWs in Ghana: brothel-based (seaters) and roamers. According to the 2011 IBBSS size estimation analysis, there were 52,000 female sex workers (both roamers and brothel-based) in Ghana. One key program objective in the MARP (KPs) Strategic Plan is to reach 80% of all KPs in Ghana.

GAC compiles data on the number of FSWs reached, although the mid-term evaluation of the NSP found that a few partners do not report data to GAC. Figure 9 includes the number of FSWs reached by SHARPER and WAPCAS as reported by GAC and data from ADRA, which is not included in the GAC database. Currently in Ghana, FHI360 and its thirty-one (31) implementing partners in the SHARPER project, WAPCAS, ADRA, and PEPFAR are the four key players involved in sex worker interventions; so their data can fairly be considered as national.

The SHARPER project, WAPCAS, ADRA, and PEPFAR were the main providers of HIV prevention information and services for FSWs in 2012, 2013 and 2014. As at December 2014, about 54,693 FSWs nationwide had been reached with HIV prevention information and services. The breakdown of FSWs reached in 2014 is as follows: SHARPER project reached 19,572 FSWs, WAPCAS reached 5,018, ADRA reached 7,438 and PEPFAR reached 23,991 FSWs. Efforts have been made to avoid double counting, however, the one cannot assume that it was absent. Consequently it was assumed that double-counting existed so the highest of the three figures for each year was taken as a proxy for the national figure of the number reached. Consequently, the number of FSWs reached was about 26,000 in 2011, 38,000 in 2012, and 40,000 in 2013 and 54,693 in 2014.

Figure 9 : Female sex workers reached (2011-2014



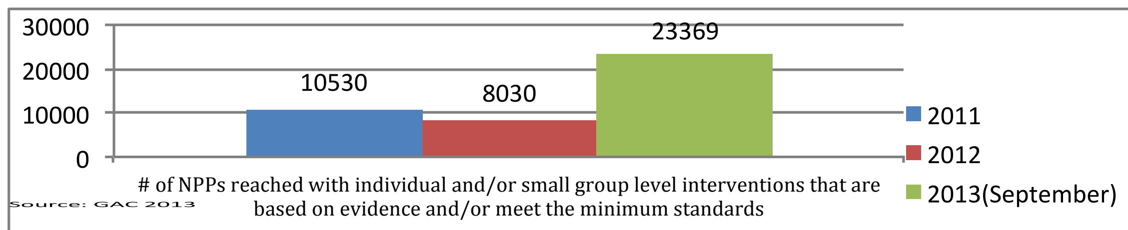
One of the successes of KPs interventions is the enhanced accessibility of condoms by FSWs. Based on a recent MARP evaluation[12], many sex workers mentioned obtaining condoms from many different places. The majority of FSWs explicitly mentioned obtaining condoms and lubricants from peer educators.

The clients of FSWs including non-paying partners (NPPs) constitute an important bridging population spreading HIV to the general population. NPPs were therefore targeted with HIV prevention information and services. Data from GAC (Fig. 7) shows the number of NPPs reached with individual and or small group interventions has increased significantly in the first 9 months of 2013 compared to 2011 and 2012. In 2014 the figure for MSM reached is 8,293, which is a drastic reduction compared to 2013. In 2014 only the SHARPER project was reported as having reached NPPs.

There has been no national data on condom use since the 2011 IBBSS. However, there is evidence that condom use by FSWs with NPPs is slightly higher among sex workers involved in HIV prevention (57.7%) compared with those not engaged in any prevention activities (51.1%)[13].

[12] Evaluation of HIV Prevention Services for Most-at-risk Populations (MARP) in Ghana (2013): A Preliminary Report.
[13] Evaluation of HIV Prevention Services for Most-at-risk Populations (MARP) in Ghana (2013): A Preliminary Report.

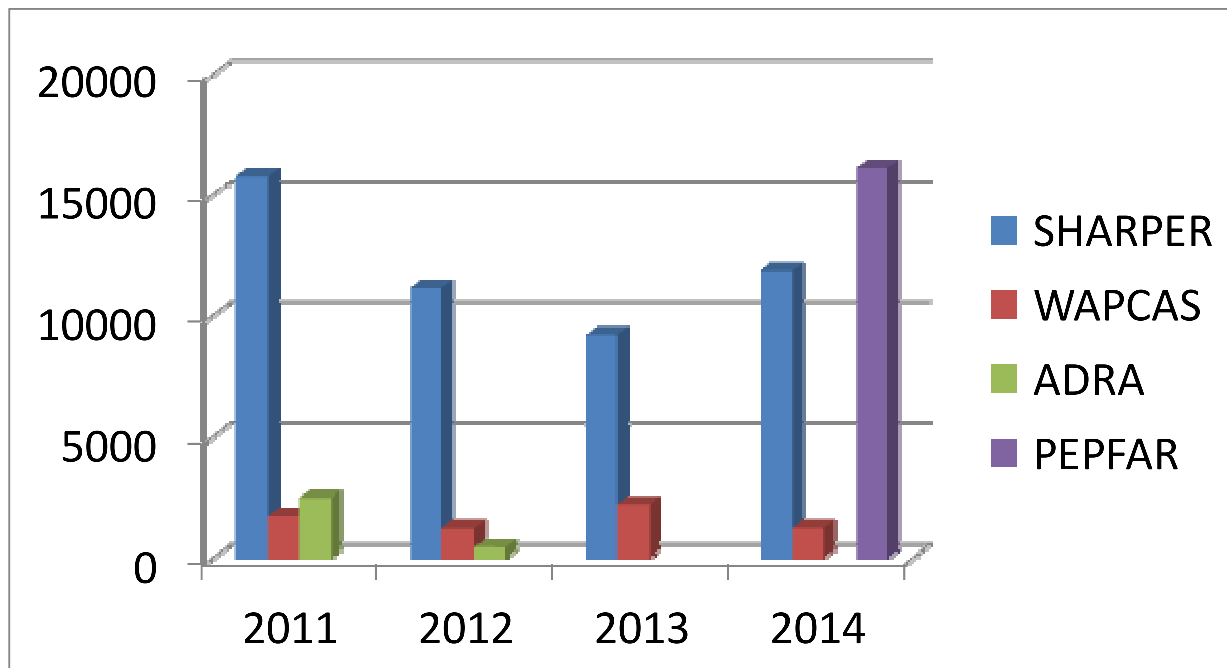
Figure 10 Number of NPPs reached with HIV prevention information & services 2011-2013



Unlike FSWs, the size of MSM in Ghana is debatable, as size estimation is based on a few sites. The estimated number of MSM in 2011 in Ghana is around 30,000. Figure 11 shows the number of MSM that have been reached by the three key partners in KPs interventions in Ghana. Unlike with sex workers, based on GAC data, the number of MSM reached by the three main partners (SHARPER, WAPCAS and ADRA) decreased between 2011 and 2012.

Regarding interventions amongst MSM, an important achievement during the review period is the introduction of other approaches to reach MSM apart from peer education. In 2013, SHARPER introduced the use of social media (Facebook, Badoo, Whatsapp etc.) to reach MSM not contacted through peer education. By December 2014 SHARPER had reached about 11,868 MSM. Preliminary findings in 2013 show that at least 75% of MSM reached by social media did not overlap with those reached through peer education. This suggests that a lot more MSM are not reached by traditional peer education strategies.

Figure 11 Number of MSM Reached (2011 to June 2014)



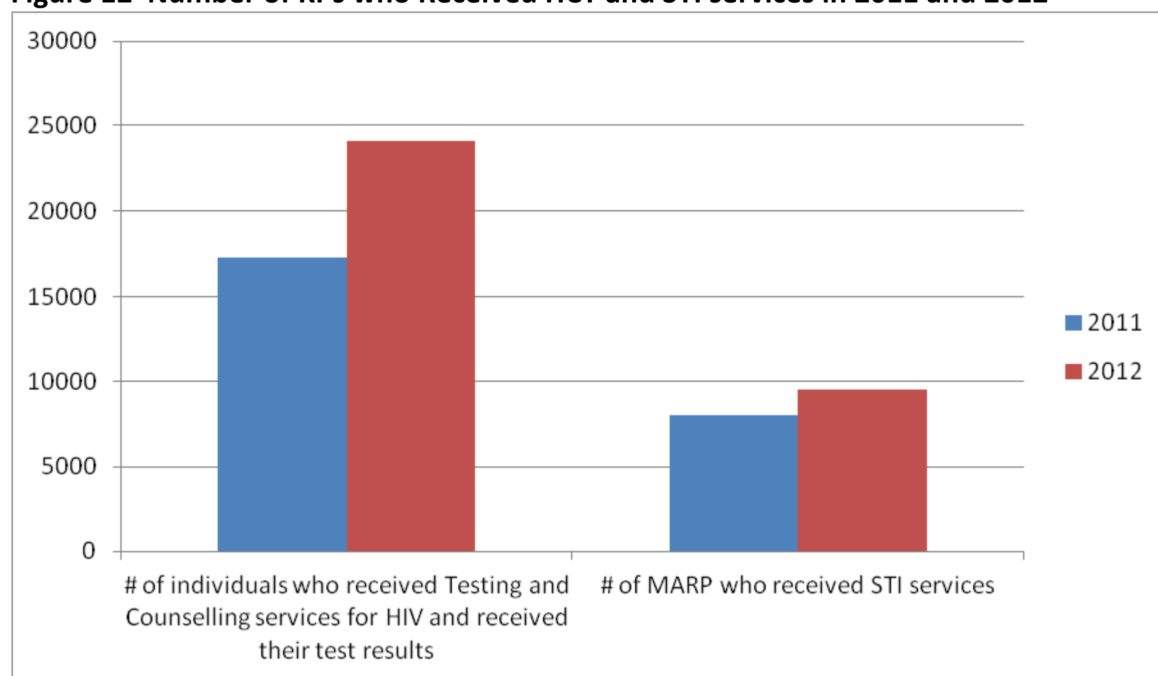
One of the leading organizations working with MSM is Maritime Life Precious Foundation (MLPF), based in Takoradi. One of the major achievements of MLPF has been the ability to be the leading advocate of MSM rights in the Western and Central Regions especially in the face of general public antagonism, anti-MSM demonstrations and stigmatization. They have

also developed Drop-In-Centers and a helpline (Text me! flash me! Call me!) for STI and violence support to get medical aid for MSM who need them. Through religious leaders, social media, and grapevine channels, MLPF is reaching out to closeted MSM who are hard to reach in an effort to prevent these people from getting infected. They also have formed support groups (love + trust activities) and socialization events to give MSMs access to public health education.

Life Relief Foundation, for example, has successfully been able to open and maintain wellness centers in three districts and one refugee camp, organize ten community-based home care support groups with psychosocial support, adapt the Models Of Hope in 40 places, and also coordinate with traditional healers in PLHIV management (a first of its kind). They also have an income generating system of liquid soap production.

Data from FHI360 (Figure 12) shows that the number of key population who received testing and counseling services for HIV and received their results from their implementing partners increased from 17,256 to 24,062, an increase of 3.4%. Stock outs and erratic supply of HIV test kits in 2011 and 2012 hampered the provision of optimal HTC services to key populations and others who required the service. The number of key populations that received STI services increased marginally from about 8,000 in 2011 to 9000 in 2012.

Figure 12 Number of KPs who Received HCT and STI services in 2011 and 2012



Source: FHI360, Ghana

Correct and consistent condom use is a key message for reducing HIV transmission risk in high-risk sex. As such, condom promotion and distribution is the key component of HIV prevention information and services for the key populations. The number of male condoms distributed increased by 30.1% from 4,413,404 in 2011 to 5,741,354 in 2012. The number of lubricants distributed increased from 569,819 in 2011 to 644,093 in 2012, an increase of 13.0%. In 2014 14,142,080 condoms were distributed in total. Of these, 1,500 were female condoms. Condom stock outs, erratic condom supply, and poor quality condoms have hampered optimum access to and use of condoms by all clients including key populations.

Very little data and information exist on the promotion and use of the female condom for HIV prevention.

Create an enabling environment for (KAPs) MARP interventions

Violence against key populations is a risk factor for HIV and should therefore be a critical component of key population programming. Organizations working among sex workers still report routine violence against sex workers. A key challenge of HIV prevention among KPs is the constant harassment of FSWs and MSM by the police. While there may be some individual police officers who offer support, there is the need for law enforcement officials to be trained to recognize and uphold the human rights of sex workers. Violence against sex workers need to be better reported and monitored.

The UN System through UNFPA has supported the Ghana Police Service to implement interventions that promote rights based interventions within the service and reduce harassment of key populations by the police. A four-prong approach was adopted namely,

i. Advocacy with IGP and the Police Administration.
ii. Orientation of Senior Police Personnel, Middle level personnel and the Patrol Teams on the rights of FSW.
iii. Follow up meetings with FSW and Police personnel on basic human rights. The UN System, in partnership with HRAC also developed and disseminated a brochure on human rights of FSW.
iv. Training of police recruits. Currently, the HIV curriculum at police training institutions has been revised to include models on SGBV, human rights, stigma, and discrimination to address challenges of key populations. Police swoops at certain locations have reduced.

The Police have been trained by both CDD-Ghana and the SHARPER project on respecting the human rights of key affected populations and PLHIV. Police swoops on prostitutes are now under the supervision of trained senior police officers to ensure FSWs are not harassed. Also police do not arrest FSWs who possess condoms and prosecute them for 'soliciting'. John Hopkins University and the SHARPER project have supported the Police Service to develop a HIV and stigma and discrimination against MSM and FSW curriculum that is used for training new police recruits to ensure they respect the human and legal rights of key populations.

In spite of these successes, the high level of stigma and discrimination against MSM in their homes, communities, mainstream media and even at certain health centers is undermining the work of the national HIV response. Also the lack of access to affordable healthcare and the perennial shortages in logistics like testing kits is another challenge. In addition, targets set by donor organizations seem impossibly high to attain.

Some efforts have been made at creating an enabling environment for KPs interventions. These include M-Friends & M-Watchers KP/PLHIV protection network; Police pre-service and in-service training; and SGBV focal points and action plans and training for some NGOs.

Maritime Life Precious Foundation suggests that a crisis center to cater for MSM who have been ejected from their homes by their families is a great opportunity to overcome the vulnerability of MSM. Also the expansion of Drop-In Centers to include psychosocial support would help reach more MSM who are closeted in fear of social stigma.

Generating strategic information to improve KP programming

Although some data are available, mainly on FSWs, generally the existing data are patchy, and in most cases not available at the community level. On the whole, apart from a few INGOs, the use of data in designing key population interventions is generally poor.

On the whole very little data exists regarding different sex worker sub-populations and their relative HIV risks. For example, women who are new entrants to sex work stand higher risks of infection[14], so efforts should be made to target them yet there is no existing reliable data which will facilitate these efforts.

The WHO recommends the *minimum* information needed to start an intervention among sex workers. These include contextual information such as different types of sex workers and clients, sex workers' needs, perceptions and priorities and demographic characteristics. Knowledge and behavior information such as level and patterns of risk behaviors of sex workers, clients and regular partners, and the contexts in which they occur as well as service-related information including attitudes of service providers. There is no evidence that these are available in most of the community level HIV prevention sites.

Size estimates of KAPs in Ghana vary depending on the type of key population. Asked about the estimated number of sex workers in the towns and cities they cover, intervention implementers were unable to give reliable figures. Even though there is reliable information regarding FSWs, there is less material available for MSMs. Furthermore on the subject of FSWs there is data available at the higher levels but not available at the grassroots level. In such circumstances, it will be difficult to know the proportion of KAPs covered by interventions. With no size estimation, projects are unable to report on coverage levels. The importance of periodic mapping and population size estimation in setting accurate denominators for coverage has not been fully demonstrated in many sex work interventions in Ghana. There is the need to use evidence to plan intervention among sex workers at the national level.

[14] HIV Vulnerability and Prevention Needs of Young FSWs in Kumasi Ghana August 2013

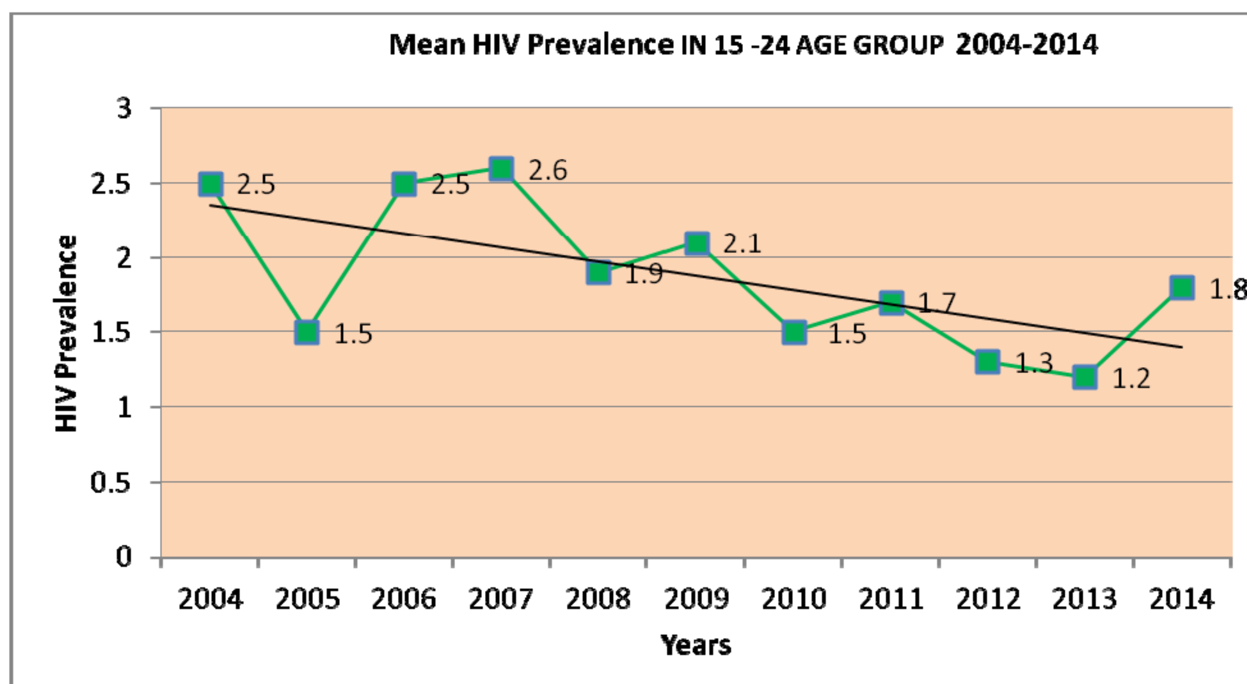
HIV prevalence in young people

Indicator 1.6: Percentage of young women and men aged 15- 24 who are HIV infected

The goal of this indicator is to measure the reduction of the HIV infection by 25% in 2010 and 50% by 2015. Trends of HIV prevalence in 15 -24 years are an indication of recent trends in HIV incidence and risk behaviour.

The National HIV Prevalence and AIDS Estimates report indicated a prevalence of 0.6% in 2011 in this age group within the general population. In 2012 prevalence in the 15 – 24 year age group is 0.36%. The prevalence among pregnant women aged 15 – 24 was 2.0% in 2010 and 2.1% in 2011 and 1.3% in 2012 as determined by the HSS. The estimates for 2013 and 2014 are 0.47% and 0.46% respectively. The graph below shows a general downward trend in the prevalence as estimated by the HSS. In 2004, when the prevalence was higher, and recognizing that this age group was a marker for the incidence of new infections, steps were taken to scale up prevention interventions among the youth. These interventions covered both in- and out-of-school youth. There is however a worrying upward trend for 2014.

Figure 13 HIV Prevalence Trend in 15 -24 Age Group, 2004 - 2014



Source: HIV Sentinel Survey Report 2014

HIV Prevention among Young Persons

Young people (15-24 years) are considered a vulnerable group for HIV infection as they are sexually active and are often involved in unprotected sexual intercourse. The GAC has led the development and dissemination of a Joint Youth Action Matrix that targets young people in the national HIV response. The Ghana Education Service (GES), Planned Parenthood Association of Ghana (PPAG), and the Adventist Development and Relief Agency (ADRA) are the major providers of HIV and AIDS interventions among young persons in Ghana[15]. The GES focuses on school-based HIV and AIDS and sexuality education for children in

[15] Ghana AIDS Commission (2012): 2012 Status Report

school i.e. primary, Junior High, and Senior High schools. The PPAG and ADRA interventions primarily target youths in tertiary educational institutions and out of school youths. The UNFPA supported activities to promote Comprehensive Sexuality Education (CSE) for in and out of school adolescents and youth at the district and national level.

In School Youth – At the national level, following the successful orientation of relevant school officials to ensure the successful roll out of the newly reviewed e-SHEP programme consisting of a module in sexuality education, refresher training was held for 280 head teachers in 14 districts. Training was also held for 55 district trainers and SHEP Coordinators in the remaining 11 UNFPA districts to facilitate the upscale of the e-SHEP in schools.
To enhance efforts at delivering as one and improve reach of the e-SHEP nationwide, the UNFPA collaborated with UNICEF, to train teachers and peer educators in schools to administer the revised HIV Alert module curriculum, e-SHEP. 210 teachers were trained in 8 districts in 10 basic schools (per district) whilst 140 students were trained as peer educators. This consisted of 3 teachers and 2 peer educators per school respectively.

Out-of-school Youth - To reach young people not in the regular education stream (vocational and technical schools), the UNFPA spearheaded and supported the inclusion of an ASRH curriculum within the Allied Subjects curriculum of the National Youth Authority's Youth Leadership and Skills Training Institutes (YLSTIs) in the country. The eleven heads of the 11 NYA youth leadership and skills training institutions were oriented in integrating sexuality education into existing curriculum. The institutional heads have acquired skills for providing leadership in the roll out of sexuality education in the curricula of the institutes. Following this, the UNFPA supported brainstorming meetings on this concept with 11 focal persons drawn from the 11 YLSTIs in the country. The focal points consisting of some institutional heads were supported to develop a curriculum for NYA's YLSTIs which will be finalized and rolled out in 2015.

Other activities included IAC support and social media for the promotion of CSE, peer education and community sensitization, advocacy and youth friendly services.

The HIV Alert School Project

The HIV Alert School model has been adopted in Ghana as the national strategy for school-based HIV prevention. It has been inculcated model into mainstream academics and is being employed MoE as a way of reaching adolescents in school through their normal schoolwork and extracurricular activities. Teachers are trained in behavior change education for children; parent-teacher associations and school management committees discuss HIV and AIDS as part of their regular meetings. Annual assessment and award process helps ensure that a HIV Alert School strives to maintain its status whilst motivating non-participating schools to seek certification.

The Ministry of Education (MoE) launched the HIV Alert School Model for national implementation in the basic schools in 2006 with support from the UN system. The model is an HIV prevention education program for basic schools, which is delivered with curricula and co-curricula activities. The GES, which is implementing the model, has developed manuals including those for teachers, peer educators, and activity cards to facilitate interaction among teachers, students and parents. The materials have been revised and will be used to inform the implementation of the Enhanced School Health Education Program (e-SHEP). The training for e-SHEP is targeting all schools; the UN system (led by UNESCO, UNFPA, and UNICEF) is funding training sessions in several districts.

Since the implementation of the HIV Alert School project started in 2006 in Primary and Junior High Schools, it has succeeded in training over 150,000 teachers in public basic schools to integrate HIV and AIDS in their lessons. Similarly, about 302,031 pupils have been trained at the JHS level in all the ten regions of the country[16]. At the Junior High School and Senior High School Levels, the establishment of writing clubs which promote talent and at the same time inculcate BCC ideals has been very helpful as is being employed in three districts in the Krobo area by Hope for Future Generations. They have also employed the use of peer educators to reach out of school youth on risky sexual behavior and safe reproductive choices. An impact assessment of the HIV Alert School Project conducted in 2010 concluded that given the progress made, the target of certifying 80% of JHS as Alert by 2016 is on track. Unlike in the basic schools, HIV education started late in Senior High Schools (SHS) and Technical Institutes.

In 2012, key activities that strengthened the implementation of the HIV Alert Model in schools included a national mass media campaign on the HIV Alert Model on radio and television and production and distribution of assorted posters nationwide. It also included orienting all 35 education directors in Central and Eastern Regions on the HIV School Alert Project that increased the success of the project from 15% of schools certified as HIV Alert in 2010/11 to 32% in the 2011/12 school year. A manual was also developed using sports to teach life skills including HIV infection prevention education and orienting GES key staffs including e-SHEP coordinators, circuit supervisors, head teachers, teachers, and student peer educators in the five (5) regions selected to start implementing e-SHEP program in the 2013/14 school year.

To improve and prepare teachers in training to take up responsibility on HIV education at basic schools, UNICEF funded the GES to collaborate with the University of Cape Coast to harmonize and integrate the Window of Hope manual with the contents of the HIV Alert Model Project. UNICEF has also supported the Teacher Education Division (TED) of GES to mainstream the Alert Model into Colleges of Education. Two manuals for tutors and trainees on effective teaching and learning were developed and distributed to all the 38 colleges and staffs trained on their use. This process ensures that trainee teachers are competent in integrating HIV and AIDS into their lessons.

Enhanced School Health Education Program (e-SHEP)

In 2012, the Ghana Education Service (GES), with support from UNICEF, developed the School Health Policy. Subsequent to the adoption of the School Health Policy and since the beginning of the school year in September 2013, UNICEF has continued its support for the implementation of the HIV Alert Model as a component of the comprehensive School Health Program known as Enhanced School Health Education Program (e-SHEP), derived from the School Health Policy. The e-SHEP encompasses HIV Prevention Education, Water and Sanitation, Nutrition, Disaster Risk Reduction, Guidance and Counseling, and Physical Education as integrated activity with the view to ensuring that behavior change leads to real sustainable change not only in childhood but also into adulthood. Implementation of e-SHEP has started in all basic schools in14 districts in 5 Regions (Central, Northern, Eastern, Upper East, and Upper West). As part of e-SHEP, 14 NGOs have been oriented and engaged to support each district to implement the peer education (child led) activities in the schools.

[16] Ministry of Education – Brief Overview of HIV and AIDS activities in the Ministry of Education

Lessons learned and best practices from the 14 districts will inform the nationwide roll out e-SHEP.

Education Sector Initiative for Young People Living with HIV (YPLHIV)

To enhance the greater and more meaningful involvement of young people living with HIV (YPLHIV) within the HIV response in the education sector globally and also in Ghana, UNESCO and Global Network of People Living with HIV (GNP+) produced the document entitled "Positive Learning: Meeting the Needs of YPLHIV in the Education Sector". This document has been shared among the education stakeholders in Ghana.

HIV prevention information and services for out of school young people

The National HIV Prevalence and AIDS Estimates Report for 2014 indicates that young people 15-24 years of age contributed 26.3% and 26.4% respectively of new HIV infections in 2011 and 2012. In 2013 and 2014, this age group contributed 25.3% and 25.6% respectively to new HIV infections. This represents a marginal decrease. It is very challenging obtaining accurate information and data on numbers, depths, and varieties of HIV prevention activities targeting out-of-school young people in the country. This may reflect a situation where many of the activities on HIV prevention information and services for young people are not sufficiently disaggregated in reports of the national HIV response since it is generally known that a number of public sector and CSOs provide HIV prevention information and services for young people that out of school.

The GHS and the GES are among key public sector institutions implementing HIV programs targeting out of school youth. The GHS Adolescent Sexual and Reproductive Health Program in the Ministry of Health provides SRH services including HIV prevention information and services to out-of-school young people. With support from UNESCO, the Non Formal Education Division of the Ministry of Education (NFED) produces a reader series that tackle Sexuality Education and Parenting for both adults and young people who are out of school. This is to re-enforce what the HIV Alert School program does for youth in school.

The UN System through ILO has interventions for some categories of youths often neglected by mainstream HIV programs: young workers in the informal sector including artisans. Peer educators have been trained among the group. UNAIDS is also reaching the youth through the “Protect the goal” (PtG) football campaign. This it does through mass media like television and radio advertisements, and working with the national male and female football teams as campaign ambassadors. Pledge signing and signature collection events were held during the year. This was carried out at the UNAIDS offices and rolled over to regional and district events. The PtG activities are mostly joint UNAIDS, GAC, GFA, NYA activities.

- Two additional PtG good will ambassadors were brought on board
- PtG IEC materials were reviewed, reprinted and disseminated widely during most events
- UNAIDS organized a Global tour to all 32, 2014 world cup participatory countries
- The PtG ball was in Ghana between May 21 and 24.
- The PtG ball was presented to H.E President Dramani Mahama by Dr. Diallo, the Senior Advisor to the UNAIDS Excutive Director
- The Ball was signed by H.E the President of Ghana in a colorful event at the Flag Staff House.
- 309,966 youth (54% of national target) were reached with prevention activities as at the end of September.
- This was done as part of the general population activities by GAC funded CSO’s and FBO’s

• ‘Condomize’ campaign undertaken and IEC materials & condoms distributed as part of 2014 WAD.

Planned Parenthood Federation of Ghana (PPAG) and ADRA are among a number of CSOs providing BCC information and services including HIV for young people in all the regions in Ghana as part of the national HIV response. PPAG, for example, provides HIV prevention information and services as part of its integrated Sexual and Reproductive Health (SRH) and family planning services to its clients including young people. The PPAG’s revised manuals for HIV prevention among the youth enjoyed a lot of support and technical input from UNESCO and UNFPA among other partners to factor in Comprehensive Sexuality Education (CSE).

UNFPA, NPC supported a review and development of a new SRH policy. In addition they supported the provision of sexuality education and services to young men and women, young persons with disability (including out-of -school, informal sector, refugees, young migrants) and the provision of integrated HIV prevention/FP/SRH education and services to out of school youth including PWDs, and young FSW (Northern, Upper East, Upper West, Volta, Central, Ashanti, Brong Ahafo) Female Head Porters and male truck pushers (8 markets- Accra, Kumasi, Kintampo), and refugees (in four camps) . This was done as a in collaborative effort between UNFPA, GHS, MOGCSP.

HIV Prevention for General Population

Multiple sex partnerships are one of the major drivers of the generalized epidemic in the African countries if sex is not protected. Sex with multiple partners for women was 1.9% in 2011 as compared to 1% in 2008. On the other hand, sex with multiple partners for men was 13.8% in 2011 as compared to 11.4% in 2008 (MICS 2011; and DHS 2008). DHS results show that, among women, multiple sexual partnerships have slightly declined in 2008 as compared to 2003. However, among men, multiple sexual partnerships have shown an increase in 2008 as compared to 2003. Multiple sexual partnerships appear to be of high concern among both women and men, specifically in Eastern, Ashanti and Greater Accra Regions.

In the Modes of transmission study in 2014 is was established that the majority of infections (72.3%) occurred among the general low risk population. Stable heterosexual couples constituted (24.2% in 2014 compared to 24.7% in 2008) and persons involved in casual heterosexual sex (CHS with non-regular partners) and their regular partners (48.1% compared to 12.3% in 2008). To sustain the importance of HIV prevention at the national level and avoid potential reversal of gains, interventions among the general populations are still necessary. Some of the key indicators for HIV prevention in the general population include the proportion of women and men aged 15-49 who both correctly identify ways of preventing sexual transmission of HIV and reject major misconceptions about HIV transmission and the proportion of women and men using a condom in the last high-risk sex. Most of the key general population indicators for this report are based on DHS results. Table 13 shows some of the key indicators at the general population level that are being tracked using program data for 2013 and 2014.

Despite some concern that the focus on the general population is not as intense as it was in the early phase of the campaign, due to the shift in focus primarily to key populations, there are a number of interventions being implemented by national response partners aimed at HIV prevention in the general population. There are several organizations involved in HIV

prevention among the general population. These include interventions in selected tertiary institutions by PPAG through peer educators, anti-AIDS clubs, and the use of student PLHIV ambassadors to reach students. This has proved effective in reaching several students but at the moment, only six institutions are covered making the coverage rather limited. Unfortunately, these interventions have now been suspended because of lack of funds and logistics to continue the program.

Table 13 Non-Clinical Prevention: Key Indicators among General Population for Global Fund and PEPFAR programs

Indicator	Baseline 2011	2013	2014	Comments
# Male and Female Condoms Distributed	59,505,436	4,702,125	2,369,653	Data from GAC; Decline particularly in 2013 and 2014 attributable to stock-outs.
Number of people reached with HIV prevention interventions			789,920	
Number of people reached with stigma reduction activities			183,006	
Number of individuals who received HIV testing and counseling (HTC) and who know their results			34,617	
Number of districts in which comprehensive BCC interventions are implemented as defined in national BCC policy and plan	100	All districts		GAC data source; Level of comprehensiveness not assessed
Number of HIV workplace programs (Health and Wellbeing programs)	45	328		GAC Source: Supported or implemented by several partners including GIZ, GBCEW, ILO, and GEA.
Number of Prisons with Workplace HIV Education Programs	Not available	35	35	There are 45 prisons in Ghana. The achievement in 2013 far exceeds the target of 20 for 2015
Cumulative number of media institutions disseminating stigma reduction messages	5 (2006-09)	34		Interventions include teasers, documentaries and adverts.

BCC activities are provided countrywide with varying intensity. There are over 30 large civil society organizations implementing activities in several districts of the ten regions of the country. Working through local CBOs/NGOs, several interventions are undertaken to reach the general population. These include community outreach (one-on-one, peer education, small/large group discussions), community mobilization for HTC, condom promotion and distribution, film shows and community drama, as well as the distribution of IEC materials. It is reported that all districts have been reached[17] BCC interventions.

[17] Ghana AIDS Commission (2012): 2012 Status Report

One key strategy of the NSP is to establish a mechanism for effective coordination of BCC interventions. This has been achieved through the establishment of a BCC TWG. This technical working group draws membership from all sectors – Public, Civil Society, Private Sector and Development Partners. However, the envisaged policies to standardize IEC materials and message evaluation of the outcomes of the IEC interventions have not been achieved. In several districts, anti-stigmatization campaigns are being run to educate people on stigma, its related dangers, and its inhibitory role to accessing preventive care.

UNFPA provided support to national partners to facilitate the strengthening of HIV and SRH linkages at the systems level. The strengthening of HIV and SRH linkages particularly at the systems level was a key recommendation emanating from the mid-term evaluation of the National HIV and AIDS Strategic Plan (NSP, 2011-2015), an exercise UNFPA previously supported by providing technical assistance. A strategic initiative adopted by the CO was to strengthen community systems in creating demand for integrated HIV prevention and SRH services for women of reproductive age (i.e. e-MTCT prong 1) and Family Planning (FP) for women living with HIV (e-MTCT prong 2). The following interventions were supported: Ccommunity mobilization approaches in targeting female head porters (Kayaye), male Involvement in Demand Creation for Integrated HIV, FP and SRH Services, establishing support groups for Sexuality Education and Contraception for Young Female Sex Workers, engaging community structures in addressing sexuality education, FP demand creation targeting PLHIV, and a National Condom Promotion Campaign.

Another strategy is to build the capacity of implementers of BCC interventions. Training and other capacity-building activities have been ongoing and have helped in strengthening the capacity of several NGOs. However, there was the perception that training is skewed in favor of enhancing monitoring and evaluation skills, without adequate attention paid to skills needed in designing, implementing, and managing HIV prevention interventions.

The use of the mass media in HIV prevention is well known in Ghana. There are currently 34 radio and TV stations with anti-stigma and discrimination messages. Several other BCC messages are aired through the mass media. Major HIV prevention media campaigns include: *Protect the Goal* (Condom-use campaign); *Be Bold* (HTC) and "*It could be me, it could be you*" (anti-stigma campaign).

Many stakeholders fear that with so much attention given to HIV prevention interventions for key populations, HIV prevention amongst the general population is being relegated to the background and may be forgotten all together eventually. HIV prevention in the general population and amongst key affected populations is necessary for a successful national HIV response and therefore both must be maintained.

Workplace HIV prevention interventions

There are also several workplace interventions, particularly in the private sector. This has led to the promotion and formation of workplace committees to deal with HIV and AIDS issues. There have been workplace BCC interventions, which also promote condom use, HTC, eMTCT as well as sensitization interventions on stigma and discrimination at the workplace. The number of HIV workplace interventions has increased sharply; from 45 in 2011 to 328 in 2013.

The International Labor Organization (UN System) is working on an extended HIV information and education as well as services (HTC) to the general population particularly the workforce especially in the informal economy. The VCT@Work initiative hopes to extend HCT to 30,000 workers by 2015. Serious concerns exist about the availability of test kits, which are very important to the success of the workforce knowing its HIV status, which is the gateway for access to services.

Three hundred and twenty eight (328) institutions across all sectors have developed HIV Workplace Policies since 2011 and started implementing these policies during the period under review. Assistance for the development of these workplace policies was provided as follows:

i. GIZ – 146 hospitality industry institutions
ii. ILO – 89 Informal Sector Organizations and Trade Associations
iii. Ghana Employers Association (GEA) – 51 member companies
iv. Ghana Business Coalition for Employees Wellbeing (GBCEW) – 42 private sector companies

ILO interventions has benefitted about 20 informal sector trade associations and private enterprises including market traders, caterers, plumbers, beauticians, hairdressers, transport owners, barbers, tailors and dressmakers, drinking bar operators, and traditional healers. As at the 2012, 89 informal sectoral HIV workplace policy guidelines have been developed; 514 informal workers trained as peer educators; 1,091,609 male condoms distributed and more than 50 districts in five regions have benefitted from Advocacy and Consensus Building Meetings[18]. The program also held 106 workshops on stigma and discrimination.

It is worthy of note, however, that sonce the re-proiritization of HIV interventions in 2012, workplace interventions on Ghana have suffered a major blow. The above named actors in this area have found it difficult to sustain the programs started during the Global Fund Round 8 HIV program, although they all maintain some engagement with their clientele.

Workplaces constitute a 'captive' population and hence are cost-efficient to reach with prevention interventions. In addition, a majority of the countries working population spends most of its waking hours at the workplace and this is where information (whether beneficial or harmful) is received from peers. Many relationships between the sexes find their genesis in the workplace. The workplace also forms the hub of the country's economic development and for this and all the above reasons deserves to be adequately funded and the institutions involved should be strengthened.

[18] ILO Close-Out Report: Reaching the hard to reach: An expanded and comprehensive response to HIV and AIDS in the workplace- Focusing on the informal economy.

Clinical HIV Prevention and Treatment, Care, and Support

Introduction

The core areas for the Clinical HIV Prevention and Treatment, Care, and Support thematic area in the National Response are:

1. Elimination of Mother-to-Child Transmission of HIV (eMTCT)
2. HIV Testing and Counseling (HTC)
3. Blood Safety
4. Universal Precautions and Post Exposure Prophylaxis (PEP)
5. Sexually Transmitted Infections (STIs)
6. HIV and AIDS Treatment (ART)
7. HIV and TB Collaboration
8. Care and Support for PLHIV

Elimination of Mother-to-Child Transmission of HIV (eMTCT)

TARGET 3. ELIMINATE MOTHER-TO-CHILD TRANSMISSION OF HIV BY 2015 AND SUBSTANTIALLY REDUCE AIDS-RELATED MATERNAL DEATHS

The Declaration of Commitment of UNGASS in June 2001 set the goal of reducing "the proportion of infants infected with HIV by 20% by the year 2005 and by 50% by the year 2010, by ensuring that 80% of pregnant women accessing antenatal care receive information, counseling and other HIV-prevention services and - Increasing the availability of and providing access for HIV-infected women and babies to effective treatment to reduce MTCT, as well as to voluntary and confidential counseling and testing, breast milk substitutes and the provision of a continuum of care" [70].

Ghana has a unique opportunity to achieve its goal. The national antenatal coverage has been consistently over 90% of the expected pregnancies [71]. This affords an opportunity for reaching at least 90% of pregnant women with eMTCT, but creates a challenge of ensuring that eMTCT is provided at all antenatal clinics to achieve this goal. The number of Antenatal clinics and the eMTCT uptake at each clinic providing eMTCT is thus critical for achieving this target.

Progress in eMTCT has also been tremendous. Ghana adopted the policy of using ART for eMTCT in 2006. In 2009, eMTCT services were provided at the national (tertiary), regional, district, health centre level facilities in both public and private health facilities. Significant success has been chalked in further decentralizing eMTCT to the community level through Community Based Health Planning Services (CHPS). The number of eMTCT centres increased from 135 in 2005 to 2,255 functional sites by December 2014. The number of clients counselling and testing as part of ANC services has increased from 257,466 in 2008, 381,874 in 2009, 520,900 in 2010, 627,180 in 2011. There was a dip to 548,933 in 2012. The number of positive eMTCT clients receiving ART was 4,991 in 2008 but decreased to 3,643 in 2009 and rose again to 5,845 in 2010, and to 8,057 in 2011. There was a dip to 7,781and 7,266 in 2012 and 2013 respectively. There has been a rise to 8,299 in 2014.These reductions in coverage for 2012 and 2013 have been attributed to resource challenges related to supply chain issues. The percentage of HIV infected pregnant women who received

antiretrovirals to reduce the risk of mother to child transmission has increased from 38.1% in 2008 to 70% in 2012.

Indicator 3.1 Percentage of HIV-positive pregnant women who receive antiretrovirals to reduce the risk of mother-to-child transmission

Table 14: eMTCT services 2011 to 2014

Indicator	2011	2012	2013	2014
No of clients received eMTCT	627,180	548,933	492,622	601,726
No of clients positive	15,763	11,145	9,508	12,583
Percentage of Clients positive	2.51%	2.03%	1.98%	2.09%
Clients on ART	8,057	7,781	7,266	8,299
Percentage of HIV Positive clients detected through eMTCT on ART	51%	70%	76%	66%
Estimated number of HIV-infected Pregnant women in the last 12 months	10,869	10,715	10,522	10,226
Percentage of HIV infected pregnant women who received antiretrovirals to reduce the risk of MTCT	74.1%	83.6%	69.1%	81.2%

Source: National AIDS Control Programme, 2014 Annual Report, National HIV Estimates 2014

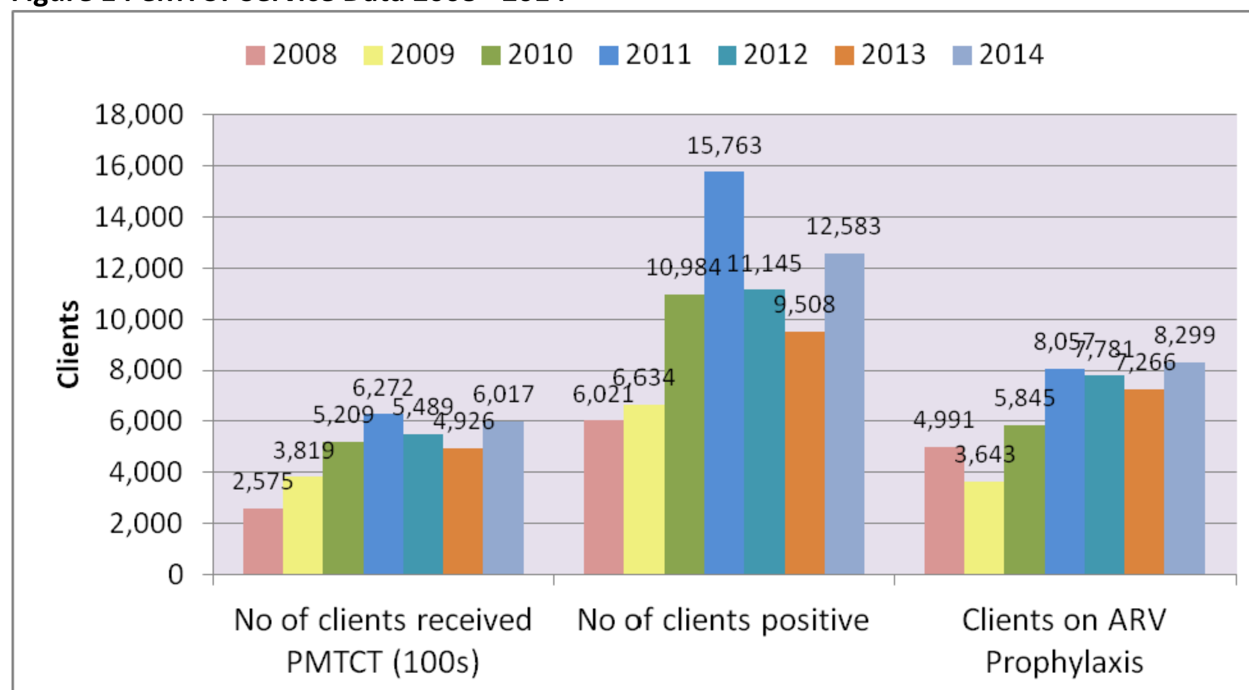
The initial decrease in the number of eMTCT clients receiving ART has been attributed to the new regimen instituted in 2007 which requires client to have a CD4 count test conducted prior to the initiation of either prophylaxis or ART. This results in delays in receiving therapy and a reduced number of clients accessing services at the end of the reporting period. . In 2012 eMTCT coverage rose from 74% in 2011 to 84%, and dropped to 69.1% in 2013 and rose again in 2014 to 81%.

In 2011 and 2012, 36.8% and 41.5% respectively of HIV +ve mothers detected through eMTCT services received ART compared with 33.8% and 39.4% in 2013 and 2014 respectively

In 2014 81.2% of identified HIV positive pregnant women received ARV prophylaxis for eMTCT of HIV.

At the national level, JUTA worked with NACP to develop national guidelines for transition from eMTCT option B to B+. UNICEF as member of JUTA provided technical assistance to NACP to conduct an assessment of Paediatric ART services in Ghana. As GF/CCM members, JUTA provided technical support for the development of the country's concept note for submission to the GF within the new funding model. The concept note prioritized eMTCT services in four high-burden regions where more than 60% of the country's HIV-positive pregnant women live. The regional targeting on the basis of HIV prevalence rate (above2%) will contribute to increase eMTCT coverage.

Figure 14 eMTCT Service Data 2008 - 2014



Source NACP 2014 Annual Statistics

Early infant diagnosis

Indicator 3.2 Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth

HIV disease progression is rapid in children; they need to be put on treatment as early as possible because without early treatment almost 50% of children would be dead by the second year

In line with the national goal of virtual elimination of mother-to-child transmission of HIV the Programme built capacity of institutions and health care workers in early diagnosis of HIV exposed infants. Five institutions were equipped in 2009 with DNA PCR machines. 85 service providers at regional, district and facility levels were trained to undertake Early Infant Diagnosis using the Dried Blood Spot method. In line with the national priority and strengthening the health systems to improve quality of services in 2012, 168 health professionals in the Northern and Upper East regions were trained in sample taking and storage of Dry Blood Spot.

This indicator measures progress in the extent to which infants born to HIV-positive women are tested within the first 2 months of life to determine their HIV status and eligibility for ART, disaggregated by test results. It also assesses the impact of eMTCT interventions in reducing new infections.

The tracing of HIV-positive children and providing ART are facing major challenges as many children are lost to follow-up. In 2014, UNICEF supported training on eMTCT/EID for 120 health staff from six high prevalence Districts of the Eastern Rregion. Additional 75 doctors, nurses and midwives were trained on Paediatric ART Services. UNICEF has supported NACP to train 70 health staff on EID from 3 Northern Regions.

Major challenges continue to plague the implementation of EID and Paediatric ART intervention and include limited skills of health providers, weak defaulter tracing of positive mother-baby pairs, erratic supply of commodities and inefficient system of EID sample collection, transmission, testing and reporting back.

The Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth was 18% in 2011 and 17.9% in 2012 and 23% in 2014.

Mother-To-Child Transmission of HIV (Modelled)

Indicator 3.3 Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months paediatric HIV infections through mother-to-child transmission

The percentage of children who are HIV-positive should decrease as the coverage of interventions for eMTCT and the use of more effective regimens increases. The transmission of HIV from mother to child can be calculated by using the Spectrum model. The Spectrum 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 eMTCT 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

To achieve the UNGASS goal to reduce the number of children infected through MTCT by 50% data needs to be collected to determine the HIV incidence among these HIV exposed infants. In Ghana, this data was not systematically collected in 2008 and 2009. The model estimated the indicator result as **5.64**% for 2011, and **3.8**% in 2012.

The model estimated the indicator result as 6.39% for 2013 and 4.26% for 2014.

In Ghana mother–to-child transmission of HIV is overwhelmingly the main mode by which young children (under 5 years of age) acquire the infection. The NSP has adopted elimination of mother to child transmission of HIV (eMTCT) as the preferred strategy to achieving an overall reduction of new HIV infections in children. The main outcome is to reduce MTCT of HIV from 30% to less than 5% by 2015. The stated outputs to achieve this target include increasing annually, the number of pregnant women attending ANC who are counseled and tested for HIV from 381,874 (40%) in 2009 to 1,023,150 (95%) in 2015, ensuring that the number of HIV-infected pregnant women who receive ARVs for eMTCT increased from 3,643 (28%) in 2009 to 16,259 (95%) by 2015 and increasing the percentage of HIV exposed infants on ARVs prophylaxis for eMTCT from 30% to more than 95% by 2015.

Among the key strategies and activities outlined in the NSP to enable Ghana reach the targets are increasing the awareness of and generating demand for HTC services among communities with specific targeting of women in reproductive age and their partners, strengthening Provider Initiated Testing and Counseling (PITC) for HIV at ANC as well as integrating eMTCT and Sexual and Reproductive Health (SRH) including Family Planning (FP) services. Other strategies as outlined in the NSP include strengthening the supply and

logistics management for ARV drugs to eMTCT sites, strengthening referral system from eMTCT to ART sites, scaling up laboratories with CD4 facilities and fully functioning Early Infant Diagnosis (EID) laboratories to provide early HIV diagnostic services for children under 18 months through dried blood spots (DBS) as well as strengthening PITC for children at other service delivery points (SDPs) such as MCH and nutrition clinics and outreach clinics. The NSP 2011-15 and the eMTCT Scale-Up Plan 2011-15 are the two key documents driving the implementation of the eMTCT program.

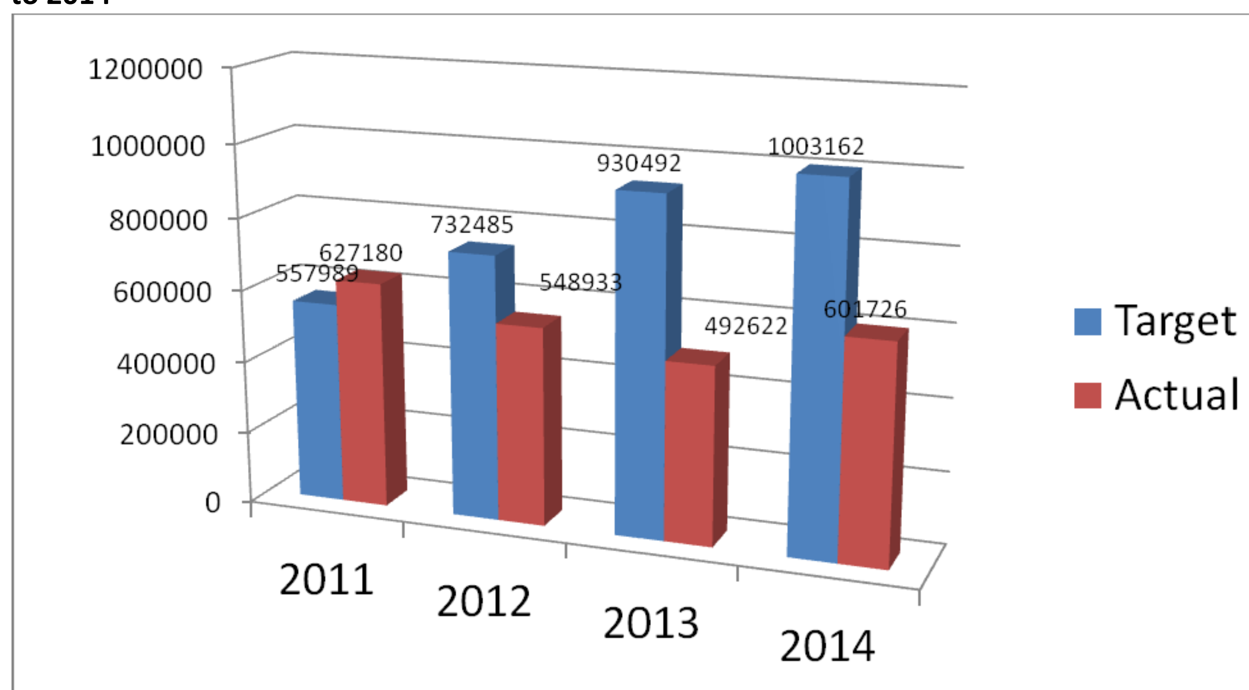
With support from UNICEF, NACP has commissioned a Review of the eMTCT Scale-Up Plan 2011-15. The main findings in the draft report of the review of the eMTCT Scale-Up Plan are rincorporated into this Report.

eMTCT Program Performance

The eMTCT program performed creditably when viewed in the context of the targets in the NSP 2011-15 but very poorly in relation to the hugely ambitious targets in the eMTCT Scale-up Plan 2011-15. The eMTCT program is highly likely to meet its NSP 2015 target of providing 95% of HIV infected pregnant women with ARVs to reduce mother to child transmission of HIV; but the program has failed to reach the 90% target by 2012 as stipulated in the eMTCT Scale up Plan.

The percentage of pregnant women who were tested, counseled, and knew their results in 2011-2013 and the targets for those years in the NSP 2011-15 is shown in Fig 12. Whereas the actual performance exceeded the target for 2011 (84.9% vs. 75%), program performance was far below the target for 2012 (63.7% vs. 85%). Program performance for 2013 is lower than the target of 90%, as records indicate only 53.2% of pregnant women had been tested, counseled, and received their results in 2013. The below target performance in the provision of HTC services for pregnant women in 2012 and that expected in 2013 is primarily due to stock out of HIV rapid test kits (RTKs) in the country.

Figure 15 Number (%) pregnant women who tested for HIV and know their results: 2011 to 2014



Source: NACP Annual Reports 2011 - 2014

As shown in Table 15 the percentage of HIV infected pregnant women who received ARV drugs to reduce the risk of mother to child transmission (eMTCT prong 3) showed a progressive increase for the 2011 to 2013. The performance for 2014 fell to 66%. The performances for 2011 to 2014 are poor when viewed against the eMTCT Scale-Up Plan targets of providing 90% of HIV infected pregnant women with ARVs prophylaxis.

Table 15 Percentage of HIV infected mothers on ARVs: 2011 to 2014

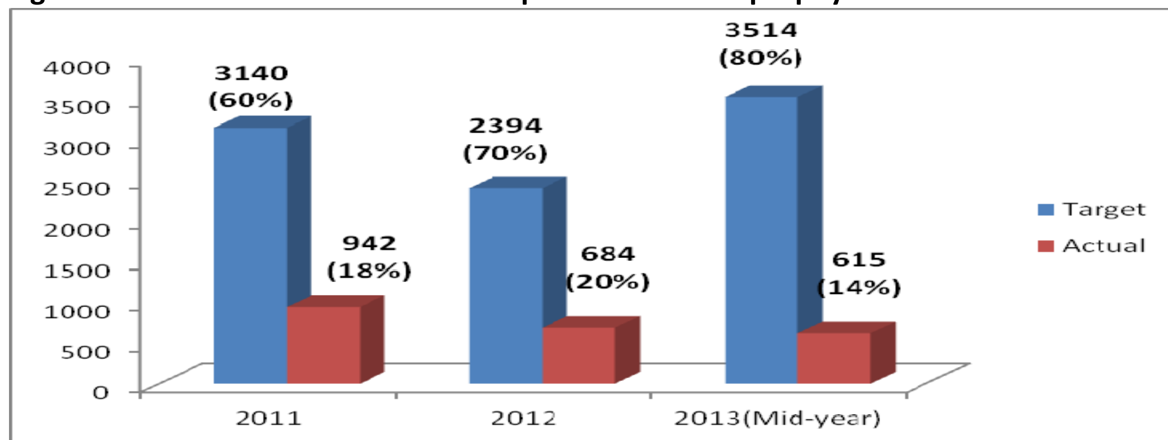
	Indicator	2011	2012	2013	2014
1.	No. Pregnant women tested for HIV	627,180	548,933	492,622	601,726
2.	No. HIV Positive Pregnant Women	15,763	11,145	9,508	12,583
3.	Number (and %) HIV infected mothers who received ARVs to prevent MTCT of HIV	8,057 (51.1%)	7,781 (69.8%)	7,266 (76.4)	8,299 (66%)
4.	*NSP 2011-15 targets* for HIV infected mothers on ARV	60%	70%	80%	
5.	*eMTCT Scale-Up Plan targets* for HIV infected mothers on ARVs	90%	90%	90%	

Source: NACP 2014 Annual Reports for Indicators 1-3.

The percentage of HIV exposed infants receiving ARV prophylaxis remains very low (18% in 2011 and 20% in 2012) for the years under review in comparison to the NSP 2011-15 targets for those years as depicted in Fig 13. The main reasons for this severe under-performance include the intermittent supply and stock outs ARV drugs for children during the period. In situations where drugs were available for HIV exposed babies, lack of drugs for HIV infected mothers affected performance since these mothers will only bring their children when they themselves are coming for their drugs. Stigma and low male involvement also play major roles. Some infected mothers with HIV exposed babies will not seek further treatment from the eMTCT site where she delivered for fear of being identified by friends. Low male

involvement stems primarily from failure by HIV positive mothers to disclose their status to their partners for fear of violent reactions also reduced the program performance. Subsequently, many HIV exposed children are not reached with ARVs prophylaxis.

Figure 16 The number and % of HIV exposed infants on prophylaxis for eMTCT



Source: NACP Annual Reports 2013

The prevalence of HIV infection amongst HIV exposed babies has decreased from a presumed prevalence of 30% in 2010 (because there was virtually no eMTCT program at that time) to an estimated MTCT rate of 2.74% in 2012 and 1.87% in 2013 at 6 weeks and 8.99% in 2012 and 8.37% in 2013 at the time of complete cessation of breastfeeding (NACP National HIV Prevalence and AIDS Estimates Report 2012-2016). The program projects there will be further reductions in MTCT rates in the coming years.

Further analysis of the HIV status of HIV exposed infants who had early diagnosis of HIV using PCR DNA testing indicates the results are quite good for the national eMTCT program: 6.6% (129/1952) of the infants born to HIV+ mothers who received DNA PCR testing in 2011 were HIV+ and similarly 6% (130/2064) of those who received testing in 2012 were HIV+.

HIV Testing and Counseling (HTC)

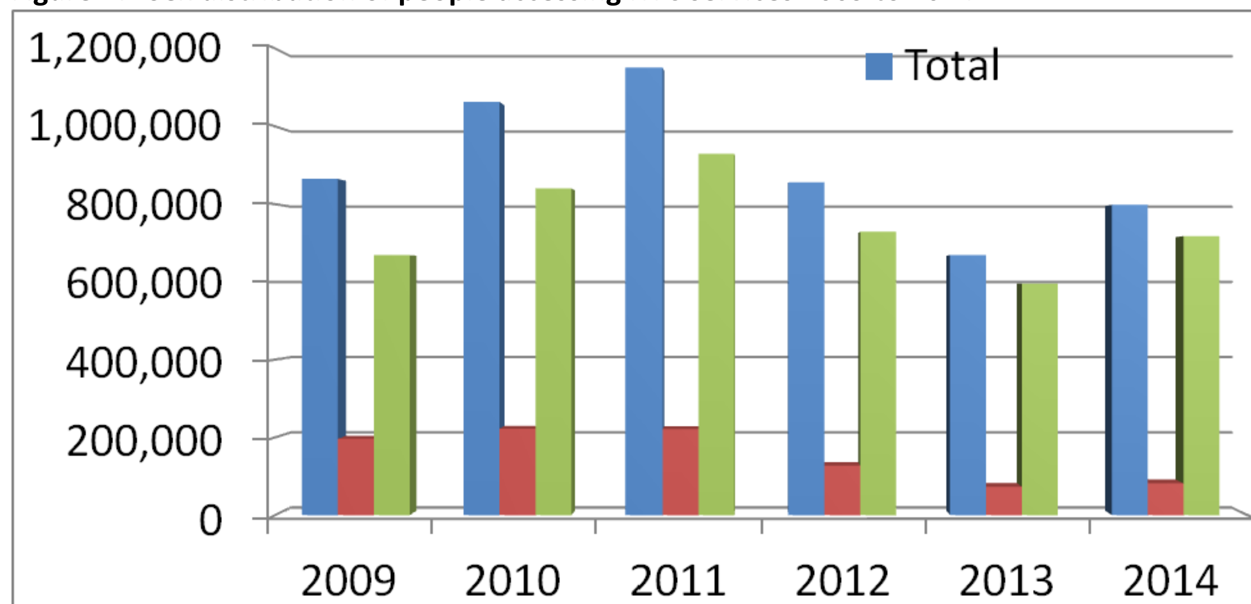
With testing and counseling as a key entry point to HIV treatment, care and support it is an important that as many people as possible are reached with HTC services for early detection and access to treatment. By 2009, HTC services had been scaled-up to a large extent with services available in 793 health facilities and through outreach programs. Program data shows that the number of people counseled and tested in that same year was 865,058 (NACP, 2010). The NSP seeks to maintain and improve on this performance by increasing the number of persons tested to 1,740,000 by 2015 (NSP, 2010). Similarly the NSP also requires the number of testing centers across the Ghana from be increased from 793 in 2009 to 2,270 by 2015 at a rate of 385 sites annually.

The NSP planned to maintain and increase the number of sites providing HIV counseling and testing services currently being provided as walk-in diagnostic testing canters, as part of eMTCT, and as part of provider initiated testing and counseling (PITC) at service delivery points (SDPs) including facilities providing Adolescent Friendly Health Services (AFHS). In addition, Know Your Status (KYS) campaign providing HTC services through outreach community programs and HIV Workplace Programs complement services at the health facilities.

Performance of the HTC program

The number of clients who tested for HIV and received their results was highest (1,151,034) in 2011 but declined in 2012 and is likely to do so in 2013 (Fig. 14). The NSP target was to provide HTC services to an average of about a 1.1 million clients each year between 2011 and 2013. The number of females accessing HTC services was at least four times the number of males in 2011 and 2012; however this gap had narrowed substantially by mid-2013.

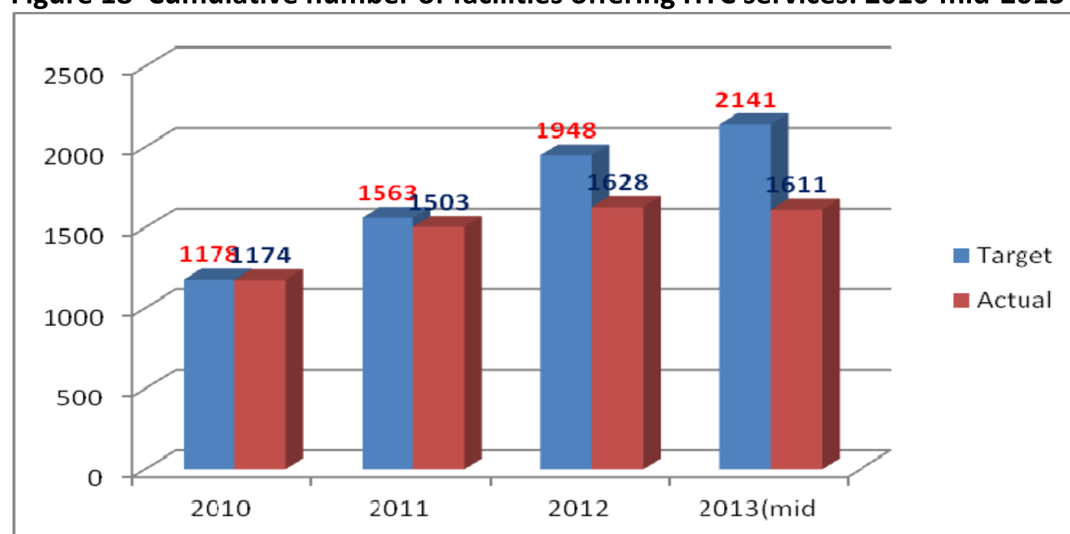
Figure 17 Sex distribution of people accessing HTC services 2009 to 2014



Source: NACP Annual Reports 2009 - 2014

The number of facilities offering HTC services increased sharply from 793 in 2009 to 1,611 by mid-year 2013 as shown in Fig.15. It is significant to observe that not only were there no additions of HTC sites, but a reduction of 17 of the existing HTC sites in the country by mid-2013 due a combination of inadequate staff and lack of RTKs for HIV testing.

Figure 18 Cumulative number of facilities offering HTC services: 2010-mid-2013



Source: NACP Annual Reports 2013

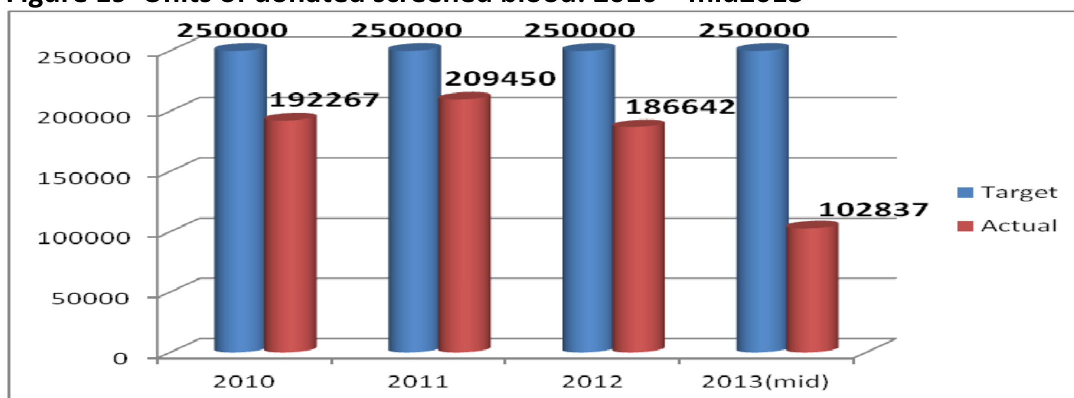
Blood Safety

The current Blood Transfusion Policy seeks to instill efficiency in donor education, recruitment, selection and retention, blood collection, laboratory testing, component preparation, storage and distribution. It also emphasizes on the quality assurance in clinical transfusion practices and adherence to code of ethics. The NSP seeks to reduce further the current low level of blood transfusion transmission of HIV and move towards the elimination of HIV and other blood borne infections such as Hepatitis B and C and Syphilis occasioned by blood transfusion by 2015. To ensure blood safety in the country the NSP requests all blood and blood products are screened for HIV and other blood borne infections before transfusion or other uses according to national guidelines. The outcome as stated in the NSP document is to achieve 250,000 blood units of donated from voluntary non-remunerated blood donation (VNRBD) sources by 2015 from the baseline figure of 159,869 units in 2009.

The NSP seeks to achieve the stated targets through improving the capacity of NBTS to provide safe blood and blood products through modernization of laboratory services, establishment of quality management systems, and improving quality of clinical transfusion practices. The introduction and use of HIV test kit that can reduce the window period for HIV in all blood screening site and revising of the existed SOPs as well as offer training for health workers on their use is to be vigorously pursued. To ensure the availability of screened blood at all health facilities that carry out blood transfusion, storage and distribution system of the NBTS were to be improved and cold storage facilities for blood to be installed in all public hospitals that provide blood transfusion services. Furthermore the NSP planned to focus on increasing voluntary blood donations instead of family donors' sources by 2015 through the development and adoptions of workable social marking strategies. The NBTS was to be resourced to also carry out campaigns to recruit and retain VNRBD.

As depicted in Fig. 16 the annual target of 250,000 units of screened blood could not be achieved in any of the years depicted. Although a very good effort was made to increase blood donated from 63.0% in 2009 to 83.8% in 2011, this could not be sustained as it dropped to 74.7% (186,642) by close of 2012. By mid-year 2013, 102,837 units of blood representing 41.1% of the annual target have been collected and screened. In 2014, a total of 140,127 units were collected and screened. This figure represents 56.05% of the annual target.

Figure 19 Units of donated screened blood: 2010 – mid2013



Source: National Blood Transfusion Service Annual Statistics 2014

SOPs for laboratories have been revised and some of the laboartory staff had received training on the use of the revised SOPs. Records at the facilities indicate that all the blood

received through donation and transfused are screened for HIV antibodies, Sphyilis and Hepatitis B and C antibodies using the existing guidelines. Refrigerators are available for the stoarege of blood at majority of public health facilities where blood transfusion is carried out.

Universal Precautions and Post Exposure Prophylaxis (PEP)

Universal precaution is an integral part of good health services delivery practice in Ghana and protocols have been developed for the health sector and are being used to prevent nosocomial infections at all levels. The protocols cover hand washing, provision for sharps disposal, and mechanisms for final medical waste disposal.

Post Exposure Prophylaxis (PEP) is offered in of the health sector for occupational incidents, and has recently been instituted for rape and defilement cases. PEP for health care settings consists of a comprehensive set of services to prevent infection developing in an exposed person including counseling and risk assessment, HIV testing and counseling, short term ARV depending on the assessed risk and provision of long term ARV with support and follow up.

ART sites are equipped to provide PEP services. Although sites providing eMTCT services are also expected to provide PEP however not all eMTCT sites had the capacity to provide this service. The NSP targeted the expansion of PEP services to cover 90% of all health facilities providing ART and comprehensive eMTCT services by the end of 2015.
To achieve the overall outcome of reducing new HIV infections, the number of infections caused by occupational incidents and through rape and defilement, efforts would be made to scale-up PEP and universal precautions for infection prevention by reviewing ART and eMTCT sites that have the capacity to provide PEP; identify the capacity building needs and provide training for health personnel in the ART and eMTCT sites on PEP. Adequate commodity supplies including ARV drugs for PEP were to be ensured while integrating PEP into the reporting system for ART and eMTCT. Universal precaution for infection prevention will be taught to all health workers including those providing HIV services. Additionally, referral services for PEP were to be strengthening through the establishment of linkages for all health facilities with ART and eMTCT sites that provide PEP with extension to police and judicial services through training to facilitate referral of rape and defilement survivors. Finally the NSP aimed at raising the awareness on the significance and availability of PEP services.

ART and eMTCT care providers are not only fully aware of the precautionary measures to prevent infections but are well aware of what to do. This they have learnt through a number of pre and in service training programs they have benefited from over the years. SOPs and protocols are not only available but well displayed on walls very close to service delivery points. Precaution measures for patients are well displayed in the health facilities in the languages they could understand countrywide. Sharp needles disposal boxes are available at the services delivery points and are in use. Protective gloves are part of the testing packages for all HIV testing kits for ready use.

The personnel at the police stations are fully aware of the existence of drugs for rape cases and where to seek PEP services. Some of the police stations have a list of ART sites displayed on their walls. Currently PEP is part of the reporting format for ART and eMTCT. There is a comprehensive list of PEP/ART sites in each of the ten regions that gives details of persons in charge including their telephone numbers and contact addresses. The number of

people assessing PEP services for all causes is unknown. Informed opinions among service providers, however, believe this number to be very small.

Sexually Transmitted Infections (STIs)

Sexual transmission of HIV remains the predominant mode of transmission in Ghana. Epidemiological and biological studies provide evidence that on the individual level, STI and HIV are co-factors for HIV acquisition and transmission especially for specific STIs, which cause genital ulcer disease. Studies indicate an especially potent interaction between very early HIV infection and other STIs. STI clients have a higher prevalence of HIV infection: the HSS has shown a consistently higher STI prevalence than in the general population.

Data on STI is mainly obtained from the Ghana Health Service. Studies of STI among FSWs and other KPs indicate a decline in STI in sex workers who have been targeted by interventions. Available data indicate that only 21,004 (6.5%) and 23,075 (7.1%) of STI cases were treated in 2008 and 2009 according to national STI treatment and management guidelines. The NSP seeks to increase the number of persons treated for STI according to national guidelines from 7% in 2009 to 50% by 2015.

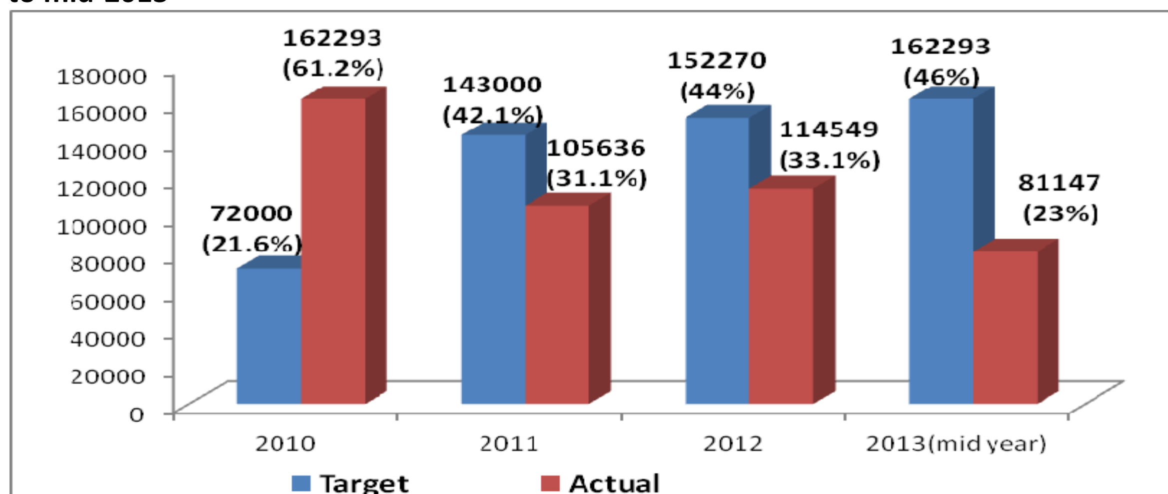
A number of strategies were put together in the NSP geared towards achieving the target stated above. Firstly demand for STI services targeting the youth, most at risk population, and pregnant women were to be generated through awareness creation and community mobilization. This intervention sought to provide information on prevention of STIs, early detection and treatment at health facilities were to be improved to provide STI management services according to national guidelines by trained healthcare providers as well as strengthening procurement and supply of test kits and drugs to the health facilities.

Moreover, the integration of STI services into HIV and reproductive health services was to be pursued targeting the youth, key populations, men, and pregnant women. To this effect guidelines for STI integration in HIV and Reproductive Health services were to be developed and disseminated with training of staff from key organizations. Finally data collection and reporting were to be improved by developing more comprehensive data collection and reporting as well as data quality assurance systems to allow for reporting by all partners in order to track implementation of the STI interventions effectively.

There are currently only few standalone STI clinics in Ghana as STI services are fully integrated in the existing services delivery system. In addition to the outpatient services, STI services are provided at MCH and FP clinics. Treatment protocols including integrated management of acute infections have been developed and disseminated throughout the health services delivery points. During the half-year of 2013, the national STI treatment guidelines were reviewed to include recent developments in the field. STI data is currently being captured on the web-based DHMIS2 platform. Drugs supply has improved as almost all drugs needed for STI management are currently covered by the NHIS making it possible for many people to access quality STI care.

The percent of people treated for STIs according to national guidelines has been below the NSP targets for 2011 and 2012 Fig. 17. The mid-year figures for 2013, however, indicate this year's target could be met barring sudden stock out of STI drugs during the remainder of the year.

Figure 20 Number/% of persons treated for STI according to the national guidelines: 2009 to mid-2013



Source : NACP Annual Reports 2013

Antiretroviral Treatment (ART)

TARGET 4. HAVE 15 MILLION PEOPLE LIVING WITH HIV ON ANTIRETROVIRAL TREATMENT BY 2015

HIV treatment: antiretroviral therapy

Ghana continues to scale-up clinical services for PLHIV including ART. The scale-up of clinical care has continued in the public sector with linkages to the private sector through a concerted coordinated programme led by the NACP. The scale-up in 2010 and 2011 focused on providing more services to the decentralised level while strengthening the central level and achieving the targets specified in the Universal Access strategy.

The scale-up has been facilitated by the increased resources from the Government of Ghana and donor partners, including, USAID, and the GFATM. Health facilities providing ART increased from 3 in 2003, to 179 by December 2014. These health facilities have provided ART for PLHIV at the district, regional and (Tertiary) national health facilities in both the public and private sector.

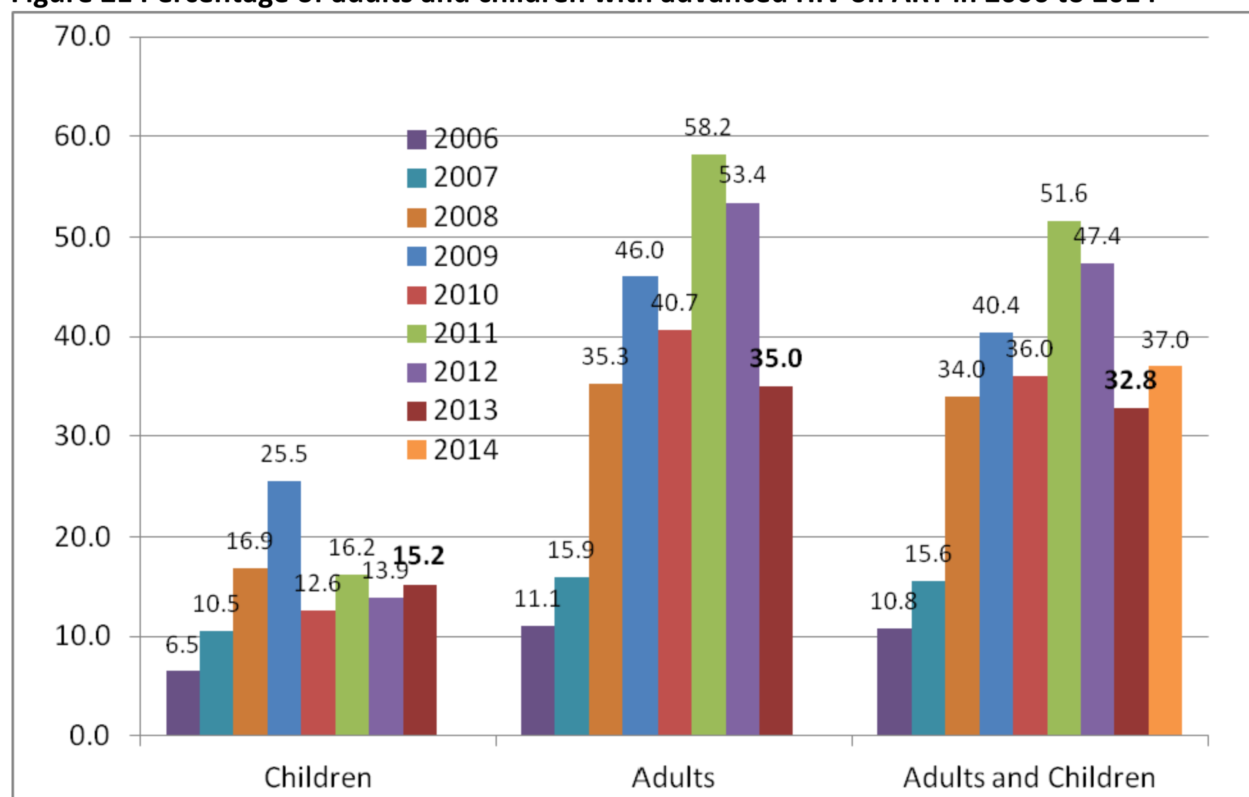
The number of adults and children receiving ART has also increased concomitantly with increasing numbers each year. The details can be seen in Table 16 below. In all 95,848 PLHIV (90,756 adults and 5,092 children) have been put on ART since the onset of the programme in Ghana and 83,712 (79,131 adults and 4,581children) of these are currently still on ART representing 95%.

Indicator 4.1Percentage of eligible adults and children currently receiving antiretroviral therapy (using WHO eligibility criteria)

Figure 21 illustrates the percentage of adults and children with advanced HIV infection receiving antiretroviral therapy. The graph shows the steady increase in overall coverage of HIV services to those who need it (adults and children) from 0.4% in 2003 to 51.6% in 2011 and 47.4% in 2012. The coverage of ART for children in particular has increased from 0% in 2003, to 16.2% in 2011 and dropped to 13.9% in 2012. The ART coverage for adults has also

increased from 35.3% in 2008 to 58.2% in 2011 and dropped to 53.5% in 2012. This shows that steady progress the country was making towards achieving its target of putting 85% of PLHIV who need treatment on ART is threatened by logistic and resource constraints..

Figure 21 Percentage of adults and children with advanced HIV on ART in 2006 to 2014



Source: NACP Annual Statistics 2014

For 2013 onwards the indicator has been altered with a denominator for All HIV+ persons. The coverage for 2013 now stands at 32.8%.. In 2014 83,712 out of 224,488 PLHIV are on ART.

Table 16: Annual Number of Clients Accessing ART Services

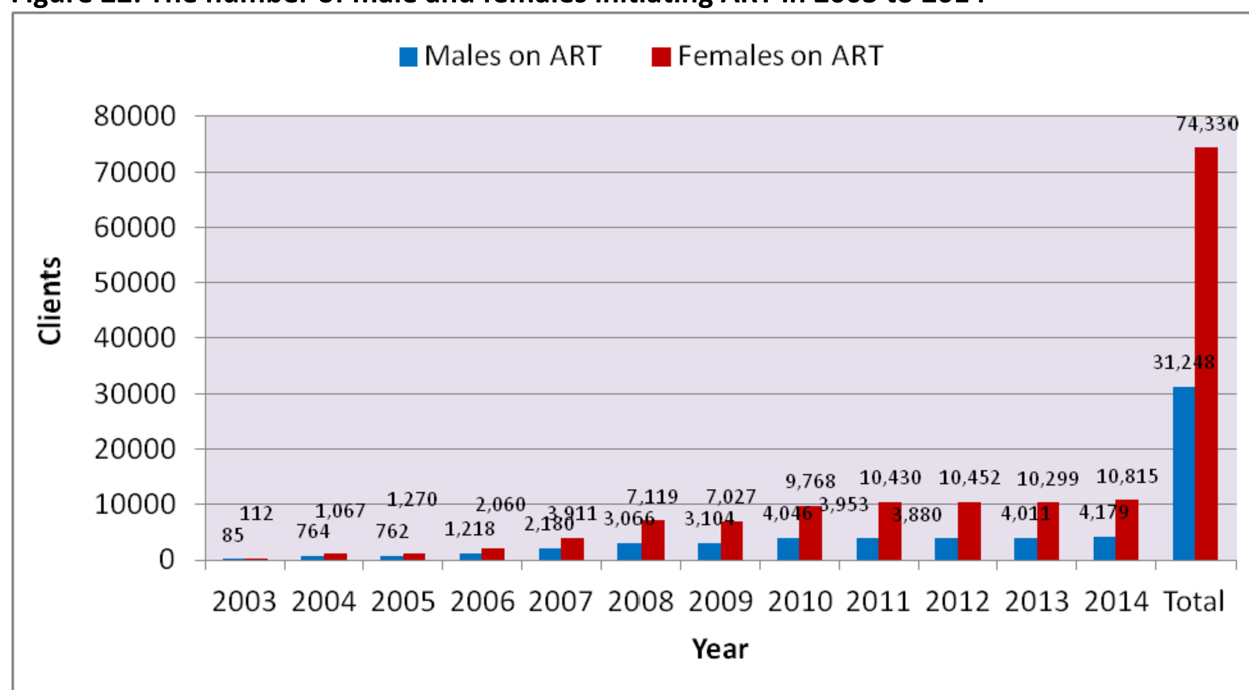
Indicator	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Total Number put on ART	197	1,831	2,032	3,278	6,091	10,185	10,131	13,814	14,383	14,332	14,299	14,994	105,567
Males on ART	85	764	762	1,218	2,180	3,066	3,104	4,046	3,953	3,880	4,011	4,179	31,248
Females on ART	112	1,067	1,270	2,060	3,911	7,119	7,027	9,768	10,430	10,452	10,299	10,815	74,330
15+	197	1,804	1,913	3,156	5,783	9,735	9,409	12,920	13,441	13,648	13,456	13,809	99,271
<15	0	27	119	122	308	450	722	894	942	684	843	1,185	6,296

Source: NACP Annual Report 2005 – 2014 and NACP 2014 Annual statistics

The data also shows that over the years a significantly larger number of females have initiated ART services compared to males. In 2009, 66.9% of clients accessing ART were women and this proportion increased to 70.7% in 2010, 72.5% in 2011 and 72.9% in 2012,

and 72.1% in 2013 and 2014. This could be attributed to the numerous entry points which affords women the opportunity to have access to services, such as counselling and testing and eMTCT as well as the differential health seeking behaviour of men.

Figure 22: The number of male and females initiating ART in 2003 to 2014



Source: NACP Annual Report 2005 –2014 statistics

Twelve month retention on antiretroviral therapy

Indicator 4.2: Percentage of adults and children with HIV known to be on treatment 12 months after the initiation of antiretroviral therapy

One of the goals of any antiretroviral therapy programme is to increase survival among infected individuals [78]. As more PLHIV have access to ART the quality of services requires monitoring. Collection and reporting on percentages of PLHIV who remain on treatment can be used to demonstrate the effectiveness of those programmes and highlight obstacles to expanding and improving them.

Ghana embarked on its large scale ART programme in 2004 and some clients have been on treatment for number of years. As part of monitoring indicators to detect early warning for HIV resistance, the NACP has instituted measures to monitor the progress of these indicators. One such early warning indicator measures the percentage of adults and children who remain on first line ART after 12 months after initiation. This is measured for each ART site. For the 2011 and cohort the overall value for this indicator was 71%.[32]

Survival of men, women and children known to be on ART 12 months after initiation of treatment is used as a proxy for AIDS morbidity and mortality. The NSP planned to achieve universal access to HIV treatment by all infected persons who require ART. It further views HIV treatment as very important extension of HIV prevention and aims at achieving the universal access target for treatment, by rapidly increasing the number of eligible PLHIV on ART from the 30.5% in 2010 to 85% by 2015. In addition The NSP targets increasing the number of eligible PLHIV (adults and children) receiving ART from 33,745 (comprising 31,994 adults and 1,751 children) in 2009 to 124,094 (comprising110, 494 adults and 13,600

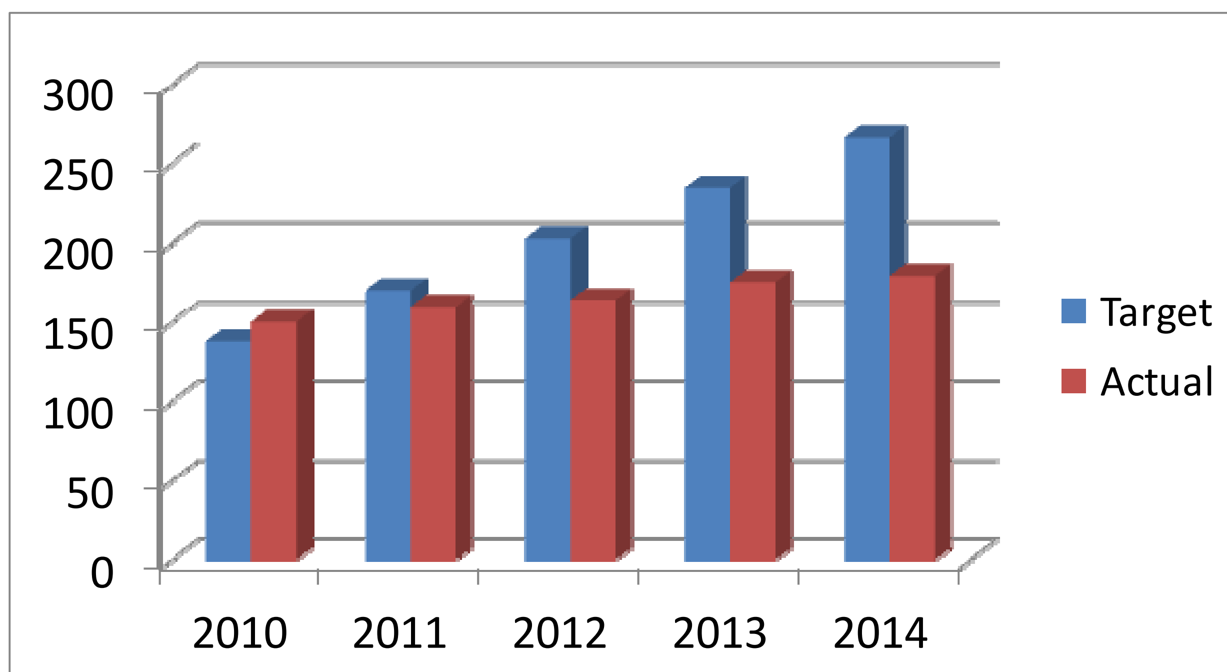
children) in 2015 while making efforts to ensure that ART sites are friendly to KPs for accessing care.

Ghana plans to scale up its ART sites from 138 in 2009 to 300 by 2015 giving priority to areas with high HIV prevalence areas. Each new site ART is expected to have about 6 health care staff trained on ART and supplied with drugs and other required commodities. As part of the quality assurance measures, sites shall meet set national guidelines and international best practices. To this end an accreditation system for ART sites and laboratories has been developed to support ART services. This forms the basis for monitoring the quality of services provided.

ART services are provided according to the national ART guidelines. Furthermore referral of patients from HTC, eMTCT, STI and TB sites to ART sites serve as entry points for treatment. Protocols for referrals are reviewed and disseminated (through training) to health personnel providing the HTC, eMTCT, STI and TB services. Moreover, HIV drug resistance monitoring is a key component of the ART scale-up plan program to safeguard the efficacy of the limited regimens available to the country. Drug resistance monitoring includes determining resistant strains in treatment naive patients and emergence of resistance strains in treatment experienced patients. Finally, drug and HIV commodities supply, and infrastructure to ART sites are strengthened to cater for increasing number of sites across the country to avoid stock outs. The forecast of drugs and other commodities required for the scale up of ART services and supply system to the new ART sites should be improved.

The program has rapidly scaled up the number of ART facilities with appropriately trained staff from 150 in 2010 to 179 by 2014 as shown in Fig. 20.

Figure 23 Cumulative establishment of ART Sites 2010-2014



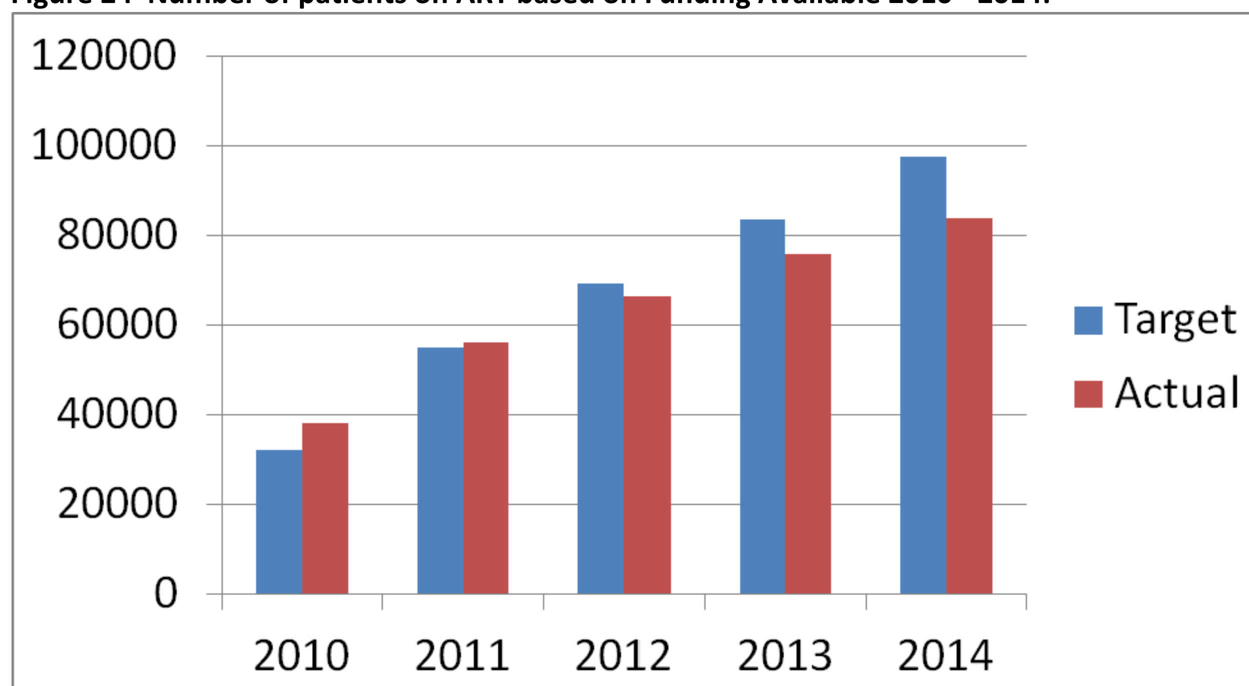
Source: NACP Annual Reports 2014

More than 60% success rate of reaching the planned number of facilities that needed to be established between 2011 and 2014, has been achieved. These facicilities have the required number of trained staff, the equipment, and the ARVs and other medical commodities needed to make the facilities fully functional. They are providing comprehensive ART services.

The number of patients receiving ART has grown rapidly in line with the increasing number of sites offering ART services. Since 2011, Ghana has had to put between 14,000 and 15,000 new patients on treatment each year. Two plausible ways of looking at the number of patients on ART are: the proportion of patients receiving treatment based on funding resources avaible to the national response and the proprtion of patients on ART relative to the number who need treatment.

Much of the funding resources needed for the ART program is provided by the GF with an increasing but small contribution from GoG. Ghana is doing very well when the funding resources are available as shown in Fig 21 where more than 75% of the target number of patients are on ART in both 2011 and 2012. The program achieved 95% of its target the target for 2013, and 86% for 2014.

Figure 24 Number of patients on ART based on Funding Available 2010 - 2014:



Source: NACP Annual Reports 2013

Viewed from the proportion of patients on ART relative to all those who need ART, the proprtion of of eligible patients on ART is growing, but slowly. Ghana was only able to provide 56% and 62% of patients who need ART in 2011 and 2012 respectively, and 64% and and 63% in 2013 and 2014 respectively (Table 17). Indications are that about 65% of patients who need treatment will receive ART in 2015. This a worrying situation as ARVs stocked out in a number of sites during the period under review.

Table 17 Proportion of patients on treatment based on all who need ART

Year	**No. Patients Needing ART** (based on NACP Annual HIV Prevalence and AIDS Estimates)	**No. Patients Actually on ART**	**% Patients on ART** relative to all those eligible for ART
2010	101,432	40,575	40.0%
2011	105,826	59,007	55.8%
2012	112,132	69,870	62.3%
2013	118,574	75,762	63.9%
2014	133,582	83,712	62.7%

Ghana may meet the target of at least 85% of eligible patients receiving ART by 2015 if substantial increase in funding is provided by the Global Fund and/or the GoG. If no such increases in funding are available, Ghana may miss the 2015 target.

HIV and TB Collaboration

TARGET 5. REDUCE TUBERCULOSIS DEATHS IN PEOPLE LIVING WITH HIV BY 50 PER CENT BY 2015

Co-management of tuberculosis and HIV treatment

The HIV prevalence among TB patients in Ghana is estimated at 14.8% in 2011. The trend for HIV prevalence among TB patients, based on routine HIV testing among TB patients is persistently downwards. The proportion of HIV positive TB patients has ranged between 40% in 2005 and 23% in 2010. Ghana has made steady progress in providing HIV testing to TB patients which has moved from 7% in 2005 to 86% in 2010. The major challenge is putting all HIV positive TB patients on ART which is currently at 40% up from 20% last year. Providing Isoniazid Preventive Therapy (IPT) to PLHIV is not yet established because this has not been agreed as policy in Ghana.

Table 18 TB-HIV Services for TB patients (2005-2010)

Year	# TB cases notified (all forms)	# HIV tested	% HIV tested	# HIV positive	% HIV Positive	% offered CPT	% offered ART
2005	12,124	844	7	340	40	100	37
2006	12,511	2,136	17	711	33	69	14
2007	12,964	5,695	44	1,621	28	72	17
2008	14,467	7,373	51	1,630	22	87	24
2009	15,286	9,870	65	2,218	22	72	24
2010	15,145	10,442	69	2,451	23	86	20

Source: NSP 2011-2015

Whereas the trend for screening TB patients for HIV is increasing all the time (from 7% in 2005 to 69% in 2010, the screening of HIV patients for TB is very low. Records at the NACP show that by December 2009, only 12% of PLHIV were screened for TB. Gaps in the coverage of screening for the two diseases include inadequate recording and reporting on TB/HIV collaboration at health facility level as health workers consider filling of the screening tool as additional work. The screening tool is also not always available in all health facilities.

Indicator 5.1 Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV

In 2010 a total of 4,073 TB cases (Male: 2,120 and Female: 1,953) tested positive for HIV. 487 received both DOTS and ART (Male: 235 Female: 252) representing 11.9% of the cases diagnosed. In 2011 a total of 4,285 TB cases (Male: 2,059, and Female: 2,226) were

HIV positive. 796 received both DOTS and ART (Male: 363, Female: 433) representing 18.5% of the cases diagnosed.
Efforts at strengthening TB/HIV collaboration continued earnestly with some significant gains.
A total number of 51,061 PLHIV were screened for TB and 770 HIV positive clients with TB are on ART as at December 2012.

Table 19 below shows the coverage for 2014 exclusively.

Table 19 positive incident TB cases that received treatment for both TB and HIV in 2014

	All Cases	Males	Females
Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV	46.6%	45.1%	48.1%
Number of people with advanced HIV infection who received antiretroviral combination therapy in accordance with the nationally approved treatment protocol (or WHO/UNAIDS standards) and who were started on TB treatment (in accordance with national TB programme guidelines), within the reporting year	1,100	519	581
Estimated Number of Incident TB cases in people living with HIV	2,359	1,152	1,207

Tuberculosis is a major opportunistic infection amongst PLHIV and a major cause of death among people with AIDS, whose impaired immune system makes them particularly vulnerable to the devastating effects of TB. Collaborative TB and HIV activities have the objectives of creating the mechanism of collaboration between TB and HIV and AIDS programs, reducing the burden of TB among people living with HIV and reducing the burden of HIV among TB patients. The current challenge is to find ways of preventing both TB and HIV, and to improve diagnosis and management of co-infection.
The NSP directs TB/HIV co-infection to be managed through a collaboration of TB and HIV and AIDS programs. TB patients will be screened for HIV as an entry point for HIV treatment while HIV patients will be screened for TB as an entry point for TB treatment. Collaboration of the two programs needs to be strengthened to improve the TB/HIV co-infection treatment. The HIV epidemic fuels the TB epidemic and vice versa i.e. the two epidemics mutually reinforce each other. In health care and congregate settings, where people with TB and HIV often crowd together, the risk of contracting TB is increased. The HIV prevalence in general population in Ghana is 1.37% but HIV prevalence is 14.5% among TB patients. The aim of HIV/TB collaborative services as outlined in the NSP is to reduce the burden of TB amongst PLHIV and vice versa by increasing the proportion of TB/HIV co-infected patients accessing ART from 24% in 2009 to 50% by 2015.

The NSP aims at strengthening screening of TB patients for HIV by equipping TB program facilities with HIV test kits, train personnel to undertake HIV testing and counselling of TB patients for HIV. Where on-site HTC for TB patients is not possible, TB patients will be

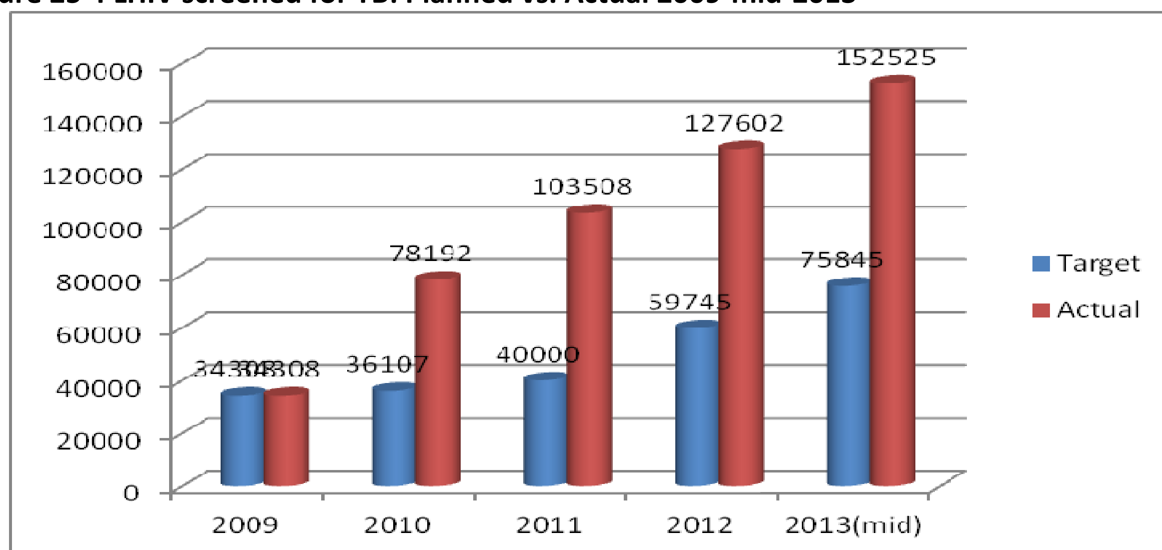
referred to HTC sites for counselling and testing services. The data on TB patients screened for HIV is shared between the HIV and AIDS and the TB programs.

Conversely screening of HIV patients for TB will be strengthened by clinically screening HIV patients for TB at HIV service delivery points, referring all HIV patients suspected to have TB on clinical grounds to the TB program for TB diagnostic tests. Those found to have TB infection will be managed for HIV/TB co-infection according to national guidelines. The TB patients who are HIV positive will be enrolled on ART. The referral system will be strengthened to ensure TB patients who are HIV positive are referred to ART sites.

The ART program will ensure supply of ARVs to ART sites to meet the demand generated through TB/HIV collaboration. Finally, Health Management Information System and reporting for HIV/TB co-infection will be improved to support the referral of patients between the two programs and to monitor the treatment of TB/HIV co-infection effectively by integrating the reporting system on both programs into each other.

Targets for screening all PLHIV for TB for all the years under review were exceeded by more than 100% (Fig. 22). A change in policy and guidelines on the screening of PLHIV for TB, which redefined the eligibility criteria for screening to 'cough for the past 24 hours' instead of 'cough for two weeks' previously in use, resulted in widening the net to cover many PLHIV. Referral system for both PLHIV with TB and TB patients with HIV infections were strengthened with the list of ART facilities available to TB clinics and vice versa.

Figure 25 PLHIV screened for TB: Planned vs. Actual 2009-mid-2013



Source: NACP Annual Program Reports

Guidelines for HIV treatment were updated to accommodate the new treatment regime for PLHIV who have TB infection. These protocols have since been made available to all HIV treatment sites with algorithms clearly visible on the walls of the health facilities across the country, ensuring that all PLHIV with TB infections received treatment without delay. Data sharing between the two programs was put in place during the period under review.

Care and Support for PLHIV

Care and support services, which include treatment of opportunistic infections and provision of therapeutic and supplementary feeds for malnourished PLHIV and psychosocial support

reduce the morbidity and mortality amongst PLHIV. All PLHIV are expected be provided with psychosocial support; treatment of OIs will also be provided. Care and support services will be scaled-up to ensure that about 90% of PLHIV on ART have access to these services.

The NSP aims to increase the percentage of PLHIV accessing care and support services from 30% to 75%. Care and support will be provided through home and community based care (HCBC). The HCBC policy and program guidelines were to be developed to include the provision of psychological support to not only PLHIV but also to the caregivers. HCBC program implementation was to be initiated, strengthened and scaled-up and the provision of nutritional assessment and counseling services, which were in the pilot phase, will be expanded by increasing the number of districts with functioning HCBC programs from the 59 districts in 2009 to 170 by 2015. Finally the HCBC under the NSP aims at increasing the percentage of clinically malnourished PLHIV (adults and children) on ART who receive therapeutic and supplementary food from zero to 15% by 2015 as well as the number of PLHIV on Cotrimoxazole (CTX) prophylaxis from 40,923 in 2009 to 170,894 in 2015**.**

Strategies and activities to achieve the above stated outcomes are as follows. HCBC policy and programs guidelines, which will define the linkages between HCBC and health facilities, the package of HCBC services to be provided to patients and the monitoring and reporting guidelines will be developed and disseminated to all key actors (health facilities and civil society organizations) through training. A national TWG for HCBC will be established to coordinate the implementation and monitoring of the policy and program guidelines.

HCBC activities will be scaled up and training on referral and provision of a defined package of services as well as monitoring and reporting requirements will be provided for health facility personnel, home based care providers, and CSOs staff. The health facility personnel will support HCBC providers through supervision and ensuring effective referral of patients for follow up through HCBC and/or from HCBC to health facilities. Furthermore, the NSP seeks to provide Positive Health Dignity and Prevention (PHDP) services to PLHIV. The package of the PHDP includes Psychosocial, Health promotion and access; Sexual and reproductive rights; Prevention of HIV transmission; Human rights including stigma and discrimination reduction; Gender equality; Social and economic support; Empowerment; and Measuring impact. PLHIV will also be provided with Cotrimoxazole (CTX) prophylaxis

Additionally, integration of nutrition in HIV treatment and care will be pursued by the developing and disseminating guidelines through training of health personnel providing ART service on management of malnutrition. Therapeutic and supplementary feeding programs for malnourished PLHIV and their household members will be instituted. The program shall involve providing and maintaining equipment for assessing malnutrition in PLHIV at treatment sites, establishing therapeutic feeding centers for PLHIV and provision of supplies of Ready to Use Therapeutic Foods (RUTF) and supplementary feeds for PLHIV and their household members at ART and feeding sites. The infrastructure for supplying the therapeutic and food supplements (food by prescription) will be established under the NSP. Finally, a monitoring and reporting system will be put in place to ensure effective monitoring of the implementation of the program. This system will ensure reporting on the nutrition assessment of PLHIV and access to therapeutic and supplementary feeding.

No data on the existence of structured home-based care services in the district is available. There exists, however, a support system using 'monitors' who may be neighbors, relatives or friends- introduced by patients to support their treatment. They are serving as sustainable substitutes for the home base care program.

Manuals and policy guidelines have been developed and staff trained for the implementation of the program. The nutritional supplement program is still in the in infantile stage. By mid-year 2013 the cumulative number of ART sites offering nutritional support services was 79 (representing 42.2%) out of 187 ARTs sites nationwide. Within these few sites, performance has been very impressive with number of persons receiving nutritional supplement increasing from 633 in 2012 to 2,135 by mid-year 2013. World Food Program is providing food supplementation for clinically malnourished patients on ART and up to 4 family members in food insecure households in Upper West, Upper East,, Northern, and Eastern Regions.

Whereas target for CTX prophylaxis for 2011 was exceeded, less than half (41.9%) of target was achieved in 2012. By mid-year 2013, less than a quarter (20.9%) of the set target for the year had been achieved. However, most of the OI drugs including Cotrimoxazole are included on the list of drugs under the National Health Insurance Scheme and therefore stocked by all health facilities without relying on supply from the NACP. PLHIV with NHIS cover could therefore access Cotrimoxazole at the any facility and not from the NACP.

Peer Education

Peer Education continues to be the backbone of interpersonal behavior change communication in the national HIV response. Virtually all the key service providers are working with trained peer educators to reach out to their peers in communities and tertiary institutions with HIV and AIDS prevention information and services. This important behavioral intervention, using one-on-one contact and targeted hotspot outreach, reduces the stigma and discrimination associated with services provided by non-peers through conventional outlets, thus ensuring access to services by hard to reach PLHIV and KPs. In many programs, trained peer educators are spearheading the provision of important HIV prevention information and services including HIV risk assessments, information on HIV transmission and prevention, referrals to key services including HIV testing and counseling, and sexually transmitted infection management; they demonstrate the use of and sell condoms and lubricants, and screen and refer for sexual and gender based violence.

In response to the complex and changing environment of the HIV epidemic in Ghana illustrated by results from the 2011 FSW and MSM integrated behavioral and biological surveillance studies (IBBSS) and the persisting high levels of stigma and discrimination, the SHARPER Project is pioneering a set of new interventions to improve reach of the most at risk among KPs. This includes an experiment with social network testing where MSM seeds are used to identify MSM that are HIV positive or at high risk of HIV acquisition.

Models of Hope

Models of Hope are community-based PLHIV volunteers who assist at the ART clinics – performing simple non-medical task, such as organizing patients, registering patients and providing psychosocial support, adherence counseling, positive prevention and healthy living to clinic attendees. They also trace patients who are lost to follow-up. The Models of Hope project reduces stigma and discrimination associated with ART clinics, as ART clinic attendees, are much more comfortable in dealing with Models of Hope members who are also living with HIV and who are not judgmental.

This popular support group network has been scaled-up to all the regions and now operates at all 164 ART sites in the country. To further strengthen and consolidate the gains of the Models of Hope activities, the NACP, with support from key implementing partners, has finalized a Models of Hope training curriculum for Training of Trainers. Training will be

rolled out soon across the country to ensure expert trainers are embedded in key regions and organizations.

As volunteers, Models of Hope members receive no pay for their services at the ART clinics and do even get stipend to cover the cost of transport when they trace patients who are lost to follow-up. Theirs is a labor of love – they just want to be of assistance to other people living with HIV. Exceptions to total voluntary work without any financial rewards done by the Models of Hope are hard to come by. One of those rare exceptions is the Models o Hope support group working at St. Joseph's Catholic Hospital in Koforidua, where HIV and AIDS services are completely integrated into the daily work of the Out Patients Department (OPD). PLHIV are treated just like any other client attending a busy OPD. The 5 members of the Models of Hope in this busy hospital receive a taxable monthly allowance from the hospital authorities.

Drop-in Centers

Drop-in centers are particularly ideal for reducing HIV related stigma and discrimination associated with providing HIV prevention information and services at conventional clinics. Drop-in clinics are located within communities, are often innocuous, and managed by trained PLHIV and KPs friendly professionals in an open drop-in format with little or no appointments. Drop-in centers provide HIV prevention information and services including sale of condoms and lubricants, HTC, STI screening, and assessment of SGBV support. An increasing number of PLHIV and KPs are using these centers, as they are more convenient and less stigmatizing. The SHARPER project currently supports 38 DICs (12 MSM, 19 FSW and 6 PLHIV) in nine regions of Ghana. Statistics on the number of PLHIV and KPs who have accessed the HIV and AIDS services in these Drop-in Centers over the last 2 years are not yet available.

Interpersonal Communication Technology Services

The SHARPER Project is using M-Health strategies to target PLHIV and KPs with HIV and AIDS prevention, treatment, care, and support services using three Information and Communication Technology (ICT)-based interpersonal communication strategies. These interpersonal behavioral interventions reduce stigma and discrimination associated with face-to-face communication systems. The 3 ICT-based behavioral interventions are:

Mobile phone: HelpLine Counseling Services (Text Me! Flash Me! Call Me!) – This is a toll-free phone service that gives easy access of KPs, PLHIV, and others to HIV-friendly service providers. Clients are provided with HIV prevention and care information, receive psychosocial counseling and referred for HTC and other services.

Bulk SMS Messaging: These are bulk SMS messages that SHARPER sends out regularly to PLHIV and KPs. HealthyLiving provides advice to KPs and PLHIV on healthy lifestyles, and LifeLine provides reminders to ART clients about medication adherence and clinic appointments. In 2012, about thousands of people were reached with HelpLine Counseling Services.

Internet: - Social Media Outreach in which MSM Community Liaison Officers (CLO) reach out to MSM (not reached through tradition peer education approaches) on social media including Facebook, Whatsapp, Foursquare, and Badoo and educate them HIV and AIDS and healthy lifestyles. Those who do not know their HIV status are encouraged to go for testing and counseling. Records at SHARPER project indicate the prevalence of HIV among the

hard-to-reach subgroup of MSM is 27%, much higher than the 15% for the general MSM population reported in the IBBSS 2011.

Between October 2012 and March 2014, a total of 19,490 hard to reach KPs have received HIV and AIDS prevention information and services provided through the social media outreach approach.

Reducing poverty in AIDS-affected households

AIDS affected households are much more likely to live below the poverty line and are among the key targets of some important national social protection programs.

The NSP seeks to increased the proportion of PLHIV Associations linked to LEAP program at the district level from 59% of districts in 2010 to 100% by 2015. Also to increase the Number of OVC whose household received free basic external support in caring for the child from 15, 309 in 2009 to 81,725 in 2015 and increase the number of PLHIV supported to start income generating activities.

The main strategies for achieving these outputs include:

i. Linking PLHIV associations with LEAP program and WFP food assistance for food insecure PLHIV households at the district level. Also to review current economic empowerment support provided to PLHIV and develop and provide financial products tailored to the needs of the PLHIV
ii. Reviewing and refining the Minimum Package of Services for OVC
iii. Institutional capacity building of the Department Social Welfare to lead the provision of OVC services
iv. Capacity building of actors to provide the full package of interventions

<u>The Livelihood Empowerment Against Poverty (LEAP) Program</u>

The LEAP program, the flagship of the Ghana National Social Protection Strategy (NSPS), is a social cash transfer program, which provides cash and health insurance to extremely poor households across Ghana to alleviate short-term poverty and encourage long-term human capital development. Starting as a trial phase in March 2008, the program expanded gradually in 2009 and 2010 reaching over 35,000 households in eighty-three (83) districts across Ghana. Eligibility is based on extreme poverty and having a household member in at least one of three demographic categories; single parent with orphan or vulnerable child (OVC), elderly (≥65 years) poor with no subsistence support, or person with extreme disability unable to work.

Initial selection of the LEAP program beneficiary households is done through a community-based process and then verified centrally with a proxy means test. Cash transfer to beneficiary households is graduated: households with one beneficiary received GHC8 per month whilst households with two, three, and four or more beneficiaries received GHC 10, 12, and 15 per month respectively. Health insurance is provided through the National Health Insurance Scheme (NHIS). The Government of Ghana (GoG), the United Nations Children's Fund (UNICEF), and United Kingdom Agency for International Development (UKAID) provide funding for the program. Teams from University of North Carolina Population Center in the USA and the University of Ghana Institute for Social, Statistical, and Economic

Research (ISSER) jointly undertook an Impact Evaluation of the LEAP program for the 24-month period April 2010 to April 2012.

Re-launched in January 2012 under the theme - "Protecting the Extreme Poor, Vulnerable and Excluded: Our Collective Responsibility" – the LEAP program has targeted to reach 200,000 beneficiary households in 170 districts in the country by 2015. Program funding sources, benefits, and beneficiary household eligibility criteria remain broadly the same. However, three (3) demographic groups are targeted for cash transfer grants: OVC and their caregivers receive conditional[19] grants whilst persons with severe disabilities with no productive capacity and extremely poor older persons 65+ years with no subsistence support receive unconditional grants. The amount of the cash transfer has tripled that of 2011: households with one beneficiary are now entitled to receive GHC24 per month whilst households with two, three, and four or more beneficiaries receive GHC30, 36, and 45 per month respectively.

LEAP households are poorer than the national average and have unique characteristics, which suggest that they are AIDS-affected, based experiences from large cash transfer programs in African countries with socioeconomic profiles similar to Ghana such as Kenya and Malawi.

Sixty seven percent (67%) of targeted districts (100 out of 150) have been reached with the LEAP program and18% (73,374 of 390,000) of targeted poor households are receiving cash transfers through the LEAP program. However, with the number of districts in the country increasing from 170 in 2011 to 213 in 2012, only 46% (100/216) of current districts are presently reached with the LEAP program.

The possible reasons for not reaching beneficiary household targets include:

i. *Inadequate funding for the LEAP program:* Even though funding for LEAP program nearly doubled[20] from US$11 million in 2009 to US$23 million in 2012, the minimum cash transfer per household increased by 300% from GHc8 in 2009 to GHC24 in 2012. Thus the LEAP program does not have sufficient funding to meet its target beneficiary households.

ii. *Estimated number of poor households too high*: The target number of beneficiary households in the LEAP program is based on the 2008 Ghana Living Standards Survey (GLSS). Meanwhile Ghana has attained Middle Income status and has a Gini Index of 0.428[21]. Currently, beneficiary households are selected through a community process and then verified centrally through a means test. The current selection process may more accurately reflect the number of needy households in the LEAP roll out plan than the targets in the NSP 2011-15.

Therefore, to reach all the districts by 2015, the speed of expansion of the LEAP project into new districts must be increased significantly or the targets should be revised.

WFP Food Assistance to Food-Insecure PLHIV Households

Good nutrition is particularly important for patients on ART as it directly impacts the nutritional status of patients, which influences the efficacy of the drugs and adherence to drug

[19] Conditionalities for Caregivers Grant Scheme are: Enroll and retain all school going age children in the household in public basic schools; Must be card bearing members of the National Health Insurance Scheme; Newborn babies (0 -18 months) must be registered with the Birth and Deaths Registry and complete the Expanded Program on Immunization; and Ensure that no child in the household is trafficked or engaged in any activities constituting the Worst Forms of Child Labor (WFCL).

[20] LEAP Impact Evaluation Report 2012 – University of North Carolina at Chappell Hill and ISSER University of Ghana

[21] The World Bank- World Development Indicators 2011

regimen. Good nutrition maximizes the benefits of ART for patients living in food-insecure households. Household food insecurity has been a recurring challenge in pockets of the country including northern Ghana during the dry season.

Working in collaboration with the GHS, the WFP has been supporting a program of food assistance to food-insecure households of 6,000 patients on ART who qualify for food by prescription as part of ART treatment program. Selection criteria for qualifying PLHIV patients include being on ART, living in a food-insecure household, and a body mass index (BMI) of 18 or less. The program covers Northern, Upper East, and Upper West, and Eastern Regions as well as the Millennium Villages Project in Amansie East and Amansie West Districts of Ashanti Region.

Each patient receives a monthly food basket containing maize, beans, vegetable oil, iodized salt, and fortified super cereal. The program also provides monthly food rations consisting of maize, beans, oil, and salt for up to four (4) members of each index patient – benefitting an additional 24,000 people each year.

ART clinical service providers, patients on ART, and Models of Hope (support groups) indicate that food rations to food patients on ART in food insecure households is making a huge improvement in adherence to ARVs treatment as patients now take their medications with food as directed by the clinicians. However, not all patients on ART receive the food rations, primarily because there is insufficient food. It has not been possible to wean patients whose BMI has increased above the BMI threshold of 18 from the food rations.

Thus, similar to the ARVs, patients on ART believe they are entitled to the food rations for life following their initiation on the food assistance program. The fear of food insecure household loosing entitlement to the food rations program make patients more determined to continue to receive food rations even when their BMI improves above the minimum threshold for qualifying food ration patients. Nutritionists and other staff providing the food rations also indicate that most patients' BMI will decrease significantly if they are taken off the food rations program since they would continue to live in food insecure households.

Initially distributed at the ART centers, food ration distribution has had to be moved away from the ART centers to different locations as some patients complained that the co-location of the food rations and the ART service increased stigma against PLHIV at the health facilities. Storage space for the bulky food rations was also often inadequate at the ART sites, which, in part, necessitated moving the food distribution services out of the ART sites to larger storage sites.

<u>OVC Program</u>

The current Ghana National Plan of Action (NPA) for OVC covers the period 2010-2013. Significant part of the NPA for OVC is incorporated into the LEAP Program. OVC are specifically targeted as a precondition for cash transfer to OVC caregivers. These pre-conditionalities ensure OVC are registered with the Births and Deaths Registry, are in school, have access to health services including childhood immunizations, and are not subjected to the worst forms of child labor or are trafficked. The government's free school feeding program ensures schoolchildren, including OVC, in first cycle schools receive at least one hot meal a day during school days.

The Strengthened Sustained Community Care and Support for Orphans and Vulnerable Children (OVC) project is a collaborative effort between USG and World Vision Ghana. Other partners are: Alliance for African Women Initiative (AFAWI), Hope for Future Generations (HFFG), Life Relief Foundation (LRF), District Assemblies, Department of Social Welfare, Ghana Education Service, Ghana Health Service, other Local NGO's and CBO's, Communities /OVC, Department of children, Ministry of Women and children, Ghana AIDS Commission. The SCASO project is pivotal to ensuring that 'vulnerable children are catered for and enjoy improved health, education and early childhood development services'- a goal by the Ghana Government.

By the end of the financial year 2014,, the capacity of the stakeholders at the local levels have been built to promote the rights and wellbeing of OVC through integrated efforts by decentralized departments of the local government and Community-Based Organizations (CBOs) with interest in OVC care and support. SCASO has contributed to the improved capacity of local structures over the year through the training and mentoring of volunteer caregivers, Community-Based Organizations (CBOs)/groups, local government structures in the areas of advocacy, provision of psychosocial support to OVC, HIV prevention, behavior change in children as well as monitoring and evaluation systems.

Over the reporting period the project worked effectively with partners at all levels of development to improve OVC care, support and advocacy. The project have accomplished many things, including improved skills in advocacy, coordination, monitoring and reporting by the Community Care Coalition (CCC) especially with the CBOs; provision of scholarships for 156 (62 males and 94 females) OVC in Senior High School s and HIV prevention and behaviour change outreaches by Peer educatorsthat reached 16,006 community members and 3,456 OVC lives impacted with the visitation and psychosocial support by volunteer home visitors in the communities and teachers in schools.

Other interventions include: psychosocial counseling and home visitation, corporate sponsorship and Public-Private Partnership, provision of school supplies to 3000 OVC and and educational materials to children of Female Head Porters, scholarships to OVC in Senior High School (SHS), scholarships for vocational school and employable/livelihood skills education, NHIS registration for OVC, training and mobilization of 500 youth HIV and AIDS peer educators, BCC campaigns

General social protection programs that could benefit eligible AIDS-affected households

Very early in the implementation of the NSP, many stakeholders recognized that it is neither economically feasible nor sustainable to develop and provide financial products tailored to the needs of the PLHIV only. Any such PLHIV-only financial assistance would fuel stigma and discrimination against the very people the intervention is meant to help. The major push was for stakeholders to ensure AIDS-affected households benefit from the broader national social protection programs in the country. The key national social protection programs are:

National Health Insurance Scheme (NHIS): Children under 12 years, pregnant women, people 72 years and older, and all currently valid PLHIV NHIS-card holders are exempt from paying for the costs associated with some health conditions stipulated under the Scheme. Additionally, for PLHIV who are unable to subscribe to the NHIS, the GAC has provided funding to register such PLHIV with the Scheme. Meanwhile, the GHS has stopped the

policy that required GHC5:00 per month that patients paid for ARVs effective September 2013.

School Feeding Program: This program provides at least one free meal on school days to schoolchildren, including OVC.

LESDEP and MASLOC programs: In addition to the LEAP project and the NHIS, other key pro-poor socio-economic protection programs with nationwide coverage include the Local Enterprises and Skills Development Program (LESDEP) for improving local enterprises and employable skills under the Ministry of Local Government and Rural Development, and the Microfinance and Small Loans Center (MASLOC) under the Office of the President that provides loans as start up business capital for disadvantaged individuals. GAC and other key stakeholders are working with associations and networks of people living with HIV and AIDS (PLHIV) to advocate for greater targeting and inclusion of vulnerable PLHIV households to benefit from these pro-poor social protection programs

Target 6 CLOSE THE GLOBAL AIDS RESOURCE GAP BY 2015 AND REACH ANNUAL GLOBAL INVESTMENT OF US$ 22–24 BILLION IN LOW- AND MIDDLE-INCOME COUNTRIES

National AIDS Spending Assessment

As the national response to HIV and AIDS continues to scale up, it is important to track how funds are spent at the national level and where funds originate. This is a measure of national commitment and action to the response. Such data can assist national decision makers to monitor the scope and effectiveness of their programmes.

To date, eight (8) National AIDS Spending Assessments (NASA) have been conducted and the results are systematically fed into the Country's Country AIDS Response report. The overall objective of the NASA assessment is to track transactions of total public, private and foreign (international) spending on HIV and AIDS across different sectors. The assessment tracks expenditure across eight programmatic areas namely: Prevention; Treatment and care; Orphans and vulnerable children; Programme management and administrative strengthening; Incentives for human resources; Social protections and social services; Enablement of environment and community programmes; and Research.

In this report data is taken from the National AIDS Spending Assessment (NASA) report of 2013. A new Funding Matrix has been put out at the time of compilation.
HIV and AIDS funding has three main mechanisms which the Government of Ghana (GOG) and the development partners utilise to channel funds for the implementation of APOW of the NSF.

These are:

- Pooled funds: funds are pooled by development partners and given directly to GAC for implementation of the response,
- Earmarked; funds earmarked for special government institutions and NGOs
- Direct funding; funding provided directly to the implementing agencies by DPs

Data collection covered the external sources of funds for HIV and AIDS, government contribution and funds made available by private entities in the years 2012 and 2013. The study employed the NASA methodology, which allows for the systematic, periodic and exhaustive accounting of the level and flows of financing and expenditures, in public, international and private sectors to confront the HIV and AIDS epidemic.
The results of the NASA study reveal a decline in the amount of funds made available for HIV and AIDS related activities in Ghana, decreasing by 39 percent from 2012 to 2013. The NASA estimates indicate that the total expenditure on HIV and AIDS related activities in the country was **US$109,674,155** in 2012 and **US$67,026,665** in 2013. Though there was a huge dip in the funds from international organisations in 2013, such funds still accounted for the largest proportion of funds made available for direct HIV and AIDS programme activities in 2012 and 2013.
The estimates further show that majority of the funds in both years went into Prevention, Care and Treatment Programme Management and Administration, and Human Resources. The analyses also reveal that PLHIV benefited most (46 percent and 54 percent of the total funds in 2012 and 2013 respectively) from the total funds and this was followed by specific

"accessible" populations, the general population, MARP and other key populations in both years in that order.
The qualitative assessment of the HIV and AIDS related activities in Ghana revealed that the inadequacy of funding is a major challenge confronting the national response. The assessment also shows that the minimal coordination of efforts among partners especially at district and community levels resulting in duplication of efforts and inefficiencies as well as the refusal of some private institutions to participate in any workplace HIV and AIDS activities are major bottlenecks that need to be addressed by the GAC.

Basic Factsheet on Ghana HIV and AIDS Expenditure for the Period 2012 – 2013

HIV and AIDS Expenditure by Funding Sources

Source of Funds	2012		2013	
	Amount (US$)	%	Amount (US$)	%
Public Funds	4,524,557	4.1	6,830,808	10.2
Private Funds	17,715,886	16.2	19,738,013	29.4
International Funds	87,433,712	79.7	40,457,844	60.4
Total Spending	**109,674,155**	**100**	**67,026,665**	**100**

HIV and AIDS Expenditure by Programmatic Area

PREVENTION: (in 2012 – 41.7% of Total Expenditure; in 2013 – 23.3% of Total Expenditure)

- Total Expenditure: US$45,741,616 in 2012; US$15,609,666 in 2013
- Main Components: Prevention - youth in school in 2012; Communication for social and behavioural change in 2013

CARE AND TREATMENT: (in 2012 – 31% of Total Expenditure; in 2013 – 44.8% of Total Expenditure)

- Total Expenditure: US$33,987,004 in 2012; US$30,012,799 in 2013
- Main Items: Opportunistic Infection outpatient prophylaxis and treatment in 2012; Antiretroviral Therapy in 2013

OVC: (0.1% of Total Expenditure each in 2012 and 2013)

- Total Expenditure: US$129,700 in 2012; US$98,208 in 2013
- Main Elements: Social Services and Administrative costs and Education in both years

PROGRAMME MANAGEMENT: (in 2012 – 14.1% of Total Expenditure; in 2023 – 14.0% of Total Expenditure)

- Total Expenditure: US$15,468,700 in 2012; US$9,359,887 in 2013
- Main Items: Planning, coordination and programme management; Administration and transaction costs associated with managing and disbursing funds; and Monitoring and evaluation in both 2012 and 2013

HUMAN RESOURCES: (in 2012 – 7.9% of Total Expenditure; in 2013 – 11.9% of Total Expenditure)

- Total Expenditure: US$8,673,074 in 2012; US$7,990,366 in 2013
- Main Components: Formative education to build-up an HIV workforce and Training in both years

SOCIAL PROTECTION & SERVICES: (4.0% of Total Expenditure each in 2012 and 2013)

- Total Expenditure: US$4,346,544 in 2012; US$2,653,735 in 2013
- Main Elements: Social protection through monetary benefits and Social protection through in-kind benefits in both years

ENABLING ENVIRONMENT: (in 2012 – 0.6% of Total Expenditure; in 2013 – 0.8% of Total Expenditure)

- Total Expenditure: US$616,652 in 2012; US$511,612 in 2013
- Mainstream: AIDS-specific institutional development in 2012; Advocacy in 2013

HIV-RELATED RESEARCH: (in 2012 – 0.6% of Total Expenditure; in 2013 – 1.2% of Total Expenditure)

- Total Expenditure: US$710,865 in 2012; US$790,392 in 2013
- Main Item: Social science research in both 2012 and 2013

HIV and AIDS Expenditure by Beneficiary groups

Beneficiary Groups	2012		2013	
	Amount (US$)	%	Amount (US$)	%
PLHIV	50,448,271	46.0	36,152,834	53.9
Most-at-Risk Populations (MARP)	5,581,910	5.1	3,733,484	5.6
Other key populations	283,365	0.3	291,019	0.4
Specific "Accessible" populations	33,784,754	30.8	13,728,429	20.5
General population	19,575,855	17.8	13,120,899	19.6
Total	**109,674,155**	**100**	**67,026,665**	**100**

Total Expenditures on HIV and AIDS and Sources of Funding

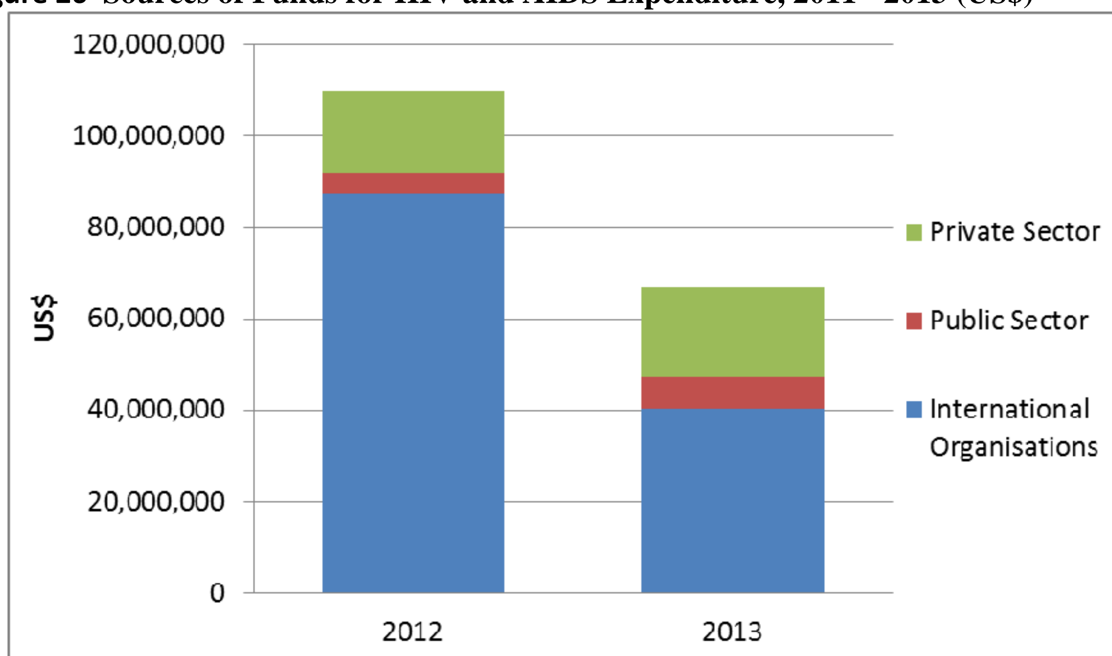
The National AIDS Spending Assessment (NASA) reveals that the total expenditure on HIV and AIDS related activities in Ghana was **US$109,674,155** in 2012 and **US$67,026,665** in 2013. This indicates that there was a 38.89 percent decline in the total amount of resources devoted to HIV and AIDS related activities from 2012 to 2013 (Figure 26). This decline is largely as a result of the 53.7 percent fall (from **US$87,433,712** in 2012 to **US$40,457,844**) in the international funds partly as a result of the global economic crises even though public funds increased from **US$4,524,557** in 2012 to **US$6,830,808** in 2013 (about 51 percent increase) and private funds also increased from **US$17,715,886** to **US$19,738,013** (11.4 percent increase) within the same period (Table 20). Comparative to the NSP 2011-2015 budget, it is evident that the actual expenditure exceeded the projected expenditure in 2012 by **US$24,980,110** and fell short by **US$31,855,164** in 2013.

Despite such a decline, the largest proportion of funds for HIV and AIDS related activities during the years under review was still sourced from international organizations accounting for 79.7 percent and 60.4 percent of the total funds in 2012 and 2013 respectively. This shows the heavily reliance of the national response on international agencies which is not sustainable. Whereas private funds accounted for 16.2 percent of the total funds in 2012 and 29.4 percent in 2013, public funds accounted for only 4.1 percent of the total funds in 2012 and 10.2 percent in 2013. The public sector funds are mainly Government of Ghana (GoG) funds.

Table 20: Sources of Funds for HIV and AIDS Expenditure, 2012 - 2013 (US$)

Source	2012	%	2013	%
Public Funds	4,524,557	4.1	6,830,808	10.2
Private Funds	17,715,886	16.2	19,738,013	29.4
International Funds	87,433,712	79.7	40,457,844	60.4
Grand Total	**109,674,155**	**100**	**67,026,665**	**100**

Figure 26 Sources of Funds for HIV and AIDS Expenditure, 2011 - 2013 (US$)



The NASA estimates further reveal that the private funds for the years under study consisted of funding from private businesses, private not for-profit organizations and household out-of-pocket spending (households' funds) on HIV and AIDS related activities. In both years (2012 and 2013), households' funds accounted for almost all the private funds devoted to HIV and AIDS related activities in Ghana (Table 21). Such a trend adversely affects the ability of households to undertake any meaningful savings since the average income of Ghanaian households is very low. Hence, the probability of such households to break out of the low income trap is very small.

Table 21: Summary of Private Sector Financing Sources, 2012-2013 (US$)

Source	2012	%	2013	%
For-profit institutions and corporations	11,999	0.1	600	0.00
Households' funds	17,521,136	98.9	19,592,484	99.3
Not-for-profit institutions (other than social insurance)	118,044	0.7	137,032	0.7
Private financing sources n.e.c.	64,707	0.4	7,897	0.04
Total	**17,715,886**	**100**	**19,738,013**	**100**

International organizations are mainly development partners (both bi- and multi-lateral) active in HIV and AIDS related programmes as well as some international not-for-profit organizations. In both years, contributions from multilateral agencies were the largest contributor at 78.6 percent and 63.2 percent in 2012 and 2013 respectively, followed by direct bilateral contributions at 21.1 percent in 2012 and 34.7 percent in 2013. In 2012 and 2013, contributions from international not-for-profit organizations' accounted for about 0.3 percent and 2.0 percent respectively of the total funds from international sources (Table 22).

Table 22: Summary of International Financing Sources, 2012 - 2013 (US$)

Source	2012	%	2013	%
Direct Bilateral Contributions	18,431,723	21.1	14,052,476	34.7
Multilateral Agencies	68,708,899	78.6	25,577,614	63.2
International not-for-profit organizations and foundations	293,090	0.3	827,754	2.0
Total	**87,433,712**	**100**	**40,457,844**	**100**

Key Spending Areas

The total HIV and AIDS spending on the key priority areas in the years under assessment are shown in Table 23 and Figures 27 and 28. In both 2012 and 2013, Prevention Programmes; Care and Treatment; Programme Management and Administrative Strengthening and Human Resources together accounted for more than 90% of the total expenditure. In 2012, most of the funds were spent on Prevention Programmes (42%); Care and Treatment (31%); Programme Management and Administrative Strengthening (14%) and Human Resources (8%). The remaining 5% of the total funds was shared amongst the remaining 4 priority areas with Social Protection and Social Services getting the largest share of 4%. Similarly, in 2013, the highest proportion of the funds was spent on Care and Treatment (45%); followed by Prevention Programmes (23%); then Programme Management and Administrative Strengthening (14%) and Human Resources (12%). The remaining 6% was shared amongst the remaining 4 priority areas with Social Protection and Social Services again getting the largest share (4%).

Table 23: Total Spending on Key Priorities or Intervention Areas, 2012 – 2013 (US$)

Key Expenditure Area	2012	%	2013	%
Prevention	45,741,616	41.7	15,609,666	23.3
Care and Treatment	33,987,004	31.0	30,012,799	44.8
Orphans and Vulnerable Children (OVC)	129,700	0.1	98,208	0.1
Programme Management and Administration	15,468,700	14.1	9,359,887	14.0
Human Resources	8,673,074	7.9	7,990,366	11.9
Social Protection and Social Services (excluding OVC)	4,346,544	4.0	2,653,735	4.0
Enabling Environment	616,652	0.6	511,612	0.8
HIV and AIDS-Related Research	710,865	0.6	790,392	1.2
Total	**109,674,155**	**100**	**67,026,665**	**100**

Figure 27 Total Expenditure Breakdown by Intervention Areas, 2012-2013

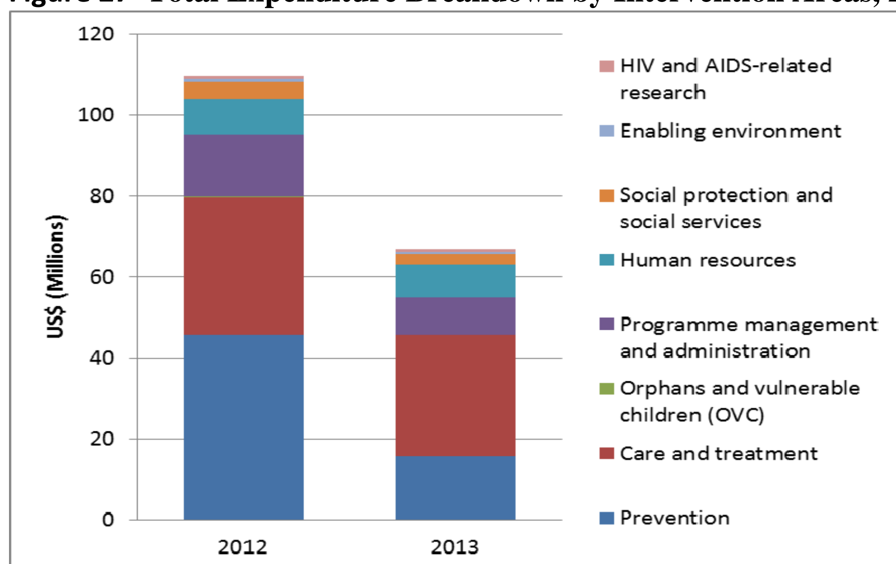
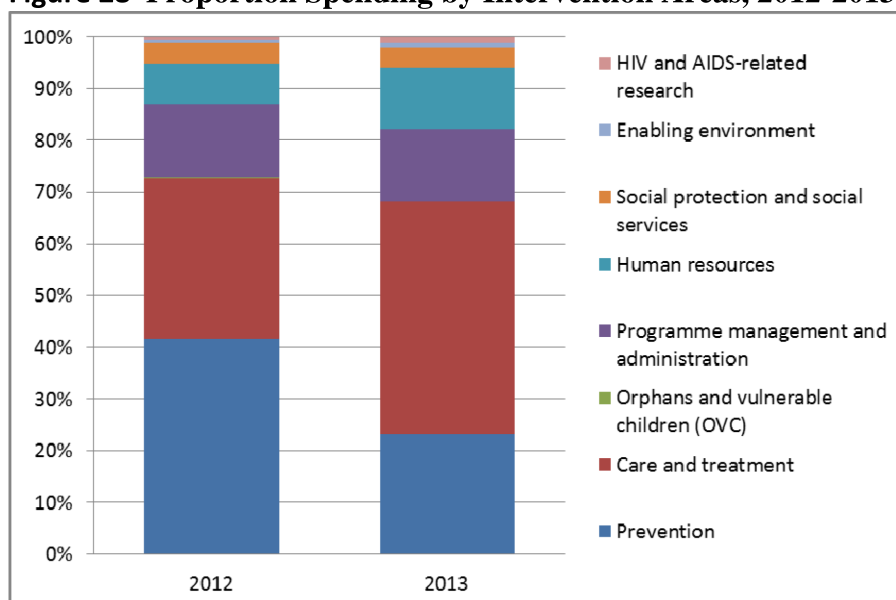


Figure 28 Proportion Spending by Intervention Areas, 2012-2013



Key Spending Priorities by Funding Agents

This section discusses the key priority areas by the various funding agents in Ghana captured in the NASA RTS (Tables 24 and 25 and Figures 29 and 30). Majority of the public funds in 2012 was spent on Programme Management and Administrative Strengthening (44%), which was followed by Prevention Programmes (30%) and Human Resources (21%). This trend continued in 2013, where out of the total services provided through public funding, 55% went into Programme Management and Administrative Strengthening, 27% was devoted to Prevention Programmes and 13% was spent on Human resources. During the years under review, no amount of public funds was devoted to Orphans and Vulnerable Children (OVCs) and HIV and AIDS related research in Ghana. In 2012, there was no public expenditure on Care and Treatment whilst there was no public expenditure on Social Protection and Social Services in 2013.

The results further show that, almost all the funds (99%) from the private sector in each of the years under study were spent on Care and Treatment. The remaining 1% of the private funds in each of the year under review was shared among the remaining seven key priority areas with some getting none. In both years, there was no private spending on OVCs, Social protection and Social Services as well as HIV and AIDS related research; and on Enabling Environment in 2013.

The results also show that in 2012, most of the funds from international sources were spent on Prevention Programmes (51%); Care and Treatment (19%); Programme Management and Administrative Strengthening (15%); Human resources (9%) and Social Protection and Social Services (5%). Similarly, in 2013, 33% of the total funds from international sources were spent on Prevention Programmes whereas Care and Treatment accounted for 26% of the international funds; 18% was spent on Human resources and Social Protection and Social Services received 17% of the funds.

Table 24: Spending Priorities by Funding Agents, 2012 (US$)

Key Priority Area	Public	%	Private	%	International Organizations	%	Grand Total
Prevention	1,342,199	29.7	36,694	0.2	44,362,723	50.7	**45,741,616**
Care and treatment	-	0	17,521,136	98.9	16,465,868	18.8	**33,987,004**
OVC	-	0	-	0	129,700	0.1	**129,700**
Programme management and administration	1,974,552	43.6	56,433	0.3	13,437,715	15.4	**15,468,700**
Human resources	984,792	21.8	85,783	0.5	7,602,499	8.7	**8,673,074**
Social protection and social services (excluding OVC)	20,156	0.4	-	0	4,326,388	4.9	**4,346,544**
Enabling environment	202,858	4.5	15,840	0.1	397,954	0.5	**616,652**
HIV and AIDS-related research	-	0	-	0	710,865	0.8	**710,865**
Total	**4,524,557**	**100**	**17,715,886**	**100**	**87,433,712**	**100**	**109,674,155**

Table 25: Spending Priorities by Funding Agents, 2013 (US$)

Key Priority Area	Public	%	Private	%	International Organizations	%	Grand Total
Prevention	1,872,328	27.4	54,571	0.3	13,682,767	33.8	**15,609,666**
Care and treatment	1,771	0.03	19,592,484	99.3	10,418,544	25.8	**30,012,799**
OVC	-	0	-	0	98,208	0.2	**98,208**
Programme management and administration	3,762,861	55.1	84,223	0.4	5,512,803	13.6	**9,359,887**
Human resources	872,632	12.8	6,735	0.0	7,110,999	17.6	**7,990,366**
Social protection and social services (excluding OVC)	-	0	-	0	2,653,735	6.6	**2,653,735**
Enabling environment	321,216	4.7	-	0	190,396	0.5	**511,612**
HIV and AIDS-related research	-	0	-	0	790,392	2.0	**790,392**
Total	**6,830,808**	**100**	**19,738,013**	**100**	**40,457,844**	**100**	**67,026,665**

Figure 29 Proportional Spending on Key Priority Areas by Funding Agents, 2012

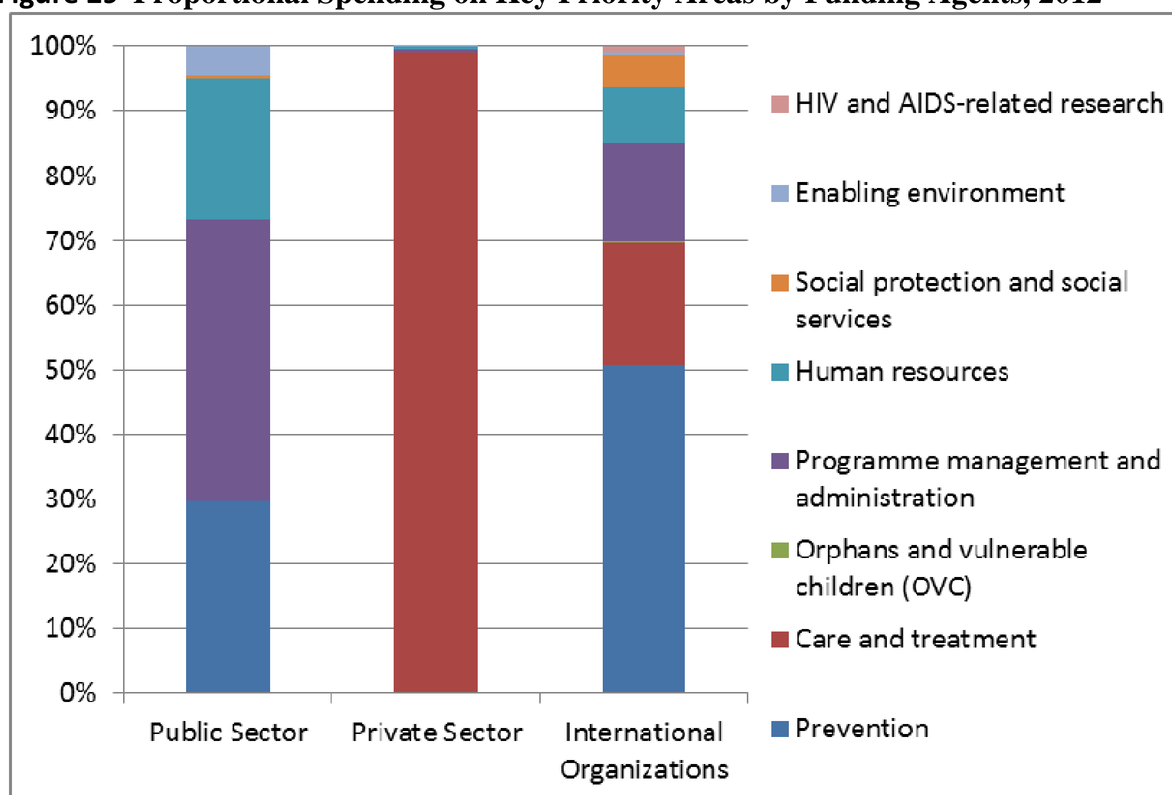
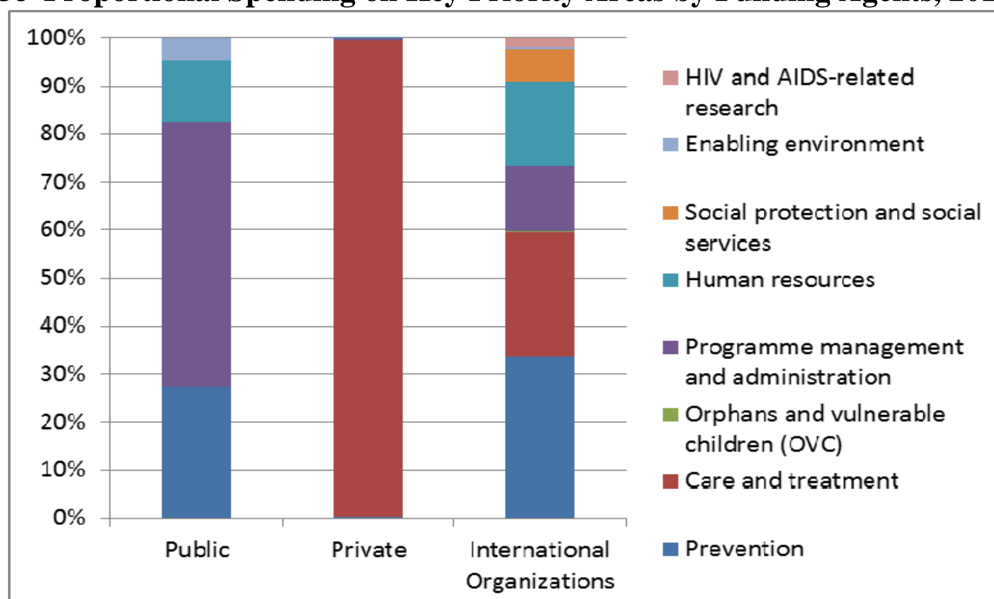


Figure 30 Proportional Spending on Key Priority Areas by Funding Agents, 2013



Prevention

Prevention continues to remain the critical part of the national strategy to overcome the HIV and AIDS epidemic in Ghana. In 2012, the total amount spent on prevention programmes was **US$45,741,616** before falling by 65.9% to reach **US$15,609,666** in 2013. Table 26 shows the areas of Prevention Programmes which received funding during the years under study. In 2012, majority of the prevention funds (31%) were devoted to prevention activities for youth in school; 20% was spent on Prevention of Mother-to-Child Transmission (PMTCT); 17% on Voluntary Counselling and Testing (VCT) and 11% on Condom Social Marketing. In 2013, majority of funds allocated to prevention activities were spent on Communication for social and behavioural change (25%); which was followed by Prevention activities not disaggregated by intervention (20%); then PMTCT (19%) and VCT (15%). In 2012, Blood Safety received the least proportion of the funds devoted to Prevention Programmes at 0.7% whereas Community Mobilization accounted for the least (0.6%) amount of Prevention funds in 2013 though there was no spending on Prevention - youth in school in that year (Table 26).

Table 26: Prevention Spending Activities, 2012 - 2013 (US$)

Key Areas of Expenditure	2012	%	2013	%
Communication for social and behavioural change	1,431,604	3.1	3,898,032	25.0
Community mobilization	1,304,531	2.9	96,549	0.6
Voluntary counselling and testing (VCT)	7,533,361	16.5	2,396,007	15.3
Risk-reduction for vulnerable and accessible populations	2,911,866	6.4	614,197	3.9
Prevention – youth in school	14,200,000	31.0	-	0
Programmes for men who have sex with men (MSM)	454,254	1.0	456,632	2.9
Prevention programmes in the workplace	624,605	1.4	718,720	4.6
Condom social marketing	4,818,771	10.5	725,287	4.6
Prevention of mother-to-child transmission (PMTCT)	8,925,816	19.5	2,917,328	18.7
Blood safety	339,572	0.7	730,321	4.7
Prevention activities not disaggregated by intervention	3,197,236	7.0	3,056,593	19.6
Grand Total	**45,741,616**	**100**	**15,609,666**	**100**

Care and Treatment

Care and Treatment activities accounted for 31% and 45% of the total funds spent on HIV and AIDS related activities in Ghana in 2012 and 2013 respectively. The areas of expenditures on Care and Treatment components are depicted in Table 27. The expenditure patterns show that in 2012, majority of the funds were allocated for Opportunistic Infection (OI) Outpatient Prophylaxis and Treatment (34%); followed by Antiretroviral (ARV) Therapy (28%); Inpatient care services not disaggregated by intervention (19%) and then nutritional support associated to ARV therapy (18%). However, in 2013 most of the funds went into Antiretroviral therapy accounting for 41% of the funds devoted to Care and Treatment. Inpatient care services not disaggregated by intervention and Nutritional support associated to ARV therapy also accounted for 24% and 23% respectively of the Care and Treatment funds in 2013. In 2012, Care and Treatment services not disaggregated by intervention accounted for the least proportion of the funds (0.01%) whereas in 2013, Specific HIV-related laboratory monitoring accounted for the least of the funds at 0.1%.

Table 27: Treatment and Care Spending Activities, 2012 - 2013 (US$)

Key Expenditure Area	2012	%	2013	%
Opportunistic Infection (OI) outpatient prophylaxis and treatment	11,573,253	34.1	2,859,223	9.5
Antiretroviral therapy	9,652,218	28.4	12,259,959	40.8
Nutritional support associated to ARV therapy	6,183,661	18.2	6,955,009	23.2
Specific HIV-related laboratory monitoring	9,314	0.03	15,435	0.1
Psychological treatment and support services	19,606	0.1	56,679	0.2
Inpatient care services not disaggregated by intervention	6,544,552	19.3	7,318,249	24.4
Care and treatment services not disaggregated by intervention Total	4,400	0.01	548,245	1.8
Grand Total	**33,987,004**	**100**	**30,012,799**	**100**

Orphans and Vulnerable Children (OVC)

Funds to support OVCs in Ghana fell from **US$129,700** in 2012 to **US$98,208** in 2013 though it accounted for 0.1% of total spending on HIV and AIDS related activities in both years. In both 2012 and 2013, all the OVC funds was spent on OVC Social Services and Administrative costs and OVC Education with the former accouting for majority of the funds during these years (Table 28).

Table 28: Total Spending on OVCs, 2012 - 2013 (US$)

Key Area of Expenditure	2012	%	2013	%
OVC Education	15,685	12.1	45,711	46.5
OVC Social Services and Administrative costs	114,015	87.9	52,497	53.5
Grand Total	**129,700**	**100**	**98,208**	**100**

Programme Management and Administration

Programme Management and Administrative Strengthening accounted for 14% each of the total funds spent on HIV and AIDS related activities in Ghana in 2012 and 2013. In 2012, 34% of these funds was spent on Monitoring and Evaluation; 34% on Planning, coordination and programme management; 16% on Drug Supply System and 14% on Administration and

transaction costs associated with managing and disbursing funds. In 2013 however, majority of the funds went into Planning, coordination and programme management accounting for 34% of the Programme Management funds. This was followed by Administration and transaction costs associated with managing and disbursing funds (33%); Monitoring and Evaluation (26%) and then Upgrading and construction of infrastructure (6%). Details of the spending on Programme Management in 2012 and 2013 are shown in Table 29.

Table 29: Programme Management Spending Activities, 2012 - 2013 (US$)

Key Area of Expenditure	2012	%	2013	%
Planning, coordination and programme management	5,216,073	33.7	3,197,888	34.2
Administration and transaction costs associated with managing and disbursing funds	2,112,081	13.7	3,111,016	33.2
Monitoring and evaluation	5,593,849	36.2	2,451,246	26.2
Drug supply systems	2,398,929	15.5	78,501	0.8
Information technology	12,515	0.1	4,384	0.05
Upgrading and construction of infrastructure	134,442	0.9	512,489	5.5
Programme management and administration not disaggregated by type	811	0.01	4,363	0.05
Grand Total	**15,468,700**	**100**	**9,359,887**	**100**

Human Resources

Human Resources expenditure constituted 8% and 10% of the total expenditure on HIV and AIDS related activities in Ghana in 2012 and 2013 respectively. The areas of expenditure on Human Resources during the years under review are shown in Table 30. Majority of the Human Resources funds in both years went into Formative education to build-up an HIV workforce (44% in 2012 and 42% in 2013). Training activities accounted for 41% and 37% of the funds in 2012 and 2013 respectively whereas 14% and 15% respectively went into monetary incentives for human resources during the same period.

Table 30: Human Resources Spending Activities, 2012 - 2013 (US$)

Key Area of Expenditure	2012	%	2013	%
Monetary incentives for human resources	1,195,535	13.8	1,222,550	15.3
Formative education to build-up an HIV workforce	3,854,027	44.4	3,359,672	42.0
Training	3,539,246	40.8	2,954,823	37.0
Human resources not disaggregated by type	84,266	1.0	453,321	5.7
Grand Total	**8,673,074**	**100**	**7,990,366**	**100**

Social Protection and Social Services (Excluding OVC)

In all, **US$4,346,544** was spent on Social Protection and Social Services in 2012 and this fell to **US$2,653,735** in 2013. These funds were spent on five key areas in 2012 and four areas in 2013. In 2012, most (65%) of the funds was devoted to Social protection through in-kind benefits; 29% was spent on Social protection through monetary benefits and 4% went into Social protection through provision of social services. In 2013, there was no expenditure on Social protection through monetary benefits but most of the funds went into Social protection through in-kind benefits (93%) and Social protection services and social services not disaggregated by type (4%). Table 31 gives full detail of the various areas of the expenditure on Social Protection and Social Services in Ghana in 2012 and 2013.

Table 31: Social Protection and Social Services (excluding OVC) Spending, 2012 – 2013 (US$)

Key Area of Expenditure	2012	%	2013	%
Social protection through monetary benefits	1,277,779	29.4	-	-
Social protection through in-kind benefits	2,817,366	64.8	2,478,331	93.4
Social protection through provision of social services	162,821	3.7	38,870	1.5
HIV-specific income generation projects	55,431	1.3	42,854	1.6
Social protection services and social services not disaggregated by type	33,147	0.8	93,680	3.5
Grand Total	**4,346,544**	**100**	**2,653,735**	**100**

Enabling Environment

Creating an Enabling Environment continues to be an important area in the effort to reduce HIV and AIDS in Ghana. Table 32 shows the areas of creating Enabling Environment that received funding during 2012 and 2013. In 2012, 45% of the funds designated to creating an Enabling Environment were spent on AIDS-specific institutional development whilst 42% went into Advocacy and 13% on Human Rights Programmes. Majority of the funds for creating Enabling Environment in 2013 was spent on Advocacy (69%) and Human Rights programmes (27%).

Table 32: Enabling Environment Spending Activities, 2012 - 2013 (US$)

Key Area of Expenditure	2012	%	2013	%
Advocacy	256,350	41.6	354,005	69.2
Human rights programmes	81,715	13.3	136,921	26.8
AIDS-specific institutional development	277,087	44.9	-	0
Programmes to reduce Gender Based Violence	1,500	0.2	20,686	4.0
Grand Total	616,652	100	511,612	100

HIV and AIDS Related Research (Excluding Operational Research)

HIV and AIDS related research is the only Key Priority Area that saw improvement in funds between 2012 and 2013. **US$710,865** was spent on HIV and AIDS related research in 2012 and it increased to **US$790,392** in 2013. The areas of spending are depicted in Table 33. All the funds designated to HIV and AIDS related research in 2012 went into Social Science research. In 2013 however, the funds were spent on Social Science research (61%), Clinical research (37%) and Bio-medical research (2%).

Table 33: Spending on HIV and AIDS-Related Research, 2012 – 2013 (US$)

Key Area of Expenditure	2012	%	2013	%
Biomedical research	-	0	18,736	2.4
Clinical research	-	0	290,814	36.8
Social science research	710,865	100	480,842	60.8
Grand Total	**710,865**	**100**	**790,392**	**100**

Beneficiaries of HIV and AIDS Spending

The beneficiary populations of the HIV and AIDS related programmes and activities are grouped into five broad areas by the NASA RTS and this is shown in Table 34. The various members of each of the broad areas are also shown in the Table 34.

The results from the NASA estimates indicate that in 2012 and 2013, People Living with HIV (PLHIV) benefited most from the total funds spent on HIV and AIDS related activities (46% in 2012 and 54% in 2013) followed by Specific "Accessible" populations (31% and 21% respectively) and then the General Population (18% in 2012 and 20% in 2013). The Most-at-Risk Populations (MARP) accounted for 5% and 6% of the funds in 2012 and 2013 respectively whilst the other key populations (OVCs, refugees, prisoners, among others) accounted for the least proportion of the funds in both 2012 (0.3%) and 2013 (0.4%). Details of the spending by sub beneficiary grouping are shown in Tables 35 and 36 and Figures 31 and 32.

Table 34: NASA Beneficiary Categories

Main category	People living with HIV (PLHIV)	Most at Risk Populations	Accessible Populations	Other Key Populations	General Population
NASA Code	**BP 01**	**BP 02**	**BP 03**	**BP 04**	**BP 05**
Levels of Disaggregation	Age Sex	IDU; Sex workers; MSMs	STI Clinic patients; Children and youth at school; People at work; Health workers; Migrant workers; Long distance truck drivers; Military; Police	OVCs; Children born from mothers with HIV; Migrants; Refugees; Prisoners; Women & children; Youth at social risk; Partners of people living with HIV	Non-targeted

Table 35: HIV and AIDS Spending by Beneficiary Groups, 2011 – 2013 (US$)

Beneficiary Groups	2012	%	2013	%
PLHIV	50,448,271	46.0	36,152,834	53.9
Most-at-Risk Populations (MARP)	5,581,910	5.1	3,733,484	5.6
Other key populations	283,365	0.3	291,019	0.4
Specific "Accessible" populations	33,784,754	30.8	13,728,429	20.5
General population	19,575,855	17.8	13,120,899	19.6
Total	**109,674,155**	**100**	**67,026,665**	**100**

Figure 31 Spending by Beneficiary Groups, 2012

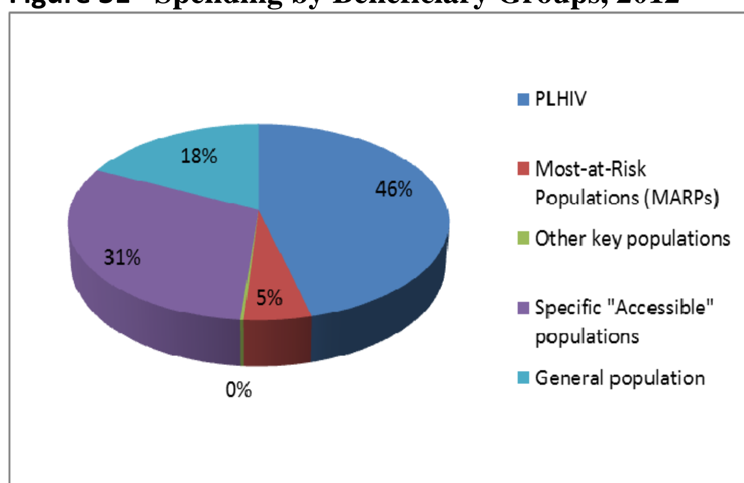


Figure 32 Spending by Beneficiary Groups, 2013

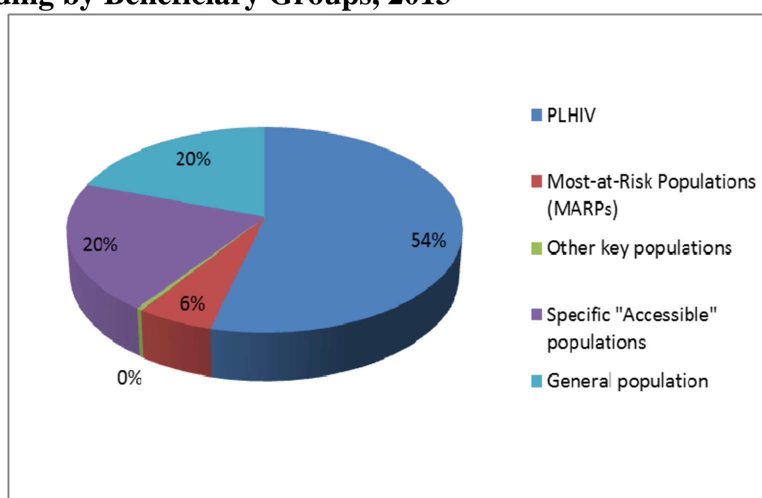


Table 36: HIV and AIDS related Spending by Beneficiary Population, 2012 – 2013 (US$)

Beneficiary group	2012	%	2013	%
PLHIV				
Adult and young women (15 years and over) living with HIV	42,000	0.1	5,000	0.01
Children (under 15 years) living with HIV not disaggregated by gender	-	-	278,958	0.8
People living with HIV not disaggregated by age or gender	50,406,271	99.9	35,868,876	99.2
Sub Total	***50,448,271***	***100***	***36,152,834***	***100***
Most at Risk Populations				

Beneficiary group	2012	%	2013	%
Female sex workers and their clients	75,000	1.3	-	-
Men who have sex with men (MSM)	454,254	8.1	456,632	12.2
"Most at risk populations" not disaggregated by type	5,052,656	90.5	3,276,852	87.8
Sub Total	***5,581,910***	***100***	***3,733,484***	***100***
Other key populations				
Orphans and vulnerable children (OVC)	129,700	45.8	98,208	33.7
Refugees (externally displaced)	43,000	15.2	-	-
Migrants/mobile populations	110,665	39.1	36,642	12.6
Prisoners and other institutionalized persons	-	-	155,439	53.4
Children and youth out of school	-	-	730	0.3
Sub Total	***283,365***	***100***	***291,019***	***100***
Specific "accessible" populations				
Elementary school students	14,200,000	42.0	-	-
Junior high/high school students	53,166	0.2	5,886	0.04
University students	-	-	5,603	0.04
Health care workers	5,175,638	15.3	5,680,343	41.4
Military	38,632	0.1	612,432	4.5
Police and other uniformed services (other than the military)	7,250	0.02	204,950	1.5
Factory employees (e.g. for workplace interventions)	11,087	0.03	600	0.00
Specific "accessible " populations not disaggregated by type	14,298,981	42.3	7,218,615	52.6
Sub Total	***33,784,754***	***100***	***13,728,429***	***100***
General population				
Female adult population	589,403	3.0	299,644	2.3
General adult population (older than 24 years) not disaggregated by gender	-	-	37,076	0.3
Youth (age 15 to 24 years) not disaggregated by gender	299,349	1.5	269,644	2.1
General population not disaggregated by age or gender.	18,687,103	95.5	12,514,535	95.4
Sub Total	***19,575,855***	***100***	***13,120,899***	***100***

Key Areas of Expenditure by Beneficiary Group

Tables 37 and 38 show the main population groups and their share of the main intervention areas captured in the NASA during the years under review. In 2012, PLHIV benefited from almost all the funds allocated for Care and Treatment, Social Protection and Social Services (99.98% on average). Specific "accessible" populations and the general population benefited most from spending on Human resources (99%) and Enabling Environment (84%) respectively in that year. All the spending on OVCs in 2012 was targeted at other key populations and nearly half (46%) of the funds allocated to Programme Management and Administration in that year went to Specific "accessible" populations. During 2012, the total funds on HIV and AIDS related research was shared between MARP (58%) and Specific "accessible" populations (42%).

Similar trends occurred in 2013 though with a little difference. In 2013, all the funds allocated to Care and Treatment and Social protection and social services went to PLHIV.

Similarly, other key populations benefited from all the funds devoted to OVCs in that year. Just as in 2012, specific "accessible" populations and the general population again benefited most from spending on Human resources (99%) and Enabling Environment (70%) respectively in 2013. The HIV and AIDS related research funds was again spent on MARP and specific "accessible" populations in 2013 and majority (51%) of the prevention funds in that year went to the general population. See also Figures 33 and 34 for more details on spending on beneficiary groups.

Table 37: Spending on Beneficiary Groups by Key Priority Areas, 2012 (US$)

	PLHIV	Most at Risk Populations	Other Key Populations	Specific accessible population	General Population	Total
Prevention Programme	8,343,063	4,862,427	112,647	17,879,969	14,543,510	**45,741,616**
(%)	(18.2)	(10.6)	(0.2)	(39.1)	(31.8)	**(100)**
Care and Treatment	33,978,204	-	8,800	-	-	**33,987,004**
(%)	(99.97)	-	(0.03)	-	-	**(100)**
OVC	-	-	129,700	-	-	**129,700**
(%)	-	-	(100)	-	-	**(100)**
Programme Management and Administration	3,728,541	175,274	4,718	7,043,307	4,516,860	**15,468,700**
(%)	(24.1)	(1.1)	(0.03)	(45.5)	(29.2)	**(100)**
Human Resources	-	100,344	25,500	8,547,230	-	**8,673,074**
(%)	-	(1.2)	(0.3)	(98.5)	-	**(100)**
Social Protection and Services	4,346,044	-	500	-	-	**4,346,544**
(%)	(99.99)	-	(0.01)	-	-	**(100)**
Enabling Environment	52,419	29,296	1,500	17,952	515,485	**616,652**
(%)	(8.5)	(4.8)	(0.2)	(2.9)	(83.6)	**(100)**
HIV and AIDS related research	-	414,569	-	296,296	-	**710,865**
(%)	-	(58.3)	-	(41.7)	-	**(100)**
Total	**50,448,271**	**5,581,910**	**283,365**	**33,784,754**	**19,575,855**	**109,674,155**

Figure 33 Total Spending on Beneficiary Groups by Key Priority Areas, 2012

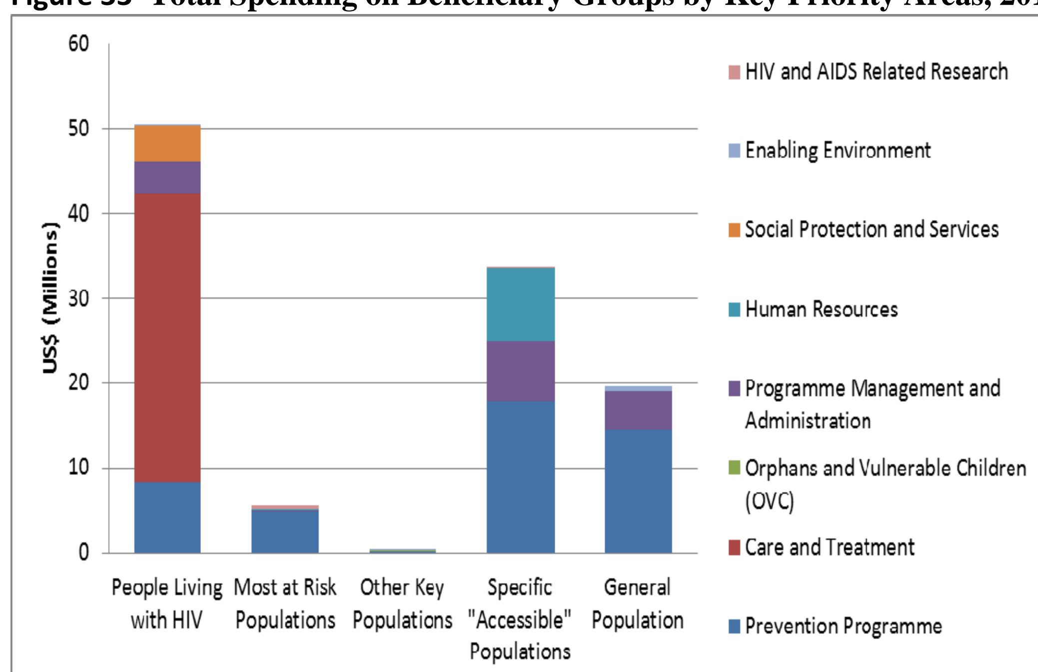
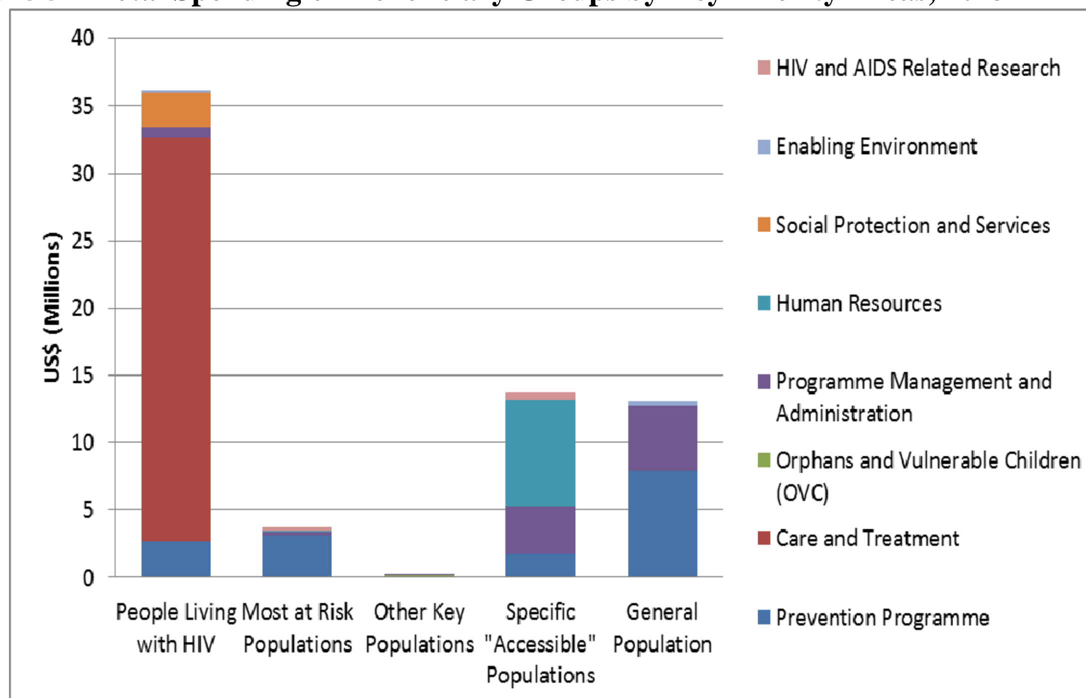


Table 38: Spending on Beneficiary Groups by Key Priority Areas, 2013 (US$)

	PLHIV	Most at Risk Populations	Other Key Populations	Specific Accessible Population	General Population	Total
Prevention Programme	2,638,370	3,151,357	51,116	1,811,656	7,957,167	**15,609,666**
(%)	(16.9)	(20.2)	(0.3)	(11.6)	(51.0)	**(100)**
Care and Treatment	30,012,799	-	-	-	-	**30,012,799**
(%)	(100)	-	-	-	-	**(100)**
OVC	-	-	98,208	-	-	**98,208**
(%)	-	-	(100)	-	-	**(100)**
Programme Management and Administration	711,122	223,980	141,695	3,478,804	4,804,286	**9,359,887**
(%)	(7.6)	(2.4)	(1.5)	(37.2)	(51.3)	**(100)**
Human Resources	-	108,074	-	7,882,292	-	**7,990,366**
(%)	-	(1.4)	-	(98.6)	-	**(100)**
Social Protection and Services	2,653,735	-	-	-	-	**2,653,735**
(%)	(100)	-	-	-	-	**(100)**
Enabling Environment	136,808	-	-	15,358	359,446	**511,612**
(%)	(26.7)	-	-	(3.0)	(70.3)	**(100)**
HIV and AIDS related research	-	250,073	-	540,319	-	**790,392**
(%)	-	(31.6)	-	(68.4)	-	**(100)**
Total	36,152,834	3,733,484	291,019	13,728,429	13,120,899	**67,026,665**

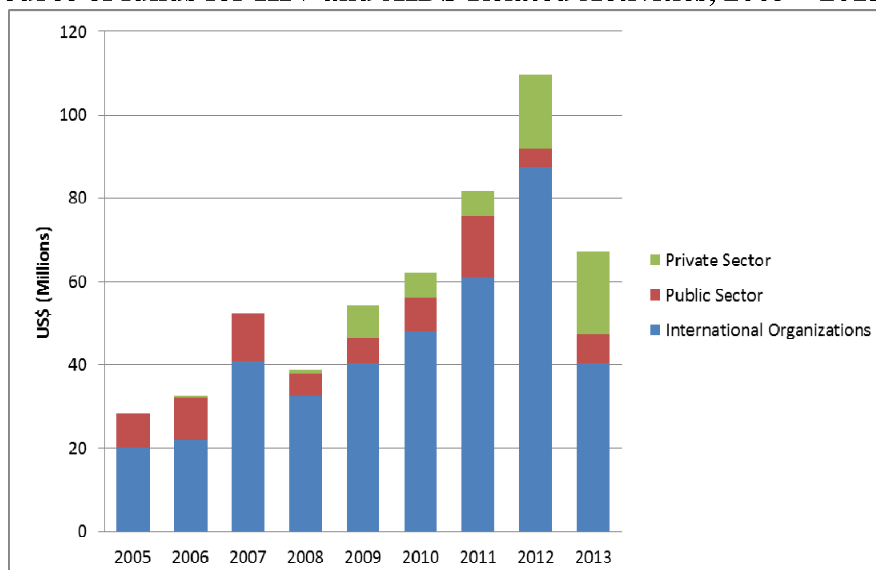
Figure 34 Total Spending on Beneficiary Groups by Key Priority Areas, 2013



Trend Analysis of HIV and AIDS Expenditure, 2005 to 2013

This eighth round of the NASA study allows us to expand the trend analysis of HIV and AIDS expenditure in Ghana captured in NASA of previous studies. This section therefore gives an overview of HIV and AIDS related expenditures over the last nine years (2005-2013). The results show that, but for 2013 there continues to be a systematic increase in funding for HIV and AIDS related programmes since the dip in 2008. Total expenditures increased from **US$28.4 million** in 2005 to **US$32 million** in 2006 and to **US$52.5 million** in 2007 decreasing to **US$38.9 million** in 2008. In 2009, total expenditure increased by 40% to **US$54.2 million** and increased further by 13% in 2010. In 2011, total expenditure increased by 31% to **US$81.7 million** and then to **US$109.7 million** before declining by 38.9% to **US$67 million** in 2013 (Figure 35). In all the years under review, funding from International Organizations has remained the major source of finance for HIV and AIDS related programmes in Ghana. In 2005, funds from international organizations accounted for 71% of total expenditure; 68% in 2006; 78% in 2007; 84% in 2008; 75% in 2009 and 77% in 2010 and reducing to 74% in 2011. In 2012 and 2013, funds from international organizations constituted 80% and 60% of the total funds spent on HIV and AIDS related activities in Ghana.

Figure 35 Source of funds for HIV and AIDS Related Activities, 2005 – 2013



Key Spending Areas

The total expenditure on the priority areas are shown in Table 39 and Figure 36. From 2005 to 2013, there have been both increases and decreases in the expenditure on all the priority areas. Total expenditure on prevention programmes declined in both 2005 and 2006 before picking up from 2008 to 2012 before falling drastically again in 2013. In 2011 and 2012, there were phenomenal jumps in funds expended on prevention programmes, almost twice the amount spent in 2010 and 2011 respectively. It shows the importance given to prevention activities in the national response given the current drive to expand treatment and care activities. The expanded programme for treatment and care continues although there were drops in the treatment and care expenditure in 2008, 2011 and 2013. There has been an increase in funds expended on human resources despite the dips in some of the years. The expenditure on HIV and AIDS related research has dropped significantly between 2005 and 2013 although there were some marginal increases in-between the period. Expenditure on Social protection and social services as well as OVC has seen more decrease than increase during the periods.

Figure 36 Total Spending on Key Priority Areas, 2005 – 2013

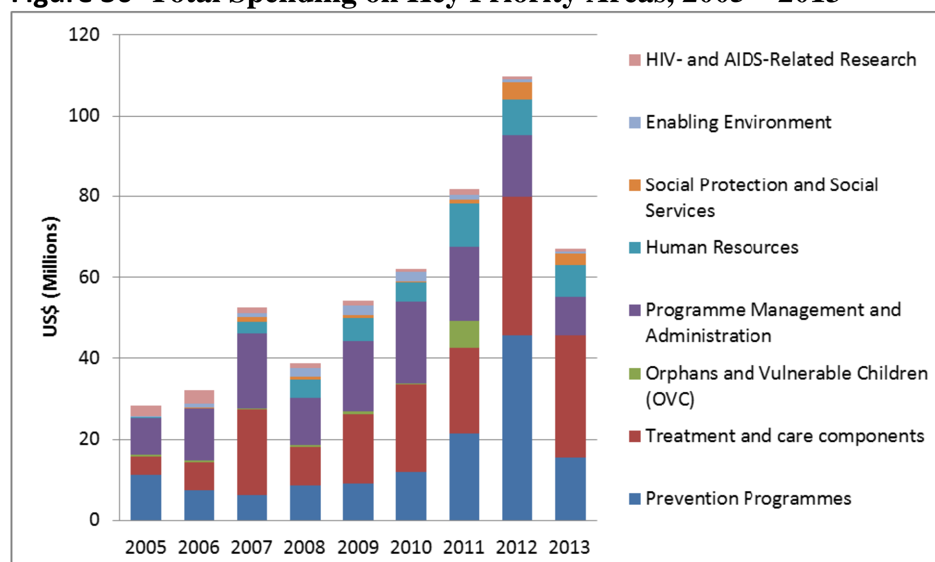


Table 39: Total Spending on Key Priority Areas, 2005 – 2013 (US$)

Key Areas of Expenditure	2005	2006	2007	2008	2009	2010	2011	2012	2013
Prevention Programmes	11,157,054	7,352,150	6,339,069	8,550,916	9,231,209	12,051,631	21,413,136	45,741,616	15,609,666
Treatment and care components	4,682,149	7,050,088	21,026,047	9,554,075	17,046,501	21,467,922	21,089,957	33,987,004	30,012,799
Orphans and Vulnerable Children (OVC)	354,865	344,997	153,233	425,999	621,251	261,175	6,634,765	129,700	98,208
Programme Management and Administration	9,133,721	12,820,701	18,566,509	11,603,866	17,315,220	20,108,990	18,471,911	15,468,700	9,359,887
Human Resources	130,246	130,620	2,788,821	4,661,299	5,813,156	4,807,684	10,522,486	8,673,074	7,990,366
Social Protection and Social Services	46,669	164,425	1,256,559	754,620	724,284	282,872	975,979	4,346,544	2,653,735
Enabling Environment	214,902	995,591	902,332	2,138,620	2,283,057	2,252,151	1,313,869	616,652	511,612
HIV- and AIDS-Related Research	2,695,102	3,209,063	1,412,521	1,161,545	1,193,710	915,139	1,255,230	710,865	790,392
Grand Total	**28,414,708**	**32,067,635**	**52,445,091**	**38,850,940**	**54,228,388**	**62,147,564**	**81,677,333**	**109,674,155**	**67,026,665**
Nominal Growth (%)		***12.86***	***63.55***	***-25.92***	***39.58***	***12.74***	***31.42***	***34.28***	***-38.89***

TARGET 8 ELIMINATING STIGMA AND DISCRIMINATION

Mitigating the Socio-Economic Impact of HIV and AIDS

The key social and economic impact of HIV and AIDS are stigma and discrimination against people infected and affected by HIV and AIDS and key populations (KPs) and poverty among households affected by HIV and AIDS. The socio-economic status of AIDS-affected households is a key determinant of the NSP 2011-15 achieving its impact results of reducing new HIV infection by half and attaining at least 95% survival rate of AIDS patients on ART by 2015. The Plan also recognized KPs as key drivers of the epidemic in the country. The NSP 2011-15 therefore requires that interventions that reduce the socio-economic impact on AIDS-affected households especially those with OVC and target KPs with quality HIV prevention information and services be implemented as key components of the national HIV response.

To meet the strategic objectives of reducing the socio-economic impact on AIDS-affected households and provide quality HIV prevention information and services to KPs, the national HIV response focuses on implementing activities that significantly contribute to reducing stigma and discrimination against PLHIV and KPs, protecting the rights of KPs and PLHIV that ensure unhindered access to services and reducing poverty in AIDS-affected households through inclusion in national social protection programs.

Reducing Stigma and Discrimination

It is generally acknowledged that stigma and discrimination almost always co-exist, are intricately linked, and mutually reinforce each other. It is also recognized that stigma and discrimination seriously hinder access to HIV prevention treatment, care and support services resulting in increased new HIV infections, HIV and AIDS morbidity, and AIDS-related deaths.

HIV and AIDS related stigma and discrimination are significant factors hindering effective response to the national HIV response in Ghana. The Ghana DHS 2008 shows that only 32% of women and 43% of men would buy fresh food from a shopkeeper living with HIV while 62% of women and 66% of men reported that an HIV positive teacher should be allowed to continue teaching. The percentage expressing accepting attitudes on all four measures of stigma and discrimination is just 11% of women and 19% of men aged 15-49 years. HIV and AIDS related stigma and discrimination, in part, stems from the fact that the disease is caused by an infection and that HIV infection may imply sexual infidelity, sex work, MSM, and/or injection drug use by PLHIV.

At the commencement of the implementation of the NSP 2011-15, PLHIV and KPs related stigma and discrimination was believed to be common occurrence in all segments of the Ghanaian society. Thus stigma and discrimination demonize and ostracize PLHIV and KPs, which often lead to their exclusion from accessing HIV prevention, treatment, care, and support and other social services. Many service providers believe stigma and discrimination are among the severest of deterrents to utilization of HIV and AIDS services by PLHIV and KPs.

The key output for the AIDS related stigma and discrimination activities is to increase the coverage of stigma reduction programs to all districts – from 100 districts in 2010 to all 170 districts then in existence by 2015.

In order to carry out stigma reduction activities in all districts in the country, the NSP recommends building the capacity of networks, associations and support groups of PLHIV and involvement of media houses and CSOs in disseminating anti-stigma messages.

The strategies for achieving these outputs include:

- Incorporating appropriate HIV and AIDS messages in national events such as World AIDS Day, Independence Day, Farmers Day, Republic Day, and at major activities of Ministries, Departments, and Agencies (MDAs)
- Sensitizing traditional, opinion, and religious leaders and policy makers on HIV related stigma to enable these leaders spearhead stigma reduction education
- Sensitizing health and community-based workers on HIV related stigma
- Integrating stigma reduction into HIV workplace policies and programs

Many HIV and AIDS program implementers carried out a number of general and specific AIDS and KPs-related stigma and discrimination reduction activities during the period under review. Relative to the level at the beginning of the implementation of the NSP 2011-15, AIDS and KPs related stigma and discrimination has reduced. However, it remains unacceptably high especially for KPs. The growing level of homophobia across the West African sub-region including Ghana, makes it difficult for service providers to work openly with sexual minorities.

Manifestations of stigma and discrimination in Ghana range from crude, rude, and in-your-face to subtle, sly, and insidious types and may take the form of physical, psychological, and/or emotional abuse and harassment. Stigma and discrimination continues to severely humiliate, depress, and undermine the dignity and confidence of KPs and people infected and affected by HIV and AIDS. It is among the most important deterrent to the utilization of HIV and AIDS prevention, treatment, care, and support and other social services by PLHIV and KPs in the country.

The key interventions with a major focus on AIDS and KPs related stigma reduction include the following:

<u>Heart-to-Heart (H2H) campaign and involvement of PLHIV as HIV Ambassadors</u>

The H2H campaign is a partnership program of the GAC and NAP+ Ghana that started in 2011. It is the flagship program of the anti stigma and discrimination campaign of the national HIV response. It aims at taking HIV out of isolation and giving it a human face through the appointment and involvement of five (5) PLHIV as H2H HIV Ambassadors for the campaign. The HIV Ambassadors to date have attended to a total of about 60 programs and have visited all the 10 regions in the country in support of AIDS stigma and discrimination reduction activities. They grant live interviews and answer questions on radio and TV; they facilitate workshops and training programs for HIV and AIDS stakeholders including FBOs, and participate and provide testimony at key national and local events and gatherings including the World AIDS Day celebrations. The acceptance of an honorary role of H2H HIV Ambassador by the First Lady of Ghana has increased the visibility of the H2H campaign.

The on-going nation-wide stigma reduction campaign has been energized by new and more engaging messages in the mass media including 3 documentaries and 7 teasers developed by NAP+ Ghana. Since 2011, thirty-four stations (4 TV and 31 FM Radio) have been disseminating HIV & AIDS related stigma and discrimination reduction messages.

Additionally, anti stigma and discrimination brochures, leaflets, handbills, and calendars have been produced and are being used to complement the anti stigma and discrimination work done on the ground and on air by the H2H HIV Ambassadors. The H2H campaign has encouraged PLHIV to come out into full public disclosure of their status; this is a first in a country where people want to keep their HIV status a closely guided secret.

Sensitizing and building the skills of key government and other stakeholders in HIV and KPs legislation

Evidence from various sources suggests the absence of HIV legislation in Ghana is one of the key drivers of AIDS related stigma and discrimination, as offenders cannot be successfully prosecuted under existing legislation. For example, a monitoring exercise conducted by CDD Ghana in selected police stations and circuit courts in Greater Accra and Eastern Region in 2009 indicated that PLHIV and KPs refused to report cases of abuse due to stigma and discrimination. With support from UNAIDS, CDD-Ghana has a help desk that offers legal advice to KPs and PLHIV whose human rights have been violated. Also the NAP+ Ghana reported receiving several complaints of high levels of discrimination and stigma against its members from landlords, employers, and social workers.

In January 2011, CDD-Ghana entered into a contract with UNAIDS to implement an eight-month project titled “Sensitizing and building the skills of key government stakeholders in HIV and KPs legislation”. This is a natural continuation of the capacity building work carried out by CDD-Ghana in the two years prior to the implementation of the NSP 2011-15. Key outputs of activities of the project work with key government officials include the following:

i. Buy-in and ownership building meetings held with key government stakeholders from CHRAJ, the Attorney General’s Department and Ministry of Justice, and Chairpersons of the Parliamentary Select Committees. This is enabling these key government stakeholders to effectively engage in the national HIV response.
ii. Draft HIV legislation for Ghana developed and is being used as the basis for discussions on HIV related stigma and discrimination and the need for legislation to protect the rights of PLHIV and KPs.
iii. Capacity Building Workshops on PLHIV and KPs related stigma and discrimination were organized for 119 key government officials from CHRAJ, the Attorney General’s Department, and chief government prosecutors from two regions. The workshops also discussed the draft HIV legislation.
iv. Advocacy workshops on stigma and discrimination and the draft HIV legislation held for 46 members of 3 Parliamentary Select Committees on Constitutional, Legal, and Parliamentary Affairs; Health; Gender; and the Employment, Social Welfare and State Enterprises
v. Media Advocacy Session with 24 media houses was held to get the media to support the advocacy on the HIV and KPs draft legislation and to gauge the public reaction towards such a sensitive law
vi. Consultative meetings with key stakeholders to seek inputs on the draft HIV bill was held with national and civil society organizations working on HIV and AIDS including GAC, UNAIDS, NACP, NAP+ Ghana, CEPHERG, SWAA-Ghana, HRAC, Ghana Police Service, and Ghana Prisons Service. Similar consultations were held with senior drafters and human rights lawyers’ who provided useful inputs on the draft HIV legislation.

The UNFPA continued its partnership with the Ghana Police Service in rights based policing initiatives with respect to the following:

i. Advocacy and capacity strengthening collaboration between stigma reduction against FSW; and
ii. Capacity strengthening on timely referrals of survivors of sexual violence for Post Exposure Prophylaxis (PEP).

The activities included a high level meeting with IGP, Orientation on Stigma Reduction against FSW, police/FSW Partnership on human rights and GBV Reduction, Orientation on Timely Referrals of Victims of Sexual Violence for PEP Services.

Reducing HIV-related stigma and discrimination in the workplace
According to the ILO, the World of Work is a key platform for the national HIV and AIDS response. The workplace experiences many of the deepest impacts of the epidemic including the loss of employment, loss of income, enduring stigma and discrimination, denial of promotion, and fear of dismissal. The GoG and employers' and workers' organizations are helping to shape the workplace program responses to the HIV epidemic. Both the progress achieved and the limits on that progress, along with changes in the epidemiological situation, require that workplace program responses continue to be refined and strengthened and coordinated within the broader front of the national HIV response.

Key outputs of HIV-related stigma and discrimination reduction activities undertaken at the workplace during the period under review include:

i. National HIV/AIDS Workplace Policy reviewed

The National HIV/AIDS Workplace Policy, developed in 2005, was reviewed in 2011 to reflect the current epidemiology and country context of the disease and incorporate the ILO Recommendation 200 of 2010. It has a strong emphasis on reducing HIV and AIDS related stigma and discrimination in the workplace in the country.

ii. HIV Workplace Policy Development intensified

Three hundred and twenty eight (328) institutions across all sectors developed HIV Workplace Policies and started implementing these policies during the period under review. Assistance for the development of these workplace policies was provided as follows:

i. GIZ – 146 hospitality industry institutions
ii. ILO – 89 Informal Sector Organizations and Trade Associations
iii. Ghana Employers Association (GEA) – 51 member companies
iv. Ghana Business Coalition for Employee Wellbeing (GBCEW) – 42 private sector companies

Integration of HIV and other health services to reduce stigma

i. HIV and SRH/FP – PPAG runs a one-stop shop for SRH, FP, and HIV and AIDS services. It has successfully integrated HIV and AIDS into its Sexual and Reproductive Health and Family Planning services. These integrated services are provided by the same health professional at the same service delivery point at the same time.
ii. HIV and OPD services - St. Joseph's Hospital Koforidua operates a fully integrated outpatient services. HIV and AIDS services are totally integrated into its OPD services with services being provided all weekdays Monday to Friday. There are no special days for HIV and AIDS services, as is the practice in many health facilities in the country.

PLHIV and KPs related stigma and discrimination reduction activities

Stigma and discrimination reduction messages are key components of the comprehensive continuum of HIV and AIDS prevention, treatment, care, and support services provided by all stakeholders in the national multisectoral response to HIV and AIDS. The program uses all HIV and AIDS service delivery points as opportunities to drive home the message on the need and how to reduce stigma and discrimination against PLHIV and KPs. These service delivery points include health facilities, community outreach, workplaces, and schools.

1) ADRA Community Capacity Enhancement program for reducing AIDS related stigma and discrimination

Pioneered in Ghana by the UNDP, the Community Capacity Enhancement (CCE) intervention is based on Community Conversations (Story Telling) methodology. Whilst most community conversations methodologies rightly focus on awareness raising and discussion, CCE interventions focus heavily on interactive dialogue on the epidemic's deeper causes and, through a facilitated process, community decision-making and action. Thus CCE interventions deal with the underlying causes of the disease including social capital, power relations, gender issues, and community ownership of and participation in HIV and AIDS activities including stigma and discrimination.

As a principal recipient (PR) of the Global Fund Round 8 HIV and AIDS grant to Ghana, ADRA has been working at the community level implementing integrated HIV and AIDS related stigma and discrimination reduction interventions with community outreach HTC services and referral to ART and other services. Between January 2011 and June 2013, ADRA has scaled up its CCE activities reaching more than 462,000 people in 693 communities in 30 districts in 4 regions (Greater Accra, Eastern, Ashanti, and Brong Ahafo) of the country. These CCE activities are helping to reduce AIDS related stigma and discrimination one community at a time.

2) WFP PAF anti stigma messages on food ration packaging

Anti-stigma messages printed in English on WFP ration posters and cards continue to be used in the country in support of WFP food assistance program for patients on ART who live in food insecure households. In the last couple of years, WFP has distributed 2,000 food ration posters and 158,000 ration cards with anti-stigma and discrimination messages at all food distribution points in the Upper West, Upper East, Northern, and Eastern Regions. These anti-stigma messages are intended to reach PLHIV and KPs, their families and service providers, and the general population to re-enforce the general anti-stigma messages in the media and on radio and television.

3) HIV School Alert Project

The HIV School Alert Project improves school children's the knowledge of HIV and AIDS and encourages behavior change in childhood that transitions into adulthood with a potential to prevent HIV infection and reduce stigma and discrimination against PLHIV.

4) GAC held a two-day residential advocacy workshop structured to equip religious leaders with requisite advocacy skills especially in the area of resource mobilization.

Protecting the Rights of KPs to access HIV and AIDS Services

Currently, Ghana has a draft HIV and AIDS law. There are laws that protect PLHIV against discrimination, address their specific rights and needs as well as protecting vulnerable populations such as women and young people. The spirit and letter of the 1992 Constitution also prohibits discrimination against individuals based on disease or disability.

However a number of laws also exist which are obstacles for successful implementation of HIV prevention and care programmes in the country (See below).

On the other hand numerous polices have been developed to address HIV issues, however these do not wield the same level of compulsion as laws do.

Laws and Policies relating to HIV and AIDS

Many of Ghana's laws and policies indirectly support the human rights issues related to HIV and AIDS. Notable among them are:

- Ghana's Constitution 1992: This protects persons against discrimination and upholds fundamental human rights. Specifically;
- Article 17 " All persons shall be equal before the law, A person shall not be discriminated against on the grounds of gender, race, ethnic origin, religion, creed or social economic status"
- Article 18 "no person shall be subjected to interference with the privacy of …. Correspondence or communication except in accordance with law as may be unnecessary in a free and democratic society" This deals with disclosure and confidentiality.

Other laws are:

- The Labour Act, 2003 (Act 651): This deals with workplace discrimination including issues of annual leave, sick leave and unfair termination. It also ensures that workers work under safe, satisfactory and healthy conditions. This provides for adequate protection for workers to be protected from contracting HIV on the job e.g. health workers.
- Labour Decree 1967, NLCD 157
- Industrial relations Act 1965, Act 299
- Workman Compensation Law 1987
- Factories, Offices and Shop Act 1990, Act 328
- Patients Charter 2002
- Ghana AIDS Commission Act, 2002 (Act 613)44: deals with the setting up of the Ghana AIDS Commission
- The Children's Act 1998 (Act 560): deals with the rights of children and the right to education, health care and shelte.
- The Domestic Violence Act 2007: that protect women and men against domestic violence.
- The laws also deal with issues of willful and or negligent transmission and the responsibilities of PLHIV such as Criminal Code 1960 (Act 29) section 76, 72 and 73.
- The quarantine Ordinance CAP 77 (Law # 2, 1915) and the Infectious Disease Ordinance CAP 78 were laws passed before the onset of HIV and AIDS. These laws cover infectious diseases and provide for the evacuation of affected areas, isolation, removal and detention of contacts. These laws will be reviewed and consolidated into a new Public Health Act to make the right to health care basic to all Ghanaians. Under the Public Health Act HIV&AIDS shall be notifiable conditions without identification of individuals.
- Civil Service Law , PNDC L327
- Civil Service (Interim) Regulations

Polices that affect HIV and AIDS exist: The difficulty, however is that polices are administrative measures which do not wield the same level of compulsion as laws.

These include:
- The National HIV/AIDS and STI Policy. This policy particularly mentions protection of human rights. The National HIV/AIDS and STI Policy was revised during the 2012 year to reflect a Human Rights Based Approach to ensure access to services by key populations.
- The Nation HIV Workplace Policy, which was also revised in 2012 to be compliant with the ILO recommendation 200.
- The policy on User Fees for services at ART Centers was discontinued in 2012
- The National Nutrition Policy was revised
- The National Gender Policy was also revised.
- The National Health Promotion Policy was rewritten to be compliant with Communication for Development (C4D approaches)
- The Affirmative Action Bill and National Social Protection Policy have been drafted.
- The Community Home Based Care Guidelines were published in 2012.
- National Social Protection Strategy 63

Mechanisms for enforcement of laws and policies
Various mechanisms are in place to ensure that these laws are implemented including:
- The Commission on Human Rights and Administrative Justice established under the Commission on Human Rights and Administrative Justice Act, 1993 64. The Commission is an independent body set up to assist person to seek redress in issues of unfair treatment and human rights abuses. Though not set up for HIV specifically it provides the opportunity for such issues to be addressed in Ghana.
- The National Labour Commission: set up under the Labour Act, facilitates the settlement of industrial disputes, and investigating labour related complaints especially unfair labour practices and provides an avenue that PLHIV can use in unfair dismissal 46.
- The Police Service established under the Police Act 1970, has the statutory duty to prevent and detect crime and apprehends offenders54. In relation to sex related crimes (e.g. rape or incest) they are best placed to enforce the law and prevent HIV/AIDS transmission 65.
- The Ghana Police Service established the Domestic Violence Victim Support Unit (DOVVSU) to cater for the increasing cases of abuse against women, men and children. DOVVSU currently has offices in all regions of the country.
- The Judiciary: The Judiciary have received specific training to address HIV issues and to have a better understanding of HIV matters.
- A legal aid system also exists in Ghana and was established and operates under the Legal Aid scheme Act (ACT 542) of 1997 66. It is an effective Legal Service for the poor in the Ghanaian society at minimal cost to enables them defend and prosecute the Human and Legal rights so that all citizens can go about their economic, social and political activities in freedom and with a sense of security. The Legal aid system provides Legal assistance to any person for purpose of enforcing any provision of the constitution and in connection with any proceeding relating to the constitution if the person has reasonable grounds for taking, defending, prosecuting or being a party to the proceedings.

The Number of civil society organisations also providing support for PLHIV and addressing their human rights violations include: International Federation of Women Lawyers (FIDA), Centre for Demographic Development (CDD), and Human Rights and Advocacy Centre (HRAC)

The country however, has laws that also present obstacles to effective HIV prevention, treatment, care and support for vulnerable populations. These include laws affecting Injecting drug Users, MSM and sex workers. The specific laws are:
• Criminal Code 1960 (Act 29) section 276: this criminalizes prostitution and soliciting for sex. 54
• Criminal Code 1960-97 Chapter 6, Sexual Offences Article 105: which criminalizes homosexuality and lesbianism.

These laws criminalize prostitution and men who have sex with men and thus make organizing prevention programmes in these groups more challenging. They have often been the recipient of human rights abuses and discrimination from the law enforcing bodies and from their own peers 67. Not much progress has been made in addressing laws which are obstacles for HIV interventions for FSW, MSM and IDU.

The Government continues to involve MARPS, PLHIV and other vulnerable populations in the development and implementation of HIV policy and programmes. This is through the inclusion of representatives to task teams and working groups. Represented in Expanded Technical Working groups, Monitoring and Evaluation Working groups and also receive funds for implementation.

The launch of an innovative 'Heart to Heart' anti-stigma Campaign has taken the fight against HIV & AIDS in Ghana to a new level. One of the side attractions to this year's event is the arrival of the 'Heart to Heart' Caravan which has been touring the country with three HIV & AIDS Ambassadors since its launch on 6th November to intensify direct engagement of the Ambassadors - all persons living with HIV - with local and community actors in various districts across the ten regions.
Ghana has no laws that specifically protect PLHIV and KPs from discrimination and address violations of their human and legal rights. However, there are aspects of key normative legal and policy frameworks that protect the general population including PLHIV and KPs against stigma and discrimination[22]. The 1992 Constitution protects all Ghanaians against discrimination and upholds their fundamental human and legal rights. Specifically, Article 17 enshrines that "All persons shall be equal before the law. A person shall not be discriminated against on the grounds of gender, race, ethnic origin, religion, creed or social economic status".

The Commission for Human Rights and Administrative Justice (CHRAJ) is charged with the general protection of the rights of all Ghanaians and has powers to investigate the violations of these rights. The National HIV and AIDS Policy objectives include reducing stigma and discrimination and respecting the rights of PLHIV whilst many institutions have HIV/AID Workplace Policies that prohibit stigma and discrimination and disclosure of confidential information. In December 2013, CHRAJ launched a web-based system to provide people living with HIV and key populations a simple, direct way to report HIV-related discrimination to CHRAJ.

From December 2013 to December 2014, 21 cases of discrimination were reported. The cases reveal a wide range of discrimination:
• Denial of basic services (employment, healthcare, education)
• Irregular payments to health centers
• Unlawful imprisonment by police

[22] HIV and AIDS Legal Audit of Ghana Laws and Policies 2011 by Human Rights Advocacy Center (HRAC)

- Unlawful pre-employment screening
- Unlawful termination by private businesses
- Poor treatment by family members
- Violence, threats, and blackmail

Assault against men who have sex with men appears to be widespread, representing five of the submitted cases. When assaults are reported to the police, the person assaulted is often put in jail until bail is made or a bribe is paid. Systemic problems within the health system also appear to be common. People living with HIV have told CHRAJ that some health facilities continue to charge GH¢5 for antiretrovirals (ARVs), even though government policy now makes ARVs free of charge. Of the 21 cases submitted, three have been resolved, either through direct follow-up or referral to the police, and eight are under investigation by CHRAJ. The other 10 cases are under investigation by various human rights organizations.

On December 1st 2014, CHRAJ launched a policy that formally protects the privacy and confidentiality of its clients. To ensure privacy, the commission must protect client information, inform clients of how the information will be used, and allow them to choose whether information can be disclosed and to whom. CHRAJ must also educate clients on its operations and provide them access to their records upon request. To ensure confidentiality, CHRAJ is required to limit access to personal information to specially trained staff members and provide a designated interviewing space to keep interviews private. In addition, electronic information must be password protected and secured within the registry.

This notwithstanding, Ghana has laws that hinder effective delivery of HIV and AIDS prevention, treatment, care and support services for sex workers, MSM, and PWIDs who are key drivers of the HIV epidemic in the country. The specific laws are: Criminal Code 1960 (Act 29) section 276, which criminalizes prostitution and soliciting for sex and Criminal Code 1960-97 Chapter 6, Sexual Offences Article 105, which criminalizes homosexuality and lesbianism. These laws criminalize sex work and MSM thus making it more challenging to organize HIV prevention information and services for these groups. There is no progress in reviewing the laws that hinder access to HIV prevention information and services for KPs despite efforts to do for some time now. Sex workers and MSM have often been at the receiving end of human rights abuses and discrimination from law enforcement agencies.

During the period under review, many activities were implemented by a cross section of stakeholders to protect the human and legal rights of all groups in Ghana including KPs and PLHIV in efforts to ensure unhindered access to HIV and AIDS services for all Ghanaians.

Development of the HIV Legislation

GAC has been providing leadership in mobilizing the collective efforts of all HIV and AIDS stakeholders to develop an HIV bill and advocate for its passage by Parliament. A draft HIV bill has been developed and provides for the protection of the human rights and legal rights of PLHIV and KPs that will enable them to have unhindered access to HIV and AIDS prevention, treatment, care, and support services. The draft bill has been discussed at various public forums. Sensitization about and capacity building meetings on the HIV bill have been held with a number of Parliamentary Committees including the Committees on Constitutional, Legal, and Parliamentary Affairs; Health; Gender; and the Employment, Social Welfare and State Enterprises. Intense advocacy efforts are continuing with key constituents including advocacy with lawmakers on the need for protecting the human rights of PLHIV and KPs and the passage of the draft HIV legislation bill into law.

Continued representation of KPs and PLHIV constituencies on key HIV and AIDS program policy and implementation structures

The national HIV response continues to involve KPs, PLHIV, and other vulnerable groups in the development of policies and implementation of programs. People Living with HIV are represented on the Board of the Ghana AIDS Commission. PLHIV groups and entities representing the interests of KPs are members on national HIV and AIDS program task teams and technical working groups (TWGs) including the Expanded Technical Working, the M&E TWG, and the MARPs (now KPs) TWG. The Regional, Metropolitan, Municipal, and District AIDS Coordinating Committees contain representatives of people living with HIV and entities representing the interest of KPs. These structures safeguard the rights of all Ghanaians including PLHIV and KPs to equal access to HIV services by ensuring HIV policies and programs do not discriminate against KPs and PLHIV.

Expansion of the M-Friends and M-Watchers Network

This SHARPER project innovation is the only network specifically designed to respond to the KPs and PLHIV need for protection of their human and legal rights. This network is a rapid response mechanism involving peers and law enforcement and legal professionals who support the protection of human rights of KPs and PLHIV. To promote an enabling environment for key affected populations and PLHIV to access services, SHARPER supported the expansion of its M-Friends and M-Watchers (M-F & M-W) protection network countrywide. There are now 365 M-F & M-W distributed across all ten regions of Ghana.

Between February and June 2013, M-Friends and M-Watchers handled more than 98 cases of Sexual and Gender Based Violence (SGBV) and other human rights abuses against KPs and PLHIV. The network has become an important mechanism for identifying and responding to human rights abuses and violations of PLHIV and KPs.

Protecting the rights of Ghanaians including KPs and PLHIV

Key stakeholders whose work includes addressing the human and legal rights violations of KPs and PLHIV include the following:

CHRAJ and Legal Aid Scheme

Established by an Act of Parliament in 1993, CHRAJ is an independent body that assists people to seek redress in issues of unfair treatment and human rights abuses. Though not set up for HIV and AIDS specifically, CHRAJ provides a forum for addressing violations and abuses of the human rights of PHIV and KPs in relation to the national HIV and AIDS response. Similar to CHRAJ, the Legal AIDS Scheme was established by Act 542 of 1997 of Parliament to provide legal assistance at a minimal cost to enable the poor to defend and prosecute human and legal rights violations so that all citizens can go about their economic, social and political activities in freedom and with a sense of security.

Staffs from CHRAJ and the Legal AID Scheme have received training on HIV and KPs related stigma and discrimination to assist in the prudent discharge of their duties. CHRAJ and the Legal AIDS Scheme have not reported cases of HIV and KPs related discrimination during the period covered by the MTE. Meanwhile, NAP+ Ghana and GHANET report their members complain of suffering stigma and discrimination but are afraid to report it to the authorities, as they believe no action will be taken and they will be stigmatized even further.

The absence of reported cases from CHRAJ and the Legal Aid Scheme may be more a reflection that PLHIV and KPs are unaware of or unwilling to seek redress for violation of their human and legal rights than its lack of occurrence in the larger society. It may also reflect reporting challenges within the two institutions. The SHARPER Project has worked with CHRAJ to prepare for a training of local CHRAJ representatives with the aim of improving reporting and documentation of human rights abuses against female sex workers (FSW), MSM, PLHIV and others.

Meanwhile, in collaboration with the USAID-funded Health Policy Project (HPP) and GAC, CHRAJ launched the website called the Discrimination Reporting System www.drsystem.chrajghana.com on 1st October 2013 on a trial basis and limited to the Key Population TWG and the Expanded TWG where human and legal rights violations and abuses perpetrated against PLHIV and KPs can be reported. The SMS module will also be available; to submit complaints and reports through a text message to CHRAJ through this system.

Ghana Police Service

Established under the Police Act 1970, the Police Service has the statutory duty to prevent and detect crime and apprehend offenders including those violating the human and legal rights of KPs and PLHIV. In relation to sex related crimes including rape and defilement, and sexual and gender based violence (SGBV), the Domestic Violence and Victims Support Unit (DOVVSU) of the Ghana Police is better placed to enforce the law and help prevent HIV transmission by referring rape survivors for HIV pre-exposure prophylaxis (PEP) treatment.

The USAID-funded FHI360 SHARPER Project in partnership with Johns Hopkins University has assisted the Ghana Police Service to develop a HIV pre-service training curriculum and complementary video that includes stigma and discrimination for new recruits. The training curriculum focuses on HIV prevention in general and rights and responsibilities of police towards key affected populations. Graduates from this training program will join the ranks of officers already trained by other stakeholders (e.g. CDD-Ghana) to better handle violations of the human and legal rights of KPs and PLHIV. To ensure the human rights of sex workers are not violated, senior police officers are expected to supervise police swoops on sex workers with instructions to officers to avoid arresting women who possess condoms as evidence of engaging in 'soliciting'.

The Ghana Police Service has moved forward from the conceptualization phase to implementation phase. The training manual that was developed was officially presented to the Inspector General of Police by the Director General of GAC and is now being used as a training document in all 7 police training institutions.

In addition, there are continuous in-service trainings for personnel across the Regions on both Public Health and Human Rights Approach to Law Enforcement with particular reference to Key Populations over the year under review.

The Judicial Service

In past years, staff from the Judicial Service received specific trainings from outside institutions to enhance judiciary staff capacity to address HIV issues and to have a better understanding of HIV matters. The national HIV response has built the in-house capacity of the Judicial Service to provide training for its staff. Since August 2010, the Judicial Training Institute of Ghana has initiated HIV and AIDS related stigma and discrimination training

program for newly appointed magistrates and judges and provides regular sensitization on the rights of PLHIV and KPs for Magistrates and Circuit Court Judges. This is expected to improve the understanding and handling of cases that violate the rights of KPs and PLHIV.

Human Rights Advocacy Centre
In 2014, the Human Rights Advocacy Centre (HRAC) conducted two projects related to HIV and AIDS. They were "Combating AIDS Among Gender Based Violence (GBV) Survivors by Improving Access to Post Exposure Prophylaxis (PEP)" and "Improving Access to Health for Key Populations and Survivors of Gender based Violence in Ghana".

Civil Society Organizations (CSOs)
A number of civil society organizations (CSOs) exist in Ghana whose mandates include providing legal support and related services for PLHIV and KPs and addressing their human rights violations and abuses. The key organizations include the International Federation of Women Lawyers (FIDA), Centre for Demographic Development Ghana (CDD-Ghana), Human Rights and Advocacy Centre (HRAC), and the Ark Foundation.

The work of CSOs in protecting the rights of KPs is often unreported but is gaining momentum. Documented reports indicate that seven cases of unlawful arrest of MSM were investigated with legal support from FIDA trained lawyers and legal representation provided to four individuals led to all the four cases being thrown out of court. Legal support was also provided in the cases of 4 FSWs – two murdered and two stabbed and raped. The Network of M-Friends and M-Watchers provide medical and psychosocial support to KPs whose human rights have been violated. Even the police have begun providing protection for abused and threatened FSWs. Feedback from KPs and implementing partners have been positive: KPs report they had experienced a greater sense of security and trust in the presence of the M-Friends and M-Watchers.

Ensuring access to services for hard-to-reach PLHIV and KPs

Access to services

In general the country has a policy of free or subsidized HIV services. In the period under review through advocacy and review of programmes outcomes, HIV prevention services such as testing and Counselling and all aspects of eMTCT have been made free. Unfortunately, condoms are still provided at a cost. ART services are also not free but are highly subsidized through funding from the GFATM. Discussion and advocacy is far advanced to integrate ART services into National Health Insurance Scheme (NHIS) to ensure that PLHIV receive free care [12]. Currently, treatment of opportunistic infections (OIs) is provided for under the NHIS.

The country has a non-discriminatory policy for all to receive access to HIV prevention, treatment, care and support services and every effort is made to ensure that there is equity in the distribution of services. In the year under review geographic access was improved by increasing of service to more sites in all regions in the country. 150 sites in 105 districts of the 170 districts are covered for ART services. Every effort was made to reach the decentralised level and provide services at the district, sub-district and even the community level through the Community Health Planning Services (CHPS).

In the period under review, "Know Your Status (KYS)" campaigns were undertaken all over the country to ensure an increase in the testing and counselling through mobile/ outreach

services. This was provided in conjunction with the health service in many communities. As mentioned above, advert and Heart-to-Heart (H2H) campaigns advocating anti-stigma and testing confirms this statement too. The H2H campaign was launched at the 2011 World AIDS Day in December by the then Vice President of Ghana, H.E. John Dramani Mahama.

The country has a policy to ensure women's access to services outside the context of pregnancy and child birth, through educational programmes and KYS campaigns. This provides services for both genders. Indeed from the statistics more women have access to prevention and treatment services than men and future direction may require addressing the need for greater involvement of men.

The country does not have a policy to ensure the equal access for MARPs per se and other vulnerable populations to HIV prevention, treatment, care and support. The programmes are however set up to ensure equal access to all irrespective of creed, colour or religion. Thus all MARPS and vulnerable populations have equal rights to access care as any other person living in Ghana. While services are generic and are not specific for MARPS, there are 21 MARPS-friendly health facilities which provide services to MARPS. MARPS-friendly services are to be expanded across the country. Occasionally, MARPS experience human rights violations from the persons who are to protect them such as the police or to provide them with services such as the health worker. In the period under review this came to the fore through the advocacy and education of the service providers including the police and health workers.

With all these laws available the new HIV and AIDS Law will complement these laws in ensuring protection of PLHIV and MARPs.

Meaningful involvement of PLHIV

The Ghana AIDS Commission has involved PLHIV in all aspects of HIV policy and programme design and implementation. PLHIV are represented on the Ghana AIDS Commission, Technical task teams, and the Global Fund Country Coordination Mechanism.

In 2009, National Association of Positive Persons (NAP+) inaugurated a nine member board. The board continues to play an executive and advisory role to guide and direct the affairs of the organisation. The organisation's secretariat is currently being strengthened through the engagement of professional staff and establishment of standard operating procedures and systems.

Funding was provided for NAP+ by the Ghana AIDS Commission to strengthen their institutional capacity at national and sub-national levels to effectively and efficiently coordinate and manage the activities of their member associations and to empower PLHIV to be more involved in the national response. The support was based on the gaps identified following an organizational assessment done in 2008.

Over 350 associations were supported in the period under review to support group meetings, refund for antiretroviral therapy, for the payment of premium for National Health Insurance (NHIS) and nutritional support [12].

The on-going nation-wide stigma reduction campaign through the mass media has been given new impetus with new more engaging messages in the mass media. The inauguration of the Heart to Heart campaign has encouraged PLHIV to come out into full public disclosure of

their status. Despite this HIV related stigma is still high as is the growing level of homophobia across the sub-region which makes it difficult to work openly with sexual minorities. The DHS of 2008 indicated that stigma and discrimination against persons living with or affected by HIV was still an important issue.

Intensive and innovative efforts were made by some implementing partners, for example, the SHARPER Project, to provide hard to reach PLHIVs and KPs with HIV and AIDS services.

Many HIV program reports, key informant interviews, focus group discussions, and testimonies from people living with HIV and key affected populations point to fear of stigma and discrimination, real or perceived, as one of the greatest deterrent to PLHIV and KPs accessing HIV and AIDS prevention, treatment, care, and support services. HIV and AIDS related stigma lurks everywhere! Specially designated days, times, and sites for the provision of HIV and AIDS services that allows prying eyes to associate all patrons with HIV positive status and the judgmental attitudes of and the penchant to leak confidential information by some service providers are some of the key stigmatizing situations PLHIV and KPs complain about.

CSOs providing services to KPs indicate that stigma and discrimination have essentially made many PLHIV and KPs "hard to reach" with HIV prevention, treatment, care and support services through conventional methods. They conclude that services for these hard to reach PLHIVs and KPs need to be provided in environments that are as stigma-free as possible. Leading implementing partners at the forefront of providing HIV and AIDS services for hard to reach PLHIV and KPs include the SHARPER Project, WAPCAS, and Maritime Life Precious Foundation. Key behavioral interventions that are designed and implemented to ensure access to HIV and AIDS services by these "hard to reach" PLHIV and KPs who do not or cannot utilize the services because of stigma and discrimination by all service providers include intensified peer education, targeted hotspot outreach and condom and lubricant sales. In addition to these interventions, the SHARPER project is using innovative interpersonal communication technology approaches including – HelpLine Counseling, SMS HealthyLiving, LifeLine, and MSM.net to seek and reach out to the hard-to-reach PLHIV and KPs in the project areas.

Findings of the Stigma Index Study

The national HIV and AIDS Technical Support Plan (TSP) 2011-2013 included the conduct of the Stigma Index Study to provide comprehensive data on the extent of HIV-related stigma and discrimination among PLHIV. In pursuance of this, the Ghana AIDS Commission (GAC) contracted Management Strategies for Africa (MSA), an organization focused on research, monitoring and evaluation as well as institutional, organizational and management capacity development for health institutions across sub-Saharan Africa, to work with the National Network of Persons Living with HIV in Ghana, NAP+, a National Coordinator and an international consultant (both PLHIV) to conduct the Stigma Index Study.

A. Experiences with stigma and discrimination

1. The PLHIV respondents avoided all the forms of social exclusion and other forms of discrimination through non-disclosure of their HIV status to individuals and groups outside the health care delivery system with striking majority of respondents, above 85% (n=366) on the average, reporting they had "never experienced" any form of HIV-related social exclusion during the 12 months preceding the survey. The worst forms of stigma experienced by the respondents however were gossip and verbal insults or harassment, which featured an average of 63% and 79% respectively of the total cases of

discrimination reported. More than one third of respondents experienced these forms of social exclusion at least once regardless of their socio-economic status or gender. Exclusion from religious activities was the least form of social exclusion experienced by the respondents due to lack of disclosure with only 6.6% of respondents having disclosed their status within their religious cycles.

2. Experience of stigma and discrimination was generally observed to be more prevalent among PLHIV in rural than in urban locations. There were also higher levels of stigma against key populations than other PLHIV across all the types and indicators of stigma analyzed. Experience of social exclusion among key populations exceeded that of the general PLHIV community by well over 100% on the average, and tended to occur in a more intensified form such as exclusion from social gatherings, family activities and to a greater extent from religious activities, in addition to experience of physical assault. Both the quantitative and qualitative findings attested to this. Thus the relatively higher vulnerability of key populations also surfaced in relation to all the forms of social exclusion.

3. More proportion of PLHIV respondents who were members of PLHIV network/support group experienced discrimination from their peers than those who were not members. PLHIV who did not belong to key populations also tended to inflict considerable emotional and psychological distress on PLHIV in key populations especially those with homosexual orientations. Non-HIV positive MSM also highly stigmatized members of their community who had tested positive affecting their access to services.

4. Respondents with no formal or just primary level education reported as much as 66.3% of all the reported cases of social exclusion. The highest income groups however reportedly experienced more levels of stigma and its associated forms of social exclusion than the lowest and middle income groups.

5. Low educational attainment appeared to be inversely correlated with experience of physical assault among PLHIV in general. The worst perpetrators of physical assault were members of the households other than the spouses of the respondents. Whilst experience of physical assault in all contexts was higher among females, experience of psychological pressure and manipulation by spouses or partners featured a higher proportion of males than females. Respondents with no form of formal education were the least to experience psychological pressure and manipulation by spouses or partners.

6. A great deal of the self or internal stigma experienced by majority of PLHIV bordered on lingering fear and assumptions about being the target of public gossip, which together with verbal abuse/assault or harassment emerged as a fundamental among PLHIV in general and MSM as well as women in particular.

7. Experience of stigma associated with poor nutritional and health status and pre-existing stigma does exist within PLHIV networks and tends to hinder access to social and emotional support for those affected, including MSM.

8. As much as 86% of the reasons for the experiences of social exclusion were either because of HIV status or both HIV status and another reason. The perceived reason why the respondents think they are being stigmatized given by almost a quarter of them was that

people are afraid of being infected through casual contact. Religious beliefs and moral judgments were the least mentioned reason.

9. Overall, PLHIV attributed the persistence of stigma and discrimination to ignorance among the general public and inadequate information to transform the effects of the initial negative publicity that engendered fear of being HIV positive.

B. Access to work, health and education

1. Experience of discrimination in the contexts of housing, employment, education and healthcare exists, though relatively low on the average, as noted in respect of social exclusion. PLHIV attributed these to weak enforcement of policies, and likewise to PLHIV ignorance about the existing policies.

2. About a tenth of the respondents reported they had either been forced to change their place of residence or been unable to rent accommodation at least once in the last 12 months due to their HIV status. This was experienced more among those with urban residence.

3. Sixty nine (16.2%) said they lost their jobs at least once in the last 12 months because of their HIV status. Some of the participants of FGDs said they lost their sources of income because someone went to disclose their status to their clients who stopped patronizing their trade.

4. Dismissal from educational institution and denial of family planning, reproductive health services and health service in general was very minimal. Three of the respondents indicated that they had been suspended or dismissed at least once from an educational institution because of their HIV status in the last 12 months; three said their child/children had had such an experience and six said they had been denied health services because of their HIV status within the same period. Thirteen and five of the respondents said they had been denied family planning and sexual and reproductive health services respectively in the last 12 months

C. Internalized stigma

1. Unlike social exclusion, which majority of PLHIV had not experienced during the preceding year, experience of internal stigma, in the form of self-blame and fear of stigma, was more pervasive among respondents. Support group membership helped to mitigate the experience of internal stigma in respect of self-blame, but not in the case of fear of stigma.

2. A great deal of the self or internal stigma experienced by majority of PLHIV bordered on lingering paranoia about being the target of public gossip, which together with verbal abuse/assault or harassment emerged as a fundamental concern among PLHIV in general and MSM as well as women in particular.

3. Apart from the negative feelings associated with their HIV status, respondents also reported changes in their behaviours especially with regards to the decision not to have more children (40.8%, n=168) and not to get married (24.9%, n=104). These two decisions also ranked highest among the KP.

D. Rights, laws and policies

1. Though knowledge levels about the Declaration of Commitment on HIV and AIDS as well as National HIV and STI Policy were moderate (41.9%, n=179 and 32.4%, n=135 respectively) there are still high levels of ignorance about the rights of PLHIV and the policies which work to their benefits. However, the female proportion exceeded that of males in this regard.

2. About a fifth of the respondents reported the abuse of their rights as persons living with HIV in the last 12 months and as much as three quarters of them did not seek redress for the abused rights. The reasons were mostly because they had insufficient financial resources to take action were advised by someone against taking action, had little or no confidence in the process or thought the process appeared too bureaucratic.

3. Institutions contacted by PLHIV for redress against their rights abused often provided support. However, the protection of the rights of PLHIV at the community level is woefully inadequate. Knowledge and awareness of the existence of rights, laws and policies among PLHIV might not necessarily translate into application.

E. HIV testing and diagnosis

1. The dominant reasons for testing were referral due to suspected HIV-related symptoms or illness/death of a spouse/partner or a family member. Few cases of involuntary testing and diagnosis were reported.

2. The level of personally initiated HIV testing was higher in urban (80%, n=36) than rural areas. Majority of the respondents (65.7%, n=276) voluntarily took the decision to be tested. This is encouraging and may be a pointer to the rigorous campaign for people to know their status. However the data collected also showed that 11% of respondents were coerced into taking the test and close to 16% were tested without knowing it.

3. It was evident from the trends captured in the data that about half of the respondents (50.6%, n=215), received both pre- and post- HIV test counselling; whiles the rest received only one-time counseling, either before (4.2%, n=18) or after (30.8%, n=131) testing; in addition to 14.4% (n=61) who received no counselling at all.

4. Low prevalence of stigma and discrimination associated with testing and diagnoses and this was reported to be indirectly associated with improved medical services for PLHIV; however, shortage of logistics was reported

F. Disclosure and confidentiality

1. The respondents in most cases feared the consequences of disclosure and hence tended to conceal their status from people within their social circles. Strategic disclosure of HIV positive status by PLHIV to health care providers and a few ‘trusted persons’ such as other PLHIV, through effective PLHIV and care-provider collaboration, was very high.

2. About 8% (n=32) of the respondents confirmed that their health professionals disclosed their status to others without their prior consent.

3. A higher proportion of male respondents(50.0%, n=60) disclosed their status to their partners than the females(42.8%, n=128)

4. Disclosure to health and social workers engendered more supportive than discriminating reactions. Discriminatory reactions to HIV status disclosure were generally low among family members (8.1%, n=34) and spouses (6.9%, n=29) despite low level of disclosure in this context.

G. Treatment

1. Respondents had a good perception about their health condition as an overwhelmingly 95.3% (n=407) rated their health conditions as good, very good or excellent. A pointer to the high access to ARVs and treatments for OIs from the country's successful ART programmes especially with the NHIS registering all PLHIV.

2. Perceived access to ARVs and medication of OIs was almost universal. While 95.1%, (n=404) of PLHIV are on ART, a proportion less than 2/3 of males and a little over 2/3 of female, are on medication for OIs.

3. Drug stock-outs and the attempt to avoid stigmatization in their local communities make some PLHIV incur additional travel costs to treatment centers.

4. More than two thirds of the respondent (66.7%, n=284) said they had had discussions with a health worker on HIV related treatment options in the last 12 months.

H. Having children

1. Although post-testing counselling about reproductive health options for PLHIV is currently high, almost one-in-ten of the respondents reported that their ARV treatment was conditioned on use of certain forms of contraception.

2. 7% (n=29) said they were advised by a health professional not to have children after being diagnosed as HIV positive.

3. One hundred and six of the females said they received ART to prevent mother to child transmission when they were pregnant and 7.6% (n=27) of the total respondents said they had HIV positive child/children.

I. Effecting change

1. Consistent with the tendency to keep their HIV status from people in their social circles and the relative low exposure to external stigma and discrimination 77% (n=328) said they had never confronted, challenged or educated anyone who stigmatized or discriminated against them.

2. With almost 80% (n= 58)of PLHIV whose rights were abused in the last 12 months preceding the study avoiding engagement with issues affecting their rights in order not to attract public attention, the prospect of effecting change would be challenging.

3. The evidence suggests that the limited initiatives taken by PLHIV to confront stigma and discrimination, achieved positive results. PLHIV networks and support groups featured prominently in this context; and despite relatively low levels of disclosure to religious leaders reported by PLHIV, over 2/3 of those who confronted stigma, channeled their grievances through faith-based organizations.

4. Overall 63.7% (n=272) of the respondents supported other PLHIV and the main forms of support were emotional and support for referral services. The roles being played by ‘Models of Hope’ in making newly infected persons overcome suicidal tendencies and instilling hope into their other peers was highly recommended by the participants of the FGDs.

IV. BEST PRACTICES

Prevention

i. The involvement of the mass media in the national HIV response is a good practice for community education, mobilization, and involvement. Media trainings for news Editors, reporters and presenters in particular were useful in improving reportage and reducing HIV stigma

ii. Models of Hope and HIV Ambassadors involved in anti-stigma campaigns are benefitting the PMTCT program. This is a good practice that should be strengthened

iii. The service of testing and counseling done without financial cost to the individual is a good inducer aiding more people to test.

iv. The abolition of the formal consent requirement and the introduction of provider initiated HTC is a best practice that should be maintained.

Treatment, Care and Support

i. The use of Pharmacist and Pharmacy Technologist ensures that unavailability of Medical doctors does not hamper the introduction of PEP in a health facility that has the capacity to take up PEP. Pre-service training for health care workers on universal precautions has been very useful. Building of linkages through sharing of list of ART facilities as well as contact details of service providers across regions is a laudable practice, which ensures PEP could be accessed in any part of the country.

ii. The use of the syndromic approach in STI management is still a very good practice. Integration of STI management in the routine health delivery system removes stigma and ensures STI care is available at all levels of health care.

iii. Strategic task shifting where Physician Assistants and Senior Nursing officers are trained to prescribe ARVs in places where there are no medical officers are not available ensures that ART is offered in remote and deprive areas.

iv. The use of simplified tools for the screening exercise is a laudable idea. The change on screening criteria is very good which will ensure that PLHIV within TB infections are detected as early as possible.

v. Continuum of care for PLHIV beyond health facilities have been successfully carried out for the past six years in both the public and private ART facilities through the use of treatment 'monitors' introduced by NACP as part of the adherence strategies. This strategy is sustainable, has no financial implication for the HIV program and uses persons who are already friendly to the PLHIV. Another very useful strategy is the Models of Hope concept that uses PLHIV to provide care to peers both at home and treatment centers as well as supporting health workers.

vi. Piloting the delivery of HIV treatment, care and support services at the Community-Based Health Planning Services (CHPS) compounds as a means of bringing the services to the door-steps of clients is laudable and must be encouraged.

vii. The current move to distribute ARVs to the regional, district and facility levels ('push mechanism') from the Central Medical Stores rather than waiting for the commodities to be picked up should be intensified to help solve some of the logistic management gaps.

Reducing Stigma and Discrimination

i. The "Heart-to-Heart Media Campaign" launched in Accra in late 2011 with objectives for eliminating stigma and discrimination against people living with HIV and AIDS,

to achieve a "zero discrimination" and ultimately a "zero infection" rate through the use of different channels of communication to enable people know what it takes to live with the virus and advocate HIV testing and counselling as a key to fighting the virus. The campaign started with four PLHIV. Since then many more have come out to join the campaign, which is being implemented in the field, and in the media.

ii. MIPA Principle – Use of PLHIV, as HIV Ambassadors is a good example of the global call for meaningful involvement of PLHIV (MIPA) in HIV prevention and management.

iii. Near total integration of HIV and other outpatient services at St. Joseph's Catholic Hospital Outpatient Department (OPD), Koforidua is a best practice for reducing stigma at the service delivery points.

iv. M-Friends and M-Watchers Networks by SHARPER project is a best practice that should be supported and expanded significantly.

v. Near total integration of HIV and other outpatient services at St. Joseph's Catholic Hospital, Koforidua, where Models of Hope volunteers are given monthly stipend is a best practice.

vi. Using Drop-in Centers (DIC) to improve access to HIV prevention information and services for KPs and PLHIV by implementers for e.g Maritime Life Precious Foundation, and WAPCAS as a mechanism to reduce stigma and discrimination and increase access to services is laudable

vii. Two organizations have taken bold steps to take HIV out of Isolation, by broadening the scope of their activities to include other communicable and non-communicable diseases. This approach has been shown to have a particular advantage in addressing stigma, especially when it comes to uptake of services. The two lead organizations in this regard are the Ghana Business Coalition on Employee Wellbeing and the German International Cooperation (GIZ). The effectiveness of the EWP concept has been acknowledged at international level (e.g. by the WHO International Consultation on Healthy Workplaces, 2011, India). There is anecdotal and well as statistical evidence to show that uptake of testing has increased with the broadening of the scope of tests that are on offer besides HIV testing.

viii. A Discriminating Reporting (DR) System and a Health Right Desk has been established at CHRAJ with support from HPP/USAID in 2013. This innovation provides a platform for PLHIV's and Key populations to report cases of stigma and discrimination via a web-based system or an SMS module for redress. The DR system serves two purposes – it tracks cases of human rights abuses/serve as a database and is a meand of providing redress to agrieved PLHIV's and Key populations.

Impact Mitigation

i. Caregivers grant for OVC is conditional: this ensures OVC benefit from health and educational programs and is not subjected to the worst form of child labor..

ii. WFP-assisted Nutritional Support for PLHIV on ART and their households – Excellent program but the lesson learned is that removing beneficiaries who have attained a BMI >18% is a big challenge.

Political Leadership and commitment

Political Leadership and commitment to the national response had been expressed in several ways and platforms. Notable among these are:

i. Commitment to the Implementation of the Pharmaceutical Manufacturing Plan for Africa Bussiness Plan (PMPA BP)

This plan which was hatched after the 19th African Union summit in July 2012 aims at enhancing access to quality essential drugs and commodities for AIDS, TB and malaria on the continent. The government of Ghana's engaged relevant private and public sectors towards implementation of the plan and committed funds to key pharmaceutical companies towards their upgrade. The plan when fully implemented would strengthen the country's policy and capacity in local manfacture of essential medicines including antiretrovirals (ARV's) for a sustained treatment program and position Ghana as a sub-regional export hub.

(ii) The Government in 2014 released GH₵11.67 million as the matching funds in fulfillment of Ghana's High level commitment to the national HIV response and implementation of the National Strategic Plan 2011-2015.

(iii)

V. MAJOR CHALLENGES AND REMEDIAL ACTIONS

Progress on key challenges reported in 2013 report

The main challenges faced that hampered implementation of national response were:

Constraints identified in 2013 report

i. Issues relating to the procurement and commodity security system led to delays and anxieties among implementers and beneficiaries of programs. The country's stringent procurement system is still yet to run seamlessly to allow for smooth program implementation

Progress made in resolving Constraints identified in 2013 report

- Finalization of HIV Commodity Supply Chain Master Plan
- Steering Commitment for the SCMP formed – June 2014
- Electronic-Logistic Management Information System (E-LMIS) Developed:
- Pilot on Private sector involvement in regional distribution accepted for roll-out
- Over 943 regional and facility level staff trained in use of the National Standard Operating Procedures (SOPs) for commodity management
- National Health Commodity Supply Agency in place and operational.
- Regional and district level supervisors have been trained by MoH/GHS in collaboration with USAID/DELIVER Project to carry out HIV logistics supportive supervision as part of an integrated process on a quarterly basis.
- High level advocacy for local production of ARVs.

Challenges faced throughout the reporting period of 2013 to 2014

PMTCT

i. Stock out of PMTCT commodities including RTKs, ARVs, and reagents for CD4 counts machines greatly retards progress towards reaching program targets. RTKs and CD4 count reagents were stocked out at a number of the facilities visited by the Mid Term Evaluation team . In key informants discussions, very inadequate quantities of the commodities procured due to lack of funds was the major culprit for the stock outs. This is particularly important as Ghana is poised to adopt the WHO Option B+ as the default for its PMTCT program.

ii. Whereas PMTCT Prong 3 was adequately carried out, the implementation of Prongs 1, 2, and 4 are weak. Key challenges include weak male involvement in PMTCT and inadequate skills to deliver Prong 4

iii. The coordination roles for Family Health Division (FHD) and NACP have not been well defined resulting in leadership-related challenges as both have mandates that cover the provision of services to pregnant women and to HIV infected mothers and their HIV exposed babies. There is great need to clearly define roles for of NACP and FHD and the coordination structures required to collaboratively coordinate the PMTCT program.

iv. Full integration of SRH and HIV services has not been attained at some facilities and referrals still being done even within the same facility

v. Appropriate human resource mix continues to be a challenge: generally the number of midwives are inadequate to provide optimum PMTCT services, whilst not all the large number of counselors trained are actively involved in service delivery

vi. Health facilities not taking up the maintenance costs for the HIV and AIDS equipment and some Stakeholders' Committees are not fully addressing the technical and operational challenges of the program.

vii. Over dependence of the PMTCT program on the GF funding is a major threat to program continuation should the funding come to end and no alternative funding has been secured especially when Ghana adopts Option B+.

viii. Lack of male involvement in PMTCT hinders access to PMTCT services by their spouses.

HTC

i. Erratic HIV test kits supply for a considerable period during the period under review did not only compel the HIV program to abandon the KYS campaign that contributed immensely to access to the HTC services, but also may contribute to people losing interest in HTC, as those who need services cannot get them. It restricts HIV testing and counseling to essential activities such as testing pregnant women and ensuring blood safety. Community mobilization was reduced following the interruption of know-your-status campaigns and HTC sites could not be scaled up as planned. Staff training in HTC was also curtailed severely.

BLOOD SAFETY

i. Lack of funds to embark on sustained blood donation campaigns as well as inability of centers to recruit and maintain VNRBD is a major challenge facing most of the blood transfusion centers especially in the rural areas.

ii. Blood banks are almost always near empty and family members as well as paid donors unfortunately step in almost always to save the situation.

iii. Finally the issue of whether to screen prospective blood donors for HIV before bleeding or screen donated blood for HIV in some of the centers lingers on.

PEP

i. PEP, like PMTCT is a top priority even in situations of low ARV availability. It is a serious challenge when there is stock out of ARVs. Many PEP cases are often not attended to.

ii. Some professional staffs that have been exposed to the risk of HIV infection may be reluctant to report at ART centers for PEP.

iii. Delays in reporting instances of rape and sexual violence to the police within 72 hours of the occurrence are a big challenge to the effectiveness of the PEP program.

TREATMENT

i. Inadequacy of trained staff (prescribers) to manage patient is a major challenge. During the period under review very few health workers received STI training for lack of funding. Organized public education by health the system and other agencies are on the decline. Educational materials carrying STI prevention massages are scarcely seen in either the stores of health educational units of the district and regional health directorates, the NGOs as well as in the health facilities.

ii. None or delayed reporting of data couple with high risk of data errors during transfer of data from primary source to the reporting forms characterizes STI documentation. Although guidelines for treatment exist, there is no structured training manual for either trainees or facilitators, which impede training process.

iii. Shortages and erratic supply of ARVs and CD4 count reagents which had characterized the ART program operations was less marked during the reporting period 2013 and 2014..

iv. Where ARVs were available at the Central Medical Stores, coordination between the CMS and the lower levels and transportation issues was a challenge.

v. Roll-out the new HIV and TB co-infection treatment guidelines provided for health workers, was not enough for the various categories of service providers working in ART sites across the country due to lack of funds.

vi. Heavy workload for staff at ART sites was a challenge for the few staffs that were expected to combine the screening process with their routine schedules

CARE AND SUPPORT

i. The WFP food supplementation program to food insecure households in the 3 northern regions and in the Eastern region is limited to only 600 patients and up to 4 dependents.

ii. Food supplementation should continue to be administered alongside the ARVs at the clinics as efforts to move the food rations away from the ART sites are not in the interest of the Patients.

iii. The present implementation guidelines which require PLHIV to be weaned off after six months of intervention once they have improved nutritional status (BMI > 18.5kg/m$^{2)}$ is difficult to be strictly adhered to and some beneficiaries are supported for a year or more.

REDUCING STIGMA AND DISCRIMINATION

i. .

ii. Criminalization of sex work, MSM, homosexuality, and lesbianism by the Ghana Constitution remains a challenge. The general anti-discrimination laws and policies notwithstanding, sex work, men who have sex with men (MSM), homosexuality, and lesbianism are criminalized and stigmatized. Persons engaged in these acts face hindrances to accessing HIV prevention, treatment, care and support services.

iii. The absence of specific HIV Legislation that provides clear and substantive rights and protections for PLHIV and KPs continues to be a challenge to the national response.

iv. Persisting community and family level stigma continues to be a challenge even though NAP+ Ghana and GHANET member testify to a significant reduction now compared to a couple of years ago. Rivalry in polygamous unions continues to be a key source of stigma and discrimination and a serious challenge to HIV status disclosure.

v. Perceived opposition to some appointments to higher political offices by some religious leaders on account of some public figures being perceived as defenders of the rights of MSM, lesbians, and Sex Workers continues to stigmatize PLHIV and KPs.

vi. Some churches and mosques are asking for pre-marriage HIV couple testing before blessing marriage: Some religious leaders' intolerance of PLHIV and rights of MSM and Sex Workers on sexual orientation grounds remains a huge and continuing challenge to the national HIV response. These are in contradiction with issues in the current revised National HIV, AIDS and STI policy document.

vii. Continuing mandatory pre-employment HIV screening in security agencies is a challenge to reducing stigma and discrimination: Security agencies including the military and police service use HIV status as a screening tool in their recruitment processes and peacekeeping assignments.

viii. Low HIV prevalence of 1.30% in the general population may promote complacency on the passage of HIV and AIDS Law. Delay in passing the HIV legislation is a threat to the national HIV response.

ix. Lack of integration of HIV and other OPD services at virtually all ART sites where Models of Hope provide voluntary support is a serious program weakness that needs immediate attention
x. The vast majority of facilities do not provide stipend for Models of Hope volunteers working at ART sites. This is a challenge to ensuring treatment adherence and loss to follow-up especially for hard-to-reach PLHIV

IMPACT MITIGATION

i. The LEAP program not covering all needy households: The Operations Evaluations Report of LEAP indicated about 10 percent of LEAP households had not heard of LEAP and a further 10 percent had never received a LEAP payment
ii. Implementation of LEAP has been inconsistent. Over this 24-month evaluation period households received only 20 months' worth of payments, however the implementation of NHIS coverage among LEAP households was impressive, with 90 percent of LEAP households having at least one member enrolled in NHIS at the follow-up.
iii. Difficulty in excluding beneficiaries with BMI greater than 18% from the WFP food assistance program for fear of re-emergence of malnutrition once they return to food-insecure households

Remedial Measures proposed
PMTCT

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- Adequate funding must be made available for the procurement and supply of commodities such as RTKs, CD4 reagents, and ARVs as well as to train staff in adopting and rolling out Option B+ for Ghana's PMTCT program.
- Conduct bottleneck analysis to identify and respond to factors responsible for the low coverage of pediatric PMTCT services.
- PMTCT must be included in the pre-service training of health care workers especially midwives, doctor and pharmacists must be implemented without delay to reduce the need for in-service trainings that are expensive, and also to ensure that staff are ready to support PMTCT services as soon as they enter the service.
- Stakeholders must be provided with the operational challenges at meetings and also endeavor to visit PMTCT implementing facilities to enable them get first hand information of program challenges
- PMTCT Prongs 1 and 2 are broader and are within the program areas for NACP and FHD. Therefore NACP and FHD must collaborate to ensure comprehensive PMTCT services are delivered and jointly supervised by both NACP and FHD.
- Other projects such as Her Excellency's the First Lady's OAFLA Advocacy project on PMTCT that also addresses Prongs 1, 2 and 4 should be supported and encouraged.

HTC

- Resources should be mobilized urgently to procure HIV test kits to ensure that more test kits are made available at all times for an effective implementation of the program.
- Monitoring and supervision of especially, program commodities such as HIV test kits and drugs should be intensified to ensure that they have long expiring dates and those with shorter durations are dispense first.

- Task shifting of staff to provide HTC at the facilities coupled with onsite training of staff on HTC are cost effective strategies, which should be encouraged to ensure that targets are met.

Blood Safety
- Efforts should be made to reach the annual target of collecting and screening 250,000 units of blood
- The NBTS prefers the Ag-Ab Combo test kit or ELISA for screening donated blood for HIV as it reduces the window period for HIV infection. This test kit should be used in all blood screening centers, as the inability to use these kits in some facilities makes blood transfused in these facilities unsafe.
- National Blood Service should intensify monitoring of blood collection and screening by unaccredited facilities as this increases the risk of Transfusion Transmisible Infections (TTI) transmission.
- The sudden removal of incentives for VNRBD especially in rural areas who are used to receiving these incentives should be reconsidered. The populace should be educated on the need to donate voluntarily before this policy is embarked upon by NBTS.
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PEP
- Reminder should be issued from NACP to all ART and PMTCT sites about their responsibility to provide PEP services backed by supervision and monitoring.
- ARVs must be made readily available at all ART and PMTCT sites countrywide to ensure people who need PEP services can receive the services-

Treatment
- Syndromic management of STIs at the primary care level are workable at that level and have great potential to increase coverage and performance and therefore should continue.
- The data on STI needs to be carefully evaluated with a view to identifying bottlenecks and providing remedies.
- Monitoring and supervision on treatment of STIs should be intensified ensuring that doctors adhere to the national treatment guidelines.
- Adequate and secured funding should be provided for ARVs and other consumables for the ART program to avoid stock-outs of ARVs and to ensure that patients on ART do not lose faith in the treatment system and also to avoid development of drug resistance.
- Additionally the procurement system in the Ministry of Health should be facilitated to ensure that commodities reach the country on time for use in the health facilities.
- Timely distribution of commodities to the regional medical stores across the country should be addressed.
- It is critical that funds are made available to train more clinicians and prescribers for the existing ART sites and to enable new ART sites to be set up.

Care and Support
- The involvement of nutrition officers at the district and regional levels to run the food supplementation program is laudable and should continue. In situations where PLHIV are weak and cannot get to the ART sites for their food rations, they should be followed up at home by health workers.
- The CHBC program, which is in its inchoate/initial stages should be strengthened. The development of the CHBC policy and guidelines is a plus to the program and should be

widely dessiminated. Storage spaces at the health facilities must be provided to ensure that large stock of food supplement are kept at the facilities for continuous supply.

- The issues of weaning off those who may not need the food supplements anymore should be address
- National Assessment and Counselling Support (NACS) sought to integrate quality nutritional assessment and counselling as a routine service in the care and treatment of people living with HIV (PLHIV) and TB clients through strengthening selected service sites to provide specialized food products for PLHIV and TB clients based on agreed eligibility criteria. This program had been scaled down and must be reactivated as nutrition plays an essential role in HIV/TB manaement

Reducing Stigma and Discrimination

- Intensify the H2H and media campaigns against HIV and AIDS related stigma and discrimination
- Strengthen community capacity enhancement interventions that reduce AIDS related stigma and discrimination
- Strengthen the capacity of the criminal justice system and law enforcement agencies to better respond to violations of the human rights of PLHIV and KPs
- Support the implementation of workplace policies that reduce stigma and discrimination for institutions and organizations that have developed HIV workplace policies and provide technical assistance for those institutions and organizations that do not have HIV workplace policies to develop and implement them.
- Strengthen the integration of HIV and other healthcare services to reduce stigma at the service delivery points.
- Adoption of the ‘M-Friends’ and ‘M-Watchers’ program by other organizations providing services for PLHIV and KPs.
- Peer Education will continue to be an important tool for implementing behavior change interventions among KPs and PLHIV. Peer Education must therefore be strengthened.
- In urban and peri-urban settings, Drop-in Centers should be used as additional sites for providing services for hard to reach PLHIV and KPs.
- The mobile phone and the web are important additional tools for reaching PLHIV and KPs who avoid visiting health and outreach facilities for their services. The use of information communication technologies especially the mobile phone and the web should be evaluated and adapted for wider use if the results show much benefit.
- The newly established DR system and Health Right Desk at CHRAJ head-office should be strengthened and operationalized at the Regional offices
- Anecdotal evidence that female head porters have a higher HIV prevalence than the national average but are not targeted as KPs should be investigated and appropriate action taken

Impact Mitigation

- The LEAP program indicators should be revised to target needy households instead of number of districts as the denominator for the remaining years of the program

Resource mobilization

- There is the need for greater governmental commitment with provision of more resources for HIV is required in the face of dwindling external resources.

- ♣ There is the need to ensure that 0.5% of the District Common Fund is provided for HIV/AIDS activities at the district level and is utilized effectively.
- ♣ Resource mobilization needs to be done to ensure that funds are available for ART in the ensuing years.
- ♣ The private sector and its umbrella organizations should be empowered and resourced to make the private sector a major contributor and participant in the National Response.
- ♣ The newly developed Resource Mobilization Strategy must be fully implemented.

Monitoring and Evaluation

- Capacity should be built in all sectors including the private sector and civil society to ensure the provision of accurate and quality information.
- Information dissemination and sharing between sectors and the GAC should be intensified. All actors should make it a point to provide GAC with information on their activities for effective coordination.
- Ensure that research is commissioned on all UNGASS indicators to address data gaps for better monitoring
- Ensure that the data generated is used for future planning
- Ensure that the implementation of the recommendations is monitored

SUPPORT FROM THE COUNTRY'S DEVELOPMENT PARTNERS

The Executive Director of UNAIDS Dr. Michel Sidibe visited the Ghana AIDS Commission (GAC) Secretariat in Accra as part of his two day visit to the country to engage with H.E. President John Mahama on issues related to the global HIV response. He was welcomed by the Director-General of GAC Dr. Angela El-Adas, Directors of the Commission, Chairman of the Network of persons living with HIV (NAP+), a Heart-to-Heart Ambassador and a seven year-old boy. Dr. Sidibe expressed confidence in Ghana's ability to achieve the goals by 2015 where the world would begin the journey to ending AIDS. The UNAIDS Executive Director encouraged Ghana to build up its capacity to produce antiretroviral medicines and demonstrate Africa's capability of reducing its dependency on foreign products.

In 2012 and 2013 development partners contributed substantially to the national response by the provision of technical and financial support to the Ghana AIDS Commission, the CCM and other implementers in the country.

Partners continued to be actively involved in the committees of the Ghana AIDS Commission especially, in the Research Monitoring and Evaluation, expanded technical working group and various task teams. Partners also provided adequate information on their funding envelope, though there are still some gaps identified.

The key development partners who provide financial support for the HIV and AIDS response in Ghana are The Global Fund for AIDS TB and Malaria, Bilateral agencies such as USAID, GIZ, DANIDA and UN agencies. These funds are provided to the GAC's pooled fund or earmarked funds or directly to implementing partners usually international NGOs, local NGOs or MDAs for implementation.

In 2012 the US government provided funds through GAC/CoAg (Cooperative agreement), University of California San Francisco (UCSF) and Morehouse School of Medicine. The UK government provided funds through SIPAA and GAPP. The EU funded GAC through GIZ, and the UN systems provided funds through World Food Programme and World Health Organisation

Actions that need to be taken by development partners to ensure achievement of UNGASS targets

To ensure the achievement of the UNGASS targets, partners will need to take the following remedial actions**.**

- ♣ All stakeholders must continue to vigorously advocate for the establishment of the AIDS Fund as part of the process to review the GAC Act 613 of 2002.
- ♣ Meanwhile, all stakeholders should continue to urge GoG to honor its commitment to provide additional GHC150 million to support the NSP 2011-15. The monies should be released on time and in full.
- ♣ Also all efforts must continue to increase private sector funding for the national HIV and AIDS response whilst waiting to see the establishment of the AIDS Fund. The success of the national HIV response depends greatly on the capacity to mobilize additional funding from various sources apart from development partners. Thus, organizations should explore opportunities for local fund raising activities in order to improve the long-term sustainability of the national response and reduce reliance on external funding

- ♣ GAC intention to institutionalize the National ADS Spending Assessment is laudable; the NASA for 2012 is being worked on..
- ♣ In order to ensure greater compliance to the accountability guidelines for financial resources and have an effective system for the national response, an oversight committee similar to that of the Ghana Country Coordinating Mechanism of the Global fund (CCM) should be established for resource tracking. Alternatively, the mandate of the CCM itself could be expanded to cover the national response.
- ♣ Budgetary provisions should be made for training resource persons. Building the capacity for specialized personnel in areas such as financial management is essential. Training would improve the capacity to properly manage and account for disbursed funds, which would lead to producing accurate financial reports on time. This would eliminate delays in the subsequent release of additional funds.
- ♣ There is the need to improve the communication channels and flow of information between organizations, particular between government institutions and the NGOs and CSOs. This would improve coordination and management of funding resources for the national HIV response.

MONITORING AND EVALUATION ENVIRONMENT

The Ghana AIDS Commission is responsible for monitoring and evaluation (M&E) of the National HIV/AIDS response. The national M&E system is based on the principle of one national M and E system. It has six defined sub-principles:

- One National M & E Unit
- One national multi-sectoral M & E plan
- One national set of standardised indicators
- One national level data management system
- Effective information flow
- National M&E capacity building [83]

This M&E function is carried by the Research, Monitoring and Evaluation Division. A research, monitoring and evaluation technical committee continues to support the GAC. It is comprised of GAC, academic experts, development partners, M&E specialist, MDAs, NGOs and PLHIV, USAID, UNAIDS, UNICEF, University of Ghana, University of Cape Coast, Ministry of Health, Ministry of Food and Agriculture, Noguchi Memorial Institute for Medical Research, NACP, WAPCAS, SHARP, GIZ and representative from PLHIV. The RM&E committee is responsible for monitoring a national set of indicators and report on of the national response.

The national HIV M&E system is constructed along the 12 components of a good national M&E system promoted by UNAIDS as an international best practice worthy of adaptation by national HIV programs. Overall, the national HIV M&E system has helped in generating Strategic Information (SI) that has driven much of the national and sector planning and decision-making on HIV and AIDS in the first half of the implementation of the NSP 2011-15. In particular, strategic information generated by the IBBSS and other studies on FSWs, MSM, and prisons have been instrumental in targeting key populations with HIV prevention information and services during the period under review. Most of the planned M&E activities were implemented or are steadily under way. The building of “one M&E system” is becoming a reality with the GAC and NACP firmly directing the processes. Work on the

National AIDS Spending Assessment (NASA), the Gender and HIV and AIDS Review, and the Stigma Index Study, which began in late 2013, will be completed during the early part of the second half of the NSP implementation. Key activities that provide important SI for the national HIV response, which were planned but not carried out (mainly due to lack of funding) include the Demographic and Health Survey, the AIDS Indicator Survey, and the Multiple Indicator Cluster Survey (MICS). These will have to be carried out in the last 2 years of the NSP.

The MTE noted some progress has been made in efforts to harmonize and integrate data platforms and to build a strong HIV M&E system at the national, regional, and district levels. GAC adapted the Country Response Information System (CRIS) data management software, which, since 2012, is widely used by all HIV M&E focal persons in Ministries, Departments, and Agencies (MDAs) at the national level and Metropolitan, Municipal, and District Assemblies (MMDAs) and some CSOs at the decentralized levels. Additionally, the GAC has established Technical Support Units (TSUs) in 8 of the 10 regions with M&E capacity to support the decentralized response. However, lack of sustained funding for the core functions of the decentralized response coordination and monitoring is hampering the work of the TSUs. The GHS operates the District Health Information Management System 2 (DHIMS2) that is web-based and has capability to and does incorporate clinical HIV and AIDS clinical data. The MTE suggests CRIS and DHMIS2 databases be harmonized and aligned so that SI obtained from both databases are similar; furthermore the CRIS database should be the repository of all key SI on HIV and AIDS meant for the public domain and GAC should publish a bi-annual factsheet on HIV and AIDS in Ghana. The GHS operates the District Health Information Management System 2 (DHIMS2) that is web-based and has capability to and does incorporate clinical HIV and AIDS clinical data.

To further strengthen M&E capacity for the national HIV response, the GAC in collaboration with CDC, Morehouse School of Medicine Georgia USA, and School of Public Health University of Ghana have rolled out the Ghana HIV and AIDS M&E (GHAME) program, a 2-weeks training course with curricular modules for basic, intermediate, and advanced M&E, to produce M&E Trainer of Trainers (T0T) and individual M&E officials through a series of workshops and fieldwork. GHAME is complementing other M&E capacity building efforts including workshops and on-the-job trainings provided by stakeholders such as GAC, NACP, and other development partners.

The M&E system is weak at the community level. For example, an M&E assessment of community level HIV activities carried out in Brong Ahafo and Eastern Regions in 2012 by GAC characterized the M&E capacity of most CSOs as weak: the M&E functions performed were limited to data collection and collation; there was limited capacity in data analyses, interpretation, and use. During the period under review, the GAC, NACP, and Development Partners made strenuous efforts to improve community level M&E through strengthening the capacities (knowledge and skills, human, material, and financial) of large national NGOs that will, in turn, cascade the capacity strengthening to community level affiliates and implementing partners including local NGOs, FBOs, and CBOs. FHI360, NAP+ Ghana, GHANET, WAPCAS, PPAG, CHAG, ADRA, and SWAA-Ghana are among the large CSOs providing leadership in this area. Strengthening the community system through support to building the capacity of “lead CSOs” must be strengthened in the second half of the implementation of the NSP.

Many CSOs are playing key roles in the national HIV response especially at the community level. With the exception of a few CSOs funded by GAC, most CSOs do not report their activities to the GAC and therefore the results of these activities are not captured in the national M&E database. For all stakeholders whose activities are captured by the two big but separate databases (CRIS operated by GAC and DHMIS2 operated by MOH/GHS), stakeholders expressed great concern about the less than sterling quality, consistency, and validity of data and strategic information for the national HIV response.

Table 40 Challenges faced in the implementation of a comprehensive M&E system

CHALLENGES	RECOMMENDATIONS
M&E Structure	
Unavailability of clear written roles	Provide clear written roles for CSO M&E staff
	Revise the roles of DFPs and key stakeholders
M&E position occupied by inexperience staff	Define a clear cut standard on what capacities and capabilities to be considered as M&E persons
	M&E training should include the permanent staff of CSOs (ie. Director, Project Managers etc)
Institutional capacities (Funds, Logistics)	National allocation through GOG should continue
	1GAC to advocate for increased resources for HIV M&E
Funds:	
Limited funding for M&E activities (including hiring right calibre of staff and volunteers).	MDAs and CSOs should embark on resource mobilization to support local level HIV activities.
	Legislate the national allocation of resources for HIV activities as in the case of disability fund
Logistics:	
Lack of computers and accessories	Necessary equipment and tools should be supplied to smaller NGOs by their larger CSOs for specific projects and recalled when project ends
Lack of customized data processing tool	GAC to assist CSOs and DFPs acquire and use customized database tools
Human Capacity for HIV M&E	
Lack of qualified M&E personnel	Lead NGOs should have M&E officers with tertiary level qualification and requisite M & E skills
High turnover of staff of CSO	Improve staff motivation in the area allowances and remuneration
High turnover of DFPs	Ensure job security of M&E staff
Inadequate HIV M&E knowledge and skills of DFPs and CSO	DFPs should have people who will understudy them and take over when they are transferred
Inadequate specific training of some staff & PEs	Establish a system of skill transfer through systematic and comprehensive handing over of documents and materials GAC should have an arrangement with learning institutions to provide M&E Training. Eg. GHAME

	Identify and train and maintain a pool of M & E experts from the various regions to train newly appointed DFPs and CSO M&E officers
	Standardize training manual and M&E tools as well as number of days required for training
Supervision, Monitoring and feedback	
Inadequate quality supervision and mentoring	Provide large CSOs with skills for providing hands-on training in monitoring for the local CSOs
Lack of written feedback	Build capacity to improve feedback reporting
Data Quality	
Weak capacities in conducting data checks/auditing	Train M & E staff of large NGOs in data auditing
	Undertake periodic data audit to strengthen CSO 1c. capacity in maintaining quality data Build capacity of large NGOs for effective data auditing of CSOs data
	Provide standard data quality assessment tool
	Train M&E staff in data management
Data Processing & Analysis	
Weak capacities in data processing and analysis	Provide training in data processing and analysis
No documentation kept on data aggregation, analysis and or manipulation steps followed	Provide simple and user friendly database for effective data processing and analysis
	Provide training and monitoring in the use of database
Reporting	Reporting
1. Late report submission	Review reporting deadlines of CSOs
	Provide motivation for early and quality submission of report and sanction late and poor quality report submission
Data Storage and Security	
Hard and electronic copies of reports not kept by all.	Develop and maintain hard and soft copies of reports
Data processing procedures/tallies not kept	Build capacity in data storage and security
Weak/Inadequate filing system (No systematic way of organising data, completed PE registers not labeled for easy identification and retrieval.	
Back-ups of data and reports are not always kept	Establish data storage, filing and retrieval procedures for auditing purposes
	Monitor to ensure systematic organisation of data and reports for easy retrieval and use

	Provide back-up units for DFPs and CSOs.
	Provide guidelines on instituting and maintaining back-up system at the community level.
	Monitor the use of back-up units to ensure that updates are maintained.
Promotion and Use of data	
Lack of District HIV Situational Analysis Report	Build capacity in data planning and use (including the development and implementation of data use plans).
District level HIV annual action plans (2011 or 2012) not available	Develop data use plan to facilitate dissemination of sub-national data
Inadequate capacity in developing action and M & E plans	Provide guidance for the development and implementation of advocacy and communication plans for improved resources for M & E.
Lack of display of relevant HIV data	Review/assess district level HIV situation periodically to track HIV status of the district
	Provide capacity in the development of Action and M & E plan at the sub-national level Display relevant HIV programme data at CSO, DA

CONCLUSION

Strategies and activities employed in NSP are working and the eMTCT program is well on course to achieve the set target of less than 5% of HIV exposed infants will have HIV infection by 2015, if only adequate funding is secured to procure adequate volumes of pediatric ARVs to prevent stock outs. However the percentage of infants on ARV prophylaxis is very low. There is urgent need to re-strategize on the provision of ARV prophylaxis for HIV exposed infants.

In terms of the HTC program there are indications that the current strategies and activities have worked to achieve the set goals and should be continued. The data trend gives clear indications that the target set for the number of persons tested and received results could easily be achieved barring a prolonged stock-out of RTKs.

For Blood Safety the data trend shows that target set for screened blood could not be achieved for any of the years in the period under review. There are indications that unless efforts are doubled the target for 2013 is not likely to be achieved. This notwithstanding, it is commendable that an average of more 75.0% of the set target was achieved for the years under review.

Although the achievement of 85.4% out of the 90% target for PEP by 2013 mid-year is commendable, failure to achieve the targeted 90% is disturbing. This is because any ART and eMTCT sites where ARVs are dispensed should be able to offer PEP services.

Using the old national guidelines for the management of STI, the performance was below target for both 2011 and 2012. With the new guidelines now in place, the targets for 2012 will be met. The performance of the ART program in Ghana is improving year on year despite severe shortfall in funding. It is possible to meet the NSP ART targets by 2015, but much more needs to be done. The GoG has always been able to find emergency funding for the purchase of ARVs usually when stock outs occur and stakeholders are concerned and agitated. This is no good way to run the ART program. Adequate and secured funding has to found to ensure there are no stock out of ARVs and other consumables for the ART program. The new and simplified tool for screening PLHIV for TB has significantly improved the chances of reaching all the targets for screening for TB in people infected with HIV. This simplified tool is responsible for the HIV/TB collaborative program to exceed the targets for the last 2 years,

All stakeholders agree that stigma and discrimination reduction activities exist in all the districts in the country. They further agree that the level of HIV and AIDS related stigma has decreased over the last few years. In the same vein, all stakeholders agree that the level of stigma and discrimination is still high and poses a significant hindrance to the delivery of quality HIV and AIDS prevention, treatment, care, and support services to PLHIV and KPs. All efforts must therefore continue to reduce AIDS and KPs related stigma and discrimination using mutually re-enforcing strategies of meaningful involvement of people living with HIV and AIDS (MIPA), H2H campaign including media campaigns, CCE methodology, capacity building on AIDS-related human rights violation for the criminal justice system and law enforcement agencies, and implementation of HIV workplace policies.

Existing normative laws are not providing adequate protection that safeguard the human and legal rights of KPs and PLHIV to HIV and AIDS prevention, treatment, care, and support services in the face of criminalization on the grounds of sexual orientation of MSM and lesbians and police harassment of especially sex workers. The work of M-Friends and M-Watchers in defending the rights of PLHIV and KPs is important but does not have the force of law. There is therefore the urgent need for an HIV specific law that will protect the rights of KPs and PLHIV and that can be used to prosecute violators of these rights.

As significant levels of stigma and discrimination are preventing many PLHIV and KPs from assessing services at many health facilities, service providers have had to develop innovative service delivery mechanisms to reach these PLHIV and KPs. Key innovative service delivery approaches include Drop-in Centers and use of information communication technologies (the mobile phone and the web) to provide services for hard to reach KPs and PLHIV.

The LEAP program is an excellent program that is making significant improvements in the quality of life of poor households in Ghana including AIDS-affected households. However, the LEAP program will not be able to meet its targets by 2015 unless significant additional funding resources are secured to support program activities in the second half of the NSP implementation. The LEAP Program provided supported to nearly 215,000 needy households between January 2011 and September 2013. The WFP Nutrition Support for PLHIV on ART and their food-insecure households is a wonderful band-aid programme for the small number of malnourished ART patients who need food as part of the treatment program. The Programme provides 6,000 ART patients and 24,000 household dependents with food ration each year. However, challenges faced by government in the transportation and distribution of food commodities severely hampers the implementation of the programme.

The provision of free external support to households caring for OVC that meet their (OVC) basic needs has been integrated as a key part of the LEAP program’s conditional cash transfer to OVC caregivers, a much easier way of monitoring and ensuring assistance gets to needy OVC. The government’s free school-feeding program also ensures all school children, including OVC, have at least one hot meal a day. However, CSOs especially FBOs and CBOs continue to provide undocumented and often sporadic external support to needy OVC. The NSP objective of providing funding for PLHIV to start income generating activities was not implemented based on experiences from a similar World Bank supported project, which ended in the early months of the beginning of the NSP that found the practice to be stigmatizing and the loan repayment success rate very poor. Instead, two government sponsored pro-poor social protection programs provide employable skills training (LESDEP) and microfinance and small loans (MASLOC) to poor people, including PLHIV.

This GARP report has provided information for the country and suggests the way forward that national authorities need to take, to achieve the national targets. The implementation of these recommendations will provide impetus to reducing the transmission of HIV and achieving Universal Access and the Millennium Development Goals.

ANNEX 1 CONSULTATION/PREPARATION PROCESS FOR THE COUNTRY REPORT

Desk review:

- Background documents on the HIV epidemic and response in Ghana and relevant international documents were reviewed. Documents included:
- Strategic documents; National Strategic Framework 2011 – 2015. Annual Programme of Work 2012 and 2013
- Programmatic Reports: Ghana AIDS Commission’s Monitoring and Evaluation Report, 2008, National AIDS Control Programme, Annual reports,
- Population based survey reports: Ghana Demographic and Health Survey 2003 and 2008,
- Mid-Term Evaluation report of the National HIV & AIDS Strategic Plan 2011 -2015
- Sub-populations survey reports; HIV Sentinel Surveillance Report 2012 through to 2013, Multiple Indicator Cluster Survey (MICS) 2011, Modes of Transmission Study Report. Behavior Surveillance Survey 2006, The Men’s Study and the Integrated Bio-behavioural Survey (IBBS) 2011.
- Specialized surveys in specific population groups, programmatic data, National AIDS Spending Assessment 2009, 2010 and 2011 and 2013
- Policy and Programme Reviews: National Commitments and Policy Instrument (NCPI)
- Epidemic and response synthesis, programme data and other relevant data sources.

Key Informant Interviews were conducted with Ghana AIDS Commission (GAC), National AIDS Control Programme (NACP), Key Ministries Departments and Agencies, NGOs, UN agencies, Bilateral Partners, development partners, CCM, private sector among others, especially in completing the NCPI and as part of the MTE.

Stakeholder consultations and preparation of the Special GARP 2014 report: A stakeholder workshop was organized with participants from the Key Ministries, UN agencies, bilateral and multilateral development partners and the civil society organizations reviewed the various aspects of the HIV response to validate the draft report. A draft Country AIDS Response Progress report was prepared and presented at a **stakeholder validation forum** on 25th March 2015 for validation and consensus building under the leadership of the GAC Research, Monitoring and Evaluation (RM&E) Committee. Feedback from the consultative forum was used to finalize the report.

Data collection was facilitated by relevant data collection tools including the guidelines on construction of core indicators by NACP, CSOs and other stakeholders..

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