COUNTRY AIDS RESPONSE PROGRESS REPORT - GHANA

REPORTING PERIOD

JANUARY 2012 – DECEMBER 2013

SUBMISSION DATE: 31ST MARCH 2014

Prepared by:

GHANA AIDS COMMISSION

TABLE OF CONTENTS

Contents

TABLE OF CONTENTS 2

LIST OF TABLES 5

TABLE OF FIGURES 6

ACRONYMS 7

1 STATUS AT A GLANCE 11

1.1 Introduction 11

1.2 Methodology 12

1.3 Status of the Epidemic 13

1.4. The policy and programmatic response 15

1.5. GARP Indicators 2012 - 2013 25

II. OVERVIEW OF THE HIV AND AIDS EPIDEMIC 29

III NATIONAL RESPONSE TO THE HIV AND AIDS EPIDEMIC 39

National Strategic Plan 39

Non-Clinical HIV Prevention 39

Background 39

TARGET 1. HALVE SEXUAL TRANSMISSION OF HIV BY 2015 40

HIV Prevention among Key Populations (KPs) 41

HIV prevention, protection, treatment, care, and support services for KPs 44

Create an enabling environment for (KPs) MARP interventions 48

HIV prevalence in young people 50

HIV Prevention among Young Persons 50

Workplace HIV prevention interventions 55

Clinical HIV Prevention and Treatment, Care, and Support 56

Introduction 56

Prevention of Mother-to-Child Transmission of HIV (PMTCT) 56

TARGET 3. ELIMINATE MOTHER-TO-CHILD TRANSMISSION OF HIV BY 2015 AND SUBSTANTIALLY REDUCE AIDS-RELATED MATERNAL DEATHS 56

Early infant diagnosis 58

Mother-To-Child Transmission of HIV (Modelled) 59

HIV Testing and Counseling (HTC) 62

Blood Safety 64
Universal Precautions and Post Exposure Prophylaxis (PEP) 65
Sexually Transmitted Infections (STIs) 66
Antiretroviral Treatment (ART) 67
TARGET 4. HAVE 15 MILLION PEOPLE LIVING WITH HIV ON ANTIRETROVIRAL TREATMENT BY 2015 67
HIV treatment: antiretroviral therapy 67
Twelve month retention on antiretroviral therapy 70
HIV and TB Collaboration 73
TARGET 5. REDUCE TUBERCULOSIS DEATHS IN PEOPLE LIVING WITH HIV BY 50 PER CENT BY 2015 73
Co-management of tuberculosis and HIV treatment 73
Care and Support for PLHIV 76
Mitigating the Socio-Economic Impact of HIV and AIDS 77
Reducing Stigma and Discrimination 78
Protecting the Rights of KPs to access HIV and AIDS Services 82
Protecting the rights of Ghanaians including KPs and PLHIV 86
Ensuring access to services for hard-to-reach PLHIV and KPs 88
Reducing poverty in AIDS-affected households 92
General social protection programs that could benefit eligible AIDS-affected households. 95
Political Support and Leadership 97
National AIDS Spending Assessment 97
The Policy And Coordination Environment 102
IV. BEST PRACTICES 105
Prevention 105
Treatment, Care and Support 105
Reducing Stigma and Discrimination 105
Impact Mitigation 106
Political Leadership and commitment 106
V. MAJOR CHALLENGES AND REMEDIAL ACTIONS 108
Progress on key challenges reported in 2012 report 108
Challenges faced throughout the reporting period of 2012 to 2013 108
SUPPORT FROM THE COUNTRY’S DEVELOPMENT PARTNERS 114

MONITORING AND EVALUATION ENVIRONMENT ... 116
CONCLUSION ... 122
ANNEX 1 CONSULTATION/PREPARATION PROCESS FOR THE COUNTRY REPORT ... 124
ANNEX 2 NATIONAL COMMITMENTS AND POLICY INSTRUMENT (NCPI) ... 128
BIBLIOGRAPHY ... 131

LIST OF TABLES

Table 1 Indicator Data 25
Table 2 Percentage of women & men with more than one sex partner in last 12 months & mean lifetime sex partners 35
Table 3 Percentage of men and women who have had sex disaggregated by age 35
Table 4 Summary of HIV estimates up to 2016 36
Table 5 Projected number of orphans due to AIDS 36
Table 6 Non-Clinical Prevention: Key Indicators among General Population 53
Table 7: PMTCT services in 2011 to 2013 57
Table 8 Percentage of HIV infected mothers on ARVs: 2011 to mid-2013 61
Table 9: Annual Number of Clients Accessing ART Services 69
Table 10 Proportion of patients on treatment based on all who need ART 72
Table 11 TB-HIV Services for TB patients (2005-2010) 73
Table 12 positive incident TB cases that received treatment for both TB and HIV in 2012 74
Table 13 Spending Priorities, 2010- 2011 98
Table 14 Relative spending on key priorities by each funding agent 99
Table 15 Contributions to spending on each key priority area by Funding agent 100
Table 16 AIDS expenditure by Category 2010 - 2011 100
Table 17 HIV and AIDS related Spending by Beneficiary Groups, 2010 (US$) 101
Table 18 Challenges faced in the implementation of a comprehensive M&E system 118

TABLE OF FIGURES

Figure 1 Median HIV prevalence 2000-2012, with linear trend 30
Figure 2. Regional HIV Prevalence 2012 30
Figure 3 HIV Prevalence by Age Group and Year 2008 - 2012 31
Figure 4 Distribution of new infections by modes of exposures 32
Figure 5 Trend of HIV prevalence in FSW in Ghana in 2006 and 2009 38
Figure 6 : Female sex workers reached (2011-2013) 45
Figure 7 Number of NPPs reached with HIV prevention information & services 2011-2013 ... 45
Figure 8 Number of MSM Reached (2011 to June 2013) 46
Figure 9 Number of KPs who Received HCT and STI services in 2011 and 2012 47
Figure 10 HIV Prevalence Trend in 15 -24 Age Group, 2004 - 2012 50
Figure 11 PMTCT Service Data 2008 - 2013 58
Figure 12 Number (%) pregnant women who tested for HIV and know their results: 2011 to 2013 60
Figure 13 The number and % of HIV exposed infants on prophylaxis for PMTCT 61
Figure 14 Sex distribution of people accessing HTC services 2009 to 2013 63
Figure 15 Cumulative number of facilities offering HTC services: 2010-mid-2013 63
Figure 16 Units of donated screened blood: 2010 – mid2013 64
Figure 17 Number/% of persons treated for STI according to the national guidelines: 2009 to mid-2013 67
Figure 18 Percentage of adults and children with advanced HIV on ART in 2006 to 2012 68
Figure 19: The number of male and females initiating ART in 2003 to 2013 69
Figure 20 Cumulative establishment of ART Sites 2010-2013 71
Figure 21 Number of patients on ART based on Funding Available: Target vs. Actual 72
Figure 22 PLHIV screened for TB: Planned vs. Actual 2009-mid-2013 75
Figure 23 Overview of Spending by Beneficiary Group, 2010 101
Figure 24 NCPI SUMMARY SCORE SHEET 2005 - 2013 130

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
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
MOWAC	Ministry of Women and Children Affairs
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
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
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
PMTCT	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
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 Program
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,
    d. Mid-Tern Evaluation report of the National HIV & AIDS Strategic Plan 2011 - 2015
    e. Sub-populations survey reports; HIV Sentinel Surveillance Report 2012 through to 2012, Multiple Indicator Cluster Survey (MICS) 2011, Modes of Transmission Study Report. 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 2009, 2010, 2011.
    g. Policy and Programme Reviews: National Commitments and Policy Instrument (NCPI)
    h. 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, especially in completing the NCPI and as part of the MTE.
3. **Stakeholder consultations** and preparation of the Special GARP 2014 report and the NCPI: Two Stakeholder workshops was organized under the guidance of GAC with participants from the Key Ministries, and government sector representatives on the one hand and UN agencies, bilateral and multilateral development partners and the civil society organizations on the other. They reviewed the various aspects of the HIV response and completed relevant sections of the NCPI.
4. **Data collection** was facilitated by relevant data collection tools including the guidelines on construction of core indicators by NACP, CSOs and other stakeholders..
5. A draft Country AIDS Response Progress report was prepared and presented at a stakeholder **validation forum** on 27th March 2014 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) 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 1-3. 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 and 1.7% in 2012[1]. 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 also for 2011, and 1.37% for 2012.

The median HIV prevalence for 2012 as determined by the HIV Sentinel Survey is 2.1% (Confidence Interval 1.55-2.59).

The HIV prevalence in Ghana varies with geographic areas, gender, age and residence. In 2011 the lowest was Adibo 0.0%, and the highest was Cape Coast with 9.6%. In 2012 the HIV site prevalence ranged from 0.2% in Nalerigu (Urban) to 10.1% in Agomanya (Urban). 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 in the survey following its momentary displacement by the Cape Coast site in 2011. This with a prevalence of 3.6%, 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 1.9%. Regional prevalence therefore ranged from 3.6% in the Eastern region to 0.9% in the Northern region. Overall the mean and median prevalence in urban areas exceeds the rural prevalence.

In 2012 the highest prevalence was recorded within the 35-39 year age group (3.3%) followed by the 40-44 year age group (3.2%), and the least prevalence of 0% was within the 40-49 year age group. Prevalence for the age group 15-19 years was 0.7% and that among young people 15-24 years, which is used a proxy for new infections, was 1.3%.

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

[1] GHS 2012 *NACP Annual Statistics 2012*

[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.*

study and the IBBS, 2011)[3] in key affected populations show that prevalence among FSW is 11.1% overall and for MSM 17.5%.

The National HIV Prevalence and AIDS Estimates Reports for 2011 to 2016 show the national HIV response is making modest progress. In 2012 and 2013, 235,982 and 231,205 people respectively were living with HIV. In 2012 this comprised of 101,759 males and 134,223 females, representing 43% and 57% respectively. In 2013 the numbers were estimated at 98,442 males and 132,763 females, representing the same proportions.

The number of new HIV infections has reduced from 12,077 in 2011 to 7,991 in 2012; adults contributed 89% and children 11% of new HIV infections in 2012 and young people 15-24 years of age contributed 28% (2,236 of 7,991) of new HIV infections in 2012, which is significantly lower than the 37% (4,438 of 12,077) reported in 2011. In 2013 the number of new HIV infections has to 7,323; adults contributed 90% and children 10% of new HIV infections. Young persons 15-24 years of age contributed 28% (2,044 of 7,323).

The estimated number of mothers in need of Prevention of Mother to Child Transmission of HIV (PMTCT) reduced from 10,762 in 2011 to 9,479 in 2012 and 8,907 in 2013.

The estimated number of patients needing Anti Retroviral Therapy (ART) also dropped from 114,972 in 2012 to 122,758 in 2013. Of these 14,761 and 13,791 respectively were children.

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 2008. The Ghana DHS scheduled for 2013 could not be held. It is now scheduled for 2014. 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 2006, 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.

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 DHS 2008 7.8% and 4.3% of young women and men aged 15-24 respectively had sexual intercourse before the age of 15.

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

---

[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..*

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.

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 shows a gradual increase till age 25 and drops dramatically thereafter.

Though data on comprehensive knowledge for sex workers was not available, 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.

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.

In 2008 it was estimated that there were 236,151 adult and children were living with HIV (20,808 children) and there were a total of 22,541 new infections, while in 2009, there were 267,069 adults and children living with HIV (25,666 children). It was estimated that in 2008 63,137 adults and 6,086 children needed ART and in 2009 64,978 adults and 6,010 children were in need of ART. The estimated annual AIDS deaths for 2008 and 2009 were 18,082 and 17,058 respectively [9]. In 2010 it was estimated that there were 230,348 adults and children living with HIV(32,057) and there were a total of 14,165 new infections, the estimated annual AIDS deaths for 2010 were 17,230 and for children in the same period 2,472.

In 2011 it was estimated that there were 225,478 adults and children living with HIV (30,401 children) and there were 12,077 new infections, while in 2012 it is estimated that there were 235,982 adults and children living with HIV (27,754 children) and there were and estimated 7,991 new infections. The estimated annual AIDS deaths for 2011 and 2012 were 15,263 and 11,655 respectively and for children in the same period 2,080 and 1,620 respectively.

It is estimated that of the 235,982 people living with HIV in 2012 101,759 were males and 134,223 were females.

1.4. 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, PMTCT, 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.

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, 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.STI Policy revised in 2012 to reflect Human Rights Based Approach to ensure access by key populations
2. Workplace HIV Policy revised in 2012 in order for it to be compliant with ILO recommendation 200
3. Community Home Based Care Guidelines published in 2012
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

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).

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 Know Your Status (KYS) 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.

During the period under review, the school-based HIV education expanded to all the Junior High Schools (JHS) in Ghana through the HIV Alert School Project implemented by the Ghana Education Service with support from the UN System. Major activities included nationwide radio and TV campaigns on the project, development and distribution of associated posters nationwide, training and orienting of Directors of Education, teachers, and student peer educators, and provision of technical materials and support to participating schools.

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 mining communities.

An HIV prevalence of 2.1% in pregnant women (HIV Sentinel Survey 2012) versus 1.37% in the general population in 2012 reflects the weak performance in implementing PMTCT prongs 1 and 2. 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 PMTCT approach and rapidly scaled up its PMTCT program by increasing facilities providing services from 793 in 2009 to 863 in 2012. NACP data indicates 69.8% (7,781 out of 11,145) of HIV infected pregnant women received ARVs prophylaxis to prevent mother to child transmission of HIV against the NSP target of 70% in 2012. In 2013 this figure rose to 76% (7,266 out of 9,508), however the 2013 target of 90% could not be achieved.

An initial regimen of providing Nevirapine only for PMTCT was quickly jettisoned in favor of the current more efficacious Option B regimen. To further enhance the success of the PMTCT 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 PMTCT program at that time) to an estimated MTCT rate of 2.74% and 1.87% at 6 weeks in 2012 and 2013 respectively reflects the good performance of implementing PMTCT prong 3

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 PMTCT program. the estimated HIV prevalence of 8.99% and 8.37% after complete cessation of breast feeding in 2012 and 2013 respectively reflects the weak performance of PMTCT prong 4.[4]

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 1,611 in 2013 and reaching about 1.15 million clients in 2011, 857, 000 clients in 2012 and 669,000 in 2013 with HTC services. 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 1.2 million clients and the failure to meet its 2013 target of providing 1.3 million clients with services. Between 2011 and mid-2013, more women than men accessed the HTC services by a ratio of about 4:1

[4] GHS, NACP Department for International Health, WHO. 2010 *National HIV Prevalence and AIDS Estimates Report 2012 - 2016*.

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 PMTCT 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 PMTCT 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.

Ghana has rapidly scaled up its ART program by increasing the number of ART sites from 79 in 2010 to 160 in 2012 and 175 in 2013, 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 66,000 in 2012. 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 83,000 patients that were projected to receive treatment in 2013. Indeed that Annual statistics show that more than 84,000 patients received treatment.. 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.

Due to insufficient funds and challenges with access to ARVs, HTC, PMTCT, 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, PMTCT, 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.

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 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, and 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.

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 and the recent procurement of sub-standard condoms that have impacted negatively on program performance.

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 (SCMP) within the whole public health sector.

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, PMTCT, 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. However, much more needs to be done especially in bridging the north-south divide and rural-urban differentials in the distribution of the human and physical resources and in improving the infrastructure maintenance culture in the public sector.

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. 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.

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, PMTCT, 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 PMTCT and ART were the major challenges that negatively affected HIV and AIDS services during the period under review.

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. However, this is not yet operationalized.

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.

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.

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. GARP Indicators 2012 - 2013

Table 1 Indicator Data

Name of Indicator	Indicator value pre-2012	Indicator value 2012	Indicator value 2013	Comments (Data Source for 2012 and 2013)
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*	Males 15- 24 yrs 34.2% 15 -19 yrs 30.4% 20 – 24 yrs 39.1% Females 15- 24 yrs 28.3% 15 -19 yrs 27.2% 20 -24 yrs 29.0%	DHS will be conducted in 2014	DHS will be conducted in 2014	Ghana Demographic and Health Survey 2008
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 will be conducted in 2014	DHS will be conducted in 2014	Ghana Demographic and Health Survey 2008
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 will be conducted in 2014	DHS will be conducted in 2014	Ghana Demographic and Health Survey 2008

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 will be conducted in 2014	DHS will be conducted in 2014	Data not available for females. Only higher risk sex is available
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 will be conducted in 2014	DHS will be conducted in 2014	Ghana Demographic and Health Survey 2008
1.6 Percentage of young people aged 15-24 who are living with HIV	1.9% (HSS 2008) 2.1% (HSS 2009)	1.3%		HIV sentinel surveillance 2012 & 2013 HSS yet to be disseminated. Value not available
Indicators for sex workers				
1.7 Percentage of sex-workers reached with HIV prevention programmes	56.3%	IBBSS will be conducted in 2014	IBBSS will be 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 will be conducted in 2014	IBBSS will be conducted in 2014	Source IBBSS 2011
1.9 Percentage of sex workers who have received an HIV test in the past 12 months and know their results	66.7%	IBBSS will be conducted in 2014	IBBSS will be 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 will be conducted in 2014	IBBSS will be 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 will be conducted in 2014	IBBSS will be 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 will be conducted in 2014	IBBSS will be 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 will be conducted in 2014	IBBSS will be conducted in 2014	Source IBBSS 2011
1.14 Percentage of men who have sex with men who are living with HIV	17.50%	IBBSS will be conducted in 2014	IBBSS will be 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 to be conducted in 2014	PWID Study to be 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 to be conducted in 2014	PWID Study to be 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 to be conducted in 2014	PWID Study to be 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 to be conducted in 2014	PWID Study to be conducted in 2014	
2.5 Percentage of people who inject drugs who are living with HIV	PWID Study to be conducted in 2014	PWID Study to be conducted in 2014	PWID Study to be 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)	71.2%		NACP Annual report 2012 & 2013 Annual Statistics not yet available
3.1a Percentage of women living with HIV receiving antiretroviral medicines for themselves or their infants during breastfeeding				
3.2 Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth	18% (2011)	15.6%		Ghana AIDS Report 2011, 2012 NACP Annual report 2012. 2013 data not yet available
3.3 Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months	9% (2011)			Ghana AIDS Report 2011. 2013 data not yet available
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%	NACP Annual report 2012.
4.2 Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	71% (2011)	95.3%		Ghana AIDS Report 2011, 2012. 2013 data not yet available
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)	Total 40% Male 37% Female 44%		NSP 2011 - 2015 Ghana AIDS Report 2011 NTP Annual Statistics

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)[5]. 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.

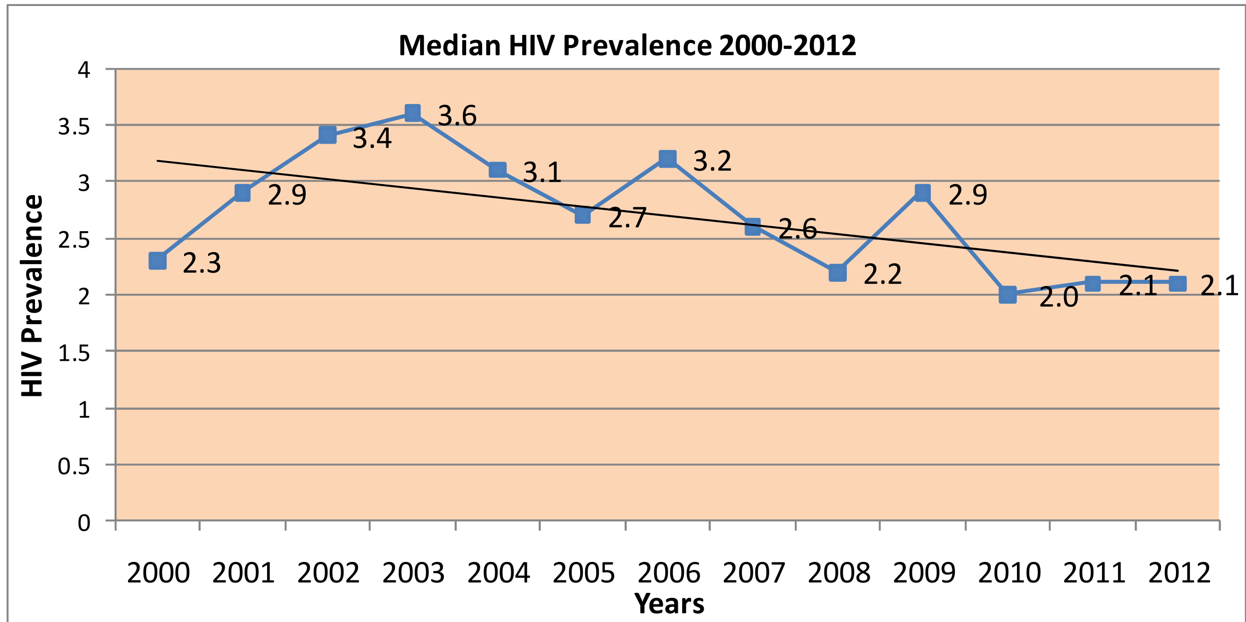
The EPP modeling (2008) estimated the national HIV prevalence among adults for 2007 to be 1.9% (range 1.7% - 2.2%) and urban and rural prevalence estimated at 2.3% and 1.7% respectively. In 2008, the estimated adult national prevalence was 1.7%. This rose to 1.9% in 2009 and dropped to 1.5% in 2010 and 2011. In 2012, the estimated national HIV prevalence is 1.37% (CI: 1.17 – 1.60). At the time of writing the prevalence figures for 2013 has not yet been computed.

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, 23 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.

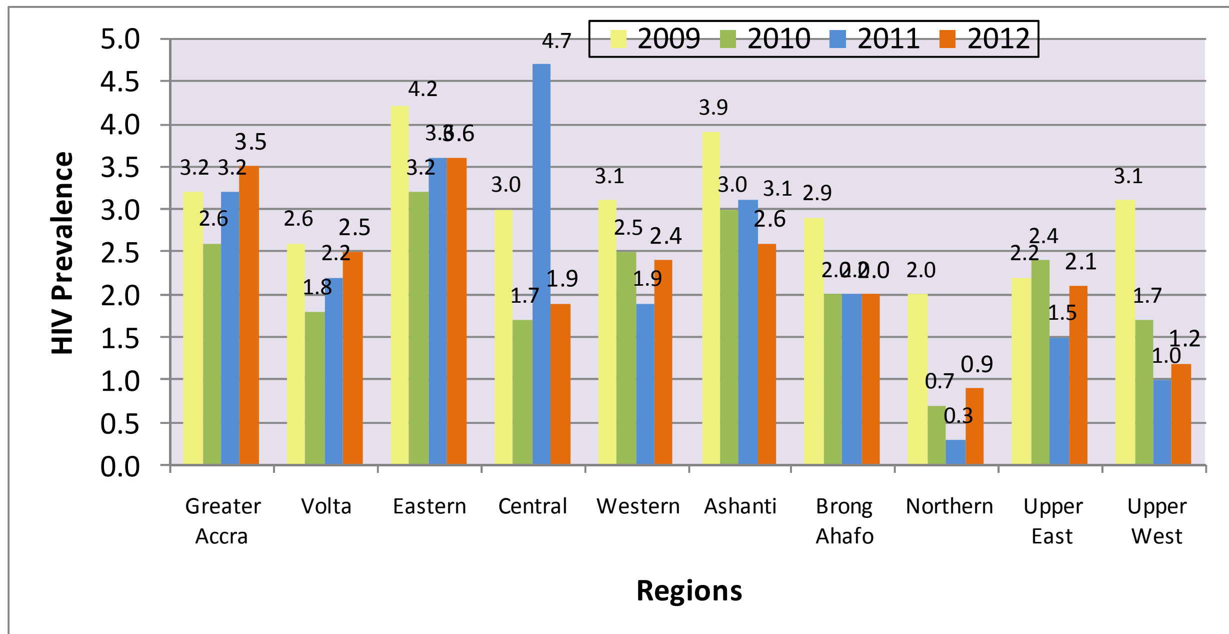
[5] GSS and ORC Macro, 2004

Figure 1 Median HIV prevalence 2000-2012, with linear trend



Source: HIV Sentinel Surveillance Report, 2012

Figure 2. Regional HIV Prevalence 2012

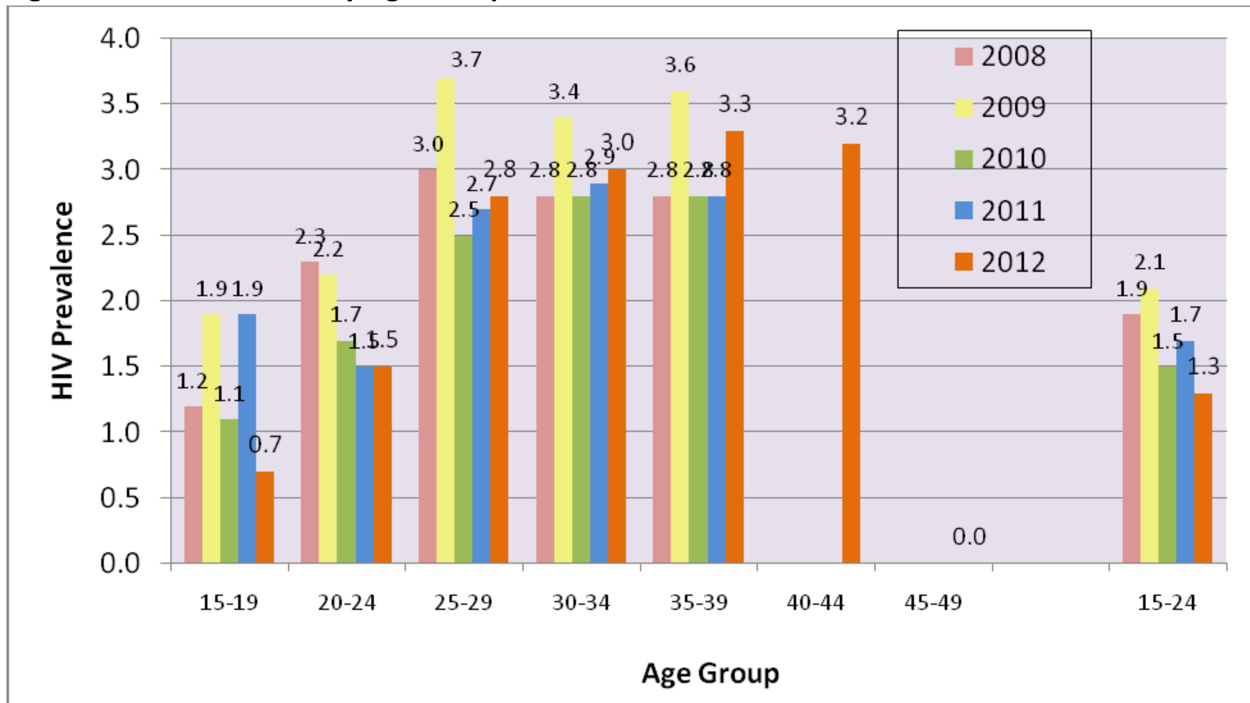


Source: HIV Sentinel Surveillance Report, 2012

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. Brong-Ahafo region has consistently kept a prevalence of 2.0% for the past three surveys whilst prevalence has increased consistently in the Greater Accra and Volta regions.

Figure 3 HIV Prevalence by Age Group and Year 2008 - 2012



Source: 2012 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 increased from 1.9% in 2008 to 2.1% in 2009 dropped to 1.5% in 2010 and rose again to 1.7% in 2011 [3]. 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 year 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%.

According to National HIV Estimates, in 2011 225,478 persons were living with HIV (100,336 males and 125,141 females) and there were 12,077 new HIV infections (10,373 adults and 1,707 children) with 15,263 deaths.

In 2012 235,982 persons were living with HIV (101,759 males and 134,223 females). There were a total of 7,991 new HIV infections (10,035 adults and 852 children) with 11,655 deaths.

In 2013 231,205 persons were living with HIV (98,442 males and 132,763 females). There were a total of 7,323new HIV infections (6,577 adults and 746 children) with 10,955 deaths.

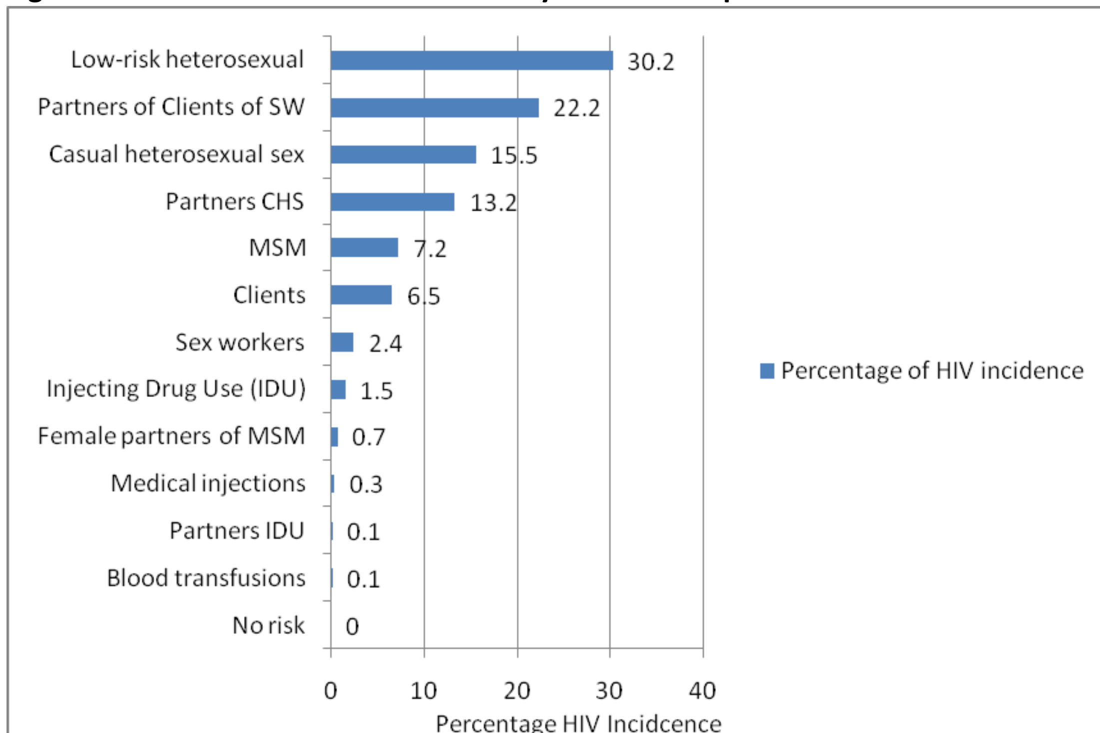
HIV epidemic among Key Populations (KPs)

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 populations (KPs) 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). 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[6].

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 suggest that HIV transmission occurs both among KPs and High risk groups as well as within the general population. According to this study 13,437 new infections occurred in 2008 (i.e. an incidence rate of 125 per 100,000.)[5] The highest proportion of these infections occurred among the low-risk general population (30.2%), and individuals involved in casual heterosexual sex with non-regular partners (15.5%) and partners of clients of sex workers (22.2%). Sex workers and MSM contributed 2.4% and 7.2% to all new infections and respectively. The regular partners of high risk groups (IDU, FSW clients and MSM) together accounted for the second largest number of new infections (23.0%)[5].

Fig 4 gives an overview of the estimated proportion of new infections and their sources..

Figure 4 Distribution of new infections by modes of exposures[7]



Source: Ghana - Modes of HIV Transmission in West Africa Study, 2009

---

[6] HIV Epidemic Analysis report, 2010 Page8

[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.

Female Sex Workers (FSWs)

FSWs remain a key most at risk population with HIV prevalence several times higher than the national average. The contribution of sex workers to new HIV infections is 2.4%, whiles the contribution of clients of sex workers is 6.5%. Partners of clients of sex workers contribute 22.2%. (see Figure 4 above). The clients of sex workers constitute a bridging population spreading HIV to the general population.

Studies on sex work have been limited in geographical coverage until a recent Integrated Biological and Behavioural Surveillance Survey was conducted. This is the first national survey whose main objective was to collect data among the female sex workers and male populations who patronize female sex worker services. In this study mapping and size estimation of sex workers was undertaken.

The population of sex workers was estimated at 51,934 (47,786 – 58,920). The mean age of all FSWs in the study was 27.2 years with Seater sex workers on average, 9 years older than Roamers. More than thirty per cent (31.5%) of FSWs have ever been married. They have low levels of education; 13.6% have never been to school and 23% have only attended primary school education. Many of them (42%) reported to have engaged in commercial sexual intercourse before the age of 20.

The proportion of respondents who reported to having at least one non-paying partner was 60%. Over half of the respondents had between one and two non-paying partners. Condom use with commercial partners was general high. Over three-quarters (79.2%) of FSWs said that they used condoms every time they had sex (consistently) with a paying client whiles condom use with non-paying partners was low. Almost 40% of the respondents reported to have never used a condom with their husband/boyfriend(s) or pimp, while about one-third (35.3%) claimed they used it sometimes. Use of lubricants was low. Over two in five (42.6%) of the FSWs reported to have used a lubricant once in the last month before the study while 18.8% reported to have used a lubricant more than once. Majority of these used oil-based lubricants. About seven percent (7.1%) of FSWs reported to have ever engaged in anal sex.

Overall, over one-quarter of the respondents had been forced by a client (paying or non-paying) to have sex without a condom in the last 3 months before the study.

60% of FSWs have ever had an HIV test. Testing was more common among seaters (70.7%) than with roamers (55.0%).

The HIV prevalence among FSWs is currently 11.1%, down from 25% in 2009. The seater female sex workers had a higher prevalence of HIV. About one in five (21.4%) of the seaters are living with HIV compared to 6.6% of the roamers.

Overall, 73.6% of the respondents have HSV-2 with more Seaters infected (86.7%) as against 66.9% Roamers. In addition, respondents were HIV positive were more likely to have HSV-2. The data shows that 70.1% of HIV negative respondents had HSV-2 compared 95.1% of HIV infected respondents. HSV-2 is the most common cause of genital ulcer disease. In this study, high levels of HSV-2 consistent with results in other studies within the Sub-Saharan region were

observed. Low (1.7%) prevalence of *Chlamydia Trachomatis* (CT) and *Neisseria Gonorrhea* (NG) (2.0%) was observed across all regions. More than six percent (6.3%) of the female sex workers had syphilis.

Men Who Have Sex with Men (MSM):
In the past there is limited data on MSM in Ghana. The first bio-behavioural study conducted among MSM was in 2006. The study found a high HIV prevalence of 25.3% among this group with 62% being bi-sexual, 66% reporting paying for sex with men and 48% using condoms. However, the study oversampled young men who engaged in transactional sex and were HIV positive. The findings showed that MSM, though perceived to constitute a small proportion of the male population in Ghana, contributed significantly to the spread of HIV. The estimation of sources of new HIV infection (shown in Figure 4), indicate that MSM account for about 7.2% of new infections.

Results from a recent Integrated Bio-behavioural survey known as the Ghana Men's Study (2011) showed that 17.5% of MSM in Ghana are living with HIV. The survey established that 95.7% of MSM had been reached with HIV prevention programmes 12 months prior to the survey. 60% of Men who have sex with men reported using a condom the last time they had anal sex with a male partner. The study also found that 26.3% of men who have sex with men have received an HIV test in the past 12 months and knew their results.

Injecting Drug Users (IDUs)
Data available on IDUs in Ghana is from prisons. A survey carried out among prison inmates in 2008 found that 11.4% of IDUs among prisoners were HIV positive[8]. However, the inmates are also exposed to other risks such as tattooing and MSM. The modelling of sources of HIV infections shown in Figure 4 estimates IDUs contribute about 0.1% of new HIV infections.

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. The DHS 2008 and 2003 show the percentage of males and female respondents who had more than one sexual partner in the last year, as well as the lifetime number of partners (Table 2). The Eastern, Ashanti, Greater Accra regions have higher proportions of men and women with more than one partner and higher numbers of lifetime partners. In both regions, more than one fifth of men report having multiple partners, and the proportion with multiple wives is lower than the national average. While it is possible that some men who report more than one partner, are not mutually exclusive from those who had a paid sex partner, the much higher levels of multiple sex partners compared to paid partners suggests a large portion of men actually have "casual heterosexual sex" with more than one partner.

[8] Correlates of HIV, HBV, HCV and Syphilis infections among prison inmates and officers in Ghana: a national multicenter study, Adjei, AA Et al, 2008

Table 2 Percentage of women & men with more than one sex partner in last 12 months & mean lifetime sex partners

	% women with 2 or more partners in last 12 months (all women)		% men with 2 or more partners in last 12 months (all men)		% men with 2+ wives	Women: Mean # of lifetime partners	Men: Mean # of lifetime partners
Region	**2008 DHS**	**2003 DHS**	**2008 DHS**	**2003 DHS**	**2008 DHS**	**2008 DHS**	**2008 DHS**
Western	0.9	0.9	11.6	7.3	4.1	1.9	5.7
Central	0.5	1.5	7.1	10.7	2.9	2.1	5.6
Greater Accra	0.8	2.1	15.1	13.5	0.4	2.2	5.3
Volta	0.5	0.2	10.9	12.3	18.2	2	5.3
Eastern	2.4	1.4	11.7	10.3	5.2	2.3	6.7
Ashanti	0.2	0.8	15	8.7	8.6	2.3	5.9
Brong Ahafo	0.7	1.2	8.3	11.4	3.9	1.9	5
Northern	0.5	0.3	6.6	9.7	23.3	1.3	3
Upper East	1.1	0.6	9.1	4.7	13.4	1.2	3.7
Upper West	1.5	0.5	6.7	4.1	17.5	1.4	4
National	1.0	1.1	11.4	9.9	9.8	2.0	5.6

The table also shows 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.

High-risk sexual behaviour

Table 3 shows data on levels of sexual activity across regions. These include the DHS reports on persons who had first sex before age 18.

Table 3 Percentage of men and women 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 218,657 by 2016. It is also estimated that about 7,991 new infections occurred in 2012 with a projected decrease in annual new infections to 5,374 in 2016. The estimated number of AIDS related deaths in 2012 is 11,655 with a projected decrease to about 7,787 deaths in 2016. 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 642 in 2016[9]. Table 4 shows the summary of the projected estimates of new HIV estimates up to 2016 based on the SPECTRUM modeling.

Table 4 Summary of HIV estimates up to 2016

Summary of HIV population					
HIV/AIDS Summary					
	2012	**2013**	**2014**	**2015**	**2016**
HIV population					
Total	235,982	231,205	226,461	222,167	218,657
Male	101,759	98,442	94,787	90,991	87,288
Female	134,223	132,763	131,674	131,176	131,369
Children		25,681			
Prevalence (15-49)	1.37	1.31	1.24	1.18	1.12
New HIV infections					
Total	7,991	7,322	6,768	6,054	5,374
Male	3,549	3,249	3,015	2,695	2,391
Female	4,442	4,073	3,753	3,359	2,983
Children 0-14	852	746	847	742	642
Annual AIDS deaths					
Total	11,655	10,955	10,381	9,236	7,787
Male	6,013	5,998	6,113	5,951	5,572
Female	5,642	4,957	4,268	3,285	2,215
Children 0-14	1,619	1,339	1,138	929	674

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 5 shows the projected number of AIDS orphans up to 2016 based on SPECTRUM modeling.

Table 5 Projected number of orphans due to AIDS

	2012	**2013**	**2014**	**2015**	**2016**
Maternal orphans					
AIDS	103,294	96,831	90,322	83,090	74,996
Non-AIDS	340,542	339,087	338,250	337,899	337,756
Total	443,836	435,918	428,572	420,989	412,752
Paternal orphans					
AIDS	133,569	129,090	125,171	121,175	116,710
Non-AIDS	586,360	587,662	590,185	593,683	597,701
Total	719,929	716,752	715,356	714,858	714,411
Double Orphans					
AIDS	53,290	50,461	47,597	44,496	41,057

[9] National HIV Prevalence and AIDS Estimates Report 2012-2016. NACP, 2013

	2012	2013	2014	2015	2016
Non-AIDS	89,070	88,277	87,654	87,248	86,958
Total	42,360	138,738	135,251	131,744	128,015
Total Orphans	1,021,404	1,013,933	1,008,678	1,004,103	999,149
All AIDS Orphans	192,226	183,530	175,430	166,758	157,064
% of AIDS Orphans	18.8	18.1	17.4	16.6	15.7

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 the HIV epidemic analysis of 2010. 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.

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.

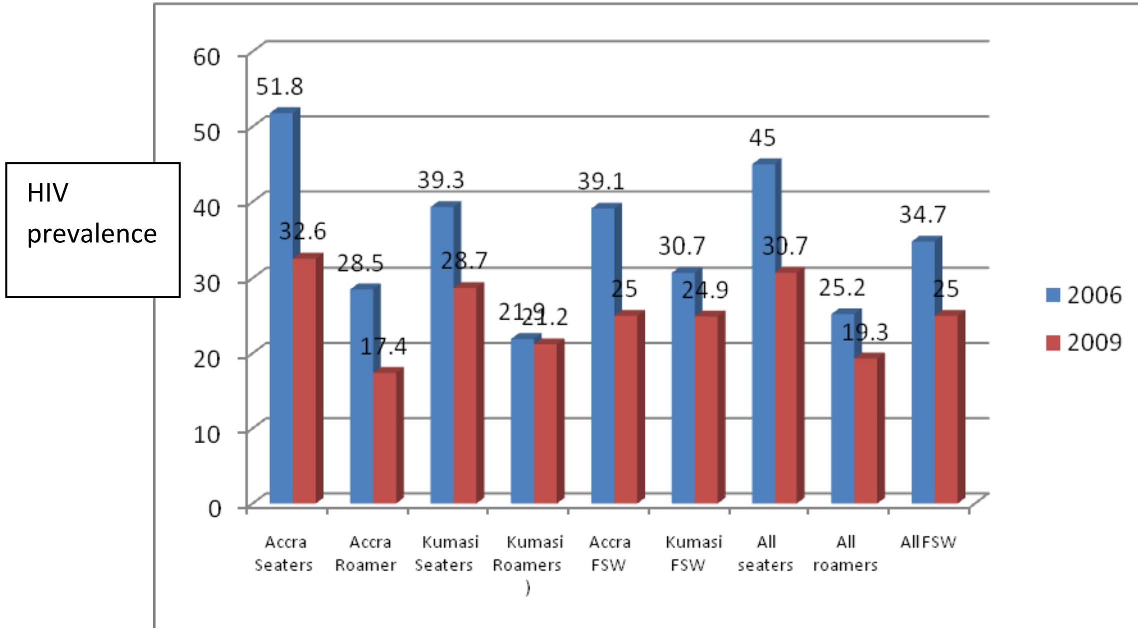
4. ***Stigma and discrimination***
HIV stigma and discrimination can be a hindrance to access to HIV prevention services resulting in exposure to HIV infection. HIV stigma and discrimination is a significant factor in Ghana. DHS 2008 shows that only 32% of women and 43% of men would buy fresh food from 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.

Figure 5 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.

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.

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 (PMTCT) 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 (PMTCT); 4) shortfalls in institutional and community capacities to rapidly scale-up care and treatment services. Workplace and School based programs have suffered 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 MARPs serve as a bridge between MARPs 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 (PMTCT), 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 PMTCT 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.

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.[10]There appears to be challenges in MSM interventions in Ghana. Firstly, the stigma, criminalization and the gender-based violence

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

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.

Prisoners as key populations

The NSP considers prisoners as KP. This may have been based on research done some years ago based on a small sample of prisons. A recent study[11] 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[12]. 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.

Currently PPAG has succeeded in introducing HIV prevention interventions and HCT for inmates of 35 prisons nationwide. 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. Based on this evidence, the continuing inclusion of all prisoners, as KPs is not ideal. While female prisoners may continue to be MARPs, 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.

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.

---

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

[12] 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

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 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%[13]. Current evidence from three small-scale studies seems to be conflicting.

Strategies and Activities for KPs

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.

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

[13] 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

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 KPs

Baseline behavior outcome indicators for key populations (e.g. condom use) were obtained through IBBSS in 2011, a similar study is expected in 2014. Since there is no nationwide behavior study among key populations, the evaluation 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 observed that more than eight out of ten FSWs in Ghana has been reached with some form of intervention.

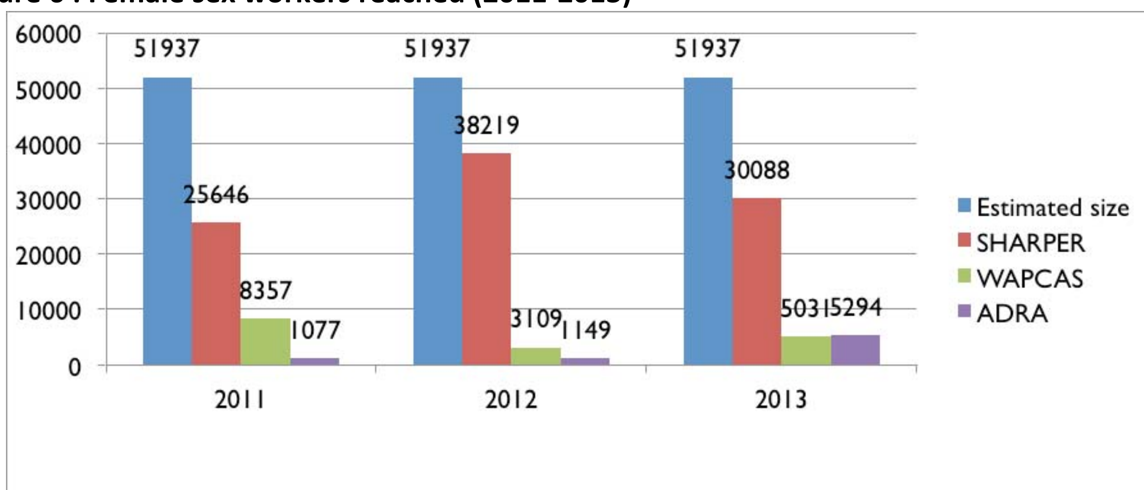
There are two broad groups of FSWs in Ghana: brothel-based (seaters) and roamers. According to the 2011 IBBSS size estimation analysis, there were 52,000 female sex workers (both roamers and brothel-based) in Ghana. One key program objective in the MARP (KPs) Strategic Plan is to reach 80% of all KPs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

GAC compiles data on the number of FSWs reached, although the evaluation found that a few partners do not report data to GAC. Figure 6 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, and ADRA are the three key players involved in sex worker interventions; so their data can fairly be considered as national.

The SHARPER project, WAPCAS, and ADRA were the main providers of HIV prevention information and services for FSWs in 2012 and 2013. As at September 2013, about 40,000 out of the estimated 52,000 FSWs nationwide had been reached with HIV prevention information and services. The breakdown of FSWs reached in 2012 is as follows: SHARPER project reached 38,000 FSWs, WAPCAS reached 5,031, and ADRA reached 5,294 FSWs. Efforts have been made to avoid double counting, however, the evaluation could not 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 (up to

September). Assuming there is no growth in the estimated size of sex workers, the number of sex workers reached increased from 49.0% in 2011 to 73.6% in 2012.

Figure 6 : Female sex workers reached (2011-2013)

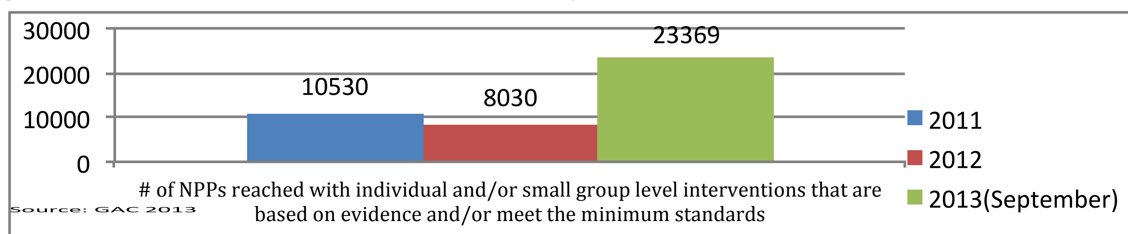


One of the successes of KPs interventions is the enhanced accessibility of condoms by FSWs. Based on a recent MARP evaluation[14], many sex workers mentioned obtaining condoms from many different places. The majority of FSWs explicitly mentioned obtaining condoms and lubricants from peer educators.

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.

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%)[15].

Figure 7 Number of NPPs reached with HIV prevention information & services 2011-2013



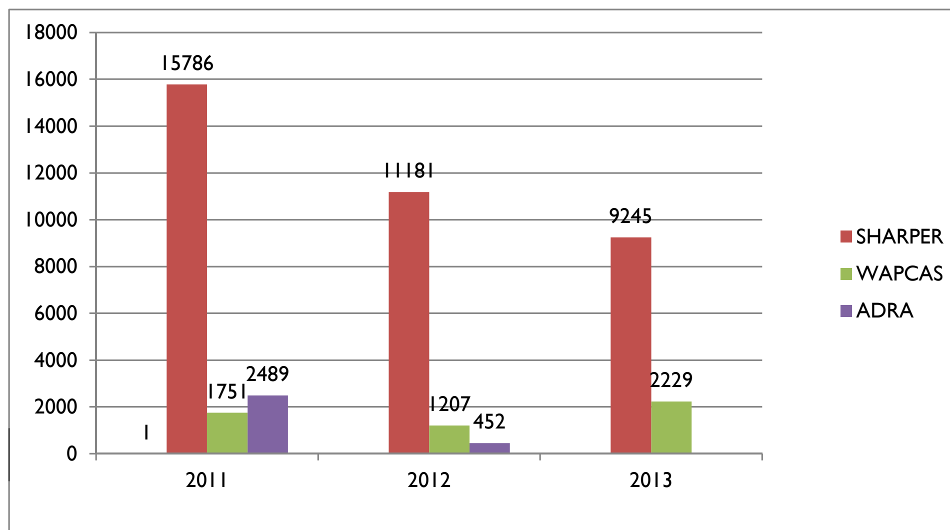
[14] Evaluation of HIV Prevention Services for Most-at-risk Populations (MARP) in Ghana (2013): A Preliminary Report.

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

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 8 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 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 September SHARPER had reached about 28,000 MSM (13,000 through face-to-face and 15,000 through social media. Preliminary findings 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 8 Number of MSM Reached (2011 to June 2013)

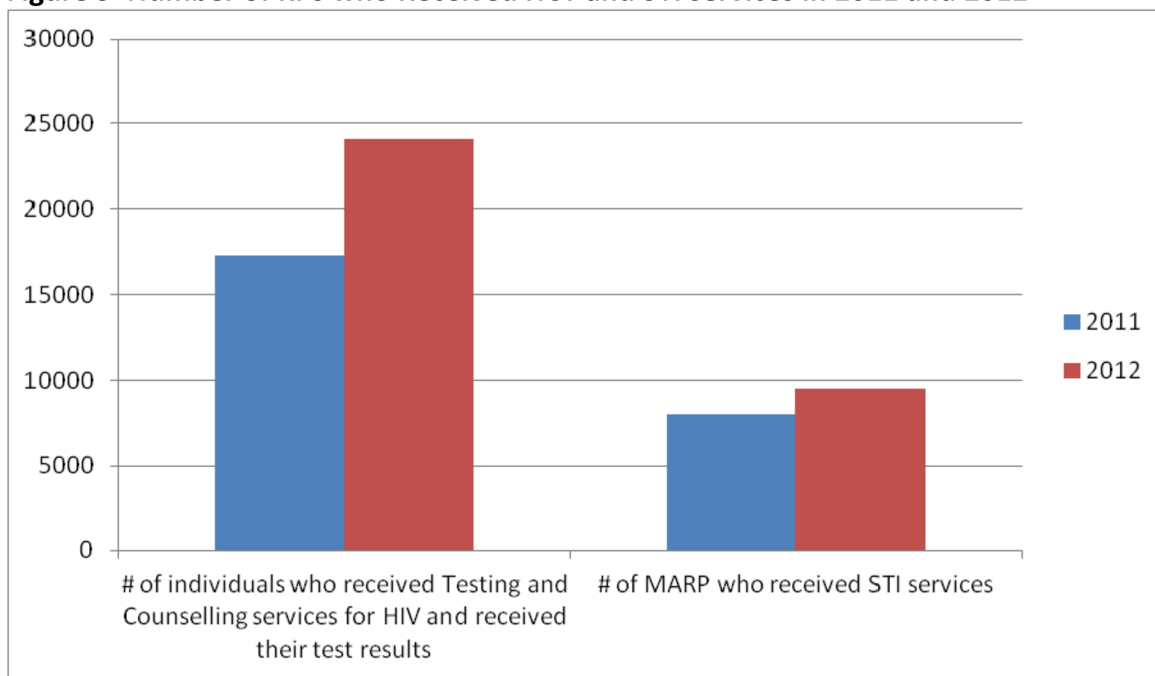


One of the leading organizations working with MSM is Maritime Life Precious Foundation (MLPF), based in Takoradi. One of the major achievements of MLPF has been the ability to be the leading advocate of MSM rights in the Western and Central Regions especially in the face of general public antagonism, 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 9) 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 hampered the provision of optimal HTC services to key populations and others who require the service. The number of key populations that received STI services increased marginally from about 8,000 in 2011 to 9000 in 2012.

Figure 9 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. For the period under review, 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%. 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 (KPs) 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[16], 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 KPs 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 KPs 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.

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

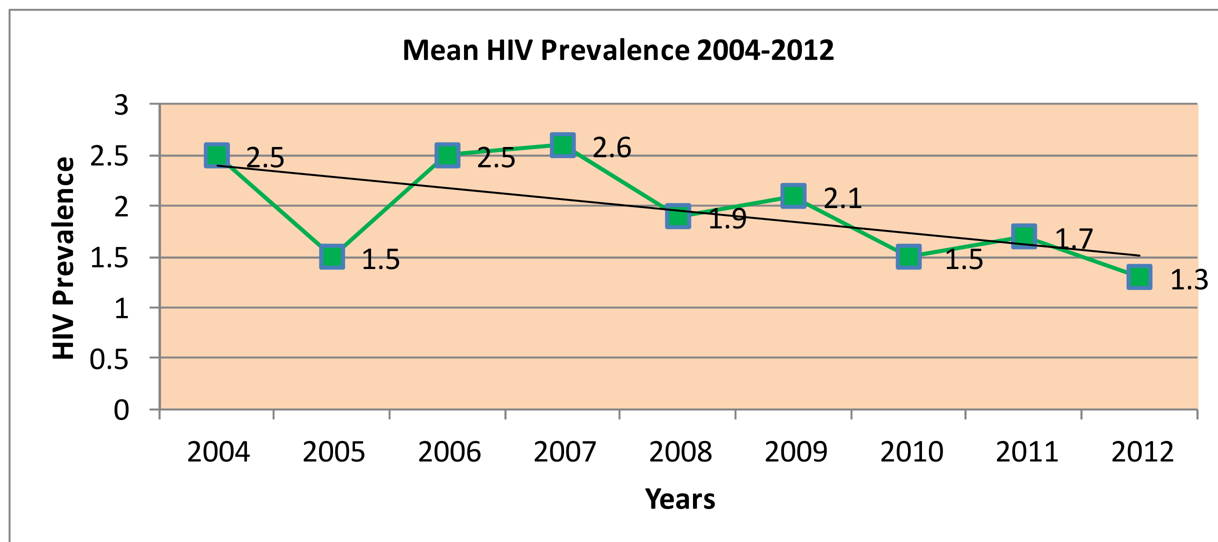
HIV prevalence in young people

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 graph below shows a general downward trend in the prevalence. 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.

Figure 10 HIV Prevalence Trend in 15 -24 Age Group, 2004 - 2012



Source: HIV Sentinel Survey Report 2012

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[17]. The GES focuses on school-based HIV and AIDS and sexuality education for children in 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.

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

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[18]. 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; 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, and the development of a manual on 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.

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

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. 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 2012 indicates that young people 15-24 years of age contributed 28% (2,236 of 7,991) of new HIV infections in 2012, which is significantly lower than the 37% (4,438 of 12,077) reported in 2011. 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" 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.

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).

HIV Prevention for General Population

The UNAIDS MOT study for West Africa in 2011, reported that 50% of new infections are not directly associated with key populations and that they occur in the general population - among discordant couples, persons having casual sex, etc. 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 are based on DHS results. Since no DHS has been undertaken in the review period, the report is unable to provide any assessment of progress. Table 6 shows some of the key indicators at the general population level that are being tracked using program data.

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 6 Non-Clinical Prevention: Key Indicators among General Population

Indicator	Baseline 2011	2012	2013	Comments
# Male and Female Condoms Distributed	59,505,436	19,424,265	4,702,125	Data from GAC; Decline particularly in 2013 attributable to stock-outs.

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		36	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[19] BCC interventions. The evaluation could not confirm this given the time available.

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.

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).

---

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

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. Every effort must be made to prevent this happening: HIV prevention in the general population and amongst key population 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, PMTCT 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 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 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[20]. The program also held 106 workshops on stigma and discrimination.

[20] 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. Prevention of Mother-to-Child Transmission of HIV (PMTCT)
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

Prevention of Mother-to-Child Transmission of HIV (PMTCT)

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 PMTCT, but creates a challenge of ensuring that PMTCT is provided at all antenatal clinics to achieve this goal. The number of Antenatal clinics and the PMTCT uptake at each clinic providing PMTCT is thus critical for achieving this target.

Progress in PMTCT has also been tremendous. Ghana adopted the policy of using ART for PMTCT in 2006. In 2009, PMTCT 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 PMTCT to the community level through Community Based Health Planning Services (CHPS). The number of PMTCT centres increased from 135 in 2005 to 1,656 functional sites by December 2012. 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 PMTCT 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 7,781 in 2012. These reductions in coverage for 2012 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

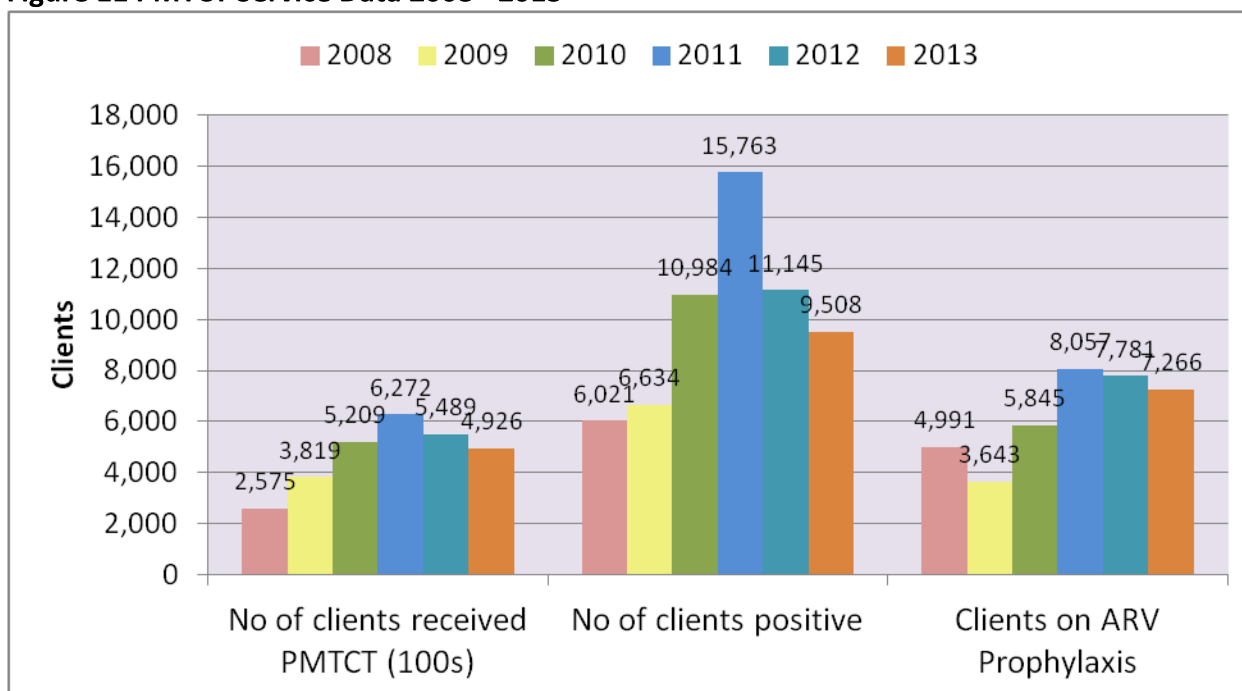
Table 7: PMTCT services in 2011 to 2013

Indicator	2011	2012	2013
No of clients received PMTCT	627,180	548,933	492,622
No of clients positive	15,763	11,145	9,508
Percentage of Clients positive	2.51%	2.03%	1.98%
Clients on ART	8,057	7,781	7266
Percentage of HIV Positive clients detected through PMTCT on ART	51%	70%	76%
Estimated number of HIV-infected Pregnant women in the last 12 months	12,661	9,479	
Percentage of HIV infected pregnant women who received antiretrovirals to reduce the risk of MTCT	64%	82%	

Source: National AIDS Control Programme, 2012 Annual Report, National HIV Estimates 2011

The initial decrease in the number of PMTCT 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 2010 and 2011 only 53.2% and 51.1% respectively of HIV +ve mothers detected through PMTCT services received ART compared with 82.9% in 2008. In 2012 PMTCT coverage rose to 70%, and rose again in 2013 to 76%.

Figure 11 PMTCT Service Data 2008 - 2013



Source NACP 2012 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 PMTCT interventions in reducing new infections.

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.

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 PMTCT 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 PMTCT programmes by age of the child
d. mother-to-child transmission of HIV probabilities based on various categories of antiretroviral drug regimen and infant feeding practices

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 9% for 2011, and 8.99% in 2012.

In Ghana mother–to-child transmission of HIV is virtually the only way that 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 PMTCT 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 PMTCT 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 PMTCT 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 PMTCT sites, strengthening referral system from PMTCT 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 PMTCT Scale-Up Plan 2011-15 are the two key documents driving the implementation of the PMTCT program.

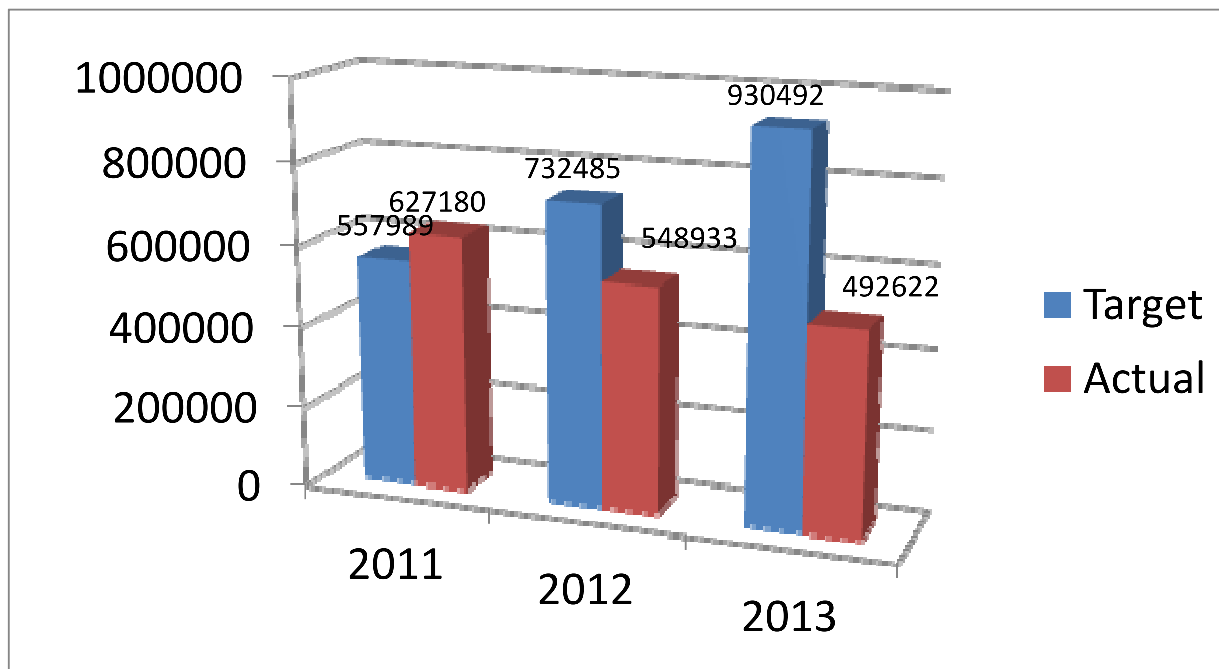
With support from UNICEF, NACP has commissioned a Review of the PMTCT Scale-Up Plan 2011-15. The main findings in the draft report of the review of the PMTCT Scale-Up Plan are rincorporated into this Report.

PMTCT Program Performance

The PMTCT 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 PMTCT Scale-up Plan 2011-15. The PMTCT 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 PMTCT 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 12 Number (%) pregnant women who tested for HIV and know their results: 2011 to 2013



Source: NACP Annual Reports

As shown in Table 8 the percentage of HIV infected pregnant women who received ARV drugs to reduce the risk of mother to child transmission (PMTCT prong 3) showed a progressive

increase for the 2011 to 2013 period under review. From a performance of below target (51% vs. 60%) in providing ARVs for HIV infected mothers in 2011, the program achieved (69.8% actual vs. 70% target) its 2012 target. It is likely that the 80% target for HIV infected mothers to be on ARVs will be exceeded in 2013 also. However, the performances for 2011 and 2012 are poor when viewed against the PMTCT Scale-Up Plan targets of providing 90% of HIV infected pregnant women with ARVs prophylaxis.

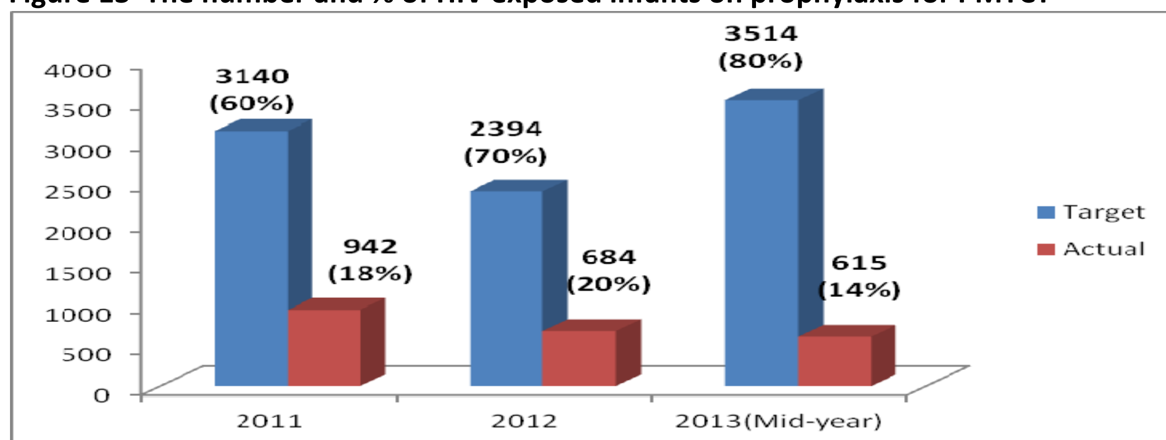
Table 8 Percentage of HIV infected mothers on ARVs: 2011 to mid-2013

	Indicator	2010	2011	2012	2013
1.	No. Pregnant women tested for HIV	520,900	627,180	548,933	492,622
2.	No. HIV Positive Pregnant Women	10,984	15,763	11,145	9,508
3.	Number (and %) HIV infected mothers who received ARVs to prevent MTCT of HIV	5,845 (53.2%)	8,057 (51.1%)	7,781 (69.8%)	7,266 (76.4
4.	*NSP 2011-15 targets* for HIV infected mothers on ARV		60%	70%	80%
5.	*PMTCT Scale-Up Plan targets* for HIV infected mothers on ARVs		90%	90%	90%

Source: NACP 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 PMTCT 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 13 The number and % of HIV exposed infants on prophylaxis for PMTCT



Source: NACP Annual Reports

The prevalence of HIV infection amongst HIV exposed babies has decreased from a presumed prevalence of 30% in 2010 (because there was virtually no PMTCT 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 PMTCT 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)

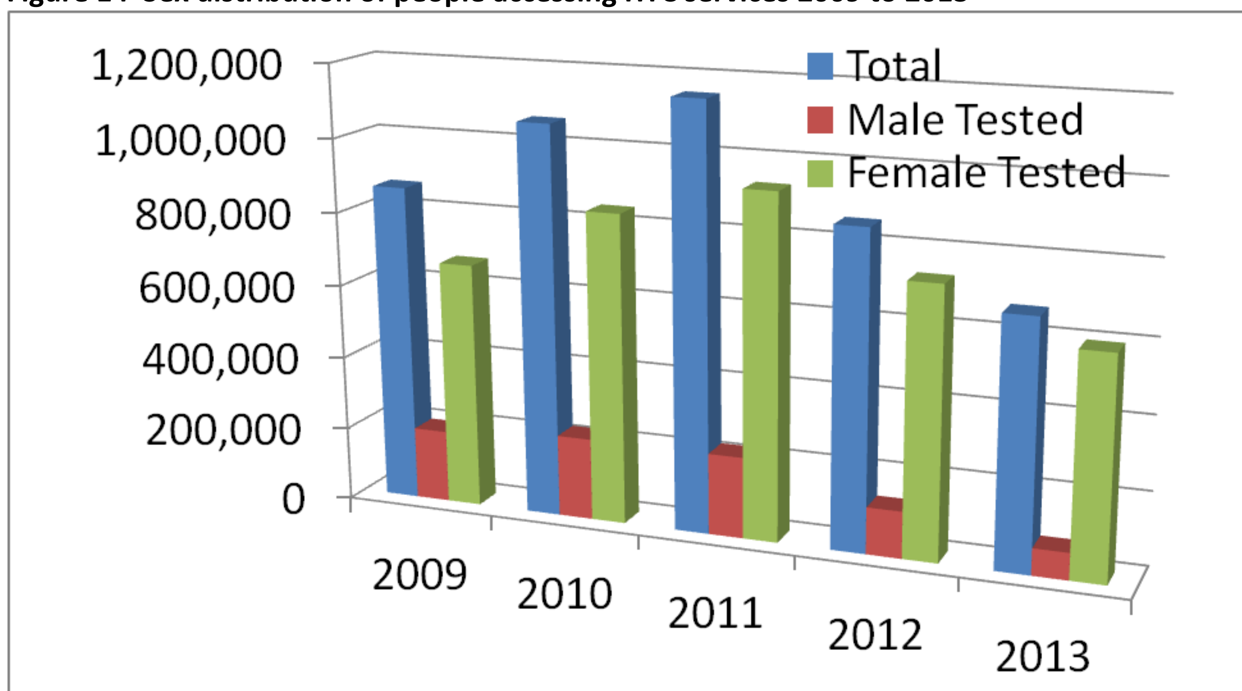
With testing and counseling as a key entry point to HIV treatment, care and support it is an important that as many people as possible are reached with HTC services for early detection and access to treatment. By 2009, HTC services had been scaled-up to a large extent with services available in 793 health 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 require the number of testing centers across the Ghana from be increased 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 PMTCT, 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.

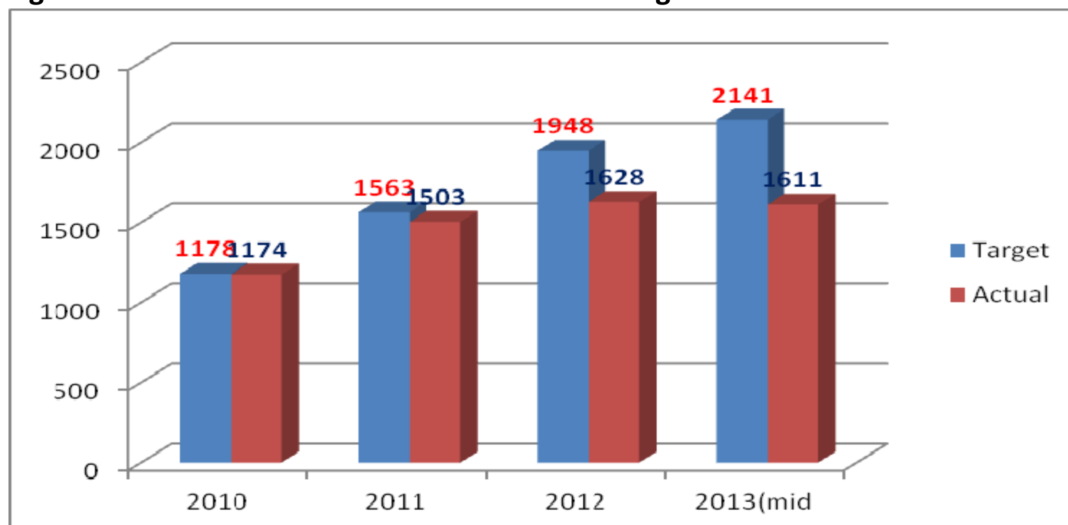
Figure 14 Sex distribution of people accessing HTC services 2009 to 2013



Source: NACP Annual Reports

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



Source: NACP Annual Reports

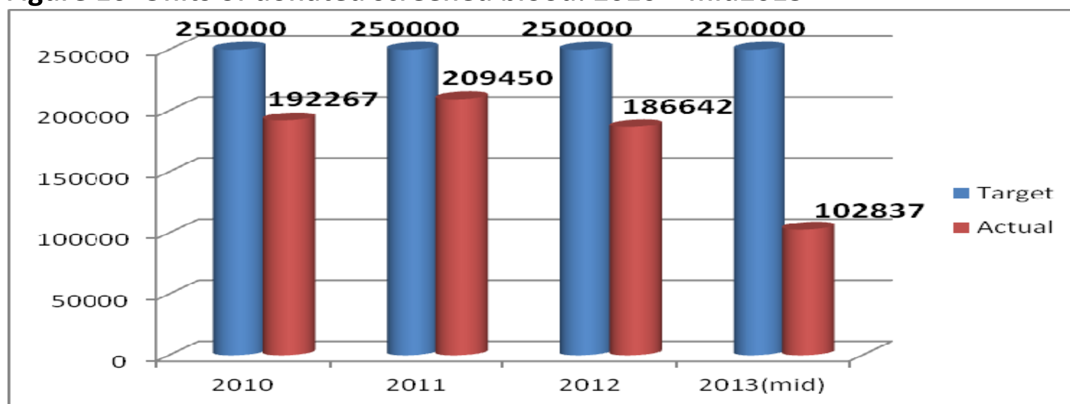
Blood Safety

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.

Figure 16 Units of donated screened blood: 2010 – mid2013



Source: National Blood Transfusion Service Annual Reports

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 PMTCT services are also expected to provide PEP however not all PMTCT 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 PMTCT 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 PMTCT sites that have the capacity to provide PEP; identify the capacity building needs and provide training for health personnel in the ART and PMTCT 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 PMTCT. 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 PMTCT 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 PMTCT 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 PMTCT. 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.

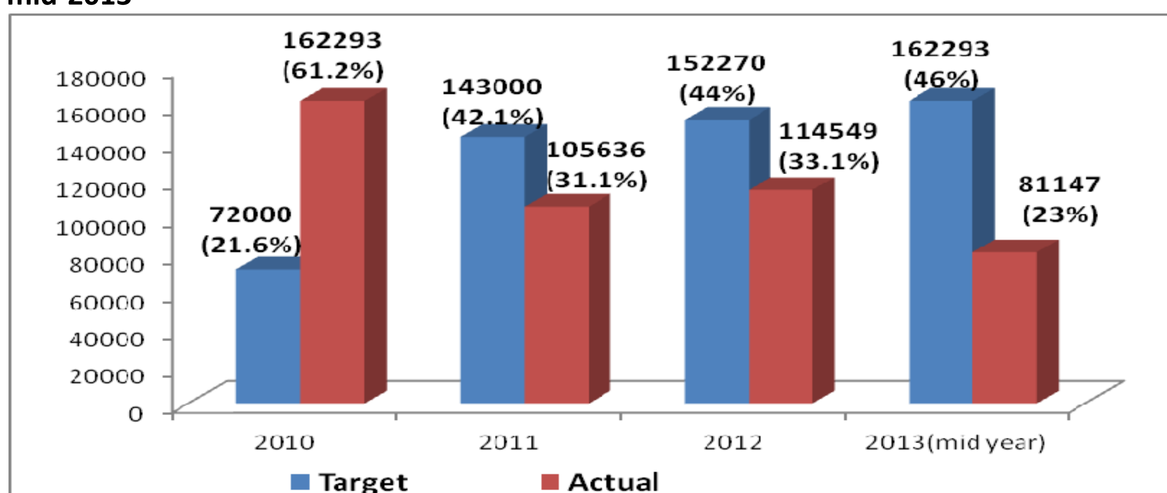
A number of strategies were put together in the NSP geared towards achieving the target stated above. Firstly demand for STI services targeting the youth, most at risk population, and pregnant women were to be generated through awareness creation and community mobilization. This intervention sought to 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 17 Number/% of persons treated for STI according to the national guidelines: 2009 to mid-2013



Source : NACP Annual Reports

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.

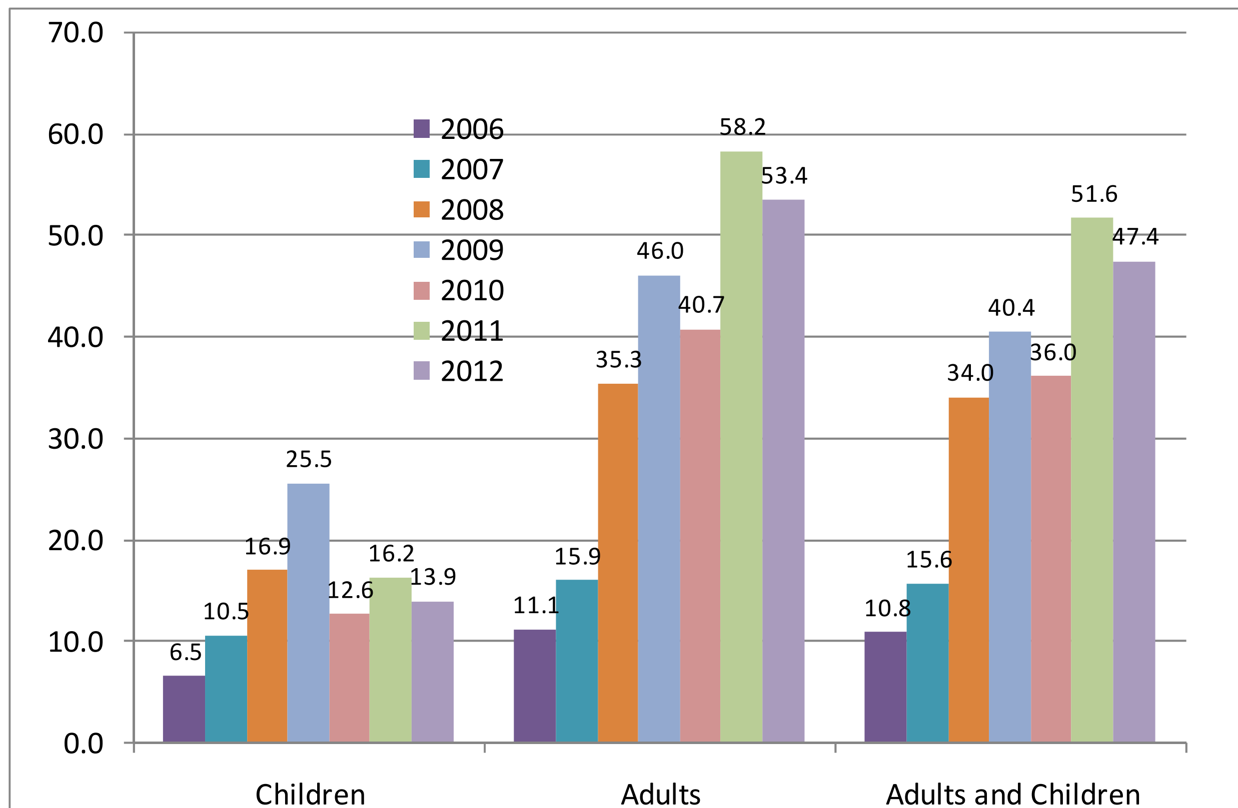
The scale-up has been facilitated by the increased resources from the Government of Ghana and donor partners, including, USAID, and the GFATM. Health facilities providing ART increased from 3 in 2003, to 162 by December 2012. These health facilities have provided ART for PLHIV at the district, regional 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 table below. In all in 73,339 PLHIV (69,698 adults and 3,641 children) have been put on ART since the onset of the programme in Ghana and 69,870 (66,366 adults and 3,504 children) of these are currently still on ART representing 95%.

Indicator 4.1: Percentage of women and men with advanced HIV infection receiving antiretroviral therapy

Figure 18 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 18 Percentage of adults and children with advanced HIV on ART in 2006 to 2012
Source: NACP Annual Statistics



For 2013 the indicator has been altered with a denominator for All HIV+ persons. The new coverage now stands at 32.8%. That is 75,762 out of 231,205 PLHIV are on ART.

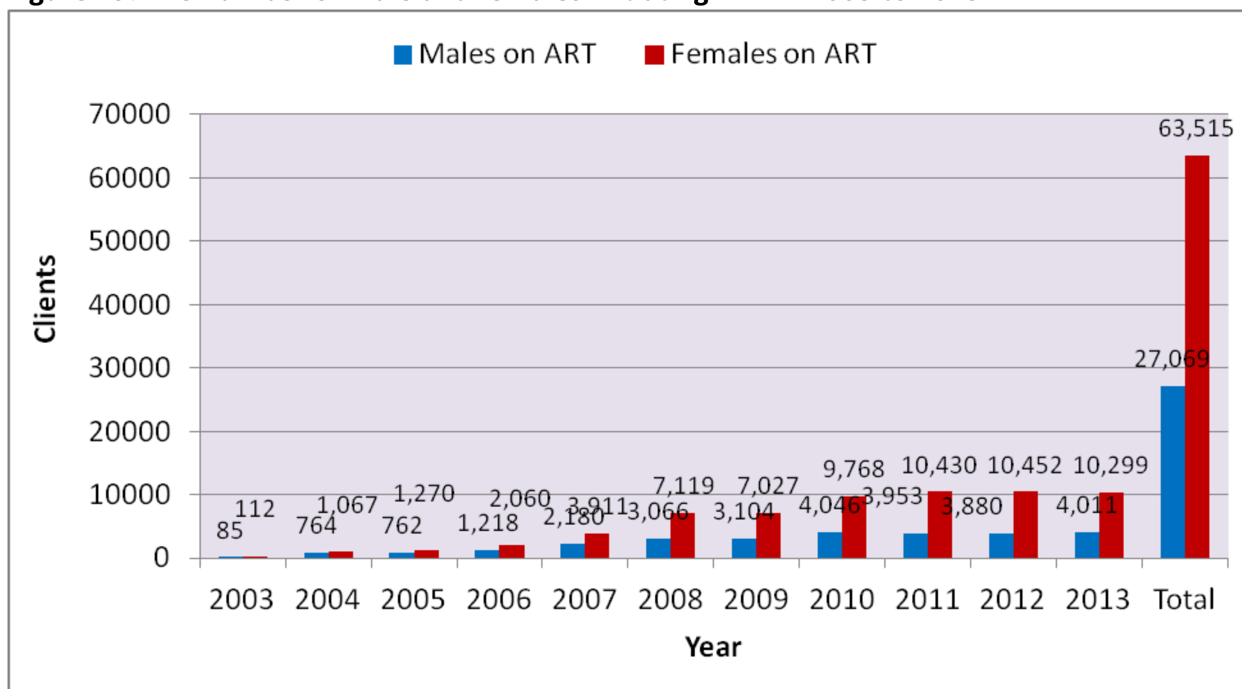
Table 9: Annual Number of Clients Accessing ART Services

Indicator	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	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	90,573
Males on ART	85	764	762	1,218	2,180	3,066	3,104	4,046	3,953	3,880	4,011	27,069
Females on ART	112	1,067	1,270	2,060	3,911	7,119	7,027	9,768	10,430	10,452	10,299	63,515
15+	197	1,804	1,913	3,156	5,783	9,735	9,409	12,920	13,441	13,648	13,456	85,462
<15	0	27	119	122	308	450	722	894	942	684	843	5,111

Source: NACP Annual Report 2005 – 2010 and NACP 2011 Annual statistics [72, 73, 76, 77]

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 70.1% in 2013. 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 PMTCT as well as the differential health seeking behaviour of men.

Figure 19: The number of male and females initiating ART in 2003 to 2013



Source: NACP Annual Report 2005 –2013 statistics [72, 73, 76, 77]

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.

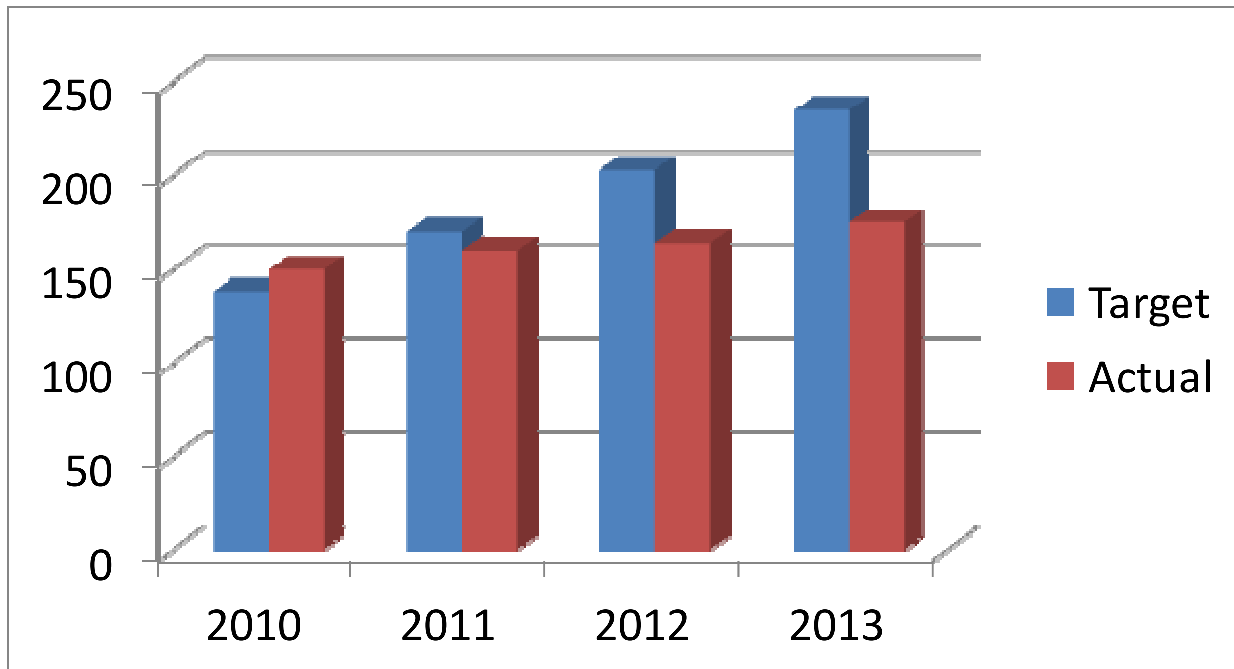
Ghana embarked on its large scale ART programme in 2004 and some clients have been on treatment for number of years. As part of monitoring indicators to detect early warning for HIV resistance, the NACP has instituted measures to monitor the progress of these indicators. One such early warning indicator 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, PMTCT, 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, PMTCT, 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 187 by mid-2013 as shown in Fig. 20.

Figure 20 Cumulative establishment of ART Sites 2010-2013



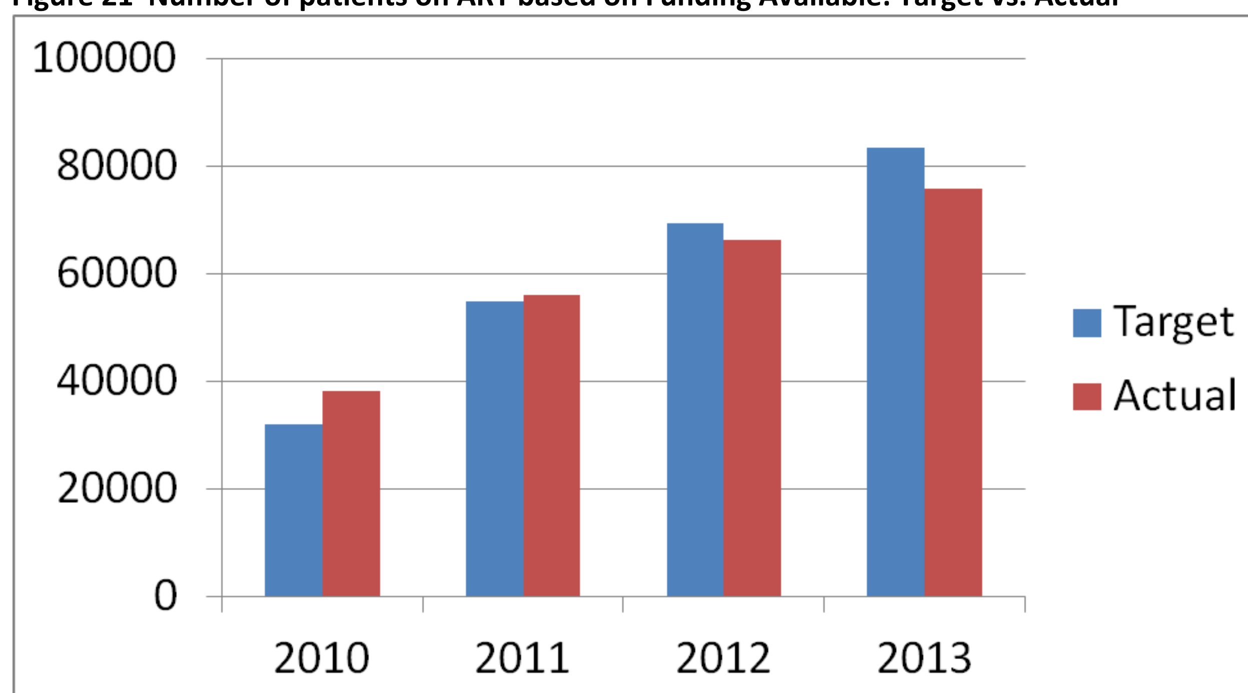
Source: NACP Annual Reports

More than 90% success rate of reaching the planned number of facilities that needed to be established between 2011 and 2013, 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.

Figure 21 Number of patients on ART based on Funding Available: Target vs. Actual



Source: NACP Annual Reports

Viewed from the proprtion 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 49% and 58% of patients who need ART in 2011 and 2012 respectively (Table 10). Indications are that about 60% of patients who need treatment will receive ART in 2013. This a worrying situation as ARVs stocked out in a number of sites during the period under review.

Table 10 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** from NACP Program data	**% Patients on ART** relative to all those eligible for ART
2010	112,656	38,188	34%
2011	113,475	56,050	49%
2012	120,466	69,870	58%
2013	136,053	83,394 (projected)	61%

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 11 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 12 below shows the coverage for 2012 exclusively.

Table 12 positive incident TB cases that received treatment for both TB and HIV in 2012

	All Cases	Males	Females
Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV	40%	37%	44%
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	1033	479	554
Estimated Number of Incident TB cases in people living with HIV	2552	1281	1271

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.

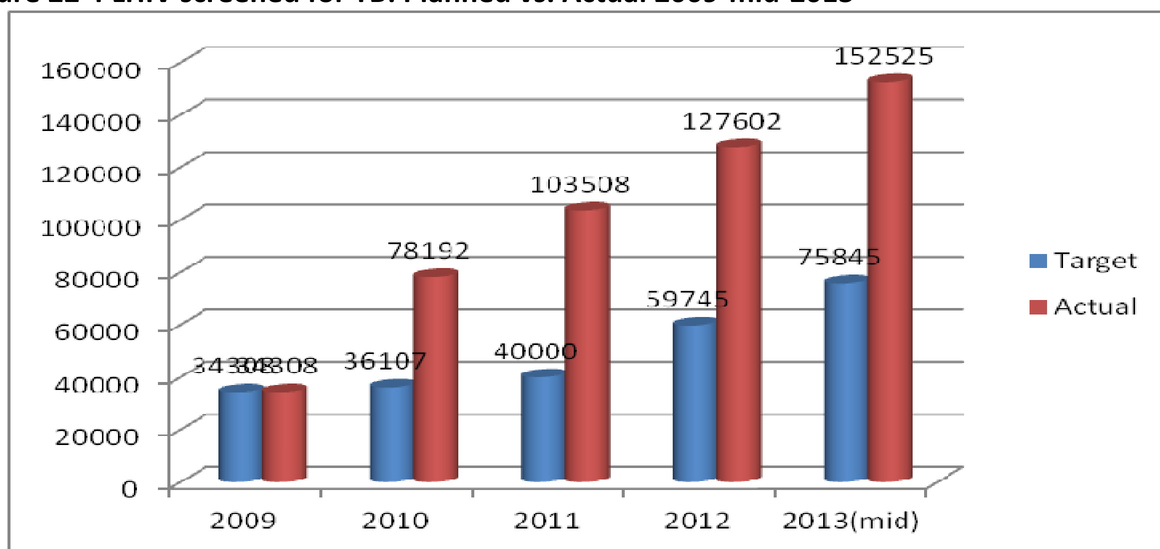
The NSP aims at strengthening screening of TB patients for HIV by equipping TB program facilities with HIV test kits, train personnel to undertake HIV testing and counselling of TB patients for HIV. Where on-site HTC for TB patients is not possible, TB patients will be referred to HTC sites for counselling 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 22 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.

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:

Heart-to-Heart (H2H) campaign and involvement of PLHIV as HIV Ambassadors

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.

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 Employees 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 are 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 and in the Millennium Villages Project in Amansie East and Amansie West Districts of Ashanti Region under Program Accelerated Funds (PAF). 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.

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[21]. 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.

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

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

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 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.

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 PMTCT 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.

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

The Livelihood Empowerment Against Poverty (LEAP) Program

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[22] 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

[22] 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).

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[23] 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[24]. 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 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,

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

[24] The World Bank- World Development Indicators 2011

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.

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 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

Political Support and Leadership

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, six (6) 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 2011. The data for the National Funding Matrix was not yet available 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

In 2011, US$81,677,333was provided for in the HIV and AIDS budget. Funds from international organisations formed 74.4% of total spending on HIV and AIDS; public funds formed 18.2% percent of the total expenditure.

International organisations are mainly the UN agencies, Global Fund, the World Bank, USAID, DANIDA, GIZ and other international for-profit and not-for-profit organisations active in HIV and AIDS programmes in Ghana. Of the contribution by International Organizations, Multilateral funds formed 47% of the total followed by 18% from International not-for-profit organizations and foundations and 34% from direct bilateral partners. Funds from GFATM formed 81% of the total funds from multilaterals in Ghana. Out of the total funding by international organisations only 21% (US$10,263,810) was sent to the pooled or earmarked fund overseen by the GAC, the remaining 79% of funds was sent directly to implementing agencies.

There was overall increase in spending (of about US$19,529,769) from $62,147,564 in 2010 to US$81,677,333 in 2011. In 2011 significant increases in spending was noted in Prevention, OVC programs, and Human Resources. (Table 13)

Table 13 Spending Priorities, 2010- 2011

	2010 US$	Percentage of total spending (%)	2011 US$	Percentage of total spending (%)
Prevention	12,051,631	19.4%	21,413,136	26.22%
Care and treatment	21,467,922	34.5%	21,089,957	25.82%
Orphans and vulnerable children	261,175	0.4%	6,634,765	8.12%
Programme management and administration	20,108,990	32.4%	18,471,911	22.62%
Human resources	4,807,684	7.7%	10,522,486	12.88%
Social protection and social services (excluding OVC)	282,872	0.5%	975,979	1.19%
Enabling environment	2,252,151	3.6%	1,313,869	1.61%
HIV and AIDS-related research (excluding operations research)	915,139	1.5%	1,255,230	1.54%
Grand Total	**62,147,564**	**100.0%**	**81,677,333**	**100.0%**

NASA 2011 draft

Table 13 shows a significant increase in spending on prevention activities between 2010 and 2011. It can be argued that this is a continuing effort to address the worsening HIV prevalence situation which occurred in 2009, when it was suggested that too much of resources had been taken from prevention in favour of treatment and care.

In 2012, there was the CIMG Award winning campaign (Azonto) encouraging people to know their status. Secondly, there was also the Heart–to–Heart Campaign (H2H) focusing on the use of live role models in advocating stigma reduction towards PLHIVs, encouraging people to test and know their status.

In 2010 the NACP supervised and supported the establishment of 251 HTC centres across the country as a key strategy to preventing new infections and re-infection among the general population. In 2012 153 new centres were established. More than 100,000 additional clients were reached for PMTCT in 2010 with more than 1,200 clients over and above the 2009 figure being put on ARV prophylaxis. In 2012 548,933 additional clients were reached for PMTCT with 7,781 pregnant women given ARVs.

Between 2010 and 2011 there was modest increase in the number of blood units screened from approximately 160,000 units to 192,000 units. In 2012 136,097 blood units were screened with 9% being positive for HIV.

The greatest expenditure for Prevention activities is in the area of communication for social and behavioural change and HTC and programmes for vulnerable and accessible populations.

Table 13 also shows that in 2011 the total amount spent on prevention was US$21,413,136 which is over almost US$2 million of the total budget for that category in the 2011 budget (US$19,610,307.00) required for the programme implementation in that year . The total amount spent on prevention activities in 2010 compared with 2011 saw an increase from US$12,051,631 to US$21,413,136. This expenditure also fell short of the requirement of US$40,931,837[25] projected for that year from the NSP. The total amount, funds provided for HIV and AIDS, prevention increased from 19.4% to 26.2% of the total expenditure.

In the same period, the amount spent on treatment care and treatment decreased from US$21,467,922 to US$21,089,957, decreasing from 34.5% to 25.8% of the total expenditure. In 2011 and 2012, a substantial investment was made in putting an additional 14,383 and 14,332 PLHIV respectively on HAART as compared to an increase of 10,131 and 13,814 in 2009 and 2010 respectively. This was accompanied by substantial investments in infrastructure in Metropolises, Municipalities and Districts as well capacity building of service providers. The current investments are mainly for the Anti-retroviral drugs (46.8% of the treatment and care expenditure in 2011)

Table 14 shows the amounts funding agents spent on key intervention areas in 2011. The majority of the funds, US$60,807,945 (74.4%) was sourced from international organisations, US$14,854,634 (18.2%) was provided through public funds and private sources (private individuals/households) of funding was US$6,014,754 (7.4%). The GFATM, and Bilateral agencies continue to be the key sources of funding from 2010 and 2012.

Table 14 Relative spending on key priorities by each funding agent

Key Priority Areas	Public sector	%	Private sector	%	International Organisations	%
Prevention Programmes	1,004,601	6.8%	124,087	2.1%	20,284,448	33.4%
Treatment and care components	1,811,137	12.2%	5,784,631	96.2%	13,494,189	22.2%
Orphans and Vulnerable Children	6,400,000	43.1%	0	0.0%	234,765	0.4%
Programme Management & Administrative Strengthening	4,492,789	30.2%	31,148	0.5%	13,947,974	22.9%
Incentives for Recruitment & Retention of Human Resources	991,909	6.7%	65,375	1.1%	9,465,202	15.6%
Social Protection and Social Services(excluding OVC)	55,752	0.4%	6,513	0.1%	913,714	1.5%
Enabling Environment and Community Development	98,446	0.7%	3,000	0.0%	1,212,423	2.0%
HIV- and AIDS-Related Research (excluding operations research)	0	0.0%	0	0.0%	1,255,230	2.1%
Grand Total	**14,854,634**	**100%**	**6,014,754**	**100%**	**60,807,945**	**100%**

[25] HIV and AIDS National Strategic Plan 2011 - 2015

Table 15 shows the contribution of funding agents to each of the key priority intervention areas.

Table 15 Contributions to spending on each key priority area by Funding agent

Key Priority Areas	Prevention Programmes	Treatment and care components	Orphans and Vulnerable Children	Programme Management & Administrative Strengthening	Incentives for Recruitment & Retention of Human Resources	Social Protection and Social Services(excluding OVC)	Enabling Environment and Community Development	HIV- and AIDS-Related Research (excluding operations research)
Public sector	1,004,601	1,811,137	6,400,000	4,492,789	991,909	55752	98,446	0
Public sector %	5%	9%	96%	24%	9%	6%	7%	0%
Private sources	124,087	5,784,631	0	31,148	65,375	6513	3000	0
Private sources %	1%	27%	0%	0%	1%	1%	0%	0%
International Organisations	20,284,448	13,494,189	234,765	13,947,974	9,465,202	913,714	1,212,423	1,255,230
International Organisations %	95%	64%	4%	76%	90%	94%	92%	100%
Grand Total	**21,413,136**	**21,089,957**	**6,634,765**	**18,471,911**	**10,522,486**	**975,979**	**1,313,869**	**1,255,230**
%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

It should be noted that the public spending does not include salary of public health and non-health personnel in HIV and AIDS related activities and cost of the use of public health facilities.

Table 16 shows the relative spending on key intervention areas in 2010 and 2011. According to the report a greater proportion of funds spent on prevention in 2011 compared with 2010. A marginal decrease on spending on Treatment, care and support was noted from 34.5% of funds in 2010 to 25.8% of the finds in 2011. Overall however, treatment care and support still receives substantial proportion of program implementation funding probably because of the cost of the intervention. A marginal increase in relative spending was also noted in the programme management and administrative strengthening.

Table 16 AIDS expenditure by Category 2010 - 2011

	2010 US$	**Percentage of total spending (%)**	**2011 US$**	**Percentage of total spending (%)**
Prevention	12,051,631	19.4%	21,413,136	26.22%
Care and treatment	21,467,922	34.5%	21,089,957	25.82%
Orphans and vulnerable children	261,175	0.4%	6,634,765	8.12%
Programme management and administration	20,108,990	32.4%	18,471,911	22.62%
Human resources	4,807,684	7.7%	10,522,486	12.88%
Social protection and social services (excluding OVC)	282,872	0.5%	975,979	1.19%
Enabling environment	2,252,151	3.6%	1,313,869	1.61%

HIV and AIDS-related research (excluding operations research)	915,139	1.5%	1,255,230	1.54%
Grand Total	**62,147,564**	**100.0%**	**81,677,333**	**100.0%**

Targeted cost-effective interventions are critical in the response to HIV and AIDS. The Modes of Transmission study indicated the contribution of various population groups to HIV transmission in Ghana. Although low risk heterosexual contact contributes considerably (30%) to HIV transmission, partners of clients of sex workers (15.5%), Casual heterosexual sex (13.2%), MSM (7.2%) and clients of sex workers (6.5%) also contribute considerably to HIV transmission [5]. Targeting these populations with effective HIV intervention would result in reduction in HIV transmission.

The NASA 2010 report also indicates that spending on activities/services excluding ART for PLHIV and MARPS was 25% and 2% respectively of the total spending.

Figure 23 Overview of Spending by Beneficiary Group, 2010

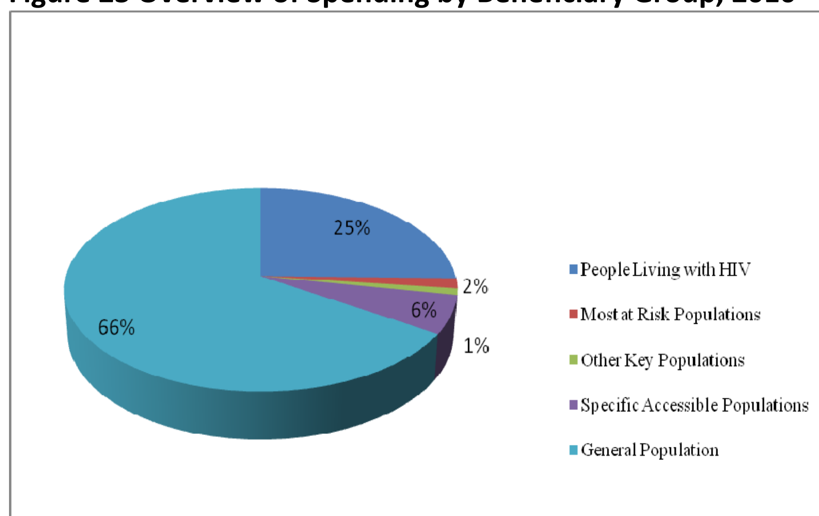


Table 17 HIV and AIDS related Spending by Beneficiary Groups, 2010 (US$)

BENEFICIARY GROUPS	Amount	% Within Beneficiary Group	% Within Total Expenditure
PLHIV			
People living with HIV not disaggregated by age or gender	15,747,863		
Sub Total	**15,747,863**	**100.00**	**25.3**
Most at Risk Populations			
Female sex workers and their clients	872,077	88.94	
Men who have sex with men (MSM)	31,211	3.18	
Most at risk population not disaggregated by tpe	77,201	7.87	

BENEFICIARY GROUPS	Amount	% Within Beneficiary Group	% Within Total Expenditure
Sub Total	**980,489**	100.00	**1.6**
Other Key Populations			
Orphans and vulnerable children (OVC)	455,325	70.88	
Refugees (externally displaced)	100,000	15.57	
Children and youth out of school	87,102	13.56	
Sub Total	**642,427**	**100.00**	**1.0**
Specific "Accessible " Populations			
Junior high/high school students	585,211	15.48	
University students	20,226	0.53	
Health care workers	70,150	1.86	
Factory workers	136,483	3.61	
Specific "accessible " populations not disaggregated by type	2,947,714	77.95	
Specific "accessible " populations not elsewhere classified	21,672	0.57	
Sub Total	**3,781,456**	100.00	**6.1**
General Population			
Female adult population	61,507	0.15	
Youth (age 15 to 24 years) not disaggregated by gender	1,295,947	3.16	
General adult population (older than 24 years) not disaggregated by age or gender	289,389	0.71	
General population not disaggregated by age or gender.	39,348,486	95.98	
Sub Total	**40,995,329**	100.00	**66.0**
TOTAL	**62,147,564**		

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.

The Consul for the Brazilian Consulate in Ghana also launched the World AIDS Day activities in Accra on 6th November 2012 and the US Ambassador was represented sat a Durbar on World AIDS day in Cape Coast on November 27th. The global event is being held under the theme "Getting to Zero: Zero new HIV infections, Zero AIDS-related deaths, Zero discrimination'', but after stakeholder consultation, Ghana chose the sub-theme "Accelerating to 'Zero' Together".

The event also coincided with the 10th Anniversary of the Ghana AIDS Commission. The anniversary year started with the historic state visit of the Executive Director of UNAIDS Michel

Sidibe to Ghana in February, and the organisation of the first ever HIV&AIDS exhibition which brought together over one hundred HIV related service providers and campaigners, religious associations and suppliers of HIV prevention products under one roof for a week's interaction.

IV. BEST PRACTICES

Prevention

i. Know-your-status campaign provided opportunity for increased community mobilization and demand creation for HIV services including PMTCT

ii. The involvement of the mass media in the national HIV response is a good practice for community education, mobilization, and involvement

iii. 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

iv. Know your status campaigns that allow testing and counseling to be conducted outside health facilities should be encouraged. The service of testing and counseling done without financial cost to the individual is a good inducer aiding more people to test.

v. 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.

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 the fight against HIV and AIDS.

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 the SHARPER project, Maritime Life Precious Foundation, and WAPCAS as a mechanism to reduce stigma and discrimination and increase access to services.

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.

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 Food Basket – Excellent program but the lesson learned is that removing beneficiaries who have attained a BMI >18% is a big challenge.

iii. National Assessment and Counselling Support (NACS) seeks 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.

Political Leadership and commitment

i. Vice President John Mahama (Now president) who had been chairing the activities of the Commission on behalf of the President officially opened an HIV and AIDS Fair on February 21, 2012.

ii. The Government in 2012 released GH₵17,650,455 as the first portion of its matching funds in fulfillment of Ghana's High level commitment to the fight against HIV and AIDS. The Vice President at the time H.E. John Dramani Mahama, at the High Level Plenary meeting on AIDS during the 65th Session of the United Nations General Assembly in June 2011 pledged GH₵150 million over a five-year period, as government's contribution to the implementation of the National Strategic Plan of 2011-2015.

V. MAJOR CHALLENGES AND REMEDIAL ACTIONS

Progress on key challenges reported in 2012 report

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

Constraints identified in 2012 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 2012 report

- ♣ Development of HIV Commodity Supply Chain Master Plan-done in 2012
- ♣ Costing of HIV Commodity Supplies-done in 2012
- ♣ Draft revised HIV Commodity Security Plan
- ♣ Electronic-Logistic Management Information System (E-LMIS) Developed:
- ♣ 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 Founded
- ♣ January 2012, after positive results from the pilot scheme, the Early Warning System was scaled-up to approximately 400 facilities
- ♣ 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 .

ii. Prices of condoms are not uniform at project sites. Whereas some organizations distribute them for free, others (especially those obtained from the government sector) are sold. This makes it difficult for those organizations who sell to distribute their condoms effectively.

Progress made in resolving issues

- ♣ GAC proposed the standardization of the price to 10p for three condoms
- ♣ Introduction of Condom Vending Machines

Challenges faced throughout the reporting period of 2012 to 2013

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 Evaluation team in October. 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. Lack 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 have characterized the ART program operations for the greater part of the reporting period 2010 and 2011. The situation was wide spread and resulted from lack of funds to procure ARVs and reagents as well as delays in the procurement process when funds were available.

iv. Where ARVs were available at the Central Medical Stores, lack of funds to transport them to the regions was the major challenge.

v. Inability of the program to provide training for new health workers especially prescribers due to lack of funds, did not only limit the recruitment of patients into care and follow up of patients on ART, but constrained the establishment of new treatment sites.

vi. 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.

vii. 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. Many more patients could benefit from the food support but this is not possible at the moment due to lack of funds.

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 guidelines which require PLHIV to be weaned off once they attained certain biomedical indicators such as weight gain is problematic as it will be highly impossible to stop supplying them food supplement

REDUCING STIGMA AND DISCRIMINATION

i. No PLHIV Stigma Index Survey has been undertaken even though stigma exists at all levels of the Ghanaian society and is a program weakness. However, the country is at an advanced stage in the process of carrying out its first ever Stigma Index Surveyin 2013.

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.

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 1.37% 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

- ♣ Ensure all identified HIV+ pregnant women receive prophylaxis during pregnancy and breastfeeding and that their infants also receive prophylaxis according to national guidelines.

- ♣ 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 readiness for Ghana adopting Option B+ for its 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.

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. This is evident in 2011 when test kits were available as the numbers shot up but declined from 2012 to midyear 2013 midyear when stock out of RTKs were common.
- ♣ 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 25,000 units of blood
- ♣ The NBTS prefers the Ag-Ab Combo test kit 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.
- ♣ 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.

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, in its current form is not working and should be replaced by the 'Monitor' and Models of Hope programs implemented in ART facilities nationwide.
- ♣ 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

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.
- 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 Miutigation

- 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
- All efforts to be made to continue the food assistance for food-insecure households with PLHIV on ART when current WFP funding runs out in 2015.

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.

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

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 18 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
Unavailability of checklist for monitoring and supervision	Provide standard checklist for specific supervision/mentoring
Lack of written feedback	Build capacity to improve feedback reporting
Data Quality	
Weak capacities in conducting data checks/auditing	rain 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
Standard Operating procedures for M & E	
Lack of operational definitions for M & E indicators.	Develop standardized M&E Operations M & E operator guideline
No clear guidelines on CSOs reports/action plans submission to District Authority	Develop a clear guidelines on CSOs reports/actions plans submission to DA
Lack of standardised narrative report formats/guideline	Develop standardized management manual/guidelines on narrative report writing
Non availability of guidelines on :	Provide training and monitoring in the effective use of the management manual to ensure that community M & E system is strengthened with respect to adequate guidance on:
- how to complete data collection and reporting tools;	what implementing partners are supposed to report on:
- how to maintain records of errors found;	How (e.g., in what specific format) reports are to be submitted.
- what to do with late data and reports; and	To whom the reports should be submitted.
- how long to retain data/reports	When the reports are due.
	4. Monitor and document use of the management manual to ensure that standard operating procedures are followed for all data management tasks including

	how to complete both data collection and reporting tools; how to follow up with late and incomplete reports; how to maintain records of errors found what to do with late data and reports; and how long to retain data/reports before discarding them
Routine Data Monitoring	
Data Collection	Data Collection
Non friendly and cumbersome data collection tools	Review data collection tools to make them user friendly e.g HTC, Daily registers for PEs etc
Absence of standardised HTC data collection tools	Advocate for harmonization of HTC and other data collection tools at all levels eg. District, regional and national levels Provide training in ethics standard
Data Processing & Analysis	Data Processing and 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 Data Use and Advocacy Plan	Provide guidelines for the development of data use plans.
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 PMTCT 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 PMTCT 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 Food Assistance Project for poor households with patients on ART is a wonderful band-aid project for the small number of poor ART patients who need food as part of the treatment program. The Project provides 6,000 ART patients and 24,000 household dependents with food ration each year. Without massive new funding, the program cannot reach many needy ART households and is not sustainable in its current form.

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-Tern 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.
- 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 and the NCPI: 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 and completed relevant sections of the questionnaire. The group worked in plenary session to present and discuss results to obtain answers for each section.

Data collection was facilitated by relevant data collection tools including the guidelines on construction of core indicators by NACP, CSOs and other stakeholders..

A draft Country AIDS Response Progress report was prepared and presented at a **stakeholder validation forum** on 27th March 2014 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.

NCPI Meeting (Participants List) for Government Sector

Attendance List - 7th March, 2014

Name	Organization	Email
Jones Blantari	POLICE	blantarijm@gmail.com
Martin Nortey	MOTR	norteymartin@gmail.com
Nana Esi Inkoom	GES/SHEP	esinkoom@gmail.com
Mohamed Wahab	MOTR	wahab1976@yahoo.com
Steve Arko	MOE	star2gh@yahoo.com
John Lovelace Kpodoviah	MOFA	dziwo6@yahoo.com
Lt. Edmund Kommogldomo	GAFACP	komeddie@yahoo.com
Fati Lily Soale	MLGRD	fatosoale@yahoo.co.uk
Kwadwo Asante	NACP	kasante@nacp.org.gh
Christopher Conduah	NDPC	ckconduah@gmail.com
Dr. Angela El-Adas	GAC	info@ghanaids.gov.gh
Dr. Joseph Amuzu	GAC	jamuzu@ghanaids.gov.gh
Jacob Sackey	GAC	jsackey@ghanaids.gov.gh
Emmanual Larbi	GAC	larbi@ghanaids.gov.gh
Fred Nana Poku	GAC	fnanapoku@ghanaids.gov.gh
Kenneth Yeboah	GAC	kyeboah@ghanaids.gov.gh
Dennis Annang	GAC	dannang@ghanaids.gov.gh
Kwasi Gyimah Okai	GAC	kgokai@ghanaids.gov.gh
Selom Djokpe	GAC	selomdjokpe@gmail.com

NCPI Meeting (Participants List) for Civil Society Organizations

Attendance List - 10th March, 2014

Name	Organization	Email
Kofi Amofa	NAP+	napghana2005@yahoo.com
Henry Nagai	UNAIDS	nagaih@unaids.org
Lucy Owusu-Darko	OICI	lowusu-darko@oici.org
George Owoo	HRAC	info@hracghana.org
Edem Hini	GHANET	heavydo@yahoo.com
Yussif A. Abdul Rahman	FHI360	yarahman@fhi360.org
Stephen Konde	World Educ.	stekonde@yahoo.co.uk
Modesta Agbenyedzi	GBCEW	info@gbcew.org
Bernice Mpere-Gyekye	PRO-LINK	prolink-organization@yahoo.com
James M. Boamah	GCNH	healthcoalition2000@yahoo.co.uk
Emmanual Larbi	GAC	larbi@ghanaids.gov.gh
Fred Nana Poku	GAC	fnanapoku@ghanaids.gov.gh
Kenneth Yeboah	GAC	kyeboah@ghanaids.gov.gh
Cynthia Asante	GAC	casante@ghanaids.gov.gh
Isaiah Doe Kwao	GAC	idkwao@ghanaids.gov.gh
Dennis Annang	GAC	dannang@ghanaids.gov.gh
Kwasi Gyimah Okai	GAC	kgokai@ghanaids.gov.gh
Selom Djokpe	GAC	selomdjokpe@gmail.com

METHODOLOGY FOR COMPLETING THE NCPI

Participants from the Government, Public sector organizations, including the Uniformed Services were invited to the Meeting on 7th March. Likewise the participants from CSOs, FBOs, and Multi/Bilateral partners were invited to a meeting on the 10th March. Participants in most cases were apprised of the contents of the questionnaire before the meeting dates.

1.0Opening

The meetings started at 10:00am. Mr. Emmanuel Larbi of the Research, Monitoring and Evaluation Directorate of the Ghana AIDS Commission explained the purpose of the meeting and introduced all participants.

2.0Overview

a. Mr. Kenneth Yeboah of the R,M&E directorate assisted the Consultant for writing the Report, Dr. Derek Nii Armah Aryee, to take the participants through the questionnaires.

3.0NCPI Questionnaire

This was filled on a question by question basis after much deliberation in each question. The consensus result was recorded in all cases.

4.0Conclusion

Mr. Larbi thanked all participants for coming and also appreciated the team work. The meetings ended at approximately 1:30pm.

The results are presented as two hyperlinks below. (They will require Acrobat Reader software to be read). A summary of the trend in scoring is also depicted. It shows a slight dipping in the standards scored by participants as compared to previous years.

ANNEX 2 NATIONAL COMMITMENTS AND POLICY INSTRUMENT (NCPI)

APPENDIX 3

National Commitments and Policy Instrument (NCPI)

Part A

[to be administered by government officials]

I. STRATEGIC PLAN

1. Has the country developed a national multisectoral strategy to respond to HIV?

(Multisectoral strategies should include, but are not limited to, those developed by Ministries such as the ones listed under 1.2)

Yes	No

IF YES, what is the period covered *[write in]*:

IF YES, briefly describe key developments/modifications between the current national strategy and the prior one.

IF NO or NOT APPLICABLE, briefly explain why.

IF YES, complete questions 1.1 through 1.10; *IF NO*, go to question 2.

1.1. Which government ministries or agencies have overall responsibility for the development and implementation of the national multi-sectoral strategy to respond to HIV?

Name of government ministries or agencies *[write in]*:

126 UNAIDS | *Global AIDS Response Progress Reporting 2014*

[Right Click and Open Hyperlink]

National Commitments and Policy Instrument (NCPI)

Part B

[to be administered to representatives from civil society organizations, bilateral agencies, and UN organizations]

I. CIVIL SOCIETY[15] INVOLVEMENT

1. **To what extent (on a scale of 0 to 5 where 0 is "Low" and 5 is "High") has civil society contributed to strengthening the political commitment of top leaders and national strategy/policy formulations?**

LOW					HIGH
0	1	2	3	4	5

Comments and examples:

2. **To what extent (on a scale of 0 to 5 where 0 is "Low" and 5 is "High") have civil society representatives been involved in the planning and budgeting process for the National Strategic Plan on HIV or for the most current activity plan (e.g. attending planning meetings and reviewing drafts)?**

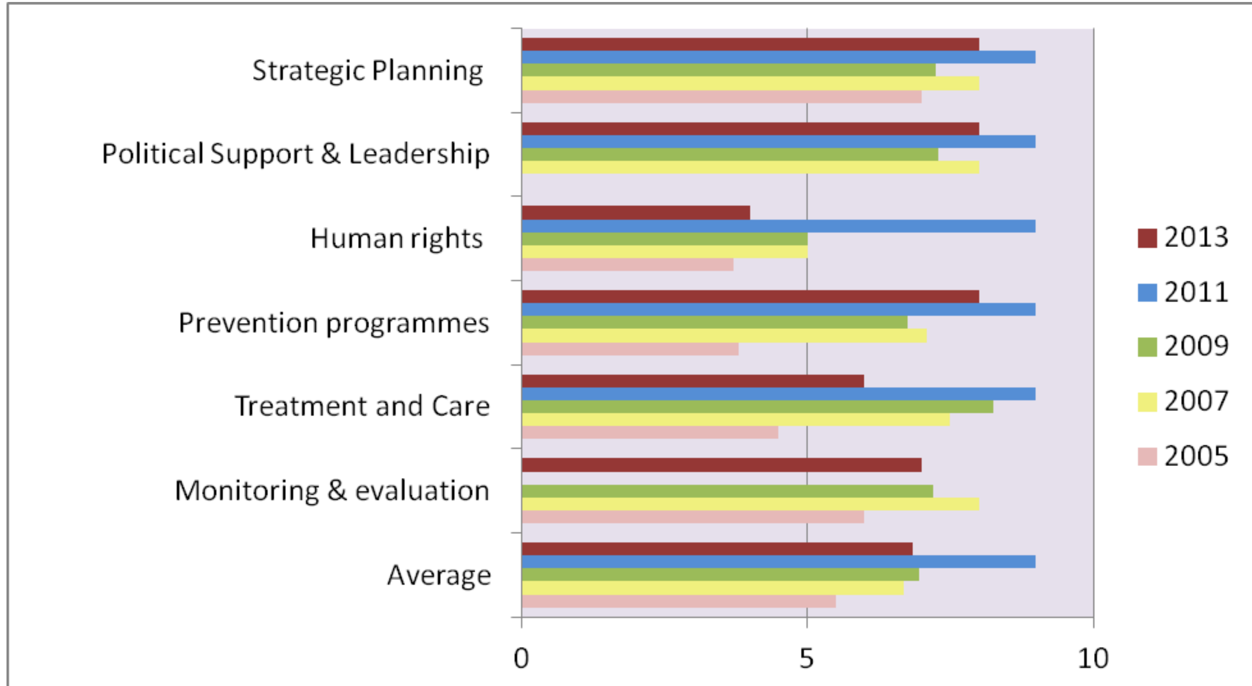
LOW					HIGH
0	1	2	3	4	5

Comments and examples:

15 Civil society includes among others: networks and organisations of people living with HIV, women, young people, key affected groups (including men who have sex with men, transgender people, sex workers, people who inject drugs, migrants, refugees/displaced populations, prisoners); faith-based organizations; AIDS service organizations; community-based organizations; ; workers organizations, human rights organizations; etc. Note: The private sector is considered separately.

[Right Click and Open Hyperlink]

Figure 24 NCPI SUMMARY SCORE SHEET 2005 - 2013



An analysis of the NCPI Summary Score Sheet from 2005 to 2013 in Fig. 24 shows that between 2011 and 2013 there has been a dip in the scoring across all categories. Participants at the validation meeting attributed these negative perceptions to issues that the National Response was facing, namely, lack of funds, stock outs of commodities, difficulties in providing services to some vulnerable populations etc. The details can be found in the Instruments themselves.

BIBLIOGRAPHY

1. National AIDS/ STI Control Programme. 2008 HIV Sentinel Survey Report. Accra: Ghana Health Service, Ministry of Health; 2009.
2. National AIDS/ STI Control Programme. 2007 HIV Sentinel Survey Report. Accra: Ghana Health Service, Ghana AIDS Comission, World Health Organisation, Department of International Development; 2008.
3. National AIDS / STI Control Programme. 2009 HIV Sentinal Survey Report. Accra: National AIDS/STI Control Programme, Ghana Health Service, Ministry of Health, Accra Ghana; 2010.
4. National AIDS / STI Control Programme. National HIV Prevalence and AIDS Estimates Report 2012 - 2016. Accra: National AIDS Control Programme, Ghana Health Service, Department for International Health, World Health Organisation; 2010.
5. Bosu W, Yeboah K, Rangalyan G, Atuahene K, Lowndes C, Stover J, et al. Modes of HIV transmission in West Africa: analysis of the distribution of new HIV infections in Ghana and recommendations for prevention. Accra: Ghana AIDS Commission; 2009.
6. Ghana Statistical Service (GSS) NMIfMRN, and ORC, Macro. Ghana Demographic and Health Survey 2003. Calverton, Maryland: GSS, NMIMR and ORC Macro; 2004.
7. Ghana Statistical Service G, Ghana Health Service G, ICF Macro. GhanaDemographic and Health Survey 2008. Accra, Ghana: Ghana Statistical Service , Ghana Health Service, ICF Macro; 2009.
8. Anarfi J, Ahiadeke C, Ampofo W, Addo K. Female Sex Workers Behavioural Surveillance Survey in Accra and Kumasi, Ghana Draft Report. Accra: Prolink Organization, Institute of Statistical, Social and Economic Research (ISSER), Noguchi Memorial Institute for Medical Research (NMIMR); 2009.
9. National AIDS/ STI Control Programme. National HIV prevalence and AIDS Estimates Reports 2008 - 2015. Accra: National AIDS Control Programme, Ghana Health Service, Ministry of Health; 2009.
10. Government of Ghana. Ghana AIDS Commission ACT(ACT 613). In: Ghana Go, editor. Accra; 2002.
11. Ghana AIDS Commission. The HIV and AIDS Programme of Work. Accra Ghana AIDS Commision; 2009.
12. Ghana AIDS Commission. Half-Year Report 2009, Multi-Sectoral HIV & AIDS Program (MSHAP). Accra: Ghana AIDS Commission; 2009.
13. Government of Ghana. Growth and Poverty Reduction Strategy (GPRS II) (2006 – 2009), . Accra: National Development Planning Commission (NDPC); 2005 November 2005.
14. Ministry of Health. Guidelines for management of Opportunistic Infections and Other Related HIV Diseases. Accra: Ministry of Health, National AIDS/ STI Control Programme, Ghana Health Service; 2008.
15. Ministry of Health. Guidelines for Antiretroviral Therapy. Accra: Ministry of Health, National AIDS Control Programme, Ghana Health Service 2008.
16. Ministry of Health. National Guidelines for Prevention of Mother to Child transmission of HIV (PMTCT): . Accra: Ministry of Health, Ghana Health Service, National AIDS COntrol Programme; 2008.
17. Ministry of Health. National Guidelines for the Development and the Implementation of HIV counselling and Testing. Accra: Ministry of Health, Ghana Health Service, National AIDS Control Programme; 2008.
18. Ministry of Health. Guidelines for Management of Sexually Transmitted Infections. Accra: Ministry of Health, Ghana Health Service, National AIDS Control Programme,; 2008 September 2008.
19. Ghana AIDS Commission. National Policy Guidelines on Orphans and Other Children made Vulnerable by HIV/AIDS. Accra: Ghana AIDS Commission; 2005 January 2005.
20. Ministry of Women and Children's Affairs. Early childhood Care and Development Policy: . Accra: Ministry of Women and Children's Affairs
21. Government of Ghana. National Social Protection Strategy (NSPS) Accra; 2007.

22. Ministry of Women and Children's Affairs. National Gender and Children's Policy: . Accra: Ministry of Women and Children's Affairs.
23. Ministry of Women and Children's Affairs. National Domestic Violence Policy: . Accra: Ministry of Women and Children's Affairs; 2008.
24. HIV/TB Workplace Policy for the Revenue Agencies of Ghana: . Accra; 2007 December 2007.
25. Serious Fraud Office of Ghana. HIV/TB Workplace Policy for Serious Fraud Office of Ghana, . Accra: Serious Fraud Office of Ghana, GIZ; 2007 November 2007.
26. Ministry of Justice. HIV/TB Work Place Policy. Accra Ministry of Justice, Ghana AIDS Commission; 2008.
27. Asante FA, Fenny AP, Ahiadeke C. National AIDS Spending Assessment 2005 and 2006 level and flow of resources and expenditure to confront HIV/AIDS. Accra: Ghana AIDS Comission, Institute of Statistical Social and Economic Research, UNAIDS; August 2007.
28. Ghana Statistical Service (GSS), Ghana Health Service (GHS), ICF Macro. Ghana Demographic and Health Survey 2008. . Accra, Ghana.: GSS, GHS,ICF Macro 2009.
29. Strengthening HIV/AIDS Response Partnerships. Behavioral and HIV Biomarker Study: Female Sex Workers in the Accra-Tema Metropolitan Area. . Accra: USAID, SHARP, AED Constella Futures; 2006
30. West African Project to Combat AIDS. Annual Statistics. Accra West African Project to Combat AIDS; 2010.
31. Ministry of Education. Statistics on the number of schools with Family Life Education, 2009. Accra: Ministtry of Education; 2010.
32. National AIDS STI Control Programme. Presentation for Early Warning Indicators 9th HIV Prevention, treatment, care and support Review Meeting Accra: National AIDS Control Programmes, Ghana Health Service; 2010.
33. Anarfi J, Ahiadeke C, Ampofo W, Addo K. Female Sex Workers Behavioural Surveillance Survey in Accra and Kumasi, Ghana. Accra: ISSER, NMIMR, Prolink; 2009.
34. Cote AM, Sobela F, Dzokoto A, Nzambi K, Asamoah-Adu C, Labbe AC, et al. Transactional sex is the driving force in the dynamics of HIV in Accra, Ghana. AIDS. 2004 Apr 9;18(6):917-25.
35. Alary M, Lowndes CM. The central role of clients of female sex workers in the dynamics of heterosexual HIV transmission in sub-Saharan Africa. AIDS. 2004 Apr 9;18(6):945-7.
36. Dzokoto A. National Report on the Progress of the United Nations General Assembly Special Session (UNGASS) Declaration of Commitment on HIV and AIDS. Ghana. January 2006-December 2007. Accra: Ghana AIDS Commission; January 2008.
37. Ghana AIDS Commission. National HIV and AIDS Strategic Framework 2001-2005. Accra: GAC; 2001.
38. Ghana AIDS Commission. National HIV and AIDS Strategic Framework 2006 - 2010. Accra: GAC; 2006.
39. Asante FA, Fenny AP. Ghana National AIDS Spending Assessment (NASA) Study, 2007: Level and Flow of Resources and Expenditures to confront the AIDS Epidemic In Ghana Accra: Ghana AIDS Comission, Ministry of Finance and Economic Planning, Ministry of Health, Ghana Health Service, National AIDS Control Programme; 2008.
40. Asante FA. National AIDS Spending Assessment (NASA): Level and Flow of Resources and Expenditure to Confront HIV and AIDS, DRAFT. Accra: Institute of Statistical Social and Economic Research (ISSER), University of Ghana, UNAIDS Ghana Country Office, Ghana AIDS Comission; 2010.
41. Ghana AIDS Commission. Annual Programme of Work (HIV and AIDS) 2007. Accra: Ghana AIDS Commission; 2007.
42. National AIDS Control Programme. Ghana National ART Scale up Plan 2006-2010, Towards Universal Access to antiretroviral therapy, : Accra: Ghana Health Service, National AIDS Control Programme, World Health Organisation 2006 January 2006.
43. Dzokoto A. Scaling Up Towards Univeral Access To Prevention, Treatment, Care and Support in West and Central Africa. Accra: UNAIDS, Ghana AIDS Commission, National AIDS Control Programme; 2009.
44. Government of Ghana. Ghana AIDS Commission ACT(ACT 613). In: Ghana Go, editor. Accra; 2002.

45. The constituion of the Republic of Ghana The Republic of Ghana; 1992.
46. Labour Act. 651. Republic of Ghana; 2003.
47. Labour Decree. NLCD 157. The Republic of Ghana; 1967.
48. Industrial Relations Act Act 299. Republic of Ghana; 1965.
49. Workman Compensation Law The Republic of Ghana; 1987.
50. Factories, Offices and Shop Act. Act 328 The Republic of Ghana; 1990.
51. Patients Charter The Republic of Ghana; 2002
52. The Children's Act Act 560. The Republic of Ghana; 1998.
53. The Domestic Violence Act. The Republic of Ghana; 2007.
54. Criminal Code 1960 Act 29 Section 76. The Republic of Ghana; 1960.
55. The quarantine Ordinance CAP 77 The Repuiblic of Ghana; 1915.
56. The Infectious Quarantine Ordinance (CAP 78) Law# 2, 1908. The Republic of Ghana; 1908.
57. Civil Service Law , PNDC L327. PNDC L327. The Republic of Ghana; 1993.
58. Civil Service (Interim) Regulations, L.I.47. LI47. The Republic of Ghana; 1960.
59. Mills J. HIV/AIDS Law Accra. . Accra: Ghana AIDS Commission; 2004.
60. Commision GA. National HIV/AIDS and STI Policy. Accra: Ghana AIDS Commision; 2004.
61. Republic of Ghana. Growth and Poverty Reduction Strategy II, 2006- 2009. Accra 2006.
62. The Police Service Act. The Republic of Ghana; 1970.
63. Republic of Ghana. Government of Ghana "National Social Protection Strategy: Investing in People" Accra; 2006 March 2006.
64. Commision on Human Rights and Adminstrative Justice Act. ACt 436. The Republic of Ghana; 1993.
65. MIlls J. AIDS Law: Laws Applicable to HIV/AIDS Issues in Ghana. Accra Ghana AIDS Commission, German Developement Cooperation (GIZ), 2007.
66. the Legal Aid scheme Act () . . ACT 542. The Republic of Ghana; 1997.
67. Nzambi K, Bevalot M, Till H, Dzokoto A. Study on Stigma and discriminatory attitudes and perceptions in Accra and Tema Metropolis in Ghana: How does the General Adult population see Most at Risk Populations and How do Most at Risk Populations (MARP) see themselves in the context of HIV/AIDS in Ghana? . Accra German Technical Cooperation; 2009.
68. Government of Ghana. Multiple Indicator Cluster Study: Monitoring the situation of children women and men. Preliminary Report Accra, Ghana: GSS, MOH, USAID, UNICEF; 2006.
69. Ghana Statistical Service, Ghana Health Service, ICF Macro. Ghana Demographic and Health Survey 2008. Accra, Ghana,: GSS, GHS, and ICF Macro; 2009.
70. United Nations. United Nations General Assembly Twenty-sixth Special Session. In: Nations U, editor. Doc: A/s-26/L2 New York; 2001.
71. Ghana Health Service. 2007, Annual Report. Accra: Reproductive and Child Health Department, Family Health Division; 2007.
72. National AIDS / STI Control Programme. Annual Report. Accra: National AIDS/STI Control Programme, Ghana Health Service; 2008.
73. National AIDS / STI Control Programme. Annual Report 2007. Accra: National AIDS/ STI Control Programme, Ghana Health Service; 2007.
74. Reproductive and Child Health Unit. Reproductive and Child Health Statistics Accra: Reproductive and Child Health, Ghana Health Service; 2010.
75. National AIDS / STI Control Programme. Behavioural Surveillance Survey 2006,. Accra: National AIDS STI Control Programme, Ghana Health Survey, World Health Organisation, Departement for International Developement, World Bank.; 2009.
76. National AIDS / STI Control Programme. Annual Report 2006. Accra: National AIDS / STI Control Programme, Ghana Health Service; 2006.

77. National AIDS / STI Control Programme. Annual Report 2005. Accra: National AIDS / STI Control Programme, Ghana Health Service; 2005.
78. UNAIDS. United Nations General Assembly Special Session on HIV/AIDS 09: Monitoring the Declaration of Commitment on HIV/AIDS.Guidelines on Construction on Core Indicators, 2010 Reporting. Geneva: UNAIDS; 2010.
79. Department of Social Welfare. Livelihood Empowerment Against Poverty (LEAP) Annual Report. Accra: Ministry of Manpower Youth and Employment, Department of Social Welfare; 2008.
80. Dzokoto A. Scaling Up Towards Univeral Access To Prevention, Treatment, Care and Support in West and Central Africa. Accra: UNAIDS, Ghana AIDS Commission, National AIDS Control Programme; 2009.
81. Ghana Water Company, Aqua Vitens Rand Ltd. HIV and TB Workplace Project Progress Report, 2009. Accra: Ghana Water Company, Aqua Vitens Rand Ltd, GTX-REgional Coordination Unit for HIV and TB (GIZ-ReCHT); 2009.
82. Ghana AIDS Commission. National Integrated IEC / BCC Strategic Framework (HIV and AIDS) 2006 - 2010. Accra; 2005.
83. Ghana AIDS Commission. Monitoring and Evaluation of Multi- Sectoral HIV and AIDS Programme 2006 Report. . Accra: GAC; 2007.

Financing Sources

Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Othe Internatio
14,854,634	**14,848,234**	**6,400**	**0**	**0**	**0**	**60,807,945**	**20,922,460**	**5,488,229**	**23,226,584**	**0**	**0**	**11,170,**
1,004,601	**1,004,601**	**0**	**0**	**0**	**0**	**20,284,448**	**6,710,651**	**1,268,817**	**9,201,631**	**0**	**0**	**3,103,**
270,660	270660					2,453,277	78343	382,673	188,536			18037
10,640	10640					593,850			593583			2
51,388	51388					5,689,887	237630	12000	5440257			
0						1,922,712	874000	561,590	29,225			457,
0						0						
0						0						
1,660	1660					722,760	722760					
2,621	2621					497,910	136774	10336	350,800			

Financing Sources												
Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Othe[r] Internatio[nal]
0						482,733	136774	10336	335623			
0						0						
933	933					386,462	187099	183,072				16,2
666,699	666699					602,451	211443		391008			
0						0						
0						0						
0						0						
0						0						
0						2,490,874	990667	108,810	832120			5592
0						0						

Financing Sources												
Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Othe Internatio
0						1,026,230	10242		750096			2658
0						0						
0						0						
0						0						
0						3,415,302	3124919		290383			
0						0						
1,811,137	**1,811,137**	**0**	**0**	**0**	**0**	**13,494,189**	**1,179,726**	**21,295**	**8,689,626**	**0**	**0**	**3,603,5**
1,811,137	**1,811,137**	**0**	**0**	**0**	**0**	9,122,877	**148,635**	**21,295**	**8,664,208**	**0**	**0**	**288,7**
0						0						
0						0						
0						8,947,430		2000	8663791			281,(
0						22,100		15000				71

Financing Sources												
Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Othe Internatio
0						0						
0						0						
0						0						
0						0						
259,738	259738					151,452	148635	2400	417			
0						0						
1,551,399	1551399					1,895		1895				
0						0						
0	**0**	**0**	**0**	**0**	**0**	1,038,070	**1,031,091**	**0**	**6,979**	**0**	**0**	
0						0						

Financing Sources												
Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Othe Internatio
0						6,979			6979			
0						1,031,091	1,031,091					
0						0						
0						0						
0						3,333,242			**18,439**			**3,314,8**
0						0						
6,400,000	**6,400,000**	**0**	**0**	**0**	**0**	**234,765**	**104,230**	**121,815**	**0**	**0**	**0**	**8,7**
0						0						
0						0						
0						0						

Financing Sources												
Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Othe Internatio
0						0						
0						121,815		121815				
0						0						
6,400,000	6400000					112,950	104230					87
0						0						
4,492,789	**4,487,056**	**5,733**	**0**	**0**	**0**	**13,947,974**	**11,276,307**	**226,383**	**1,516,913**	**0**	**0**	**928,**
1,339,917	1339917					4,090,704	3209498	144,562	727051			95
113,347	113347					4,864,911	3722110		347313			7954
1,684,677	1681344	3333				2,345,359	1944812	756	360812			389
0						16,578		16578				

Financing Sources												
Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Othe Internatio
0						0						
0						0						
0						0						
0						0						
0						0						
0						218,638	75575	64487	78576			
0						0						
1,352,019	1349619	2400				2,144,402	2076815		3161			644
2,829	2829					267,382	247497					198
991,909	**991,909**	**0**	**0**	**0**	**0**	**9,465,202**	**624,312**	**3,318,405**	**3,629,007**	**0**	**0**	**1,893,4**
35,173	35173					992,301	500312	25641	329,558			136,7
0						7,513,903		2,696,080	3236540			15812

Financing Sources												
Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Other Internatio
880,441	880441					801,873	124000	596,684	62909			182
76,295	76295					157,125						1571
0						0						
55,752	**55,752**	**0**	**0**	**0**	**0**	**913,714**	**68,325**	**44,533**	**120,122**	**0**	**0**	**680,7**
0						120,122			120122			
2,333	2333					333		333				
0						0						
0						44,200		44200				
53,419	53419					749,059	68325					6807

Financing Sources												
Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Othe Internatio
0						0						
98,446	**97,779**	**667**	**0**	**0**	**0**	**1,212,423**	**159,870**	**364,981**	**0**	**0**	**0**	**687,5**
34,902	34902					309,884		64,456				2454
667		667				171,042		171,042				
0						82,314		82,314				
0						149,836	102667	47,169				
0						0						
0						57,203	57203					
62,877	62877					442,144						4421

Financing Sources												
Public Sources						International Sources						
								Multilaterals				
Public Sub-Total	Central / National	Sub-National	Dev. Banks Reimbursable (e.g. Loans)	Social Security	All Other Public	International Sub-Total	Bilaterals	UN Agencies	Global Fund	Dev. Bank Non-Reimburseable (e.g. Grants)	All Other Multilateral	All Othe Internatio
0	**0**	**0**	**0**	**0**	**0**	**1,255,230**	**799,039**	**122,000**	**69,285**	**0**	**0**	**264,9**
0						533,230	199039		69285			2649
0						0						
0						0						
0						645,000	600000	45000				
0						0						
0						77,000		77000				
0						0						