Under the Office of the President

NATIONAL HIV & AIDS STRATEGIC PLAN

2016 - 2020

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GHANA
NATIONAL HIV AND AIDS STRATEGIC PLAN

2016 - 2020

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Acronyms and Abbreviations

AAP	Annual Action Plan
ADRA	Adventist Development and Relief Agency
Ag-Ab	Antigen-Antibody
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Treatment
ARVs	Antiretroviral Drugs
BCC	Behaviour Change Communication
BCI	Behaviour Change Interventions
BMI	Body Mass index
CBHC	Community Based Health Care
CBOs	Community Based Organisations
CPP	Comprehensive Condom Programming
CDD-Ghana	Centre for Democratic Development - Ghana
CHAG	Christian Health Association of Ghana
CRIS	Country Responsive Information System
CHBC	Community Home Based Care
CHPS	Community Health Planning and Services
CHRAJ	Commission on Human Rights and Administrative Justice
CHTC	Couples HIV Testing and Counselling
CMS	Central Medical Stores
COP	Country Operational Plan
CRIS	Country Response Information System
CSOs	Civil Society Organisations
CSS	Community Systems Strengthening
CTX	Cotrimoxazole
DACF	District Assemblies Common Fund
DACs	District AIDS Committees
DFID	Department for International Development
DHIMS	District Health Information Management System
DICs	Drop-In-Centres
DNA PCR	Deoxyribonucleicacid Polymerase Chain Reaction
DOTS	Directly Observed Treatment Short Course
DSW	Department of Social Welfare
e-SHEP	Enhanced School Health Education Programme
e-MTCT	Elimination of Mother-to-Child Transmission of HIV
ETE	End Term Evaluation
FBOs	Faith Based Organisations
FHI360	Family Health International 360
FIDA	International Federation of Women Lawyers
FSWs	Female Sex Workers
GAC	Ghana AIDS Commission
GARPR	Global AIDS Response Progress Reporting
GBCEW	Ghana Business Coalition on Employee Wellbeing

GBV	Gender Based Violence
GCNIH	Ghana Coalition of NGOs in Health
GDHS	Ghana Demographic and Health Survey
GEA	Ghana Employers Association
GES	Ghana Education Service
GF	Global Fund
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GHANET	Ghana HIV and AIDS Network
GHS	Ghana Health Service
GIZ	German Development Cooperation
GoG	Government of Ghana
GSS	Ghana Statistical Service
H2H	Heart to Heart
HAART	Highly Active Antiretroviral Treatment
HACS	HIV and AIDS Commodity Security
HCWs	Health Care Workers
HEI	HIV Exposed Infant
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPV	Human Papilloma Virus
HRAC	Human Rights Advocacy Centre
HSS	Health Systems Strengthening
HTS	HIV Testing Services
IBBSS	Integrated Biological and Behavioural Surveillance Survey
ICT	Information Communication Technology
IEC	Information, Education and Communication
IGA	Income Generating Activities
IHCC	International Heath Care Centre
ILO	International Labour Organisation
IPC	Infection, Prevention and Control
IPC	Interpersonal Communication
IPs	Implementing Partners
ISY	In School Youth
JUTA	Joint United Nations Team on AIDS
KPs	Key Populations
KYS	Know Your (HIV) Status
LEAP	Livelihood Empowerment Against Poverty
M&E	Monitoring and Evaluation
MARPs	Most-at-Risk-Populations
MCH	Maternal Child Health
MDAs	Ministries, Departments, and Agencies
MGCSP	Ministry of Gender, Children and Social Protection
MMDAs	Metropolitan, Municipal, and District Assemblies
m-HEALTH	Using Mobile Technology Platforms to educate young people
MNCH	Maternal Newborn and Child Health

MoE	Ministry of Education
MoFA	Ministry of Food and Agriculture
MoH	Ministry of Health
MoT	Modes of Transmission
MoYS	Ministry of Youth and Sports
MSM	Men-who-have-Sex-with-Men
MTCT	Mother-to-Child Transmission
MTDPs	Medium Term Development Plans
MTE	Mid-Term Evaluation
NACP	National AIDS and STI Control Programme
NAP+ Ghana	Network of People Living with HIV Ghana
NASA	National AIDS Spending Assessment
NBTS	National Blood Transfusion service
NCLS	National Condom & Lubricant Strategy
NCTE	National Counsel for Tertiary Education
NDHS	National Demographic and Health Survey
NETEWAG	Network of Teachers and Educational workers in HIV & AIDS
NFED	Non Formal Education Division of Ministry of Education
NFM	New Funding Model
NGOs	Non-Governmental Organisations
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NMIMR	Noguchi Memorial Institute for Medical Research
Non-PP	Non Paying Partner
NSP	National Strategic Plan
NSPS	National Social Protection Strategies
NYA	National Youth Authority
OIs	Opportunistic Infections
OVC	Orphans and Vulnerable Children
PE	Peer Educators
PEP	Post Exposure Prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PITC	Provider Initiated Testing and Counselling
PLHIV	Persons Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission of HIV
PPAG	Planned Parenthood Association Ghana
PSCM	Procurement and Supply Chain Management
PwD	Persons with Disabilities
PWIDs	People-Who-Inject-Drugs
RACs	Regional AIDS Committees
RME	Research, Monitoring and Evaluation
RTKs	Rapid Test Kits
RUTF	Ready to Use Therapeutic Foods

SBGBV	Sexual and Gender Based Violence
SC	Steering Commitee
SCMP	Supply Chain Master Plan
SHARPER	Strengthening HIV/AIDS Response with Evidence based Results
SI	Strategic Information
SOP	Standard Operating Procedure
SRH	Sexual Reproductive Health
STIs	Sexually Transmitted Infections
TB	Tuberculosis
TGs	Transgender Persons
TMA	Total Market Approach
ToR	Terms of Reference
TSUs	Technical Support Units
TWGs	Technical Working Groups
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Scientific, and Cultural Organisation
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	United States Government
WAPCAS	West Africa Progamme to Combat AIDS and STIs
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme
WHO	World Health Organisation
YPLHIV	Young People Living with HIV & AIDS

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Glossary of Terms[1]

Adolescents:	Males and females between 15 and 19 years old.
Adults:	Males and females between 15 and 49 years old.
Antiretroviral Drugs:	Highly active medicines which suppress viral replication, reduce the amount of the virus in the blood to undetectable levels and slow the progress of the HIV disease.
Behaviour Change:	The adoption and maintenance of healthy behaviours (with respect to particular practices) that reduce the chances of acquiring HIV.
Behaviour Change Communication (BCC):	BCC promotes tailored messages of personal risk assessment, greater dialogue and an increased sense of ownership.
Bridging Population:	Population at higher risk of HIV exposure whose members may have unprotected sexual relations with individuals who are otherwise at low risk of HIV exposure.
CD 4 Cells:	Type of white blood cells that fight infection, also known as T-helper cells.
Commercial Sex:	The sale of sexual services.
Concurrent Sexual Partners:	Involvement in overlapping sexual partnerships.
Drivers of the Epidemic:	The underlying determinants of an epidemic (i.e. structural and social factors, such as poverty, gender inequality and human rights abuses that can increase people's vulnerability to HIV).
EBOLA:	Previously known as Ebola Haemorrhagic Fever is a rare and deadly disease caused by infection with the Ebola Virus (of which five species have been identified) which causes a severe and often fatal haemorrhagic fever in humans and other mammals.
Ending AIDS:	This means that the spread of HIV has been controlled or contained and that the impact of the virus on societies and on people's lives has been marginalised and lessened, owing to significant declines in ill health, stigma, deaths and the number of orphans. It also means increased life expectancy, unconditional acceptance of people's diversity and rights, increased productivity and reduced costs as the impact of AIDS diminishes.

[1]Some of the terms are taken from UNAIDS Terminology Guidelines, 2015

Evidence Based/Informed:	In the context of research, treatment and prevention, evidence usually refers to qualitative and/or quantitative results that have been published in a peer-reviewed journal.
Fast-Track Strategy:	This strategy calls on countries, especially those with a high burden of HIV, to provide lifesaving HIV treatment and prevention services as a matter of priority to people most at risk of HIV infection in areas with high HIV prevalence and density of people living with HIV in a short window of five years. Such an approach will drastically reduce the number of new HIV infections as well as AIDS-related deaths to record low levels.
Gender Equality:	Gender equality between men and women means that all human beings, both men and women, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles and prejudices. Gender equality means that the different behaviours, aspirations and needs of women and men are considered, valued and favoured equally without discrimination.
Health System:	A broad range of institutions and individuals whose actions help to ensure the efficient and effective delivery and use of products and information for the prevention, treatment, care and support of people in need of these services.
Kayayei:	Female head porters who mostly work at various large markets in Accra.
Key Populations:	Refers to those most likely to be exposed to HIV or to transmit it – their engagement is critical to a successful HIV response. In all countries, key populations include people living with HIV. In most settings, Men-who-have-Sex-with-Men, transgender persons, People-Who-Inject-Drugs, sex workers and their clients, and sero-negative partners in sero-discordant couples are at higher risk of exposure to HIV than other people.
Partnerships:	Intercourse with one partner occurs between two acts of intercourse with another partner.
Post-exposure prophylaxis (PEP):	PEP refers to antiretroviral medicines that are taken after exposure or possible exposure to HIV. The exposure may be occupational, as in getting stuck with an infected needle, or non-occupational, as in having unprotected sex with a person living with HIV.

Pre-exposure prophylaxis (PrEP):	PrEP refers to antiretroviral medicines prescribed before exposure or possible exposure to HIV. PrEP strategies under evaluation increasingly involve the addition of a post-exposure dosage.
Safer Sexual Behaviour:	Behaviour adopted to reduce or minimise the risk of HIV acquisition and transmission.
Sexually Transmitted Infections (STIs):	STIs are spread by the transfer of organisms from person to person during sexual contact. In addition to the traditional STIs (syphilis and gonorrhoea), STIs also include: HIV, which causes AIDS; chlamydia trachomatis; human papilloma virus (HPV), which can cause cervical, penile or anal cancer; genital herpes; and chancroid.
Targeted Interventions:	Interventions focusing on populations that are key to the epidemic and key to the response.
Youth or Young Persons:	Males and females between the ages of 15 and 24 years.
Vulnerable Populations:	They are subject to societal pressures or social circumstances that may make them more vulnerable to exposure to infections, including HIV.

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Foreword

Ghana has made significant progress towards eliminating HIV and AIDS. This has been made possible through the implementation of the National HIV & AIDS Strategic Frameworks, 2001-2005 and 2006-2010 (NSF I and NSF II) respectively, and the National HIV and AIDS Strategic Plan (NSP) 2011-2015.

This National Strategic Plan (NSP) 2016-2020 is intended to sustain the progress made in the national HIV response thus far and guide the implementation of the national HIV response over the next five years. It has been developed to guide the country's efforts towards the achievement of the HIV-related Sustainable Development Goals. It is aligned to the 90-90-90 fast-track targets aimed at ensuring that 90% of Persons Living with HIV know their HIV status, 90% of Persons Living with HIV who know their HIV status are placed on sustained treatment, and 90% of Persons Living with HIV on sustained treatment achieve viral suppression.

It is therefore the commitment of my Government to provide sustained financing towards the achievement of the set targets in this Plan. I believe the strategies in this Plan will achieve the ambitious but transformative results we expect by 2020.

To ensure ownership and improve accountability for investments, I encourage stakeholders to be actively involved in the implementation of this Plan. We must improve our efforts to be more effective and coherent to support the national HIV response and to address the barriers which prevent access to available HIV services. No one must be left behind.

Guided by this Strategic Plan, let us unite with a shared responsibility, with renewed energy, commitment and determination to end AIDS by 2030.

John Dramani Mahama
President of the Republic of Ghana

1. Introduction

The National HIV and AIDS Strategic Plan 2016-2020 (NSP) is a five year strategic document designed to fast track the country's effort towards ending AIDS by 2030. The document is informed by lessons learnt from past interventions and the UNAIDS 90-90-90 targets. This is in line with Sustainable Development Goals (SDGs) and focuses on ensuring healthy lives and promoting wellbeing for all at all ages.

The NSP 2016-2020 was developed through a multi-sectoral consultative process which commenced with an end of term evaluation of the NSP 2011-2015, the recommendations of which informed the direction of this current Strategic Plan. Accordingly, the objective of the NSP 2016-2020 is to fast-track efforts towards the prevention of new HIV infections and AIDS related deaths, as well as to emphasise treatment, care and support interventions by 2020.

The NSP 2016-2020 specifies rights-based approaches to rapidly scale up HIV services. These interventions are aimed at saving lives and averting new HIV infections at a rate and scale necessary to reach a tipping point of the AIDS epidemic.

This plan provides evidence-based and results-oriented strategies for the implementation of the national response to HIV. It focuses on high-impact HIV prevention, treatment, care and support activities and the critical social and programmatic enablers of the national HIV programme. It also builds on synergies with HIV-related activities in key development sectors that have the greatest potential to optimise the national HIV response.

The NSP 2016-2020 is aligned to the Ghana Shared Growth and Development Agenda (GSGDA 2014-2017) and the Sustainable Development Goals and focuses on ensuring healthy lives and promoting wellbeing for all at all ages. The plan ascribes to the 90-90-90 fast-track targets which are to ensure that by 2020:

90% of all people living with HIV will know their HIV status;

90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy;

90% of all people receiving antiretroviral therapy will have viral suppression.

2. Vision

The NSP 2016-2020 is anchored within the overall vision of the national HIV response which is aimed at eliminating HIV and AIDS in Ghana.

3. Goal

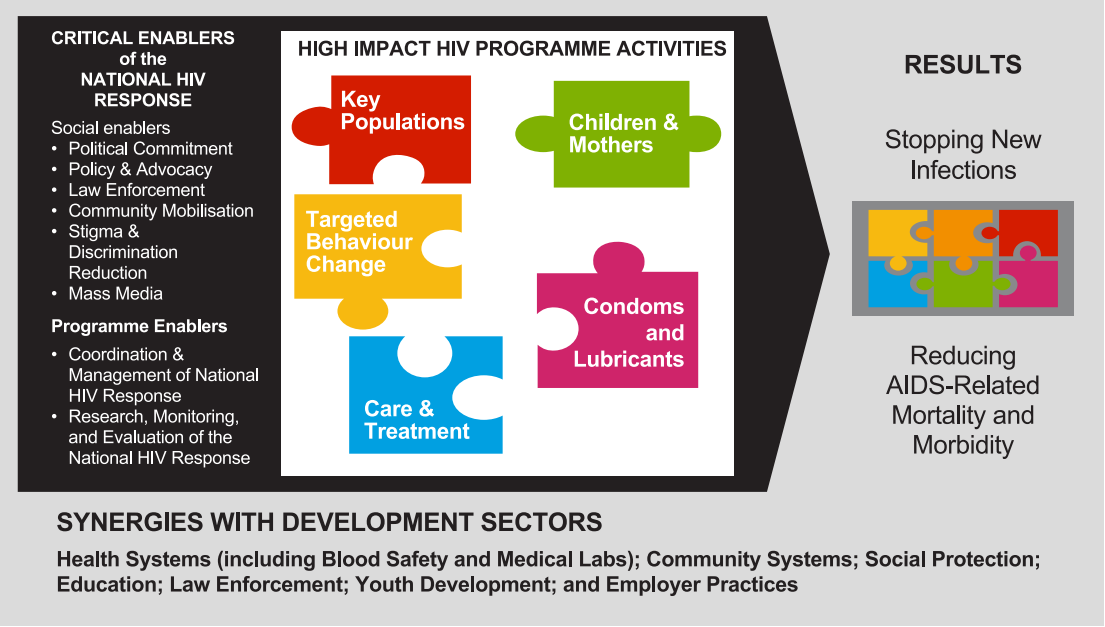
The goal of the NSP 2016-2020 is to achieve the 90-90-90 fast-track treatment targets by 2020.

4. Guiding Principles

In line with our vision, the NSP 2016-2020 leverages the investment thinking approach to detail the country's commitment to invest for results. Consequently, the AIDS investment framework has enabled the identification of high-impact direct HIV activities, critical social and programmatic enablers and synergies with HIV-related activities in key development sectors.

Ghana adopted the UNAIDS Investment Framework 2013 as the overarching framework for developing the NSP 2016-2020. The Framework informed the choice of the high-impact direct HIV activities and the critical social and programmatic enablers of the national HIV programme on the one hand. On the other, the Framework prioritises interventions that built on synergies with HIV-related activities in key development sectors that have the greatest potential to optimise the national HIV response.

Figure 1: The AIDS Investment Framework – Ghana NSP 2016—2020 Investing for Results



The NSP 2016-2020, is also guided by the following principles:

- Multi-sectoral approach characterised by advocacy and strategic partnerships;

- Evidence-based targeted interventions for HIV prevention, treatment, and care;
- Meaningful involvement of persons infected and affected by HIV;
- Participatory approaches for planning, monitoring and evaluating the national HIV response;
- Shared accountability and transparency for the national response;
- Human rights based approach for HIV programming;
- Gender sensitive response;
- Integration of the national response into all national plans and strategies;
- Universal coverage for equity – leaving no one behind.

5. Situational Analysis

The situational analysis is based on an assessment of the current situation of the HIV epidemic and response in Ghana and the results of expectations from the implementation of the NSP 2011–2015. This was fundamental in designing and updating the national policies and also formed the basis for priorities to be addressed in the NSP 2016-2020. The Epidemiological Analysis relied on findings from a series of antenatal HIV Sentinel Surveys (2005-2015); National Demographic and Health Surveys (DHS) 2003, 2008 and 2014; the 2011 Integrated Bio-Behavioural Surveillance Survey (IBBSS) and Size Estimation covering Female Sex Workers (FSWs), Men-Who-Have-Sex-With-Men (MSM) and prison inmates in 2012. The 2015 HIV Prevalence and AIDS Estimates from EPP/Spectrum modelling, the Modes of Transmission (MOT) Study 2014 and routine HIV programme data provide complementary information.

5.1 HIV Epidemic in Ghana

5.1.1 Prevalence

Ghana is classified as having a generalised HIV epidemic. According to the 2014 GDHS, HIV prevalence in Ghana was 2.0%, having decreased marginally from 2.2% in 2006. Prevalence amongst males, 15-49 years (1.1%) is lower than that of females (2.8%) in the same group across all regions of the country.

According to the 2015 HIV Sentinel Survey (HSS) Report, the Western, Ashanti, Greater Accra and Eastern Regions have an HIV prevalence of more than 2% (HSS, 2015). In addition, the epidemic is more prevalent in urban areas (2.4%) than rural areas (1.4%). By the end of 2015, there were 274,562 Persons Living with HIV (PLHIV), with women constituting about 60% and 89,113 people on antiretroviral treatment (ART). New HIV infections stood at 12,635 persons in 2015. The country recorded total annual AIDS deaths of 10,958 in the same year. HIV testing increased from 21% for women and 14% for men in 2008 to 43% for women and 20% for men in 2014. At the end of 2015, 2,335 testing sites had been set up nationwide.
The estimated size of FSWs in Ghana is 52,000 (IBBSS 2011). Even though HIV prevalence among FSWs has been decreasing consistently over the last 15 years, it

is still unacceptably high. Prevalence among female sex workers in Accra decreased from 50% in 2001 to 11% in 2011.

HIV incidence among the general population in 2015 was 0.08% (Estimates Report) and according to the MoT, the majority of new HIV infections (72.3%) is occurring among the general population. Regular partners of high-risk groups together accounted for nearly one-quarter (23.0%) of new HIV infections in 2009. Sex work accounted for 18.4% of all new infections in 2014 having declined from 27% in 2009 according to the study. This was based on declines in new HIV infection among the following sub-groups: clients of female sex workers from 14.7% in 2009 to 5.0% in 2014; Sex workers from 5.4% in 2009 to 2.9% in 2014; female partners of clients of sex workers from 19% in 2009 to 10.4% in 2014.

Results from the 2011 IBBSS estimates the total population of MSM to be 30,600 and that 17.5% of MSM are living with HIV.

The 2014 modes of transmission (MoT) study indicated that MSM contribute to 3.6% of new infections. Very little information is available on transgender persons (TGs) in Ghana. As with FSWs, further research is needed to estimate a national MSM population size, better delineate sub-populations and their relative risk to HIV.

The low HTS coverage in Ghana is broadly attributable to:

1. Continuing reluctance by people to access HTS because of ignorance, fear and/or stigma
2. Significant health system constraints including inadequate physical infrastructure especially in rural communities, weak procurement and supply chain system resulting in stock outs or limited availability of HIV rapid test kits
3. Almost all HTS are provided at fixed health facilities on a provider initiated testing and counselling basis with little outreach and community-based HTS

In 2013, a study conducted amongst prisoners found HIV prevalence among them to be 2.3%.

5.1.2 HIV Knowledge

Comprehensive knowledge about HIV among the general population had decreased (GDHS 2014). Knowledge decreased from 25% to 18% among women compared to

33% to 30% among men from 2008 to 2014. These figures are far below the national response target of 55% for females and 59% for males in 2013 and 80% for both males and females in 2015. This was as a result of less programmatic efforts focused on the general population compared to key populations.

5.1.3 Risk Behaviour and Condom Use

Condom use at last sexual act among men aged 15-49 who had two or more partners in the last 12 months preceding the survey decreased from 26% in 2008 to 19% in 2014 with 11% using a condom during their last sexual intercourse (GDHS 2014). Condom use among young men 15-24 years with two or more sexual partners decreased from 42.0% in 2008 to 34.2% in 2014. The 2011 IBBSS showed that 92% of FSWs used a condom during their most recent sex act with a paying client.

A National Condom and Lubricant Strategy (2016-2020) was developed in 2015 to address issues of condom availability and programming.

Risk behaviours of MSM include unprotected anal sex, multiple concurrent or serial sexual partners and drug use. Punitive laws, widespread and entrenched stigma, harassment and/or arrest by police also increase MSM's vulnerability. There have been reports of widespread transactional sex amongst young MSM. The risk is elevated as many do have multiple partners. Furthermore, many young MSM are bisexual. A recent study amongst young MSM reported that about half also have female sexual partners (Sabin et al, 2013). There is the need to explore further the key vulnerabilities of young MSM in Ghana.

The needs of MSM as a risk group include HIV prevention services including condoms and lubricants, STI screening and treatment, HIV testing services (HTS), continuum of care and treatment including, sexual health services, post- and pre-exposure prophylaxis (PEP and PreP) services and post-violence/rape care and societal acceptance.

The size of the People-Who-Inject-Drugs (PWIDs) population as well as HIV prevalence among them is unknown and levels of risk behaviours are poorly understood. It is however reported that PWIDs in Ghana rarely used condoms despite their elevated HIV risk levels. The MoT study in 2014 found the key population (KP) group with the highest HIV incidence in 2014 was PWIDs (at 3,543 per 100,000). Formative research amongst PWIDs in Ghana suggests that for most PWIDs, the top priority is to quit drug use. Consequently, needle exchange interventions alone may be unappealing and any interventions with no rehabilitation in mind are unlikely to be successful.

Though prisoners are vulnerable, they are not classified as a key population. Their risk behaviours may include injecting drug use, unprotected sex, tattooing with shared objects and blood covenants. In addition to sharing sharp objects, prisoners are also vulnerable as a result of coercive sex and lack of condoms/lubricants.

5.1.4 Other Vulnerable Groups

Other populations which are not considered key populations are still recognised as HIV vulnerable population groups. These include kayayei (female head porters), long distance truck drivers, uniformed (security) personnel and health workers. They are hence not prioritised in this NSP 2016-2020, but a certain minimum package of routine services will be extended to cover them. Further studies ought to be carried out to determine the exact size, risk behaviours and vulnerabilities of these sub-groups for a targeted response.

5.1.5 BCI Challenges

There appears to be little positive behaviour change among the general population over the past decade or so. All available data points to a decline in comprehensive knowledge of HIV and condom use compared with 2008. There has also been a decrease in the proportion of the general population with accepting attitudes towards PLHIV.

General behaviour change interventions have been undertaken in the past but not with great intensity. This must be addressed with a special focus on young people who might have been missed. The new 90-90-90 initiative in the NSP needs to be complemented with prevention behaviour. There are challenges with HIV youth interventions. There is evidence that many partners are implementing small-scale interventions for both in and out of school young people using appropriate and current approaches such as social media. However, 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. Out of school interventions are uncoordinated and lack cohesion.

5.2 HIV Clinical Prevention, Treatment and Care

Overall, the focus of the NSP 2011-2015 HIV Clinical Prevention, Treatment and Care Programme was on reducing HIV new infections including virtual elimination of Mother-to-Child transmission of HIV. This included increasing the number of clients receiving life-saving ARVs, which not only averts AIDS-related deaths but also reduces the transmission of HIV.

5.2.1 HIV Testing Services

HIV Testing Services (HTS) are the entry point for all HIV services including HIV treatment, care and support. Following modest efforts to improve HIV testing services (HTS) coverage among adults in recent years, the percentages of women and men tested for HIV and who received their results were only 13% and 6% respectively in 2014 (DHS 2014). The higher HTS coverage in women is principally due to the fact that

about 90% of pregnant women attend antenatal clinics (ANCs) at least once during the index pregnancy and ANCs provide very robust and vibrant HTS programmes in the country. Generally, men have poor health seeking behaviour culture especially for health promotion and disease prevention services

Provider initiated testing and counselling (PITC) has been fully implemented over the past years. Scaling up provider initiated testing and counselling in the majority of health institutions will help to identify infected persons. Couples HIV testing and counselling (CHTC) also remained very low even though about 75% of Ghana's infected couples are sero-discordant at some point during their relationship. Couples testing would help identify the 25% of partners so they can be linked to care and treatment. Therefore, scaling up CHTC to identify sero-discordance could possibly reduce HIV transmission significantly among heterosexual stable couples.

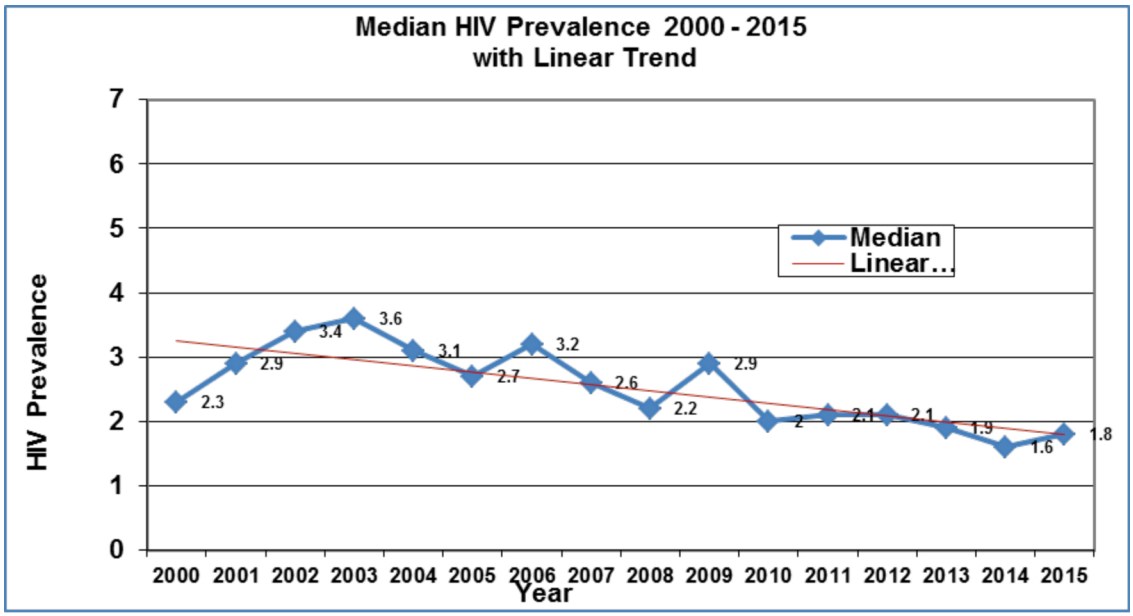
HIV testing is low among young persons. In 2014 only 10.6% of young men 15-24 years have ever tested for HIV compared with 22.4 % of men aged 15-49 years, and about 0.8% people age 15-24 are living with HIV.

There has been a major emphasis on institutional testing instead of general population testing supported by reprogrammed funds. The decline in the general population prevention activities has led to a reduction in testing rates because testing is a component of general prevention activities. Outreach campaigns were stopped because of reprioritisation of funds.

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

Elimination of MTCT continues to be a national priority towards achieving an "HIV free generation". The median ANC HIV prevalence in Ghana has shown a downward trend from year 2000 to 2015 (Figure 2), moving from as high as 3.6% in 2003 to 1.8% in 2015.

Figure 2: Median HIV Prevalence in Ghana 2000-2015 with Linear Trend



Provider-initiated testing and counselling (PITC) at ANC clinics is the preferred methodology for the PMTCT programme and the WHO Option B as the preferred treatment protocol for HIV positive pregnant women. Ghana is currently implementing the WHO Option B+.

The End Term Evaluation of the NSP 2011-2015 in June 2015 showed:

- 70% of all pregnant women were tested and counselled for HIV and received their results;
- 46% of HIV positive pregnant women received ARVs prophylaxis to prevent mother-to-child transmission of HIV;
- In relation to HIV exposed infants (HEI), only 21.6% received ARV prophylaxis, 17.9% received Cotrimoxazole prophylaxis and 5% received viral load done by DNA PCR testing;
- The overall mother-to-child transmission rate including the breastfeeding period was 15.97% (2014).

The major challenges of the PMTCT programme include:

- Male partners very low participation rate in the PMTCT programme and low level of couple HIV testing and counselling (CHTC) in the presence of high sero-discordance levels among couples in the country;
- A weak HIV and AIDS Commodity Security (HAC) system resulting in frequent

stock outs of HIV test kits especially between 2013 and 2015;
- Missed opportunities for testing of infants and young children at the postnatal and child welfare clinics and in-patient admission wards;
- Weak viral load testing programme as a result of difficulties in sending dry blood samples (DBS) from requesting health facilities to the regional DNA PCR labs and receiving the test results;
- Non-universal coverage of ANC, late accessing of ANC services and non-institutional deliveries;
- Under reporting of ANC from private sector providers;
- Non-availability of ARVs at all PMTCT sites (there are 197 ART sites with over 2,000 PMTCT sites);
- PMTCT services are not fully integrated into maternal and neonatal care services.

5.2.3 Treatment

Antiretroviral therapy (ART) delivery is at the core of the national HIV response; it remains a priority as a treatment as well as a prevention strategy. HIV treatment reduces morbidity, mortality and improves quality of life. It also prevents HIV transmission.

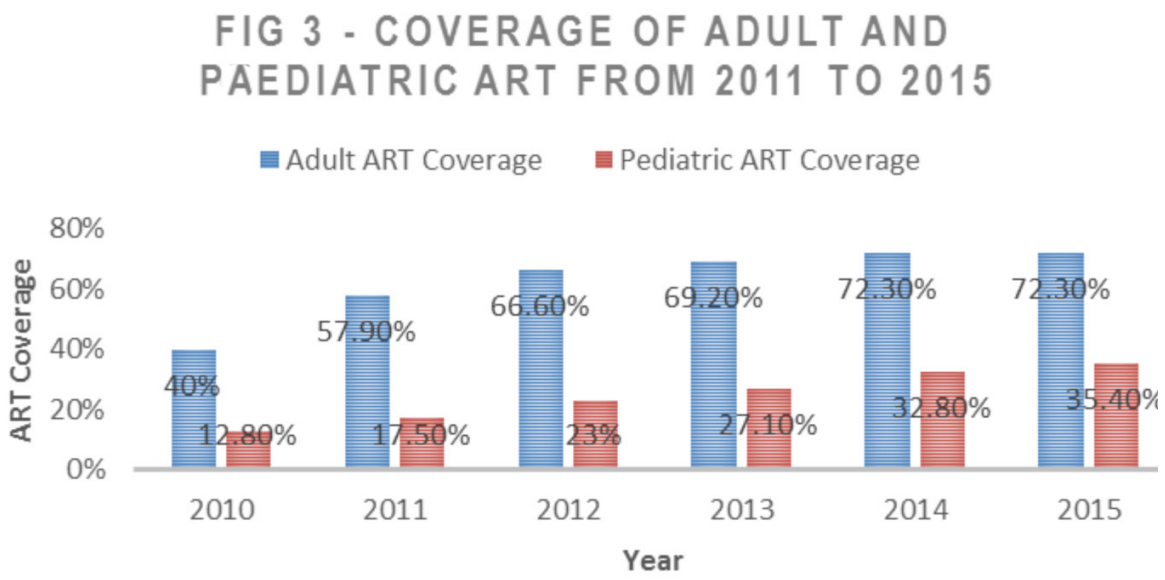
There are 197 ART sites in 145 districts out of the 216 districts. There are nine functional DNA PCR testing laboratories in nine regions in Ghana. Since commencement of ART in 2003, over 95,000 clients have been initiated on treatment. However, cohort assessment undertaken in 2013 showed a 12-month retention rate of approximately 74%. As at December 2015, about 89,000 clients were on treatment with about 45,000 in clinical care (not on treatment due to CD4 initiation criteria).

The unmet need for ART is approximately 65% with low paediatric ART coverage less than 30%. Due to inadequate ARVs, ART initiation since 2015 has been done at CD4 count <350cells/mm3 within current implementation framework with the Global Fund to Fight AIDS, TB and Malaria. This will be scaled up with the implementation of 'Test and Treat'. In summary, the following must be addressed:

- Unrevised policy and guidelines for initiation on ART;
- Limited physical and laboratory infrastructure to support sudden scale-up to lower levels of service delivery;
- Inadequate number of frontline cadre of health care workers to initiate therapy since ART is physician led. The need for task sharing and capacity building are hence critical;
- Changing paediatric ARV formulations making regimen choice difficult;
- Weak supply chain system worsened by CMS fire in 2015;
- Low viral testing coverage and non-routine reporting of viral load results;
- Limited data on retention rates of patients on treatment partly because of a lack of unique ID system.

The end of term evaluation (ETE) of the 2011-2015 National HIV Strategic Plan revealed that the national coverage of ART (adults and children) was 70.5%, a shortfall of 19.5% to the 2015 target of 90%. At the end of December 2015 the ART programme data showed the following:

Figure 3: Coverage of Adult and Paediatric ART from 2010-2015



With the increase in sites providing treatment and commensurate improvement in Infection, Prevention and Control (IPC) activities, incidences of injuries due to sharps are expected to reduce, hence also the requirements for post exposure prophylaxsis (PEP). The present EBOLA response has resulted in infection prevention activities being scaled up nationally. In addition most institutions have mainstreamed IPC into orientation programmes for new staff. All the challenges to treatment highlighted above must be tackled comprehensively because they form the crux of the 90-90-90 fast track strategy which is the focus of the NSP 2016-2020.

5.2.4 TB and HIV Collaboration

The high morbidity and mortality due to TB/HIV coinfection is well documented. A recent study in Ghana revealed a 2-months mortality of 25% and 6 months mortality of 33% among HIV infected TB patients (Bjerrum et.al, 2015). The percentage of HIV/TB co-infected patients on ART from 2012 to 2015 was never more than 50% and vacillated between 32% and 47%. This needs to be improved to 100% to ensure drastic reduction in morbidity and mortality. Screening for TB among PLHIV, which serves as one of the entry points for co-infection was less than 60% of the 2011-15 NSP target. Screening of TB patients for HIV infection is high; however linkage to care is poor. Identifying

co-infected patients, linking them to ART and DOTs sites and initiating treatment early will help to reduce morbidity and mortality.

5.2.5 Care and Support

Care and support interventions have been delivered over the years and some interventions such as the CBHC programme of the national HIV response need to be reviewed, synchronised and harmonised with those of established social protection programmes and other pro-poor initiatives in the country. In 2015, 5,892 PLHIV were registered with the NHIS to access both ARTs and medicines for managing Opportunistic Infections. Care and support, having been streamlined with national programmes, will therefore not be prioritised in this NSP. Food supplementation programmes to food insecure households in some regions should however be prioritised as they target malnourished patients on ART living in food insecure households and provide them with food rations.

5.2.6 Other Related Health Care Services

Blood safety: Currently the disclosure of HIV sero status to voluntary blood donors is not actively pursued to ensure linkage to treatment and care. Transfusion care is a differentiated care opportunity which must be explored in the context of 90-90-90 so that no one is left behind.

STIs: The diagnosis and management of sexually transmitted infections is done using the syndromic approach in all health institutions. Current STI guidelines have been revised to include the care of ano-rectal conditions. The 2014 GHDS estimates that 61% of women and 58% of men with an STI sought advice or treatment from a health related source– health facility, private doctor or health professional. However, management of STIs is not fully mainstreamed in all health care settings. In this NSP, STI management coverage and integration must improve as a critical strategy for prevention HIV incidence.

5.3 Enabling Policy Environment

The NSP 2011-2015 was implemented within an enabling policy environment that contributed to reducing the number of new HIV infections and improving the survival of PLHIV on ART.

The National HIV and AIDS STI Policy was revised in 2013 to further strengthen the policy environment to support the implementation of the NSP 2011-2015 and other related documents have been developed. In addition, the Ghana AIDS Commission Bill is currently in Parliament and its passage will create amongst others an enabling environment for the national HIV response.

5.3.1 Advocacy

Concerted advocacy efforts resulted in all key government line ministries mainstreaming HIV prevention activities into their core businesses; however, the level of mainstreaming and implementation was mixed as it depended on the availability of funding.

5.3.2 Coordination and management of the national HIV response

To effectively fulfil its mandate of coordinating and managing the national HIV response, GAC has established coordination and management mechanisms. At the national level, the GAC has a multi-sectoral Board and a Steering Committee with membership drawn from the public and private sectors and civil society in Ghana. The Technical Working Groups and the Partnership Forum and Business Meeting have worked successfully to support coordination of the national response. Coordination is also ensured at the regional and district levels through the Regional and District AIDS committees and the Technical Support Units (TSUs) established in eight of the 10 regions.

Harmonisation of HIV implementation reporting tools

Implementing partners in the public and civil society sectors have harmonised and synchronised their M&E systems with the indicators in the National HIV M&E Plan. Thus far, it has not been possible to effectively engage the private-for-profit sector to harmonise their individual M&E systems with the national HIV M&E plan.

Partnerships

Effective partnerships are essential for a successful and sustained national HIV response. Under the stewardship of GAC, effective partnerships for the national response include:

- Partnership with HIV services providers
- Partnership with the public sector
- Partnerships with Civil Society
- Partnership with the media

The ETE revealed some critical gaps in the management of the national HIV response including human resources for leadership and management at national and sub-national levels (coordination, implementation, and community systems).

5.4 Mitigating the Socioeconomic impact of HIV and AIDS on Key Populations

It is well established that the impact of HIV and AIDS constitutes a developmental issue that calls for a multi-faceted approach at both macro and micro levels. Impact mitigation

at the micro level is to improve the quality of life of PLHIV and all those affected by the epidemic. The end of term evaluation of the NSP produced key findings corresponding to the four dimensions of impact mitigation as thematically presented below.

5.4.1 Reducing Stigma and Discrimination against KPs including PLHIV

The strategies adopted to address potential or actual stigma and discrimination included:

- Mounting of HIV-related stigma and discrimination reduction campaigns;
- Engagement of traditional authorities and religious leaders;
- Information Dissemination in National Events, World AIDS Day etc;
- Preponderance of CSOs in stigma reduction;
- Reducing HIV stigma in health care settings;
- Meaningful Involvement of PLHIV in HIV stigma and discrimination reduction;
- Interventions to mitigate workplace HIV stigma and discrimination;
- Reducing stigma and discrimination against women with HIV.

Despite the above efforts, the 2014 GDHS showed that the percentage of adults with accepting attitudes towards persons living with HIV decreased from 19% in 2008 to 14% for males, and from 11% to 8% for females in 2014. This is much lower than the 50% acceptance target by 2015 in the NSP. However, though the HIV Stigma Index Study in 2013, at 20.8%, is considered low, stigma and discrimination against persons living with HIV remain a big challenge.

5.4.2 Strengthening Human Rights for HIV Responses

The human rights activities in the last NSP for mitigating stigmatisation and discrimination against PLHIV were based on the engagement of a range of legal agencies and duty bearer organisations, such as the Ministries of Justice, Interior, Defence, Health, Education, Commission on Human Rights and Administrative Justice (CHRAJ) and Parliamentary Select Committees.

Pre-employment HIV testing is mandatory in some public sector organisations especially the security forces; this runs counter to the right of individuals to voluntarily go for HIV testing.

Increasingly, measures are being taken to safeguard human rights issues through the Commission on Human Rights and Administrative Justice and training of Police personnel on safeguarding the human rights of KPs.

Increased advocacy by CSOs on stigma and discrimination, as evidenced by the first ever film festival on Stigma and Discrimination by the Red Ribbon Film Festival International with support from UNAIDS.

Significant Challenges and Gaps

- Anti-discrimination: Several Acts strengthen the Constitutional prohibition against discrimination but they do not address the issue of HIV-related discrimination.
- The Ghana penal code criminalises the activities of KPs, which hinders access to HIV prevention information and services.
- Some cultural and religious values against KPs still persist in the country.
- Prison/Correctional Laws - The laws and policies do not address the prevention of transmission of the virus between prisoners through the provision of condoms.

5.5 Mitigating Socioeconomic Effects on People Infected and Affected by HIV and AIDS

5.5.1 The LEAP Programme

The LEAP Programme is a national social cash transfer programme, which provides cash and health insurance to extremely poor households across Ghana to alleviate short-term poverty and encourage long-term human capital development. It is a core component of the National Social Protection Strategy (NSPS).

Significant Challenges/Gaps

Weak inter-agency coordination hampering effective complementarity of programmes. Limited data disaggregation on the LEAP programme hampering effective monitoring of poor HIV infected individuals, orphans and vulnerable children (OVCs) or affected households benefitting from LEAP.

5.6 Community Systems Strengthening (CSS)

Community systems in Ghana, generally, refer to the wide range of civil society organisations (CSOs) and actors including Community Based Organisations (CBOs), Faith Based Organisations (FBOs), Non-Governmental Organisations (NGOs), traditional authorities including paramont chiefs and queen mothers, women's and youth organisations, PLHIV associations and support groups, as well as public and private sector actors who work at the community level to deliver community-based health services including HIV and AIDS.

Challenges of Community Systems for HIV response:

- Inadequate Capacity to address the constraints that limit the extent and scope of community based service provision.
- Sub-optimal Collaboration and Coordination.
- Weak linkages between community systems and health systems to ensure logical continuum through the cascade of care.

- Limited Advocacy and Social Accountability of service providers for high quality and accessible services.
- Monitoring and Evaluation and Reporting are retained to improve community level data collection, analysis, reporting and use by all actors irrespective of the sources of funding. Results of all interventions will be reported to GAC for inclusion in the national HIV and AIDS database.

5.7 Public Sector Response

Essentially, public sector activities in the NSP 2011-2015 period covered two broad intervention types. These were: Workplace HIV Prevention Programmes and HIV and AIDS interventions related to the mandates of key public sector entities. According to the End-Term Evaluation (ETE) of the NSP 2011-2015, the public sector HIV and AIDS response at all levels - national, regional and district - was severely under-funded and beset with irregular government budget and donor grant releases. In spite of these constraints, the public sector sustained implementation of both HIV workplace activities and activities related to the mandate's key sectors.

5.7.1 Workplace Programmes

In the NSP 2011-2015 period, key sectors including Ministries of Health, Education, Food and Agriculture, Tourism, Culture and Creative Arts, Defense and the Interior, Information and Media Relations, Chieftaincy Affairs, Local Government and Rural Development, Gender, Children and Social Protection, Employment and Labour Relations, and Finance, received Ghana AIDS Commission (GAC) support to mainstream HIV into key policies, medium term development plans (MTDPs) and budgets. They also developed and implemented HIV Workplace Programmes for employees. MDA focal persons received largely GAC-supported workshop-based training for skills that enabled them to provide services, such as: behaviour change communication (BCC), counselling and testing (CT), correct and consistent condom use, stigma and discrimination reduction education, as well as basic treatment, care and support services for persons living with HIV (PLHIV).

5.7.2 Public Sector Mandate-Specific HIV Interventions

Below are some of the key mandate-specific interventions implemented by the public sector (Government Ministries, Departments, Agencies, and Commissions).

- **The Ghana AIDS Commission (GAC):** coordination and resource mobilisation for the national HIV response.
- **Ministry of Health (MoH) and Ghana Health Service (GHS):** clinical prevention, treatment and care services.
- **Ministry of Education (MoE) and Ghana Education service (GES):** School health and HIV programme.
- **Ministry of Gender, Children, and Social Protection:** social protection issues

such as LEAP.

- **Ministry of Agriculture (MoFA):** use of extension staff for HIV education.
- **Ministry of the Interior:**
  (a) Ghana Police Service - clinical care services and workplace HIV programmes targeted at personnel and their families and issues of gender based violence and rape.
  (b) Ghana Prison Service - HIV prevention activities targeted at staff and prison inmates.
- **Ministry of Defence/Ghana Armed Forces:** clinical care services and workplace HIV programmes targeted at personnel and their families.
- **Ministry of Justice and Attorney General's Department:** enabling environment for justice for survivors of sexual violence.
- **Commission on Human Rights and Administrative Justice (CHRAJ):** web-based platform for reporting on HIV related stigma and discrimination issues.
- **Metropolitan, Municipal, and District Assemblies (MMDAs):** decentralised coordination and implementation of community based HIV prevention programmes.
- **Ministry of Youth and Sports:** HIV prevention education to adolescents and young people.

5.8 Health Systems Strengthening

Strong health systems form the backbones that drive effective and efficient health sector responses to HIV. The strength of the health systems to support the delivery of HIV and AIDS services are sub-optimal and are relatively ineffective to sustain and deliver quality HIV prevention, treatment, care, and support services.

5.8.1 Leadership and Governance

Analysis of the current situation reveals the following: The functions required, in general, are effectively and efficiently being carried out by all stakeholders and at all levels. The desired outcomes are also largely present. Significant barriers include: Limited view and politicisation of leadership identification and capacity building; Insufficient role clarity amongst key stakeholders; Verticalisation of HIV and AIDS programmes and poor integration of the National response.

5.8.2 Human Resources

The functions of the system are planning, managing and utilising the numbers, quality and distribution of health staff. If the system is operating well the following outcomes are expected: the required workforce to deliver quality health services is available, motivated, satisfied and functional.

Health work force is inadequate overall and distribution is not equitably reflected across the country, with proportionately more staff in urban as against rural areas where the care needs are considered more acute. Motivation is low amongst health workers

towards HIV and AIDS activities. Staff capacity to care for persons living with HIV and AIDS is limited to selected cadres and professional groups making the majority not adequately functional in this area.

5.8.3 Health Services Delivery

Infrastructure for service delivery has been increased through the establishment of more CHPS compounds and retooling of the teaching hospitals and some regional and district hospitals. Analysis of the current situation reveals that comprehensive services covering the continuum of care for HIV and AIDS are available, and the distribution of these services though not as readily available in rural and hard-to-reach communities as compared to urban areas. It also suffered periodic shortages of essential commodities for HIV prevention and treatment, including condoms, HIV test kits, and antiretroviral drugs. These were severely worsened by the central medical stores (CMS) fire which occurred in January 2015 leading to the loss of essential commodities estimated at over 300 million Ghana cedis. There is a Supply Chain Masterplan but it is yet to be fully implemented. These constraints seriously limited the health sector's ability to effectively provide facility-based and community level HIV services under the decentralised HIV response.

5.8.4 Health Information Management

The functions of the system are to ensure the timely collection, collation, analysis, storage and retrieval of accurate, reliable data. The current situation analysis reveals that there are still challenges with the functions of the Health Management Information System (HMIS) with respect to timeliness, accuracy and reliability in particular. However, the available data is referenced and used in decision-making as much as possible. Significant barriers include high workload on data officers, inadequate funding for staff training and over-reliance on donor funds; unreliable internet connectivity affecting DHIMS 2 and data transmission; incomplete harmonisation of CRIS and DHIMS 2 and updating of software; and limited monitoring of use and outcomes of the HMIS.

5.8.5 Health Technologies

The functions of the system are ensuring access to and appropriate utilisation of medicines, vaccines, technologies and infrastructure. The current situation reveals the utilisation of available technologies. The challenge is limited local initiatives for utilisation of modern and indigenous technologies including for manufacturing of commodities, service delivery and systems strengthening. Significant barriers include: Resource limitations (financial) of the Ghana Health Service to enable it establish and effectively practice the concept of district medical stores; Inadequate logistics to support the supply chain especially at the district level (transportation, appropriate storage facilities, human resources); and Inadequate integration and cooperation of GAC interventions to support GHS in improving their supply chain management capacity.

5.8.6 Health Financing

The functions of the system are the mobilisation, management and accountability of funds and resources. Significant barriers include: Overall slowdown in national economic growth and reduced focus on supporting Ghana by international community since the country attained Middle Income Status in 2012.

5.9 Strategic Information (SI)

The current Strategic Information System has improved over the years and provides some support to the national response to HIV. Resources have gradually increased for some levels and in some sectors. However, some implementing partners continue to operate M&E systems that are partially harmonised with and not fully aligned to the one national M&E system. Analytical skills for generating strategic information for use is not as strong as expected especially at the decentralised level and results of most basic and operations research conducted in the country are not widely disseminated and may not adequately inform HIV programme planning and implementation.

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

A situation analysis of the current M&E system provides the basis for improving upon strategic information in the national response. The results are categorised under three broad headings using the 12 components of a functional M&E systems (UNAIDS). These categories are: (1) People, partnership and planning; (2) Data collection, verification and analysis, and (3) Data use.

5.9.1 People, Partnership and Planning

The assessment found that mainstreaming of HIV research, monitoring and evaluation has gained momentum in the Ghana Health Service (GHS) but is undocumented in other ministries, departments and agencies (MDAs) in the public sector. The progress made with integration in the Ghana Health Service is commendable. However, a standardised systematic approach to M&E capacity strengthening was not implemented as planned and this contributed to some weaknesses in the quality, analysis, presentation, interpretation and use of data.

5.9.2 Data Collection, Verification and Analysis

Review of the M&E system shows that data quality assessments were conducted but some data quality issues persisted because remedial action was not taken in key

areas in a timely fashion. The research and evaluation agenda was not finalised and operationalised. Therefore, utilisation of the large body of knowledge emanating from the extensive HIV research going on in Ghana was likely sub-optimal.

5.9.3 Data Use

Findings from assessing implementing partner's ability to use data for decision-making reveal that the use of data to improve the performance of the national response has most likely been undermined by low quality data, inadequate analysis, and interpretation. The M&E system did not provide adequate strategic information for tracking and assessing the national response.

6. Strategic Objectives and Impact Results

The NSP 2016-2020 details the country's commitment to employ rights-based approaches to rapidly scale up and fast track evidence-based HIV services and interventions. The strategic direction of the national response is anchored on a number of guiding principles. Consequently, the overall objective of the NSP 2016-2020 is to accelerate efforts towards the prevention of new infections and AIDS-related deaths, as well as emphasise treatment, care and support by 2030.

The following impact results are to be achieved by 2020:

- Reduction of new HIV infections by 80% from an estimated 12,803 in 2015 to 2,560 in 2020.
- Reduction in AIDS-related deaths by 80% from an estimated 12,646 in 2015 to 2,530 in 2020.
- Strengthening of health and community systems.

The expected impact results (Table 6.1) are informed by the Spectrum modelling data on the total number of new infections and total annual AIDS deaths from the 2015 National HIV Estimates. These will be achieved through a combination of behaviour change interventions targeting the general population, young people (15-24 years) and key populations. In addition, investments will be made in key social and programmatic enablers of the national HIV response as well as strengthening of synergies with key development sectors in the country.

Effective scale-up of the treatment programmes will ensure that by 2020:

90% of Ghanaians living with HIV will know their HIV status;
90% of those who know their status will receive life-saving antiretroviral medicines;
90% of those on treatment will attain viral suppression.

Table 6.1 - Impact Results of the NSP 2016-2020

		Baseline		Target	
Expected Impact Results	Indicators	Value	Source & Year	2018	2020
Reduction in new HIV infections by 80% from 12,803 in 2015 to 2,560 in 2020	Estimated number of all new HIV infections	12,803	Spectrum 2015	6,660	2,560
	Estimated number of new HIV infections (Adults 15+)	10,606	Spectrum 2015	5.520	2,120
	Estimated number new HIV infections in Children 0-14 yrs)	2,197	Spectrum 2015	1,140	440
Reduction in AIDS-relates death by 80% (from 12646 in 2015 to 2,490 in 2020	Estimated AIDS-related death (All)	12,646	Spectrum 2015	6,580	2,530
	Estimated AIDS-related death (Adults 15+ yrs)	11,223	Spectrum 2015	5,840	2,240
	Estimated AIDS-related death (Children 0-14 yrs)	1,423	Spectrum 2015	740	290

The end term evaluation of the NSP 2011-2015 provided the basis for determining the framework and priorities for NSP 2016-2020. The AIDS Investment in a resource-limiting environment was chosen as the overarching framework, with a focus on investing in High Impact HIV Activities, Critical Programmatic and Social Enablers of the response, and Synergies with Development Sectors. Furthermore, the country is committed to the Sustainable Development Goal of ending AIDS by 2030. To underscore this commitment, the country has adapted the UNAIDS 90-90-90 fast-track treatment targets as the cornerstone for NSP 2016-2020.

6.1 Critical Influencing Factors

The critical influencing factors for implementing the NSP include how well we know the current status of the epidemic, the drivers of the epidemic and the modes of transmission of HIV.

6.1.1 Know Your HIV Epidemic

Ghana is classified as having a low level generalised HIV epidemic where HIV prevalence consistently exceeds 1% among pregnant women. Over the last decade

HIV prevalence in the country has remained about 2% in adults 15-49 years (GDHS 2014), however, there are significant variations of the HIV epidemic in the country including:

Knowledge, Attitude and Practice: Comprehensive knowledge of HIV and accepting attitudes towards people living with HIV are low and nearly half (49%) of the women and a fifth (22%) of men have never been tested for HIV.

Geographic variation: HIV is more prevalent in urban (2.4%) than in rural (1.7%) areas. Eastern Region has the highest (2.8%) followed by Western (2.7%), Greater Accra (2.5%), Brong Ahafo (2.2%), Central (2.1%) and Volta (2.1%) all above the national average of 2%. Northern Region (0.3%) has the lowest HIV prevalence, followed by Upper West 0.4%) Upper East (0.6%) and Ashanti Region (1.9%) all below the national prevalence.

Young people 15-24 years: Less than 1% of young people are HIV positive. Central Region (2.9%) and Brong Ahafo Region (1.1%) are the regions with prevalence above 1%; all other regions have prevalence below 1%.

Gender: The HIV gender ratio of 3 to 1 (female to male) is higher than found in most-population based studies in Africa.

The high gender ratio implies that women are more particularly vulnerable to HIV infection than men.

Men and adolescent boys have poor health seeking behaviour and are less involved in the HIV and sexual and reproductive health (SRH) responses than women and adolescent girls.

HIV impact females more than males: about 60% of people living with AIDS, 56% of new HIV infections, and 51% of AIDS related deaths are female.

Pregnant women: The median ANC HIV prevalence in Ghana has shown a downward trend from year 2000 to 2015, moving from as high as 3.6% in 2003 to 2% in 2015.
Population groups at high-risk of HIV infection: These population groups include sex workers, MSM, PWIDs, prisoners, and people suffering from STIs and TB.

6.1.2 Drivers of the Epidemic

The key drivers of the HIV epidemic in Ghana can be categorised into the following:

Sex-based drivers

- Low personal risk perception of acquiring HIV: Most people especially men and young adolescents have a low personal perception of their risk of contracting

HIV. The low illusion prevents people seeking to know their HIV status.

- Multiple concurrent sexual partnerships without accompanying correct and consistent condom use: That men and women engage in sexual activity with more than one partner at the same time is common in the country. Every unprotected sexual intercourse especially at the beginning of a relationship is risky. Emphasis will be placed on promoting condom use in all high-risk sexual intercourse by the campaign slogan of "if it is not on, it not in".

- Transactional and inter-generational sex: This exposes many women especially young women and adolescent girls to HIV infection. Condom use and alternate means of livelihood will reduce the risk of HIV exposure.

Health System Drivers

Ineffective and inefficient services for sexually transmitted infections (STIs): STIs are important co-factors for the transmission and acquisition of HIV and therefore ineffective treatment of STIs is key driver for the spread of HIV.

Inadequate access to and poor quality of healthcare services: Effective HIV prevention and treatment programmes as part of a good health system reduce the risk of transmitting and acquiring HIV. Many components of Ghanas health systems are weak leading to delivery of poor quality services. Strengthening health systems including collaboration between the TB and HIV programmes will contribute to reducing HIV acquisition and transmission.

Gender-based drivers

Entrenched gender inequalities and inequities: Ghana is a male-dominated society. Examples of gender-based inequalities and inequities including harmful gender norms and gender-based violence abound and are key drivers of the epidemic as they effectively hinder women and adolescent girls from accessing HIV prevention and treatment services. Therefore gender equality and gender-sensitive approaches must be integral parts of the policies and actions that drive the HIV response. This involves engaging both men and adolescent boys, and women and adolescent girls.

Poverty-based drivers

Chronic and debilitating poverty: Severe and prolonged poverty is a significant barrier to poor people accessing HIV prevention and treatment services. Poverty sometimes forces people, especially women and girls, to adapt survival strategies that increase their vulnerability to HIV infection. Linkages with poverty reduction and social protection programmes will contribute to reducing poverty as a significant driver of the epidemic.

Stigma and discrimination against KPs

Persistence of HIV/AIDS-related stigma and discrimination against people living with HIV, sex workers, MSM, and other sexual minorities prevents them from utilising HIV prevention and treatment services, resulting in their continuing ability to acquire and transmit HIV. Reducing HIV-related stigma and discrimination will contribute to reducing the spread of HIV.

6.1.3 Modes of HIV Transmission in Ghana

It is important to know the modes of transmission of new HIV infections in order to design appropriate strategies to reduce future infections. The Modes of Transmission (MoT) Study Ghana 2014 shows that greater efforts should be placed on heterosexual modes of transmitting the infection in a general population that has a low personal perception of the risk of HIV infection.

Heterosexual sex (casual 39.3%), stable (24.2%), and partners of casual heterosexual sex (8.78%) is the commonest mode of transmission responsible for nearly (72%) of new HIV infections.

Sex Work comprising partners of clients of sex workers (10.46%), clients of sex workers (4.90%), and sex workers (2.92%) is the second highest mode responsible for transmitting about (18%) of new infections.

MSM and PWIDs consisting of MSM (3.58%) and female partners of MSM (1.79%) and PWIDs (3.59%) and partners of PWIDs (0.18%) are responsible for transmitting about 9% of new HIV infections.

6.1.4 Know Your HIV Response

The end term evaluation of the NSP 2011-2015 in validating its findings at regional and national levels by key stakeholders presented opportunities to deliberate on the framework and priorities for NSP 2016-2020. The AIDS Investment in a resource-limiting environment was chosen as the overarching framework with a focus on investing in High Impact HIV Activities, Critical Programmatic and Social Enablers of the response, and Synergies with Development Sectors. Five high-impact HIV activities selected for implementation are: 1) Targeted behaviour change, (2) Key Populations (KPs) HIV programme, (3) Condom promotion and distribution, (4) Prevention of mother-to-child transmission of HIV (PMTCT), and (5) Treatment and care for people living with HIV.

Over the last two decades, Ghana has made modest gains in the national HIV response: new HIV infections have been going down and more people are getting access to life-saving antiretroviral medicines. The country is committed to the Sustainable Development Goal of ending AIDS by 2030. To underscore this commitment the country has adapted the UNAIDS 90-90-90 fast track treatment targets as the cornerstone

for NSP 2016-2020. Implementation of the ambitious fast-track targets presents both programmatic and health and community systems challenges and opportunities.

6.1.5 90% of people living with HIV need to know their HIV status by 2020

The GDHS 2014 shows 2% of women and men 15-49 years are living with HIV and 23% women and 6% men 15-49 years were tested and counselled for HIV and received the results 12 months before the survey. The 2014 MoT study shows 72% of all new HIV infections occur through heterosexual intercourse. To achieve the ambitious target of 90% of people living with HIV knowing their status by 2020 calls for a massive increase in the HTS coverage between 2016-2020 in a programme that is currently implemented in an environment of high HIV and AIDS-related stigma and discrimination under weak health systems including poor procurement and logistics management resulting in stock outs of HIV test kits.

The ambitious target of 90% of PLHIV knowing their status by 2020 presents opportunities for using new approaches for increasing access to HTS including community-based and self-testing and re-introducing tried and tested demand generation approaches such as the "Know Your HIV Status" (KYS) and "It Could be You, It Could be Me" stigma and discrimination reduction campaigns, which significantly increased the utilisation of HTS about three years ago, but had to be scaled down due to inadequate availability of HIV test kits. Innovative ways to increase programme efficiency and domestic funding (especially domestic) would contribute to improving the availability of HIV test kits. However, in the event of severe and prolonged stock out of HIV test kits, priority for HTS should be given to high-yield situations, including pregnant women, TB and STI clinics and drop-in-centres for key populations.

6.1.6 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy by 2020

Ghana has adopted the "Test and Treat Policy" for all people who test positive for HIV for full implementation beginning 2017. The "treat all policy" is a key strategy for the 90-90-90; guidelines will be revised in June 2016 for full implementation by January 2017. It will however begin by October 2016 in four prioritised regions and will cover all, including KPs. Presently only HIV positive pregnant women, children under the age of 10 years, and persons with HIV-TB co-infection are started on ART on diagnosis.

There is a significant backlog of people living with HIV who are eligible for ART but are not receiving ARVs because of inability of the country to procure and make available adequate quantities of the drugs at any one time. The programme is in the process of quickly reducing this backlog that will enable it start the "test and treat" for all HIV positive people not on treatment and all new HIV positive clients from 2017. A

serious and concerted drive is underway to mobilise adequate funding from domestic (government and private sector) and external (mainly the United States Government (USG) and Global Fund) sources; indications are that these funding sources are committed to ensuring availability of ARVs that will significantly improve the coverage of the ART programme. In the event of deep and prolonged periods of ARV stock outs, priority will be given to PLHIV with CD4 of less than 500.

6.1.7 90% of all people receiving antiretroviral therapy will have viral suppression by 2020

Viral load testing is not used as routine form of monitoring patients on antiretroviral treatment (ART). Thus to monitor the viral suppression in patients on ART, viral load testing capacity must be installed and maintained. Viral load testing machines are available in nine out of the 10 regions. The adoption of the fast-track strategy provides an opportunity to build the human capacity necessary to provide and report on quality viral load testing and adequate and sustainable logistics system to transport blood samples for testing to viral load testing centres and test results back to requesting health facilities. The adoption of the fast-track strategy also provides opportunities for improving treatment and adherence management that would contribute to increasing the retention rate and to following up on patients on ART through strengthening the participation of community members and associations, networks, and support groups of people living with HIV.

6.2 Priorities for the NSP 2016-2020

These priorities are based on the gaps/challenges identified in the End of Term Evaluation of the NSP 2011-2015 as well as the critical factors enumerated above.

Table 6.2: Priorities for the NSP 2016-2020

Focus Investment	Focus Areas	Priority Areas for NSP 2016-2020
High Impact Interventions	Treatment and care for People Living with HIV. Prevention of Mother to Child Transmission of HIV (PMTCT) Key Populations (KPs) HIV Programme Condom Promotion and distributions Target Behaviour Change Communication Interventions	1. The national condom and lubricant strategy (NCLS) 2016-2020 must be implemented as part of the NSP 2016-2020 2. Accelerate HIV programming for key populations in hotspots and high burden areas nationwide 3. Improve levels of comprehensive knowledge about HIV among the general population 4. Expand HIV testing services among general population especially high risk groups and vulnerable populations - using Know Your HIV Status as the flagship approach for generating demand for HTS. 5. Scale up high burden geographic areas with Prevention of Mother to Child Transmission of HIV (PMTCT) to achieve the elimination target. 6. Accelerate Antiretroviral Treatment services towards situation with special focus on children and implementation the Test and Treat policy. 7. Ensuring HIV commodity security to support treatment scale up (availability of HIV test kits, ARVs, and capacity for EID etc) 8. Improve the management of co-morbidities (e.g HIV-HBV&HCV Co-infection)
Critical Social Enablers	Political Commitment Policy & Advocacy Law Enforcement, Community Mobilization, Stigma & Discrimination Reduction Mass Media.	1. Increase and sustain adequate funding for the national HIV response 2. Continue strengthening enabling policy environment ad advocacy for the national HIV response. 3. Continue improving coordination and partnership for the national HIV response 4. Strengthen GAC's capacity at both the secretariat and regional TSUs. 5. Strengthen HIV-related stigma and discrimination reduction interventions 6. Continue to facilitate heavily impacted HIV households access to social protection programmes 7. Strengthen the promotion and protection of the human rights of KP,s. 8. Capacity Building to CSO,s for community mobilisation. 9. Collaboration and coordination 10. Integrated Health Services Delivery. 11. Advocacy and Social Accountability 12. Monitoring and Evaluation and Reporting
Critical Programmatic Enablers	Coordination & Management of the National Response. Resources for the HIV response (Mobilization, Allocation, Spending Assessment) Research, Monitoring, and Evaluation of the National HIV Response.	1. Adequate amount of funding released on timely basis for HIV and AIDS interventions. 2. Adequate numbers of health staff trained in the provision of quality HIV prevention treatment, care, and support services. 3. Increasing and improving service delivery infrasture including the lab services needed to scale-up HIV intervention as a result of implementing ambitious 90-90-90 fast track targets. 4. Assuring HIV and AIDS commodity security including HIV test kits and antiretroviral drugs through a strengthened procurement and supply chain management and logistics system. 5. Strengthening the HMIS and strategic information for HIV and AIDS 6. Develop the National HIV M&E Plan 7. Strengthen data collection, verification and analysis. 8. Improve Data Use. 9. Carry out key HIV studies and assessments.

Table 6.2: continued

Critical Social Enablers	Political Commitment Policy & Advocacy Law Enforcement, Community Mobilization, Stigma & Discrimination Reduction Mass Media.	1. Increase and sustain adequate funding for the national HIV response 2. Continue strengthening enabling policy environment ad advocacy for the national HIV response. 3. Continue improving coordination and partnership for the national HIV response 4. Strengthen GAC's capacity at both the secretariat and regional TSUs. 5. Strengthen HIV-related stigma and discrimination reduction interventions 6. Continue to facilitate heavily impacted HIV households access to social protection programmes 7. Strengthen the promotion and protection of the human rights of KP,s. 8. Capacity Building to CSO,s for community mobilisation. 9. Collaboration and coordination 10. Integrated Health Services Delivery. 11. Advocacy and Social Accountability 12. Monitoring and Evaluation and Reporting
Critical Programmatic Enablers	Coordination & Management of the National Response. Resources for the HIV response (Mobilization, Allocation, Spending Assessment) Research, Monitoring, and Evaluation of the National HIV Response.	1. Adequate amount of funding released on timely basis for HIV and AIDS interventions. 2. Adequate numbers of health staff trained in the provision of quality HIV prevention treatment, care, and support services. 3. Increasing and improving service delivery infrasture including the lab services needed to scale-up HIV intervention as a result of implementing ambitious 90-90-90 fast track targets. 4. Assuring HIV and AIDS commodity security including HIV test kits and antiretroviral drugs through a strengthened procurement and supply chain management and logistics system. 5. Strengthening the HMIS and strategic information for HIV and AIDS 6. Develop the National HIV M&E Plan 7. Strengthen data collection, verification and analysis. 8. Improve Data Use. 9. Carry out key HIV studies and assessments.
Building synergies with the development sect	Leveraging impacts of key development sectors	1. Health Sector - Ministry of Health/Ghana Health Service (MoH/GHS) to build a resilient and sustainable systems for health service delivery 2. Community Sector - CSO's and GHS-Community Health Planning and Services (CHPS) 3. Education Sector - Ministry of Education/Ghana Education Services (MoE/GES) 4. Youth Sector - Ministry for Youth and sports (MoYs), and CSOs 5. Legal & Law enforcement Sector - Ministry of Justice and AG's Department, Judicial services, CHRAJ, and Ghana Police Service, Ghana Prison Service 6. Social Protection Sector - Ministry of MGCSP; National Health Insurance Scheme (NHIS) 7. Tourism and communication Sector. 8. Employment Sector - Ministry of Labour & Employment, MDSs & MMDA, Private Sector Firms, and CSOs for informal sector.

7. STRATEGIES AND ACTIVITIES

7.1 High Impact HIV Activities

Ending the AIDS epidemic by 2030 is one of the key targets of the new 2015-2030 United Nations Sustainable Development Goals (SDGs) - specifically for Goal 3 which focuses on ensuring healthy lives and promoting wellbeing for all at all ages. The UNAIDS HIV fast- track targets which are aligned to the SDGs, advocates for rights-based approaches to rapidly scale up proven-effective HIV services to save lives and avert new HIV infections at a rate and scale necessary to reach a tipping point of the AIDS epidemic.

Based on the results of the NSP 2011-2015, the fast-track targets and the AIDS Investment Framework, Ghana has identified five (5) high impact interventions. These are:

(1) Targeted behaviour change
(2) Key Populations (KPs) HIV programme
(3) Condom promotion and distribution
(4) Prevention of mother-to-child transmission of HIV (PMTCT)
(5) Treatment and care for HIV and AIDS

7.1.1 Targeted Behaviour Change Interventions (BCI) for Preventing New HIV Infections

The NSP seeks to reduce the total number of new HIV infections from 12,803 in 2015 to 2,560 by 2020 through two (2) critical and contributory approaches such as Behaviour Change Interventions and the use of HIV Treatment as prevention approaches.

The main mode of HIV transmission among the adult population in the country is sexual transmission. Injecting drug use is thought to be low and the country's harm reduction interventions presently do not include needle exchange programmes. Thus the Behavioural Change interventions are the main approaches to reducing transmission of HIV in the adult population in the NSP 2016-2020.

The behavioural change intervention (BCI) results that will contribute to the total Impact Result 1 of reduced new HIV infections are:

- Reduced incidence of sexual transmission of HIV among adult females and males in the general population;

- Reduced incidence of sexual transmission of HIV among key populations including female and male sex workers, men who have sex with men (MSM), and people

who inject drugs (PWIDs); and
- Reduced incidence of HIV transmission through sharing of needles and other risky behaviours among persons who inject drugs.

7.1.2 General Population

Over the last few years, the focus on HIV prevention programmes for KPs and pregnant women has crowded out general population HIV prevention interventions. This has contributed to poor behaviour change outcomes among the general population.

Impact Result

Reducing new HIV infections from sexual transmission (Adult Population) by 56% from 10,606 in 2015 to 2,120 in 2020.

The indicators shown in Table 7.1 – will track the general population impact results.

Table 7.1: Impact Results General Population

Impact Indicator	Baseline	Source & Year	2018	2020
% of adults 15+ living with HIV	Female = 2.8% Male = 1.1%	GDHS 2014	2.4% 1.0%	2.0% 0.8%
# New HIV Infections in general population 15-49 years	10,606	Spectrum 2015	5,520	2,120

Outcome Results

The expected Outcome Result of the Behaviour Change Interventions is: Increased proportion of adult 15+ (females and males) in the general population practicing safer sexual behaviours. This manifests as increased condom use in sexual intercourse with more than one partner, improved accepting attitudes towards PLHIV, and increased percentage of people assessing HTS among the general population. The indicators shown in Table 7.2 will track the general population outcome results.

Table 7.2 - General Population Outcome Results

Outcome Indicators for general population	Baseline	Source & Year	2018	2020
% Women & Men age 15-49 years who had sexual intercourse with a non-marital, non-cohabiting partner in the past 12 months reporting the use of a condom during their last sexual intercourse with that partner	Female = 25.4% Male = 45.1%	GDHS 2008	Female = 35% Male = 60%	Female = 45% Male = 70%
% (Number) of people in the general population who have received HIV test in last twelve months and know their results (disaggregated by sex and age)	Female = 13% Male = 6%	GDHS 2014	Female = 28% Male = 21%	Female = 38% Male = 31%
% of women and men with comprehensive knowledge of HIV and AIDS	Female = 23% Male = 34%	GDHS 2014	Female = 40% Male = 50%	Female = 70% Male = 70%

Strategies and Activities

Strategy 1:

Sustained BCI to improve Comprehensive Knowledge of HIV.

Comprehensive knowledge about HIV among the general population decreased between 2008 and 2014, yet improved knowledge is often a precursor to behaviour change. Programmers need to know what HIV messages are more likely to increase comprehensive knowledge about HIV.

Activities

- Develop a fact sheet on what constitutes comprehensive knowledge
- Develop specific target and gender-specific messages needed to improve comprehensive knowledge
- Behaviour change interventions must include messages aimed at improving comprehensive knowledge

Strategy 2:

Target interventions among selected general population including workplaces, tertiary institutions and informal sector workers.

Activities

- Design interventions for specific groups to reflect interest
- Engage with employers to continue to implement workplace interventions
- Work with appropriate partners to expand interventions in the informal sector

Strategy 3:

Develop and promote innovative approaches to improve accepting attitudes towards PLHIV. Stigma and discrimination is still prevalent and the proportion of the general population with accepting attitudes towards PLHIV is decreasing instead of increasing.

Activities

- Design nationwide stigma reduction campaigns
- Train programmers on how stigma and discrimination are measured and include the items in message design
- Incorporate stigma reduction campaigns into all testing campaigns

Strategy 4:

Design and implement specific interventions to address the HIV vulnerabilities of persons with disabilities, kayayei (female head porters), migrants, refugees and other emerging vulnerable groups. The HIV vulnerabilities of some vulnerable populations need to be specifically addressed to ensure their rights to HIV prevention information and services are protected.

Activities

- Undertake research to understand the HIV vulnerabilities of persons with disabilities, kayayei, migrants and refugees to facilitate the design and implementation of interventions

- Design general population interventions keeping in mind the needs of persons with disabilities and other vulnerable groups
- Understand the risky behaviours and HIV prevalence among kayayei, migrants and refugees and use evidence to inform programming

Strategy 5

Targeted interventions among uniformed services personnel as well as prisoners.

Activities

- Study the vulnerabilities of uniformed services personnel
- Design, implement and evaluate more interventions for the uniformed services personnel
- Scale up interventions among officers on sensitisation training regarding the human rights approach when dealing with key populations
- Expand interventions in prisons including specific interventions to avoid transmission within prisons

Table 7.3: General Population Output Results

General Population output Indicators	Baseline	2016	2017	2018	2019	2020
Fact sheet on comprehensive HIV knowledge developed and used in BCI		Develop fact sheet	Factsheet used in BCI	Factsheet used in BCI	Factsheet used in BCI	Factsheet used in BCI
% MMD's with intensified BCC interventions	NA	50%	80%	100%	100%	100%
Prevention workplace programmes employers	(MTE 2014)	330	335	340	345	350
Studies on HIV vulnerabilities of people with disabilities, uniformed services and Kayayei carried out	NA	Studies carried out	Studies carried out	Implement specific BCI	Implement specific BCI	Implement specific BCI
Specific BCI addressing the identified HIV vulnerabilities of people with disabilities, kayayei, and uniformed services implemented	NA		Implement specific BCI	Implement specific BCI	Implement specific BCI	Implement specific BCI

7.1.3 Young Persons (15-24 years)

About a quarter of all new HIV infections occured in young people (spectrum 2015). 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. Comprehensive knowledge of HIV among young persons is declining as well as condom use among young persons with two or more partners. In addition, young people have little access to HIV and AIDS prevention, treatment, care and support services. Compared with adults, HIV testing is low among young persons.

Impact Result

Reducing new HIV infections among young persons 15-24 years from by 80% from

3,250 in 2015 to 650 in 2020 (Spectrum 2015). The indicators shown in Table 7.4 will track the Impact results.

Table 7.4 - Young Persons Impact Results

Impact Indicator	Baseline	Source & Year	2018	2020
# New Infections in young people 15-24 year	3250	Spectrum 2015	1650	650
HIV prevalence among young persons (15-24) ((GDHS (2014)	F+M = 0.8% F=1.5% M=0.2%	GDHS 2014	F+MI 0.6%	F+M – 0.5%

Outcome Results

The expected Outcome Results include: increased percentage of young people 15-24 years using condoms in sex with multiple partners and increased percentage have accessed HTS and know their results. The indicators shown in Table 7.5 will track the outcome results.

Table 7.5 - Young Persons Outcome Results

Young persons	GDHS 2014	2018	2020
% who report using a condom during their last sexual intercourse among young women and men aged 15-24 years who had sexual intercourse with a non-marital, non-cohabiting partner.	F: 28.2% M: 46.4%	F: 70% M: 80%	90% 95%
% Who reported using a condom during last sexual intercourse among young women and men 15-24 years who had 2+ sexual partners in last 12 months	F: 14.9% M: 34.2%	F: 70% M: 80%	F: 90% M: 95%
% Young women and men 15-24 years ever tested for HIV and received results	F: 26.4% M: 8.6%	F: 59% M: 59%	90% 90%

Strategies and Activities

Strategy 1:

Present condom use among young persons as a strategy for dual protection against pregnancy and HIV.

Activities:

- Develop a fact sheet on condom use for dual protection among young persons
- Liaise with other sector ministries and reproductive health NGOs to develop, test and implement dual protection interventions
- Female condoms should be included in the package for adolescent dual protection interventions

Strategy 2:

Establish and maintain gender-specific interventions for young persons 15-24 years of age (further disaggregated into adolescents (15-19) and young adults (20-24) years in school and out of school.

Activities

- Develop a fact sheet on what constitutes comprehensive knowledge about HIV as part of a minimum prevention package for adolescents and young adults
- Develop programmes, including technology-driven ones, which specifically target adolescent behaviours including: (a) intergenerational sex; (b) alcohol and other drug abuse; and (c) high risk sex
- Prepare and implement BCC programmes which specifically target adolescents and young adults and address access to commodities and referral to relevant services
- Develop programmes to ensure that service delivery points are youth friendly
- School-based interventions should emphasise interventions using community resources in low-resource settings

Strategy 3:

Innovative approaches to improve accepting attitudes of young persons towards PLHIV. Stigma and discrimination is still prevalent and the proportion of young persons exhibiting accepting attitudes towards PLHIV is less than adults.

Activities

- Design nationwide youth interventions addressing stigma
- Train programmers on what constitutes stigma and discrimination and how it is

measured, and include the items in message design
- Incorporate stigma reduction campaigns into all HIV testing campaigns
- Monitor and evaluate interventions

7.1.4 HIV Programmes for Key Populations (KPs)

Over the last few years, there has been great upsurge in efforts to provide HIV prevention information and services to MSM and FSWs in particular and to a lesser extent, non-paying sex partners of FSWs as well as PWIDs in the country. The National Strategic Plan for Most-at-Risk-Populations (MARPs) 2011-2015 articulates the minimum HIV information and services for KPs. The main sources of funding for KP HIV programmes include the GoG, the Global Fund, and the US Government. The major providers of these services are civil society organisations (CSOs). The policy guideline for the provision of HIV information and services to KP is shown in Table 7.6.

Table 7.6: Policy Guidelines for Provision of HIV information and services to KPs

KP Group	Provide HIV Prevention Information	Provide HIV Prevention Services	Estimated Population Size
MSM	Peer Education; Use of Information Communication Technologies including telephone, SMS, Twitter, Facebook,	Condom and condom-compatible lubricants promotion and distribution, and use; Psychosocial support, Provision of STI treatment and HTS (2-4 times a year) at DICs, friendly health facilities, or outreach to hotspots	34470 (NFM 2014 proposal)
FSWs	Peer Education; Use of information communication technologies including telephone, SMS, Twitter, Facebook,	Condom and condom-compatible lubricants promotion and distribution, and use; Psychosocial support, Provision of STI treatment and HTS (2-4 times a year) at DICs, friendly health facilities, or outreach to hotspots	59,000 (NFM 2014 Proposal)
PWIDs	Peer Education; Use of Information Communication Technologies including telephone, SMS, Twitter, Facebook	Condom and condom-compatible lubricants promotion and distribution, and use; Psychosocial support, Provision of STI treatment and HTS (2-4 times a year) at DICs, friendly health facilities, or outreach to hotspots	NA
Prisoners	Peer Education; Use of Information Communication Technologies including telephone, SMS, Twitter, Facebook	Condom and condom-compatible lubricants promotion and distribution and use; Psychosocial support, Provision of STI treatment and HTS (2-4 times a year) at DICs, friendly health facilities, or outreach to hotspots	13,580 (2016 data latest from Prison Service)

7.1.5 KP Impact Results

The expected impact results include: reduced HIV prevalence in key populations as a result of reduced new HIV infections in key populations and improved high-risk sexual behaviours.

The aim is to reduce HIV prevalence in key populations by 50% by 2020. The indicators shown in Table 7.7 will track the Impact results.

Table 7.7 - Impact Results for KPs

Impact Results	Indicator	Sources IBBSS 2011	2018	2020
% KP living with HIV - FSWs	HIV Prevalence FSWs –General	11.1%	8.3%	5.6%
	HIV Prevalence FSWs – Seaters	21.4%	16%	10.7%
	HIV Prevalence FSWs – Roamers	6.8%	5.1%	3.4%
% KP living with HIV - MSM	HIV Prevalence MSM	17.5%	13.1%	8.8%
% KP living with HIV - PWID	HIV Prevalence PWID	NA	NA	NA

7.1.6 Female Sex Workers and Non-Paying Partners

Even though HIV prevalence among FSWs has been decreasing consistently over the last 15 years, it is still high. Female sex workers remain a critical key population with HIV prevalence several times higher than the national average.

Compared with their fee-paying clients, non-paying partners of FSWs are less likely to use condoms with partner FSWs. Interventions aimed at reducing HIV transmission among sex workers are unlikely to achieve their full potential unless HIV prevention programmes also focus attention on non-paying sexual partners of sex workers in regard to vulnerabilities for HIV infection. These vulnerabilities are presently not well

understood and therefore no-evidence based programmes are designed to specifically target them. Therefore studies on the vulnerabilities of non-paying partners are called for. The indicators shown in Table 7.8 will track outcome results of the FSWs interventions.

Table 7.8 - FSWs Outcome Results

Outcome Indicator	Baseline IBBSS 2011	2018	2020
% FSWs reporting use of condom with their most recent client	92.0%	99%	99%
% FSWs reporting use of condom with their most recent non-paying partner	20.1%	45%	100%

Strategies and Activities

Strategy 1:

Utilise the peer education model and employ non-traditional methods of peer education

Peer education has been reported to be one of the most successful strategies in HIV prevention over the past few years. There is the need to expand peer education that reaches street-based sex workers in the night.

Activities

- Review the FSW Standard Operating Procedures (SOP to reflect interventions among different FSW sub-groups such as new entrants) and share results with respective CSOs
- Employ innovative night interventions at hotspots through edutainment
- Standardise incentives for peer educators
- Employ innovative ways of motivating peer educators who sell condoms
- Identify non-traditional outlets such as kiosks, beer bars/parlours motels and nightclubs and convince and train owners to sell condoms at hotspots during the night

Strategy 2:

Focus attention on new entrants to sex work

Sex workers are most vulnerable at the early stage of sex work. Many may be young and also lack the self-efficacy needed to negotiate condom use. Interventions targeting new entrants could include making condoms easily available.

Activities

- Develop self-efficacy skills for condom negotiation
- Include guidelines to reach new entrants in peer education manuals
- Encourage collective efficacy to use condoms among sex workers, particularly at the brothel level
- Increase number of condom vending machines. Consider outsourcing vending machines

Strategy 3:

Build capacity of organisations and increase the number of organisations working with FSWs.

Activities

- Organise appropriate training for small CSOs in evidence-based programming among FSWs
- Build skills in small scale data collection to measure condom use at the community level
- Provide sensitisation for legislating bodies, the judiciary, law enforcement officials and health care providers
- Aim at reducing funding gaps between projects, particularly for small CSOs

Strategy 4:

Sex work interventions should also focus on non-paying partners

Interventions among sex workers often include non-paying clients by default. However in such situations, appropriate resources and programme efforts are not devoted to the non-paying partners whose risk of HIV infection may, at least, be similar to paying clients. Non-paying partners should be specifically targeted.

Activities

- Develop self-efficacy skills for FSWs on condom negotiation with non-paying clients

The indicators shown in Table 7.9 - will track the FSWs Output Results.

Table 7.9: FSWs Output Results

Female sex Workers Output Indicator	Baseline IBBSS 2011	2016	2017	2018	2019	2020
% / Number female sex workers reached with individual end and /small group level interventions that are based on evidence end or meet the minimum standard condom with their most recent client	56,3%	70%	75%	88%	90%	95%
% FSW's who received an HIV test in the past 12 months and know the results.	66.7%	75%	80%	80%	90%	90%

7.1.7 Men-Who-Have-Sex-With-Men (MSM)

Although the contribution of MSM to new HIV infections in Ghana has reduced substantially (from 11.4% in 2008 to 3.6% in 2014) the HIV risk behaviours of MSM still make them a vulnerable group.

Impact Result

Reduced percentage of MSM living with HIV through decreased number of new HIV infections among MSM.

The indicator shown in Table 7.10 will track the MSM Impact Results.

Table 7.10 - MSM Impact Results

MSM Impact Indicator	Baseline	Source & Year	2017	2020
% MSM who are living with HIV	17.5%	IBBSS 2011	13.1%	8.8%

The expected Outcome Results include: increased condom use and accepting attitudes, and improved comprehensive knowledge of HIV amongst MSM.

The indicator shown in Table 7.11 will track the MSM Outcome Results.

Table 7.11- MSM Outcome Result

MSM Output Indicators	Baseline	Source / Year	2018	2020
% MSM reporting of use of condom the last time they had anal sex with a partner	60%	IBBSS 2011	99%	99%

Strategies and Activities

Strategy 1:

Develop specific interventions for MSM with a special focus on the most vulnerable.

Interventions amongst MSM need to identify the different sub-groups of MSM and those at the highest risk. Through innovative interventions, special attention need be paid to young MSM, who may find it difficult to access services as well as MSM who are hard to reach.

Activities

- Set up DICs for MSM
- Expand technology-driven interventions, particularly for hard to reach MSM
- Scale up interventions for sophisticated and other hard to reach MSM sub-groups
- Evaluate interventions

Strategy 2:

Pilot innovative interventions for sex worker MSM.

Reports from within the MSM community show an emerging group of MSM who are sex workers. Their size and HIV vulnerabilities are hardly known.

Activities

- Undertake size estimation and also obtain data on sub-groups of MSM
- Identify, train and mobilise peer educators for interventions among male sex workers
- Expand network of condom and lubricant distribution including use of condom (with lubricant) vending machines

- Provide sensitisation training for legislating bodies, the judiciary, law enforcement officials and health care providers
- Evaluate interventions

The indicators shown in Table 7.12 will track the MSM Output Results.

Table 7.21- MSM Output Result

MSM Output Indicators	Baseline	Source / Year	2016	2017	2018	2019	2020
%/Number of MSM reached with individual and/or small group level interventions that are based on evidence and/or meet the minimum standards	54.7%	IBBSS 2011	99%	99%	99%	99%	99%
Percentage of MSM who have received HIV test in last 12 months and know their results	26.3%	IBBSS 2011	60%	70%	80%	85%	90%

7.1.8 People-Who-Inject-Drugs (PWID)

Sharing of drug injecting equipment is a very effective means of transmitting HIV. This is compounded by high-risk sexual behaviours often under the influence of drugs. Very little is known about HIV amongst PWIDs. The size of and HIV prevalence in the PWID population are unknown and levels of risk behaviours are poorly understood. As a corollary, no key HIV interventions are currently being implemented on PWIDs in the country.

Strategy and Activities

Strategy

Size estimation and determination of HIV vulnerabilities of PWID.

Activities

- Carry out large scale studies on PWIDs
- Use existing evidence on risk behaviours to begin programming
- Carry out size estimation of PWIDs and determine their HIV vulnerabilities
- Use findings to design HIV prevention programmes for PWIDs

7.1.9 Condom and Lubricant Promotion and Distribution

Ghana launched a National Condom and Lubricant Strategy (NCLS) in September 2015. The NSP 2016-2020 will support and use the NCLS as the basis for its Condom Promotion and Distribution interventions. As such the NSP 2016-2020 will collaborate with other programmes that need condoms to ensure that good quality condoms are available all the time to all sectors. The NSP 2016-2020 seeks to integrate condom promotion, distribution and use with the Sexual and Reproductive Health and Family Planning programme, the Adolescent Health Programme, the STI programme and Key population programmes in the country.

7.1.10 Ghana National Condom and Lubricant Strategy

In keeping with the globally accepted Comprehensive Condom Programming (CCP) framework, the NCLS is structured under five (5) thematic areas:

(1) Leadership, coordination and partnership
(2) Demand access and utilisation
(3) Supply and Commodity Security
(4) Programming Support and Services and
(5) Financing

(a) Leadership, Coordination and Partnership

Strategic Objective 1:

To improve the environment for condom and lubricant programming

The NCLS seeks to create leadership, coordination and policy environment that supports and ensures availability of condoms and lubricants to the population of Ghana the outcomes of which are:

(i) Strong partnership between government and NGOs including social marketing organisations focused on strategies and clear written processes to provide an enabling environment in which to operate a comprehensive condom programme
(ii) Strengthened leadership and coordination of comprehensive condom programming
(iii) Harmonised roles and responsibilities

(b) Demand, Access and Utilisation

Strategic Objective 2:

To increase demand for quality condoms and lubricants

Develop and implement a sustained national plan to increase the overall use of condoms and lubricants based on increased knowledge and awareness in the population and supported by an effective distribution channels:

(1) Appropriately segmented market using the Total Market Approach (TMA) to ensure the needs of all segments are catered for

(2) Condom and lubricant use improved and expanded particularly among key populations

(3) Female condoms well branded and positioned as a viable device for dual protection (HIV and pregnancy)

(c) Supply and Commodity Security

Strategic Objective 3:

To guarantee the timely and continuous supply of condoms and lubricants

Develop evidence-based programmes with focus on promotion and distribution encompassing free, subsidised and commercial condoms for maximum coverage and efficiency:

(i) Condom (female and male) and lubricants supply chain strengthened to enable smooth distribution and flow from the central level right down to the end user

(ii) Robust methodologies used for routine condom quantification and procurement of needs

The annual national condom and lubricant requirements for 2015-2020 are shown in Table 7.13 .

Table 7.13 -Annual Condom and Lubricant National Requirements

General Population Output Indicators	Baseline 2015	2016	2017	2018	2019	2020
# Male Condoms Annual Requirements	62,353,712	64,070,813	65,806,869	67,563,873	69,590,789	71,678,513
# Female condoms Annual Requirements	247,074	1,281,416	1,316,137	1,351,227	1,391,815	1,433,570
# Lubricants Annual Requirements	550,368	660,442	759,508	865,839	969,740	1,086,108

*Source: Ghana Condom Lubricant Quantification Report 2014, *2019 and 2020 -" figures extrapolated from 2014 Quantification Report*

(d) Programming Support and Services

Strategic Objective 4:

To establish a national mechanism for comprehensive condom programming

Improve national level planning and management of resources to ensure availability and use of safe and effective condoms and lubricants to all sections of the population based on equitable distribution criteria:

(i) Functional strong coordination and other support services to provide a supportive environment for CCP

(ii) Improved public, private and social marketing sector involvement in condom (male and female) and lubricant programming

(e) Financing

Strategic Objective 5:

To ensure sustainable funding for comprehensive condom programming

(i) Expanded and sustained funding for comprehensive condom programming in country

(ii) Functional national mechanism for comprehensive condom programming

7.1.11 Critical Enablers for CCP in Ghana

The strategy recognises that condom programming requires more than just financing the commodities:

there must also be funding for promotion of activities, behaviour change communication activities, operational costs, capacity building as well as research, monitoring and evaluation. Funding must also take into account critical supply chain components such as intensified female condom rollout, appropriate warehousing, transportation, logistics, staff development, waste reduction and a strong Logistics Management Information System.

Strategies and Activities

Strategy 1:

Condom awareness creation, sensitisation, and promotion

Awareness of and sensitisation about condoms and lubricants is critical if they are

to be used correctly and consistently. Clients need to know that male and female condoms are available and that both have dual protective roles: preventing pregnancy and preventing STIs including HIV. Where there is community-based distribution of condoms, the location for getting the condom must be notified to clients.

Activities

- Establish a long-term programme of evidence-based and theory driven mass media campaigns on condom availability and use targeting different groups of sexually active persons
- Include short and long-format mass media (ads, jingles, drama and radio/TV serials) for condom promotion
- Develop and maintain nationwide demand creation strategies for condom use

Strategy 2:

Strengthening condom quantification and quality control

Condoms are needed for family planning and for preventing STIs including HIV. There is a need to quantify both needs and place a procurement order to meet the national condom needs for both Family Planning and HIV and AIDS programmes. Condom stock outs should be avoided. Quality control must be performed on all condom batches brought into the country to ensure they are of high quality. Female condoms must be included in the quantification and procurement. Condom-compatible lubricants for MSM and FSWs should be quantified and procured.

Activities

- Undertake quantification exercise at appropriate periods
- Strengthen condom procurement, monitoring and evaluation system, which will focus on providing better distribution, reducing stock-outs and increasing condom usage
- Constitute a multi-institutional team to coordinate procurement, distribution, warehousing & transportation as well as data management across programmes and projects
- Mobilise resources for lubricant procurement
- Review and standardise instruction messages on packages on correct condom and lubricant storage and use
- Clarify roles of the different national bodies who certify condom quality

Strategy 3:

Develop Total Market Approach for condom programming

The total market approach must be implemented to identify and characterise clear

market segments to be reached through focused interventions that will lead to improved access demand creation and utilisation of condoms and lubricants. Integrate HIV programme activities with sexual and reproductive health, STI, adolescent health, KP programmes and distribute quality condoms in different formats including free condoms, subsidised condoms, socially and commercially marketed condoms.

Activities

- Maintain an appropriate balance between free condoms and socially/commercially marketed condoms
- Maintain aggressive social marketing approach to condom and lubricant programming within Total Market Approach Framework
- Identify and create linkages social marketing organisations
- Work to develop a total market approach
- Create favourable environment to encourage social marketing interventions

7.2 HIV Testing and Treatment Programmes: 90-90-90 Fast-Track Targets

Treatment of HIV and AIDS has been a core and enduring strategy of the global response to the AIDS epidemic. Past global AIDS targets sought to achieve incremental progress in the HIV response; however, one of the policy objectives of the 2015-2030 Sustainable Development Goal (SDG) 3 - on ensuring healthy lives and promoting wellbeing for all at all ages is to end the AIDS epidemic by 2030. Many strategies will be needed to end the epidemic. However, one thing is certain: it will be impossible to end the epidemic by 2030 without bringing HIV treatment to all who need it. Therefore a strong global momentum has been built towards a new narrative on HIV treatment and ambitious but achievable targets for 2020, known as the UNAIDS 90-90-90 fast track targets, have been set to generate the desired momentum that will contribute to achieving the SDG of ending the AIDS epidemic by 2030.

Ghana is committed to ending the AIDS epidemic by 2030 and has adopted the UNAIDS fast track targets as the cornerstone of the national HIV response between 2016 and 2020. The aims of the national HIV and AIDS Treatment programme are:

(i) By 2020, 90% of all people living with HIV will know their HIV status

(ii) By 2020, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy

(iii) By 2020, 90% of all people receiving antiretroviral therapy will have viral suppression

Table 7.14 - Estimated Census Population, HIV Population, and Prevalence

Indicators	2015 Baseline	2016	2017	2018	2019	2020
Estimated Population of Ghana	27,670,170	28,308,300	28,924,266	29,614,340	30,280,810	30,955,200
Ghana HIV Population (Spectrum 2015)	274,560	272,090	269,620	268,260	266,650	264,660
90% HIV Population that Knows Status	247,110	244,880	242,660	241,440	239,990	238,190
Target of PLHIV to know their HIV status	50% (133,609)	60% (147,000)	70% (170,000)	85% (205,000)	90% (216,000)	90% (214,000)

7.2.1 HIV Testing Services (HTS)

HIV Testing Service is the entry point to HIV treatment, care and support and an important ingredient for HIV prevention. The HTS is therefore indispensable for the national HIV response and every effort must be made to ensure the service is available in health facilities and at HIV outreach programme sites all the time.

The HTS key outcome indicator of the proportion of persons tested for HIV must be improved in order to increase the detection of those infected by HIV. This outcome indicator will provide the level of progress being made to reach the target of 90% of PLHIV who know their status by 2020; it also serves as the reference point for the 90% of those who know their status receiving ARVs (according to national guidelines) and 90% of PLHIV on ARV attaining viral suppression by 2020. It is therefore, important to intensify activities that will ensure more individuals are tested and if positive are linked to care and treatment.

Preparations for implementing the treatment strategy including strengthening related aspects of the health system that are deemed critical for the success of the fast-track strategy especially developing the treatment guidelines, training HIV service providers, improving infrastructure, and mobilising funding will be carried out in 2016.

Outcome Results

Ghana's 2015 population is estimated at about 27 million; this will increase to about 31 million by 2020. The Spectrum modelling estimates that about 272,000 Ghanaians are living with HIV in 2015. The number of PLHIV will slowly decrease to 265,000 by 2020. Even though HIV prevalence in Ghana is much higher among key population groups especially MSM and FSWs, the vast majority of people living with HIV are found

in the general population. The general population is therefore the focus for the HTS program; however, special focus will be given to key populations where the yield for HIV positive status is higher than the general population where the yield is low.

To ensure all persons living with HIV know their HIV status by 2020, it is estimated that about 13.5 million of Ghana's projected population of 31 million in 2020 will need to be tested and counselled for HIV at least over the 5-year period of the NSP 2016-2020.

Progress towards achieving the Outcome results will be monitored as shown in Table 7.15 - HTS Outcome Results.

The National Need for HTS programme is to test about 13.5 million people for HIV between 2016 and 2020 over the 5-year period of the NSP. The annual targets of HTS are informed by historical experiences, past achievements, projected health systems strengthening efforts, and estimated levels of available funding. The targets are ambitious but are manageable within the health systems and funding constraints. However, the HTS programme will be implemented on a higher scale and will not be business as usual. The annual targets are significantly higher than for any year in last NSP 2011-2015: the lowest annual HTS target is for 2016, but this is about 2.7 times higher than the HTS result for 2015.

Table 7-15 - HTS Outcome Results

Outcome Indicator	Baseline 2015	2016	2017	2018	2019	2020
% (Number) of people receiving HTS (cumulative)	(955,674) NACP 2016	19% (2,576,055)	39% (5,211,105	59% (7,906,009	79% (10,683,076	100% (13,500,000)

Strategies and Activities

Strategy 1:

Generate demand for HIV testing services (HTS)

It is estimated that about 274,562 (Spectrum 2015) people are currently living with HIV in a population of about 27 million people in Ghana. Since a business as usual approach of waiting for people to visit health facilities to receive HTS will not enable the country to achieve the fast-track target of 90% of people living with HIV knowing their status by 2020, it is critical to generate a huge demand for HTS.

Activities

- Mount a huge and sustained nationwide “Know Your HIV Status” campaign with special focus on high yield geographic locations and population groups
- Mount a HIV-related stigma and discrimination reduction campaign
- Provide HTS at multiple service delivery points - health facilities including clinics, community and outreach services delivery points, special events etc.

Strategy 2:

Strengthening health systems and increasing facilities and staff providing HIV services including HTS

A significant increase in the number of people are expected to demand HTS, it is important to strengthen the health systems, and increase the number of facilities and trained staff providing HTS including exploring the use of lay counsellors. This will prevent long queues of people waiting for HTS at health facilities and community and outreach service delivery points.

Activities

- Establish additional testing and counselling sites in health facilities, communities, and outreach services
- Contract and train NGOs to provide HTS through community-based HIV testing and counselling services
- Train NGO and other staff to provide PITC services

Strategy 3:

Provide quality HTS

In order to reach the fast track target of 90% of PLHIV knowing their HIV status, a multi-point testing approach will be used to provide HTS.

Activities

- Provide HTS at fixed health facilities including outpatients departments (OPDs) and admission wards in health facilities, Accident and Emergency (A&E) departments, ANC clinics, maternal and child health (MCH) clinics, directly observed treatment short course (DOTS) sites, family planning (FP) clinics, Drop-in-Clinics (DICs), and in prison settings.
- Provide HTS at outreach programmes including routine outreach activities, community HIV testing (CHTS), sports and traditional festivals, religious events, and on special days in designated communities.

- Provide HIV treatment and care on-site or refer to health facilities that have the

capacity to provide these services. This will include providing condoms to all HIV-positive clients; HIV positive women will need family planning services to prevent unintended pregnancies.

Strategy 4:

Pilot self-testing and peer-led testing for HIV

In the 2011 IBBSS in Ghana, only 26% of MSM tested for HIV and received the results. Providing HTS to MSM is very challenging in Ghana, as discrimination or fear of discrimination deters many MSM from attending health facilities for HTS. As a key driver of new HIV infections in Ghana, innovative approaches are needed to reach MSM with HTS and linking HIV positive MSM to care.

With positive results confirmed by an accredited facility, trained peers providing rapid HIV testing with social support and case management through the early period following diagnosis can efficiently expand HIV testing and improve linkage to care amongst MSM in China. The MSM peer-led HIV testing and counselling programme clients were significantly more likely to be younger, single, non-resident of the area, more educated, and used condoms less frequently with higher proportions of HIV-positive MSM screened by the peer-led interventions receiving their confirmatory test results compared with traditional intervention outlets.

Self-testing and peer-led testing in Ghana will provide additional avenues for providing HTS thus reaching many MSM. These testing methods are not yet approved in Ghana and there is therefore the need to pilot test these approaches and if found appropriate, a policy directive will be needed to roll out the approaches.

Activities

- Design and test the relevance, efficacy, efficiency, and effectiveness of self-testing and peer-led testing for HIV
- Take decision to roll out or not to roll out self-testing and peer-led testing depending on the results of the pilot studies

Output Results

Roll out of HTS programme

To make progress toward meeting the 90-90-90 targets by 2020, it is estimated the country will need to provide HTS for about 13.5 million people between 2016 and 2020. Ideally, the HTS programme should front-load a significant proportion of the estimated national need for HTS between 2016 and 2020 in the first three years and then spread out the remainder over the last two years in order to meet the target of 90% of people who know their HIV status are on ART with 90% of this achieving viral suppression by

2020 under full funding availability and optimum health systems functionality conditions.

Realistically, full funding for the national response and strengthening of the health systems to function optimally cannot be achieved in the early years of implementation of the NSP to enable front-loading of the HTS programme.

The annual targets of HTS programme are informed by historical experience, previous achievements, projected health systems strengthening efforts, and estimated levels of available funding. The targets are ambitious but are manageable within the constraints of the health systems and funding. However, the HTS programme will be implemented with higher intensity and coverage; it will not be business as usual. The annual targets are significantly higher than for any year in last NSP 2011-2015: even though the HTS target is for 2016 is the smallest, this is about double the HTS programme achievement for 2015.

Progress towards achieving the Output Results of the HTS programme will be monitored by the indicators shown in Table 7.16 Output Results of the HTS programme.

Table 7.16 - Output Results of the HTS programme

Output Indicators	Baseline 2015	2016	2017	2018	2019	2020
Number of people tested, counselled for HIV and received results (HIV National HTS Programme Roll Out)	955,674 (NACP 2015)	2,576,060 (19%)	2,635,050 (20%)	2,694,910 (20%)	2,755,550 (20%)	2,816,920 (21%)

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

The four pronged-approach of the comprehensive prevention of mother-to-child transmission of HIV forms the basis for the attainment of a generation free of HIV. PMTCT is the main strategy to reduce HIV transmission from HIV infected mothers to infants. The NSP 2016-2020 places premium on the provision of HTS for women in the reproductive age 15-49 years; preventing unintended pregnancy in HIV-positive women through on-site provision of or referral for family planning services; PITC for HTS in all ANC facilities and outreach sites in the country and providing on-site or referral for treatment for HIV-positive pregnant women; and providing care and support for HIV exposed infants (HEI).

Impact Result

The Impact result is: Reduced number of children (0-14 years) living with HIV

The estimated number of children living with HIV is expected to decrease significantly as a result of the combined effects of successful PMTCT and ART programmes.

The Indicator in Table 7.17 will track progress towards achieving the Impact result.

Table 7.17 - PMTCT Impact Result

i. Outcome Indicator	ii. Baseline	Source & Year	2018	2020
Number of new HIV infections in children (0-14 years))	2,197	Spectrum Estimates 2015	1140	440

Outcome Result

The Outcome Result is: Percentage of child HIV infections from HIV positive mothers reduced from 15.9% in 2015 to <5% by 2020.

The Ghana 2014 HIV and AIDS Estimates and Projections put the transmission of HIV from mother to child including during the breastfeeding period at 15.97%. The GDHS 2014 indicates 97% of pregnant women in Ghana receive antenatal care at least once and 86% make at least four visits (focus ANC). The country is committed to the virtual elimination of MTCT of HIV and has adopted the global MTCT rate of 5% or less for the elimination of mother-to-child transmission of HIV (eMTCT). With the high ANC coverage rate of 97% of pregnant women making at least one visit to the ANC (GDHS 2014), opportunities exist for skilled health care providers to ensure the country's ambition to eliminate mother-to-child transmission of HIV by 2020 is achieved.

All efforts will be made to provide HIV testing and counselling services to all pregnant women; and all HIV positive pregnant women will be provided with ARVs to prevent mother to child transmission of HIV.

The indicator in Table 7.18 will track the PMTCT outcome results.

Outcome Results

Table 7.18 - PMTCT Outcome Results

Outcome Indicator	Baseline 2015	Source / Year	2016	2017	2018	2019	2020
Percentage of child HIV infections from HIV positive women reduced from 15.9% to <5% by 2020.	15.9%	NSP MTE Report 2015	14%	12%	10%	7%	<5%

Strategies and Activities

Output 1:

Number of HIV-positive mothers and HIV exposed infants (HEIs) receiving PMTCT services annually according to annual targets in the NSP

The End Term Evaluation (ETE) of the NSP 2011-2015 revealed about 70% of expected pregnant women were counselled and tested for HIV. This is inadequate to ensure elimination of mother-to-child transmission of HIV. The deficit may be attributable to: not all pregnant women attend ANC, inadequate number of staff trained to provide HTS in health facilities, not all pregnant women were tested because of inadequate number of test kits, and not all the ANC sites provide HTS.

Achieving 95% of the target will require effective integration of PMTCT into MNCH services especially at the service delivery point, task shifting of health workers at lower level health facilities, capacity building in provider initiated testing and counselling (PITC), ensuring HIV commodity security, and improved data collection and reporting. The scale up of the number of pregnant women to be tested for HIV to 95% of expected pregnancies will require that all ANC sites are equipped and have trained health staff and commodities to conduct HTS.

The standardised package will be to test and treat all HIV positive pregnant women; provide ARVs for HIV exposed infants (HEI); provide Cotrimoxazole (CTX) for HIV positive mothers and HIV exposed babies; provide infant and young child feeding (IYCF) support; and carry out Early Infant Diagnosis (EID) of HIV.

Strategy 1:

Generate demand for PMTCT services

The NSP seeks to create awareness on comprehensive knowledge of HIV and PMTCT. The 2014 GDHS shows that 78% of women and 76% of men know that HIV can be transmitted by breastfeeding. Fewer women (64%) and men (61%) know that taking drugs can reduce the risk of mother-to-child transmission during pregnancy. Even fewer women (61%) and men (52%) know both HIV can be transmitted by breastfeeding and mother taking special drugs during pregnancy can reduce transmission.

Activities

(i) Increase demand and access to PMTCT services

- Use community resources (CBOs, volunteers, FBOs, support groups etc.) to provide support and facilitate pregnant women and their partners to attend ANC at least four times (focused antenatal care) to enable them receive good quality antenatal care including PMTCT. Current effort to provide ARV at all PMTCT sites is expected to significantly improve access at least within ANC sites. Trainings and orientation of district public health nurses and pharmacists currently taking place will ensure the deployment of ARVs in all PMTCT sites.
- Mount "Know-Your HIV Status" (KYS) campaigns for pregnant women to access HTS: KYS will be mounted using multiple communication channels to increase access to PMTCT services for pregnant women and their partners.

(2) Increase number of facilities/sites providing PMTCT services

- Maintain functional PMTCT sites and refurbish poorly functioning PMTCT sites
- Establish new PMTCT sites to meet expected increase in demand for PMTCT services
- Ensure HTS commodities are available to meet demand all the time

(3) Train service providers in the provision of integrated PMTCT and MNCH services

- Provide training and refresher trainings on Option B+ to service providers including counsellors, midwives, nurses, physician assistants, physicians, and other health providers on PITC for PMTCT
- Provide training and refresher trainings for laboratory scientists and technicians on haematology, biochemistry, immunology, and virology tests for HIV

Strategy 2:

Provision of HTS to pregnant women and linking HIV+ pregnant women to care

Pregnant women that are HIV positive will have the opportunity to receive ART to prevent transmitting HIV to infant during pregnancy, the birthing process, and breastfeeding period.

Activities

- Provide HTS to pregnant women at ANC, labour ward, and postnatal clinics and outreach programmes
- Provide HIV testing and counselling to all pregnant women and their partners at enrolment in ANC and at 34 weeks of pregnancy
- Provide HTS in labour ward and at postnatal clinics for women (and their babies) who do not know their HIV status
- Initiate ART for HIV positive pregnant women. Ghana has adopted Option B+ (Test and Treat and for life) as the preferred treatment regimen

Strategy 3:

Provide Treatment, Care and Support for HIV-positive mothers and HEI

Available treatment and care regimen are effective and affordable in preventing mother to child transmission of HIV after the bay is born.

Activities

- Continue Option B+ (Test and Treat and ARVs for life) services for HIV-positive pregnant women
- Provide counselling and support for infant and young child feeding
- Provide ARVs and CTX prophylaxis for HEI according national guidelines
- Carry out virological test on HEI within 2 months of birth
- Carry out HIV antibody testing at 18 months of age for HEI who have not received a virological test
- Link HIV-positive mother and HEI to HIV treatment and care programmes and other support services

Output Results

Progress towards achieving the Output Results of these activities will be monitored by the indicators shown in Table 7.19 - PMTCT Output Results

The National Need is the number of HIV positive pregnant women and HEI who will need PMTCT services. The percentage receiving the PMTCT services is proportion of HIV positive pregnant women and HEI who are targeted to receive the services based on the estimated available resources for the year.

Table 7.19 - PMTCT Output Results

Output Indicator	Baseline 2015	2016	2017	2018	2019	2020	Assumptions
Number Estimated Pregnant women in need of HTS	1,106,807	1,132,332	1,158,263	1,184,573	1,211,232	1,238,208	4% Pop
Number HIV+ pregnant women receiving ARVs-Option B+	7,813 (NACP 2015)	22647	23165	23691	24225	24764	2% pregnant women HIV+
Number (%) HEI receiving ARV prophylaxis	3,733 (NACP 2015)	12,456 (55%)	15,057 (65%)	17,769 (75%)	20,591 (85%)	23,526 (95%)	Graduated targets from 55% to 95%
Number (%) HEI receiving CTX prophylaxis	3,733 (NACP 2015)	12,456 (55%)	15,057 (65%)	17,769 (75%)	20,591 (85%)	23,526 (95%)	Graduated targets from 55% to 95%
Number (%) HEI that have virological test within 2 months of birth	3,733 (NACP 2015)	12,456 (55%)	15,057 (65%)	17,769 (75%)	20,591 (85%)	23,526 (95%)	Graduated targets from 55% to 95%
MTCT Rate at 18 months	15.9%	12%	9%	7%	5%	<5%	

7.2.3 Treatment of HIV and AIDS

The 2016 -2020 plan will focus on treatment as a prevention strategy aimed at diagnosing and treating HIV to curtail spread of the infection. Treatment, care and support for PLHIV will also aim at reducing the mortality and morbidity due to HIV and AIDS

Impact Result

The Impact result is: Reduced morbidity and mortality amongst PLHIVs

A reduced number of adults and children will die from AIDS-related causes as a result of the combined effect of the PMTCT and ART programmes.

The indicators in Table 7.20 will measure progress towards achieving the Impact results. The annual targets are informed by the 2015 Spectrum modelling data.

Table 7.20 - Treatment Impact Results

Impact Indicator	Baseline 2015	2016	2017	2018	2019	2020
Number of AIDS-related Adult deaths (disaggregated by age and sex)	11223 (Spectrum 2015)	9699	8492	6363	4987	4504
Number of AIDS-related deaths in children (disaggregated by age and sex)	1423 (Spectrum 2015)	1384	1164	881	673	509
Total AIDS-related deaths	12646 Spectrum 2015)	11192	9656	7244	5660	5013
Percentage of adults known to be on ART 12 months after initiation of treatment (disaggregated by age and sex)	74% (Preliminary data from Cohort Analysis)	80%	83%	85%	90%	>90%
Percentage % children known to be on ART 12 months after initiation of treatment (disaggregated by age and sex)		80%	83%	85%	90%	>90%

The ART plan is based on the number of clients to be enrolled per year in the table. The immediate step would be to enroll on ART all clients currently in care but not eligible due to the CD4 500 criterion. The number of sites offering ART will increase by end of October 2016 with 50 new DOTS sites in the four priority regions (GAR, ER, AR and WR) and subsequently in the remaining regions by January, 2017. In addition task sharing guidelines are being developed to facilitate ARV initiation and dispensing by a lower cadre of health care providers at sub-district levels (Health centre and CHPS) where possible.

The priority regions are GAR, ER, AR and WR for ART and PMTCT; this is already reflected in the current performance framework of the Global Fund NFM. The scale-up plan for this NSP will also be based on this.

Outcome Result

Ghana has adopted the UNAIDS fast track targets of 90-90-90 by 2020. The second 90 requires that 90% of all PLHIV eligible for ART are receiving treatment by 2020; the third 90 is to achieve viral suppression in 90% of patients on ART by 2020. The second 90 and third 90 of the fast-track treatment targets will be achieved through the HIV treatment programme. This will require new and aggressive strategies with high impact being applied in a background of adequate resources. Progress towards achieving the Outcome results will be monitored as shown in Table 7.21 Outcome Results of the ART Programme.

The National Need is the number of people who need ART services and the annual targets are informed by the 2015 Spectrum modelling data.

Table 7.21 - Outcome Results of ART Programme

Indicators	Baseline 2015	2016	2017	2018	2019	2020
Cumulative Number of Children 0-14 years on ART	4,934 (NACP 2015)	17,585	16,251	15,066	13,882	13,300
Cumulative Number of Adults 15+ years on ART	84,179 (NACP 2015)	156,440	161,959	209,758	213,360	216,620

**All Spectrum Data will be updated annually*

Strategies and Activities

Key strategies and activities for achieving the Outcome results are:

Strategy 1:

Scale up ART sites

In order to increase the number of persons accessing ART, the number of treatment sites would have to be increased to meet the demand. Hence, the ART sites in the country will be scaled up in order to improve access to ART services and to improve their capacity to serve the increased number of PLHIV to be put on ART. New sites will be located in areas with high HIV prevalence and areas considered as hotspots. The establishment of the new sites will involve ensuring staffing of about six health care staff in each ART site, training of the health personnel on ART and supply of drugs and other required commodities to these sites.

Key Activities

- Refurbish existing ART sites where appropriate
- Establish new ART sites
- Improve skills and knowledge of health workers to provide ART

Strategy 2:

Accreditation and certification of ART sites

New ART sites will meet minimum accreditation criteria and be certified to administer ART. The accreditation system for ART sites and laboratories to support ART services will be used as part of quality assurance. The scale up of ART services needs to go in tandem with the provision of services according to the national ART guidelines. The accreditation will ensure that sites meet set national/ international standards and will form a basis for monitoring quality of services provided.

Key Activities

- Selection of site to improve access
- Apply accreditation checklist
- Upgrade facility
- Train core team for ART provision
- Provide resources

Strategy 3:
Test and treat for children and pregnant women

The strategy of test and treat will apply to all children and pregnant women in line with new treatment guidelines. The current guidelines will be revised to ensure all children that test positive for HIV are put on treatment immediately for life and similarly with all HIV positive pregnant women.

Key Activities

- Review and revise the current treatment guidelines
- Train service providers on revised guidelines
- Disseminate and distribute revised guidelines

Strategy 4:

Initiation of ART for adolescents and adult patients irrespective of CD4 count

The current policy of initiating ART at CD4 count of 500 or less will ensure many PLHIV initiate treatment before the immune system breaks down. The test and treat protocol is implemented for HIV positive pregnant women and children and HIV-TB co-infection situation. Full implementation of the test and treat protocol for all children

and adults who test HIV positive will start in January 2017. This will contribute to meeting the 90-90-90 targets by 2020.
Key Activities

- Train service providers on new guidelines in initiating therapy
- Disseminate and distribute guidelines

Strategy 5:

Follow up of patients on ART using multi-modal approaches

In order to retain patients in care, maintain treatment adherence and achieve virological suppression, different modes of follow up will have to be engaged at and outside the treatment sites. The aim is to follow up clients who have defaulted to determine the reasons defaulting and engage those alive and return them into care.

Key Activities

Follow up of clients who have defaulted to determine those lost to follow up and engage them back into care

- Create a robust appointment system for patients on treatment
- Use ICT to remind clients of upcoming appointments - telephone, SMS,
- Use volunteers to trace and return to care patients with missed appointments support groups including Models of Hope

Strategy 6:

Improve referrals from HIV testing sites to treatment sites

With the increase in HIV testing sites, modalities must be put in place to link those that tested HIV positive to care to achieve treatment for 90% of patients

Key Activities

- Establish SOPs on referrals from testing sites
- Train service providers on SOPs

Strategy 7

Improve HIV and AIDS Commodity Security (HACS)

In order to achieve the 90% eligible PLHIV on treatment and viral suppression in 90% of those on treatment, ART commodities including medicines and laboratory reagents must be available at treatment sites at all times. The planned scale up of ART services will require strengthening and expanding the procurement and supply chain management (PSCM) system including infrastructure to ART sites across the country to avoid stock outs. Accurate and robust forecasting of drugs and other commodities required for the scale up of ART services will be done and supply system to the new ART sites will be developed.

Key Activities

- Improve the PSCM system especially between the regional medical stores and health facilities
- Provide adequate numbers of CD4 machines at sites initiating ART
- Carry out planned periodic maintenance of CD4 machines
- Provide adequate amounts of laboratory reagents
- Provide adequate ARVs in the right formulations especially for paediatric treatment

Strategy 8:

Viral load monitoring and resistance testing

Viral load monitoring and quality treatment and adherence management are required to ensure sustainable viral suppression and identify patients who may have developed resistance to ART. Capacity must be built locally to test for drug resistance.

Key Activities

- Scale up of viral load monitoring including efficient transport of samples from requesting facilities to facilities providing viral load testing and resistance monitoring services
- Build capacity of at designated health and research institutions to carry out resistance testing
- Carry out planned periodic maintenance of viral load machines

Strategy 9:

Conduct Cohort Studies

Cohort studies are important in two key areas of the ART programme: survival rates and retention of patients on treatment. Patients may die whilst on treatment; they may be lost to follow-up because of death or some other reason including seeking alternative treatment, economic and geographical access to treatment sites etc. Survival rates provide proxies on effectiveness of the ART programme and retention in care rates provides some reasons why patients are lost to follow up. Addressing

the reasons for the survival and retention rates are important in improving the performance of the HIV treatment programme.

Key Activities

- Conduct Cohort studies on survival of patients on ART at 12 months, 24 months, 3 years; and 5 years on ART
- Conduct studies on retention rates of PLHIV in care at 1 year, 3 years, and 5 years after initiation of treatment.

Output Results

Progress towards achieving the Output Results of these activities will be monitored by the indicators shown in Table 7.22 - Output Results of the ART programme.

Table 7.22 - Output Results of ART programme

Output Result Indicator	Baseline 2015	2016	2017	2018	2019	2020
Number of health facilities providing ARTs	197	237	247	267	287	307
Number of adults newly initiated on ART	15,875	20,582	23,400	24,782	26,500	30,713
Number of children newly initiated on ART	1,093	1,417	1,600	1,694	1,760	2,100
Proportion of adults living with HIV who are on ART with undetectable viral load	NA	80%	85%	90%	90%	95%
Proportion of children living with HIV who are on ART with undetectable viral load	NA	80%	85%	90%	90%	95%
Number of facilities that carry out HIV viral load testing (cumulative)	9	10	10	25 (Additional 15 using gene Xpert machines)	70 (Additional 45 using gene Xpert platform)	115 (Additional 45 using gene Xpert platform)

7.2.4 Management of HIV and TB Co-infection

Tuberculosis is a major opportunistic infection amongst PLHIV and a major cause of AIDS-related deaths. The 2016-2020 NSP seeks to strengthen HIV and TB co-infection management through collaboration of TB and HIV programmes to reduce the mutually reinforcing morbidity and mortality rates amongst both diseases.

Outcome Result

The Outcome Result is: Increased percentage of HIV-TB patients on ART from 32.8% in 2015 to 70% by 2020.

Tuberculosis still remains a major cause of mortality in co-infected patients. Despite the strong collaboration between the two programmes a lot more needs to be done to improve the provision of ART to and reduce mortality in HIV-TB co-infected patients.

The Outcome Indicator for HIV-TB Co-Infection Management in Table 26 will be used to track progress made in providing ART to HIV-TB co-infected patients

.

Table 7.23 - Outcome Indicators for HIV-TB Co-infection Management

Outcome Indicators	Baseline 2015	2016	2017	2018	2019	2020
Increase percentage of TB/HIV co-infected patients on ARV treatment	32.8%	55%	85%	100%	100%	100%

Strategies and Activities

Strategies and key activities for improving the management of HIV-TB co-infected patients are:

Strategy 1:

Strengthening screening of TB patients for HIV

HIV testing is offered to patients with TB at DOTS sites. The programme must be strengthened to reach all TB patients. Where TB and HIV programme services are not co-located, TB programme facilities or DOTs facilities will be provided HIV test kits and the personnel trained to undertake HIV testing and counselling in order to strengthen screening of TB patients for HIV. The data on TB patients screened for HIV will be shared between the HIV and AIDS and the TB programmes.

Key Activities

- Train health care providers at TB sites including DOTS to provide HTS for TB patients
- Provide HIV test kits at TB sites for testing HIV in TB patients
- Initiate HIV+ TB patents on ART according to national guidelines

Strategy 2:

Initiating ART for HIV positive TB patients

This strategy is to ensure that all co-infected patients are initiated on ART within the shortest possible time (up to 2 weeks). The ART programme will ensure supply of ARVs

to ART sites to meet the demand generated through TB/HIV collaboration. DOTS sites will be upgraded to provide ART services.

Key Activities

- Train service providers at TB sites to test and treat for HIV in TB patients on-site or refer patients to facilities with capacity to manage HIVTB co-infections
- Provide adequate ARVs to all ART sites at all times including TB sites provide ART
- HIV and TB programmes hold review meetings
- HIV and TB programmes carry out joint monitoring and evaluations

Strategy 3:

Strengthening clinical screening of HIV patients for TB

The current policy directive is to screen all PLHIV for TB. Screening for TB in all PLHIV entails consistent and correct use of the WHO-recommended clinical screening tool. The tool is not used correctly and consistently in all PLHIV being reviewed clinically and results reporting is often incomplete as screening results are sometimes not recorded in the patient files.

It is important to introduce biological tests like the urine Lipoarabinomanan test whilst strengthening the use and reporting of the screening tool. All PLHIV suspected to have TB on clinical grounds should be referred to the TB programme for TB diagnostic tests or tested with the new urine test for severely ill patients; those found to have TB infection would be managed for HIV/TB co-infection according to national guidelines.

As part of the collaborative activities between the HIV and TB programmes, the TB programme will use Gene Xpert technology to improve diagnosis of HIV in TB patients.

Key Activities

- Build capacity of service providers to improve on documentation
- Strengthening the use of the WHO screening tool
- Use new diagnostic tools for testing TB in PLHIV such as urine
- lipoarabinomanan test

Strategy 4:

Scaling up of DOTS sites to provide ART

DOTS centres will be assessed, upgraded and given accreditation to provide ART service. This will ensure most of the co-infected clients that are lost through referrals are retained at DOTS site and ART initiated. Service providers will be trained on new guidelines for co-infection and HIV treatment in general.

Key Activities

- Assess and accredit DOTs centres
- Train service providers on ART new treatment guidelines and logistics management
- Provide ARVs to DOTS sites
- Co-locate TB and ART services, wherever and whenever feasible.

Output Results

The Outputs of the HIV-TB co-infection management programme will be monitored using the output indicators shown in Table 7.24 Output Results for HIVTB Co-infection Management

Table 7.24 Output Results for HIV TB Co-infection Management

Outcome Indicator	2013	Baseline 2015	2016	2017	2018	2019	2020
Proportion (%) of TB patients receiving HIV testing services.	11,387 of 74,360 (15.3%)	17,364 of 77,175 (23%)	20,182 of 74,887 (27%)	23,096 of 72,175 (32%)	26,740 of 71,594 (37%)	29,528 of 69,478 43%)	33,572 of 67,821 (50%)
Percentage of HIV-positive patients who were screened for TB in HIV care or treatment settings.	20% of 224,448	56% of 185,261	64% of 244,880	70% of 242,660	80% of 241,140	85% of 239,990	90% of 238,190
Proportion of HIV+TB patients who receive CPT during TB treatment.	74%	85%	90%	95%	100%	100%	100%
Proportion (%) of ART enters providing DOTS	13 of 175 (7%)	10%	30%	50%	75%	100%	100%
Proportion (%) of DOTS centers providing ART services	13 of 230 (6%)	10%	40%	60%	858%	100%	100%
Percentage of HIV-positive registered TB patients given ART during TB treatment.	6% (1,009 of 17,846)	11% (2,084 of 18,522)	40%	60%	85%	100%	100%

Source: Ghana HIV-TB Policy Guidelines 2014

7.2.5 Care and Support for Patients on ART

Adequate food intake and balanced nutrition are key ingredients for successfully treating patients on ART.

Outcome

The Outcome result is:

Access to food by prescription and food rations for malnourished PLHIV on ART improved.

Malnourished PLHIV will be supported with ready to use therapeutic foods (RUTF) for children and food rations and baskets for adults through social protection programmes such as the LEAP project or the World Food Programme food rations for patients on ART in food insecure households. Patients on ART with specific nutritional deficiencies will be managed by food for prescription approach. ART sites will be supported to link up patients with food ration projects.

Strategies and Activities

Strategies and key activities for improving the care and support for malnourished patients on ART are as follows:

Strategy 1:

Supporting malnourished HIV positive patients to access food and nutrition programmes

Guidelines on nutrition for HIV patients produced by the Ghana Health Service need to be disseminated to ART sites and HCWs trained to use these.

Key Activities

- Review, revise and reproduce guidelines on nutrition for use in HIV treatment programme
- Train service providers on the national food by prescription approaches
- Equip ART sites to diagnose malnutrition through BMI measurements
- Procure RTUF for managing acute malnutrition in HIV positive children
- Procure food supplements for managing nutritional deficiencies with food by prescription
- Link malnourished PLHIV in food insecure households to projects that provide economic support such as the LEAP project or provide food baskets like the WFP project.

7.3 Critical Social and Programmatic Enablers

Implementation of high impact HIV activities by themselves alone cannot achieve the fast-track targets. These activities must be catalysed by the simultaneous implementation of critical social and programmatic enablers.

7.3.1 Critical Social Enablers

Critical social enablers include the following:

(a) Political Commitment

Since the beginning of the HIV epidemic in Ghana, the national HIV response enjoys high-level political commitment and support. This commitment manifests in many forms:

government providing leadership through the GAC, creating enabling policy environments, providing direct funding, and facilitating access to external funding for the national response.

Output: High-level political commitment to the national HIV response strengthened

Strategy:

Advocacy and continuing dialogue with high-level political leaders

Activities

- Hold sensitisation and advocacy meetings and discussions with high-level political leaders at national and decentralised levels
- Ensure high-level political leaders commit to providing leadership and adequate funding for the national HIV response
- Hold high-level political leaders accountable for the performance of the national HIV response.

(b) Enabling Policy Environments

The current National HIV Policy was fully reviewed in 2013 and is currently the main document guiding the national response. In response to the recent fast-track strategy which Ghana has signed onto, it is important to review the National HIV and AIDS, STI Policy again to provide the needed environment for achieving the 90-90-90 Fast-Track targets set out in the NSP 2016-2020. Good policy environments will contribute to reducing the number of new HIV infections and improving the survival of PLHIV on ART.

Outcome: The national HIV response operates within enabling policy environments

Output 1:

The National HIV and AIDS and STI Policy gets strengthened and is enabling the country achieve the fast-track targets

Output 2:

Other HIV-related policies and strategies are strengthened and are enabling the country achieve the fast-track targets

Strategy:

Ensure inclusion of HIV and AIDS in national development plans and Review of National HIV/AIDS and STI Policy as well as other HIV-related policies and strategies

Activities

- Ensure HIV and AIDS is included in the 40-year national development plan currently being developed by the National Development Planning Commission.
- Ensure HIV and AIDS is included in the National Health Development Plan currently being developed by the Ministry of Health.
- Ensure HIV and AIDS is included in the Medium Term Expenditure Framework (MTEF) of the Ministry of Finance.
- Review the National HIV and AIDS and STI Policy to provide support to high-impact interventions. The NSP 2016-2020 requires policy reforms to enable rapid scale-up of innovative HIV testing if the first 90 of the 90-90-90 treatment strategy - 90% of people living with HIV know their HIV status - is to be achieved. This may require introducing self-testing for HIV, which will involve other interventions like training volunteer counsellors.
- Review other associated sector and programme level policies and strategies including National HIV Workplace Policy, Community Home Based Care (CHBC) Strategy, the Behaviour Change and Communication Strategy, the National Gender Policy, and National Social Protection Policies. The review should focus on the relevance, effectiveness and efficiency as they relate to the fast track treatment targets.

(c) Advocacy for the national HIV response

Targeted advocacy ensuring critical issues of the NSP are addressed effectively and in time will contribute immensely to the successful achievement of the 90-90-90 fast track targets by 2020. The critical issues include the following:

- Continuing high level political commitment on HIV and AIDS

- Adequate funding for the national HIV response
- HIV and AIDS Commodity Security (HACS)
- Mainstreaming HIV into core business of MDAs and MMDAs
- Improve implementation of Workplace HIV Programmes
- Enthusiastic support for the "Know Your HIV Status" campaign and generating demand for HIV prevention, treatment, care and support services
- Reducing stigma and discrimination against KPs.

Output:

Targeted advocacy activities are successful in addressing critical issues and are contributing to the successful implementation of the NSP 2016-2020

Strategy:

Identifying, planning, and executing key targeted advocacy activities
Activities

- Advocate for continuing high level political commitment to HIV and AIDS
- Advocate for adequate funding of the national HIV response including the passage of the Ghana AIDS Commission Bill and the full and timely release of the DACF for HIV activities
- Advocate for HIV and AIDS commodity security (HACS) at all times especially for HIV test kits and antiretroviral medicines (ARVs) for the Behavioural Change Intervention, HTS, PMTCT, ART, and KPs programmes
- Continue to advocate for strengthening the mainstreaming of HIV activities into the core businesses of MDAs and MMDAs
- Continue to advocate for strengthening Workplace HIV programmes
- Enthusiastically advocate for support for the "Know Your (HIV) Status" campaign that is critical for achieving the target of 90% of PLHIV knowing their HIV status
- Continue to strengthen advocacy on reducing stigma and discrimination against KPs including PLHIV
- Partner with the media to ensure visibility of critical issues including "Know Your Status" campaign and reducing stigma and discrimination against KPs campaign.

(d) Addressing gender dynamics/norms related to HIV transmission

Outcome:

HIV related policies sufficiently address gender issues in the prevention and treatment of HIV across different levels of the national response

Output:

Gender issues are properly integrated into all relevant HIV related policies

Strategy:

Mainstreaming gender in all HIV related strategies and policies

Activities

- Greater involvement of the Ministry of Gender, Children and social protection in the development of HIV related policies and strategies
- Revision of HIV policies and strategies to ensure that gender equality issues are adequately captured

(e) Community Mobilisation

Community mobilisation and participation is critical in successfully implementing the NSP. The roles of individuals, groups, associations, and networks in the community in the national response cannot be over-emphasised: they generate demand for HIV prevention, treatment, care and support services in the communities as well as provide community and home based care for people infected and affected by HIV and AIDS. To achieve the fast-track targets of the NSP, community participation and involvement is absolutely critical

Output:

Communities are mobilised to achieve the 90-90-90 fast-track targets by 2020

Strategy: Community Mobilisation and participation in national HIV response

Activities

- Identify and develop effective partnerships with community level actors (CBOs, NGOs, and FBOs, spearheading behaviour change interventions for general populations, young people, and KPs; promoting and distributing condoms and lubricants through community outlets; promoting and protecting the human rights of KPs; and participating in PMTCT and ART programmes at the community level
- Support institutional and organisational capacity development of HIV and AIDS focused organisations
- Facilitate access to capacity building opportunities including funding, material, training and technical assistance for HIV-focused CSOs
- Support meaningful involvement of PLHIV in the national response including providing support for treatment adherence and follow-up of patients lost to follow-up in PMTCT and ART programmes

(f) Stigma and discrimination

Several studies including a study on Stigma and Discrimination of People Living in Ghana including the Stigma Index study of 2013 indicate that stigmatisation and discrimination against KPs occurs in communities, families, religious institutions, workplaces, and health institutions mainly as a result of ignorance, prejudice, and cultural values and norms. This places a significant barrier to KPs access to HIV prevention, treatment, care and support services and results in the further spread of the infection.

Outcome:

Accepting attitudes for KPs among the general population improved

Strategy:

Work with other stakeholders to reduce stigma / discrimination against KPs

Activities

- Review the 2011-2015 MARPs Strategy for continuing relevance, effectiveness, and efficiency
- Mount anti-stigma and discrimination campaigns through multiple communication channels and engage with traditional authorities and religious leaders to reduce HIV and AIDS stigma and discrimination in their communities and among their congregations
- Work with, support, and facilitate work promoting and protecting the human rights of KPs
- Reduce stigma and discrimination in health settings
- Provide Workplace HIV education, prevention and services
- Involve PLHIV in anti-stigma and discrimination activities.

7.3.2 Critical Programmatic Enablers

Implementation of high impact HIV activities by themselves alone cannot achieve the fast-track targets. These activities must be catalysed in tandem with the implementation of critical social and programmatic enablers.

Critical social enablers include the following:

(a) Coordination of national HIV response

The GAC has the overall mandate of providing leadership, coordination, and management of the national HIV response. The GAC therefore works with and coordinates all stakeholders (MDAs, MMDAs, private sector, CSOs, the media, and development partners) to align their programmes of work with the NSP.

Output:

Coordination of the HIV response at the national and decentralised levels improved

Strategy:

Strengthening existing coordination framework for the national HIV response

Activities

- GAC to coordinate planning, implementation, review, oversight, monitoring, evaluation and reporting, of the national HIV response
- Hold GAC Board meetings twice a year
- Hold Partnership Forum and Business Meting twice a year on the national HIV response
- Hold Extended Technical Working Group (TWGs) Meetings
- Strengthen sector partnership meetings with the public, private, and civil society sectors and with the media at national, regional, and district levels
- Strengthen RAC meetings and oversight functions
- Strengthen DAC meetings and oversight functions.

(b) Management of national HIV response

GAC's mandate includes the day-to-day management of and mobilising of resources for the national HIV response through the GAC Secretariat

Output:

Management capacity of the Ghana AIDS Commission (GAC) improved

Strategy:

Strengthening management capacity at GAC Secretariat

Activities

- Fill existing staff vacancies at GAC especially those at the Directors level
- Establish Technical Support Units in the two remaining regions
- Strengthen resource mobilisation capacity at the GAC Secretariat
- Strengthen the internal financial arrangements at GAC
- Institutionalise the National AIDS Spending Assessment (NASA).

(c) Monitoring and Evaluation of the national HIV response

Ghana will continue to use the 12 components of the UNAIDS organising framework for a functional HIV M&E system as the backbone for organising and implementing the national M&E plan and expects outcomes, strategies, activities and outputs as indicated below.

Goal

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

Outcomes

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

Strategies

Strategy 1:

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

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

Broad activities to be implemented are:

- M&E capacity assessment at all levels
- Develop a national HIV M&E capacity strengthening plan
- Periodic capacity building in M&E
- Develop an online M&E capacity building platform to support capacity building.

Strategy 2:

Harmonise comprehensive routine HIV reporting system to provide quality data

In line with the concept of a multi-sectoral response as indicated by the "three ones principle" the strategy is to harmonise all data management documents and ensure all stakeholders use the same tools etc. at all levels.

Activities

Broad activities to be implemented are:

- Review and update Strategic Information guidelines, manuals and tools
- Train implementing partners in the use of the revised guidelines, manuals and tools
- Strengthening data management at national and sub-national level
- Scale up the implementation or use of Country Response Information System (CRIS)
- Develop a data exchange platform to facilitate the exchange of data between DHMIS and CRIS
- Conduct periodic data audit and verification
- Conduct routine monitoring, which includes all HIV implementing partners
- Implement a performance rating system for all implementing partners.

Strategy 3:

Promote the generation and use of strategic information

National level key stakeholders of the HIV response have a capacity that enables them to generate appropriate strategic information and use data regularly for decision-making. These stakeholders include GAC, NACP, GHS, the CCM, and MDAs. The reasons for data not being used at the decentralised level can be attributed to inadequate capacity.

This strategy cuts across from data generation to planning and programme review processes. Data generation would go beyond measuring performance to also providing information to explain and improve performance since an appreciation of the reasons for observed performance and options for improving performance can facilitate appropriate decision-making. Integration of information in planning and programme review processes would be strengthened with emphasis on decision-making and action. A decision-support guideline based on the functions and authority at each sub-national level will be used to promote evidence based decision-making and action sub-nationally.

Activities

Broad activities to be implemented are:

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

Strategy 4:

Develop a comprehensive tracking and assessment system for the 90-90-90 fast- track strategy

Activities

- Develop an online near real time reporting system for the first 90
- Conduct an assessment of the 90-90-90 strategy
- Organise quarterly review meeting
- Continuous monitoring of the strategy.

(d) Research and Special Studies

Research and special studies provide important strategic information for improving the performance of the national HIV response. Important research and special studies that constitute important activities during the life of the NSP include the following:

- NDHS - Ensure HIV and AIDS issues are reflected in the NDHS
- NASA - Conduct National AIDS Spending Assessment annually
- IBBSS for key populations - Conduct IBBSS for FSWs, MSM, PWIDs, and NPP every 2-3years
- ART and PMTCT Cohort Analysis - Conduct annual cohort analysis in view of the fast track targets
- ARVs sensitivity studies - Conduct sensitivity studies as an on-going concern
- Size Estimation of Key Populations - MSM, FSWs, NPPs, and PWIDs - Conduct

size estimation every 2-3 years

- Midterm Evaluation (MTE) of NSP - Conduct MTE in mid-2018
- End of Term Evaluation (ETE) of NSP - Conduct ETE mid 2020
- PLHIV Stigma Index Study - Conduct Stigma Index Study 2-3 years
- Modes of Transmission Study (MoTS) Studies - Conduct MoTS every 2-3 years
- HIV Sentinel Surveillance at ANC clinics - Conduct HIV Sentinel Studies every year.

(e) Integration of High Impact HIV Interventions and key activities of the Critical Programmatic and Social Enablers

The Investment Case Approach for the national HIV response integrates the high impact HIV activities and the critical programmatic and social enablers to jointly contribute to achieving the expected results of the NSP 2016-2020.

Table 7.25 is a matrix showing implementation of the relevant activities of the critical enablers which contribute to achieving the expected results of high impact activities.

Table 7.25 - Matrix of High Impact Interventions & Critical Programmatic & social Enablers

High Impact Interventions	Critical Programmatic Enablers				Critical Social Enablers				
	Coordination of National Response	**Management of National Response**	**Strategic Information**	**Resources**	**Political Commitment**	**Advocacy**	**Community Mobilisation**	**Stigma & Discrimination**	**The Media**
Targeted behaviour change interventions	Functional HIV Prevention TWG at national, regional, and district level; RACs; DACs	Strong management capacity at GAC; NACP, RHMTs; and DHMTs	General population, young people, and KPs size estimates and HIV prevalence; MoT studies	Adequate numbers of trained health and allied workers; logistics support, HIV test kits, and service delivery sites	Government providing leadership and adequate resources for national HIV response	Ensuring commodity security for HTS programme, reducing HIV-related stigma and discrimination, and protecting the human rights of KPs	Social mobilisation promoting and supporting increased uptake of HTS by the general and key populations, and young people	Promoting acceptable attitudes toward and reducing stigma and discrimination against KPs including PLHIV	Dissemination of accurate IEC via multiple media channels on HIV prevention
Condoms and lubricants promotion and distribution	Functional HIV Prevention TWG; RACs; DACs	Good management capacity at GHS, in the Private Sector, for Social Marketing Sector; and community - based distribution programmes	Data on annual condom and lubricant requirements and use	Adequate condoms & lubricants warehousing and storage, promotion and logistics support	Government providing leadership and adequate resources for condoms and lubricants	Advocating for the availability and affordability of quality condoms; promoting and correct and consistent condom use	Sensitisation on the use and supporting community-based distribution of condoms and lubricants	Reducing stigma associated with the distribution and use of condoms and lubricants	Disseminating accurate IEC via multiple media channels promoting condoms and lubricants prevention

Table 7.25 - Matrix of High Impact Interventions & Critical Programmatic & social Enablers

High Impact Interventions	Critical Programmatic Enablers				Critical Social Enablers				
	Coordination of National Response	**Management of National Response**	**Strategic Information**	**Resources**	**Political Commitment**	**Advocacy**	**Community Mobilisation**	**Stigma & Discrimination**	**The Media**
HIV Programmes for KPs	Functional KP TWG at national, regional, district level; RACs; DACs	GHS, CSOs	IBBSS for KPs	Adequate numbers of KP-friendly health facilities including DICs providing condom and lubricant, HTS, STI and psychosocial services	Government promoting and protecting the rights of key populations including PLHIV	Advocating for the promotion and protection of human rights and reduction of stigma and discrimination against KPs	Communities have accepting attitudes toward KPs including PLHIV	Reducing stigma and discrimination against and protecting and promoting the human rights of KPs	Promoting the human rights of KPs and PLHIV
E-MTCTC	Functional PMTCT TWG at national, regional, and district level; RACs, and DACs	GHS, CSOs	Estimates PMTCT HTS Coverage; Estimates of HIV positive pregnant women; ARVs & CTX prophylaxis and EID coverage;	Adequate number of PMTCT sites, trained staff, and HIV test kits, viral load for EID capacity, ARVs and CTX	Government providing leadership and adequate resources for E-MTCT programme	Ensuring commodity security and quality care for PMTCT programme	Building the Capacity of CSOs to Provide PMTCT and Pediatric HIV services	Reducing stigma associated with male involvement in PMTCT	Disseminating accurate and timely information and education
Care and Treatment	ART TWG at national, regional, and district level; RACs; DACs	GHS, CSOs	Adult & Children ART coverage; Survival on ART cohort data; Loss to follow-up data	Adequate number of ART sites, medical laboratory support, trained staff; ARVs & CTX; viral load-testing capacity	Government providing leadership and adequate resources for HIV care and treatment programme	Ensuring commodity security for Care and Treatment and quality services for the care and treatment programme	Building the Capacity of CSOs to provide HIV care and treatment services including support for treatment adherence and loss to follow-up	Reducing HIV and AIDS related stigma and discrimination	Disseminating accurate and timely information and education

7.4 Synergies with Development Sectors

HIV poses a serious threat to national development. Since the results of effective synergies are greater than the sum of the individual parts, the NSP has identified key development sectors (Table 7.26) with which to build synergies for an effective national HIV response, which is committed to achieving the 90-90-90 fast track targets. This list is not exhaustive and the national HIV response will form other synergies as and when necessary during the implementation of the NSP 2016-2020. The development sectors to synergise with the national HIV response are from the public, private, and civil society sectors.

7.4.1 Health

The three critical components of the 90-90-90 fast track strategy are (1) the trained health workforce needed to implement the strategy, (2) the HIV commodities including HIV test kits and ARVs medications needed for the testing for and the treatment of HIV, and (3) the medical laboratories that are needed to confirm viral suppression.

Ensuring synergy between the national HIV response and the health sector is a given. Strengthened and effective health systems are at the core of efforts to achieve the 90-90-90 fast track targets by 2020.

7.4.2 Health Systems Strengthening

Health Systems Strengthening (HSS) refers to the continuous efforts to update, maintain and improve all Health System Blocks (HSB) in a comprehensive manner, thereby improving the functioning and outcomes of the larger health system in terms of increased access to quality health services, improved responsiveness to the burden of disease and, ultimately, better health outcomes for the population. The six HSBs must be understood in a dynamic architecture of interactions and synergies. It is the multiple relationships and interactions among the HSBs - how one affects and influences the others and, in turn, is affected by them - that constitutes the dynamic and ever-changing character of the health system.

Strengthening the health system forms the foundational interventions upon which all other interventions of the National Strategic Plan can be successful. The national HIV response will work with the MoH and the Ghana Health services to strengthen the health systems with a particular focus on those that facilitate and strengthen the effective implementation of the NSP 2016-2020.

(a) Leadership and governance

The functions of this system are stewardship, setting performance goals, developing strategic plans and managing operations and resources in line with regulatory frameworks. If the system is operating well the following outcomes are expected:

Table 7.26 - National HIV response and Synergies with Development Sectors

Table 12: National HIV Response and Synergies with Development Sectors			
	NSP 2016-2020 Focus	**Synergising Activity**	**Development Sector & Key Partners**
1.	Strengthening key health systems impacting on national HIV response including HTS, PMTCT, ART, and condom and lubricant promotion and distribution programmes	Health Systems Strengthening (HSS)	Health Sector – Ministry of Health/Ghana Health Service (MoH/GHS)
2.	Strengthening key community systems impacting on the HIV response	Community Systems Strengthening (CSS)	Community Sector- CSO's and GHS/Community Health Planning and Services (CHPS), Paramount Chiefs and Queen Mothers
3.	HIV education for in school youth (ISY) – for targeted behaviour change among young people	School-Based HIV Education	Education Sector – Ministry of Education/Ghana Education Service (MoE/GES)
4.	HIV education for out of school youth (OSY) - for targeted behaviour change among young people	HIV prevention information and services for OSY	Youth Sector - CSOs, Ministry of Youth and Sports (MoYS)
5.	Stigma and discrimination against KPs including PLHIV	Human Rights and Legal protection for KPs rights to access HIV services	Legal Sector – Ministry of Justice and AG's Department, Judicial Services, CHRAJ, and Ghana Police Service
6.	HIV Services for Prisoners	HIV Services for Prisoners	Ghana Prison Service
7.	Mitigating socio-economic impact on AIDS-affected households	Social Protection for the Poor including poor households heavily affected by HIV and AIDS; Gender and HIV	Social Protection Sector – Ministry of MoGCSP; National Health Insurance Scheme (NHIS)
8.	Workplace HIV Programme – Formal sector of the economy	Workplace HIV Programmes	MDAs & MMDAs, Private Sector Firms
9.	Workplace HIV Programme - Informal sector of the economy	Workplace HIV Programmes	CSOs and Ministry of Labour & Employment

accountability, transparency, efficiency, effectiveness and synergy amongst stakeholders towards the achievement of the goals of the national response.

The current situation reveals the following:

The functions required, in general, are effectively and efficiently being carried out by all stakeholders and at all levels. The desired outcomes are also largely present. There are instances of duplication and unclear areas of roles and responsibilities amongst stakeholders around resource mobilisation and programme implementation in particular. Where stakeholder cooperation and collaboration is required for effective implementation the desired synergistic is not realised.

Desired outcome:

Accountability, transparency, efficiency, effectiveness and synergy amongst the health system building blocks (and stakeholders) towards the achievement of the goals of the NSP are improved.

Strategy 1:

Develop and introduce policies and guidelines to promote the 90-90-90 know your status, treatment, virus suppression] approaches and integration into relevant sector development plans.

Activities

- Prepare policy and guidelines for the adoption, dissemination, and implementation of the UNAIDS fast track 90-90-90 targets
- Distribute and disseminate the policy and guidelines to stakeholders nationwide
- Develop guidelines defining the specific roles, responsibilities and relationships of MDAs.

(b) Human Workforce

The functions of the system are planning, managing and utilising the numbers, quality and distribution of health staff. If the system is operating well the expected outcome is that the required workforce to deliver quality health services are available, motivated, satisfied and functional.

The current situation reveals that the human resources system functions are being carried out effectively and efficiently. The significant shortage of staff in the health sector limits the ability of the sector to achieve the desired outcome. The health workforce is inadequate overall and distribution is not equitably reflected across the country, with proportionately more staff in urban as against rural areas where the care

needs are considered more acute. Motivation is low amongst health workers towards HIV and AIDS activities. Staff capacity to care for persons living with HIV and AIDS is limited to selected cadres and professional groups making the majority not adequately functional in this area.

Desired outcome:

To have the required manpower (health workforce and other groups) to deliver quality services across the continuum of care for HIV and AIDS

Strategy:

Improve upon the knowledge, attitudes and skills required for the identification and provision of the full continuum of care, treatment and management of HIV and AIDS, without stigmatisation, by all cadres of health workers through pre- and in-service training.

Activities

- Work with and support the MoH to strengthen HIV and AIDS in pre-service and in-service trainings for health workers;
- Support efforts by public and civil society health managers to work together to increase the pool of trained health workforce needed to provide quality care across the continuum of HIV services;
- Review and effectively implement workplace HIV and AIDS safety and protection policies and procedures for health workers.

(c) Health Service Delivery

The functions of the system are the provision of essential, accessible, affordable and integrated health services. If the system is operating well the following outcomes are expected: availability, accessibility and affordability of health services that meet patient needs.

The current situation reveals the following: comprehensive services covering the continuum of care for HIV and AIDS are available. The distribution of these services though is not as readily available in rural communities as compared to urban areas. Logistic stock-outs have also disabled the service points from being able to offer the services they are expected to.

Desired outcome:

Availability, accessibility and affordability of health services that meet the needs of persons infected with HIV or who have AIDS

Strategy:

Integrate basic clinical services (diagnosis and treatment) for HIV and AIDS, at all levels of service delivery on a daily basis in both public and private health care facilities

Activities

- Advocate for the provision of basic HIV diagnostic and treatment services as part of integrated services at service delivery points in the country
- Empower and capacitate all staff to play their role in the provision of basic services for HIV and AIDS
- Increase logistics availability for improved and continuous access to services
- Prioritise and support community level interventions to meet the UNAIDS fast-track targets
- Increase public education on the availability of HIV and AIDS services
- Develop a robust communication strategy and guidelines to address information needs of all segments of society
- Roll out a sustained nationwide education campaign to increase knowledge and awareness about service availability.

(d) Health Information Management

The functions of the system are to ensure the timely collection, collation, analysis, storage and retrieval of accurate reliable data. If the system is operating well the following outcomes are expected: the use of reliable and timely information for evidence-based decision-making.

The current situation reveals the following: there are still challenges with the functions of the HIMS system with respect to timeliness, accuracy and reliability in particular. The available data though is referenced and used in decision-making as much as possible.

Desired outcome:

Availability of accurate, reliable and timely information for evidence-based decision-making.

Strategy

Enhancing the functionality of the DHIMS II

Activities

- Advocate for critical staff in data quality management at the lower levels
- Improve capacity for uninterrupted internet connectivity at all levels

- Finalise the harmonisation and inter-operability of application software in the sector (DHIS and CRIS)
- Review and update data management protocols and guidelines for health information officers at all levels
- Distribute and disseminate protocols and guidelines to all staff in the health information management units.

(e) Health Technologies

The functions of the system are ensuring access to and appropriate utilisation of medicines, vaccines, technologies and infrastructure. If the system is operating well the following outcomes are expected: availability and use of scientifically sound and cost effective technologies.

The current situation reveals the following: Utilisation of available technologies is appropriate. The challenge is the limited availability of medicines, testing reagents and kits, appropriate supply chain infrastructure that facilitates the distribution and access at lower levels (district and community). In all the desired outcome of availability is not being achieved.

Desired outcome

Availability and use of scientifically sound and cost effective technologies (drug and non-drug consumables, infrastructure, equipment etc.) needed for the provision of services to persons infected with HIV or who have AIDS.

Strategy:

Decentralise supply and management of health technologies to improve availability, access and security

Activities

- Operationalise the MOH Supply Chain Master Plan (SCMP) that seeks to improve the procurement and supply chain management systems including strengthening district level availability and accessibility of HIV and other health commodities
- Ensure HIV and AIDS commodity security (HACS) at all times and in all health facilities that require them including the procuring and distributing locally produced ARVs and other HIV commodities that meet international quality standards.

(f) Health Financing

The functions of the system are the mobilisation, management and accountability of funds and resources. If the system is operating well the following outcomes are expected: the required inputs for services are available at the most competitive prices.

With respect to fund mobilisation, global resources have reduced and continue to do so in general. With Ghana classified as a lower-middle income country external financing is even less. Funding from local sources [government] in general has reduced in real terms and is available inconsistently. The results of the NASA [2012 and 2013] study confirmed a 39% decrease in overall funding for HIV and AIDS from 2012 to 2013. The report also identified that the inadequacy of funding is a major challenge confronting the national response and this is compounded, especially at the district level, by insufficient coordination of activities leading to duplication of efforts and inefficiencies.

Desired outcome

The availability of adequate financial inputs to ensure that required inputs for services are available at the most competitive prices.

Strategy

Ensure adequate funding for the national HIV response to achieve the 90-90-90 fast-track targets by 2020

Activities

- Develop a financing strategy reflecting priority areas of intervention and the UNAIDS 90-90-90 fast-track approach for implementing the NSP 2016 to 2020
- Increase domestic contribution to the financing of the national HIV and AIDS response
- Continue advocacy for the establishment of a national HIV and AIDS Fund
- Carry out annual National AIDS Spending Assessment (NASA).

7.4.3 Community Development

The end-term evaluation of the NSP 2011-2015 found that many organisations and actors engaged in community-based HIV service delivery faced severe institutional and operational capacity constraints, which limited the extent and scope of the work they were able to do. They often needed not only greater and more consistent financial and material assistance but also assistance in developing and improving the skills of staff in effective advocacy and social accountability, integrated services delivery, coordination and collaboration to increase coverage, and monitoring, evaluating and reporting on activities.

To achieve the ambitious 90-90-90 fast-track targets by 2020, community participation has a catalytic role to play in generating demand and providing community and home based support for HIV prevention, treatment, and care services. The national HIV response will work with other stakeholders to strengthen community systems to effectively contribute to achieving the fast track targets in the NSP 2016-2020.

7.4.4 Community Systems Strengthening (CSS)

For the CSS, the NSP 2016-2020 focuses on facilitating strengthening capacity building, improving collaboration and coordination of CSO activities at community level to increase coverage and quality, strengthening the delivery of integrated community level health services including HIV services, strengthening advocacy and social accountability, and improving monitoring and evaluation and reporting on community level HIV activities.

(a) Capacity building

Capacity building support for community level HIV service providers (CSOs, CHPS zones) has lacked the consistency required for the achievement of planned programme results. Technical and organisational skills building interventions have not had sufficient duration and frequency to guarantee acquisition of the requisite capabilities for organisational goal achievement. Financing for capacity building, and for programme implementation and operations has been inadequate and material resource-support especially for essential commodities including medical products has been intermittent.

Outcome

Human, institutional, financial and material resource-support for selected HIV-focused network organisations improved

Strategy:

Strengthening organisational and operational capacities of HIV-focused CSOs working at the community level to support increased uptake of HIV prevention, care and treatment services and local level advocacy, transparency, and accountability

Activities:

- Facilitate access to leadership and governance skills development for large HIV-focused CSOs
- Work with other stakeholders to build the capacity of CSOs in resource mobilisation
- Support and facilitate CSO's access to diversified sources of funding and technical and material assistance
- Develop a standardised CSO training guide.

(b) Collaboration and Coordination

In the NSP 2011-2015 period, collaboration between community actors at the level of

programme implementation, and coordination of community based service delivery activities have generally been disjointed. For example, many interrelated health programmes such as family planning and antenatal care ran vertically; while most implementing CBOs/NGOs on direct donor support fail to submit to the coordination authority of the Ghana AIDS Commission (GAC) or its decentralised structures (TSUs). Yet, closer working relationships that combine the resources of service providers, and an all-inclusive coordination framework that captures the complete picture of community level service provision are important.

Outcome

Closer working relationships between community level HIV and AIDS actors strengthened and an all-inclusive programme coordination framework adopted

Strategy

Improving collaboration and coordination of CSOs providing community-based HIV services

Activities

- Support and facilitate well-coordinated and mutually beneficial HIV programme implementation arrangements amongst community-based service providers of HIV services under the auspices of the District AIDS Committees (DACs)
- Constitute community level multi-actor implementation management and coordination teams
- Map and sort service providers by target-group (women and children; adolescents; youth; KPs, etc.) and by programme area (BCC, CHBC, HTS, etc.)
- Develop and adopt detailed implementation arrangements for collaborative service delivery
- Train service providers to deliver community level services collaboratively.

(c) Integrated community-level health services delivery including HIV services

The ETE of the NSP 2011-2015 noted that chronic resource constraints have limited the scope and coverage of what HIV service providers are able to do at the community level. Improved geographical coverage and reach (of target groups) require increased funding and technical skills. In the current environment of increasing resource constraints, technical skills for HIV service delivery can be enlarged by tapping into the existing pool of skills now available to the different community level health programmes that currently run vertically.

Service integration will be promoted to appropriately link all components of health service delivery with other health care and related social services at the level of

implementation. Service integration will extend the reach of HIV prevention, treatment and support services where vertical services will reduce uptake. For example, when HIV services are integrated with Malaria; TB; Maternal, Newborn, and Child Health (MNCH), Water, Hygiene and Sanitation (WASH) holistic improvements can be achieved in overall community level health outcomes.

Outcome

Community level HIV services delivery and integration with other health programmes improved

Strategy:

Increasing access to quality integrated community level health services including HIV services

Activities

- Strengthen the delivery of integrated community-based health services through collaboration and coordination of key GHS programmes including Malaria, Environmental Health, MNCH, TB, HIV and AIDS interventions at the community level
- Strengthen collaboration between key health service delivery programmes of the GHS including Malaria, TB, Environmental Health, Reproductive Health, and Maternal, Newborn and Child Health, and HIV and AIDS programmes on integration of services at the community level
- Integrate community level HIV services with Malaria; Community TB Care; Maternal, Newborn, and Child Health (MNCH); and Water, Sanitation and Hygiene (WASH) services
- Increase community level education for HIV testing, condom use and antenatal care for PMTCT services

- Strengthen community based HIV prevention and treatment service including Drop-In-Centers (DICs)
- Expand HIV services delivery in urban communities especially for disadvantaged and vulnerable populations
- Scale up community HIV testing services through multi-disease health campaigns to accelerate achieving fast track target of 90% of PLHIV knowing their status.

(d) Advocacy and Social Accountability

Social accountability encompasses both the right and responsibility of service beneficiaries to demand quality and consistent services; both service providers and beneficiaries have to faithfully play the roles expected of them. There were no social accountability structures in place at the community level until late 2015 when efforts

were made to establish social accountability structures. Social accountability for the national HIV response, which was weak until recently is expected to improve significantly during the 2016-2020 NSP period.

The social accountability practices envisaged for community service provision in the period of the NSP 2016-2020 include dialogue and negotiation with service providers, participatory programming, and consistent community engagement. Advocacy activities for social accountability will, for example include seeking improved services for children, women, or KPs; or increasing consistency in funding for HIV prevention, treatment and care services; or improving treatment and support programmes for PLHIV. These advocacy activities will be the combined effort of individuals or organisations to persuade influential individuals, groups, or funding agencies to adopt effective approaches to different aspects of HIV services delivery.

Outcome:

Advocacy for social accountability in community HIV service provision improved

Advocacy activities for social accountability can take many forms and be conducted at different levels. For the NSP 2016-2020 advocacy efforts will be focused at activities including achieving consistency in funding for service provision, increased funding for HIV prevention, care and support services; and improved services for children, women, key populations and PLHIVs. Advocacy for HIV prevention and case finding among children, for example, should be made the combined effort of both individuals and organisations to persuade influential individuals, groups and organisations through various activities to adopt an effective approach to HIV service provision among children.

Output:

Community level structures for social accountability established

Activities

- Establish community level social accountability committees
- Develop criteria for selecting members of social accountability committees
- Set up social accountability monitoring committees
- Select and train members of social accountability committees
- Facilitate access to funding for activities of social accountability monitoring committees
- Mobilise communities to demand accountability.

(e) Monitoring, Evaluation, and Reporting

The NSP 2011-2015 end-term evaluation (ETE) found that community level M&E faced challenges including inadequate CBO staff with adequate M&E and participatory planning skills. These constraints weakened the quantitative and qualitative data collection and analysis functions at the community level and discouraged community involvement in programme planning and implementation. The Country Response Information System (CRIS) software adapted for use at the decentralised level was not synchronised with the district health information management system (DHIMS II) of the formal health system.

Outcome:

Community-level planning, monitoring and evaluation, and reporting strengthened.
In the NSP 2016-2020 period, community level data collection, analysis, reporting and use will be strengthened. Service providers will be trained to use GAC's standard M&E guidelines and recommended practices for tracking progress of community level services. They will also be trained to acquire community entry and participatory planning skills for involvement of communities in programming.

Output:

Community-level planning, monitoring and evaluation, and reporting improved

In the NSP 2016-2020 period, community level data collection, analysis, reporting and use will be strengthened: CBO staff will be trained to use GAC's standard data collection tools and reporting formats for community level activities as well as submit quarterly financial and programmatic reports in accordance with GAC's recommended standards and guidelines.

Activities

- Link up with relevant public sector agencies (education, health, water, sanitation, hygiene) to enlist consensus for participatory programming arrangements
- Scale up community participation in programming including especially HIV testing services (HTS)
- Work with GHS to harmonise health-related M&E indicators for community level activities
- Enlist the help of higher-level NGOs to provide step-down training for CBOs
- Train HIV-focus CBOs on GAC's M&E guidelines and reporting for CRIS.

7.5 Education

The school environment provides an ideal opportunity to provide HIV and sexuality education to young people. For more than two decades now, the education sector through the Ministry of Education (MoE), the Ghana Education Service (GES) and

the National Council for Tertiary Education (NCTE) have been playing important roles as critical stakeholders in the national HIV response with regards to integrating HIV activities into its core business that benefit its staff and young people in school. The MoE has developed and is implementing the Education HIV Sector Policy. The GES has introduced HIV education into the curriculum of teacher training colleges in the country, implemented a fairly successful HIV Alert School Project over the last decade, and has been piloting the enhanced School Health and Education Programme (e-SHEP). However, inadequate funding is adversely affecting the coverage and quality of the education sector response programmes to HIV.

During the NSP 2016-2020 period, the national HIV response will continue to work with, support, and facilitate the MoE and the GES to consolidate the gains made in and expand the education sector response to HIV.

Output:

The education sector response to the HIV epidemic improved and continues to make significant contributions to the national HIV response during the 2016-2020 NSP implementation period.

Strategies:

Forming effective partnerships and collaborative working relationships to support the education sector response to HIV.

Activities

- Work with the MoE to provide technical assistance and facilitate the review of the existing Education Sector HIV Policy when this is due.
- Provide technical assistance and material support for the HIV activities of the GES including the following:

  (a) The HIV Alert School Project - a nationwide HIV prevention education programme for basic schools, which is delivered through curricula and co-curricular activities using pupils/students as peer educators and teachers as training of trainers.

  (b) The Enhanced School Health Education Programme (e-SHEP) encompassing HIV Prevention Education, Water and Sanitation, Nutrition, Disaster Risk Reduction, Guidance and Counselling, and Physical Education as integrated activity with the view to ensuring that behaviour change leads to real sustainable change not only in childhood but also into adulthood.

  (c) Mainstreaming the teaching of HIV into colleges of Education - a national

programme providing training in HIV trainee teachers in the Colleges of Education in Ghana to ensure trainee teachers are competent in integrating HIV and AIDS into their lessons.

(d) Education Sector Initiative for Young People Living with HIV (YPLHIV) - strengthening the roles and responsibilities for the education sector in supporting young people living with HIV to realise their personal, social and educational potential. It provides practical recommendations for all those involved in the education sector, and further suggested actions for those in the health sector and for civil society.

(e) A reader series that tackle Sexuality Education and Parenting for both adults and young people who are out of school produced by the Non Formal Education Division of the Ministry of Education (NFED).

(f) Support for Network of Teachers and Educational Workers in HIV and AIDS (NETEWAG) - a common platform to build capacities and discuss and address concerns of teachers and educational workers living with HIV.

7.6 Youth

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. Young people who are not in school are particularly vulnerable to HIV infections, as services providers do not often target them with HIV prevention information and services. Results from the 2014 GDHS show young people HIV programme outcomes are mixed. Comprehensive knowledge of HIV among young persons is declining: In 2014, 19.9% of young women had comprehensive knowledge of HIV compared with 28.3 % in 2008 and the corresponding figures for men are 27.2% in 2014 compared with 34.2 % in 2008. Condom use among young men with two or more sexual partners decreased from 42.0 % in 2008 to 34.2 % in 2014. Compared with adults, HIV testing is low among young persons. In 2014 only 10.6% of young men 15-24 years have ever tested for HIV compared with 22.4 % of men aged 15-49 years. This data notwithstanding, less than 1% (0.8%) people age 15-24 are living with HIV.

Outcome:

Comprehensive knowledge of HIV improved and high-risk sexual behaviour reduced

Strategy:

Supporting MDAs and MMDAs and civil society and other organisations working on HIV prevention programmes for young people

Activities

Provide technical assistance and material support on HIV prevention information and services to the following:

- Ghana Education Service (GES) HIV programmes for young people - same as under Education Sector HIV response.
- Provide technical assistance and material support to the National Youth Authority HIV prevention programme for youth including the ReproTalk project, an m-health activity that uses modern mobile technology platforms to educate young people in school and out of school on adolescent reproductive health through bulk SMS messaging targeting persons aged 15-24 years including alerts on HIV, sexual and reproductive health, and general health.
- CSOs HIV programmes for Young people: Planned Parenthood Association of Ghana (PPAG) and the Adventist Development and Relief Agency (ADRA) are among major CSOs providing HIV and AIDS services for young persons in Ghana. The PPAG and ADRA interventions target youths in tertiary and other higher educational institutions and out of school youths with BCC and family planning, STIs and HTC services. Other youth organisations providing HIV information, education, communication, and services include Curious Minds - a youth advocacy group, which uses traditional media like radio and television to reach out to young people with BCC and information on HIV; Youth Action Movement provides HTC and education for young people in the communities reaching both in school and out of school youth; Hope for Future Generations works in several districts in Ghana, providing a wide range of services including BCC education, HTC, vocational training for out of school youth, psycho-social support for survivors of physical and sexual abuse, as well as referral services at health facilities.
- UN System-supported HIV prevention programmes for young people: ILO supports interventions for some categories of youths often neglected by mainstream HIV programmes: young workers in the informal sector including artisans. Peer educators have been trained and supported among many artisan groups. UNAIDS is also reaching the youth through the “Protect the goal” football campaign. This is being done through mass media including television and radio advertisements, and working with the national male and female football teams as HIV prevention campaign ambassadors.

7.7 Social Protection

Most-at-risk populations (MARPs) are population groups that are highly exposed to HIV infection due to their risky sexual behaviour; they contribute a significant proportion of the new HIV infections. The national HIV response recognises female sex workers (FSWs), clients of FSWs, men who have sex with men (MSM), persons who inject drugs (PWIDs), and prisoners as MARP groups at high risk of acquiring and along with persons living with HIV (PLHIV) as key population (KP) groups with high risk of

transmitting HIV. MARPs are key drivers of the HIV epidemic in Ghana, as they have HIV prevalence several times the magnitude in the general population; as such MARPs constitute a bridging population spreading HIV to the general population where the HIV prevalence is low.

In Ghana, stigmatisation and discrimination against KPs is widespread, both within state institutions and in the community at large simply because others disapprove of their behaviours. KPs are increasingly marginalised not only from society, but also from the services they need to protect themselves from acquiring and transmitting HIV. KPs therefore need their social and economic rights protected.

Outcome:

Social and economic rights of KPs protected

Strategies

Strategy 1:

Linkages with pro-poor economic and empowerment assistance for poor households including households negatively impacted by HIV and AIDS

Activities

- Work with and facilitate Ministry of Gender, Children, and Social Protection (MGCSP) to ensure HIV heavily impacted poor households are enrolled on the Livelihood Empowerment Against Poverty (LEAP) programme, flagship of the national social protection strategies and other social protection schemes in the country.
- Work with the World Food Programme and other organisations providing food for the poor to include heavily impacted HIV poor households as recipients of food aid.
- Work with other stakeholders to provide technical assistance and material support for interventions that reduce poverty including among households heavily impacted by HIV and AIDS.
- GAC to continue the provision of free health insurance cover for people living with HIV.
- Strengthen and roll out nationwide MARPs-specific HIV and AIDS programmes.
- Work with m-financing sector to ensure extension of micro-financing facilities to KPs.
- Strengthen and intensify stigma and discrimination reduction programmes in the country.

7.8 Human Rights

The national HIV response recognises female sex workers (FSWs), clients of FSWs, Men-who-have-Sex-with-Men (MSM), Persons-Who-Inject-Drugs (PWIDs) and prisoners as MARP groups at high risk of acquiring along with pesons living with HIV (PLHIV) as key population (KP) groups for transmitting HIV.

Most-at-risk populations (MARPs) are highly vulnerable to and contribute a significant proportion of new HIV infections. They are key drivers of the HIV epidemic in the country. Widespread stigma, discrimination, and physical and verbal abuse and harassment against KPs occurs simply because others within state institutions and the community at large disapprove of their behaviours within public and private institutions and workplace and in the community at large.

KPs are increasingly marginalised not only from society, but also from the services they need to protect themselves from acquiring and transmitting HIV. KPs therefore need their human rights protected to mitigate their exposure to discrimination, abuse, gender-based violence (GBV) and school related gender based violence (SRGBV).

Outcome:

Human rights of KPs (PLHIV & MARPS) protected

Strategy 2:

Protect and promote the right of KPs to access HIV services without fear, stigma, or discrimination

Activities

Work with stakeholders to provide technical assistance and material support for interventions that reduce discrimination against KPs including:

- Support CSOs and PLHIV associations advocacy on promoting and protecting the rights of KPs
- Decentralise the Heart-to-Heart (H2H) Ambassador Programme nationwide and strengthen “Models of Hope”
- Lawmakers (MPs and Members of MMDAs) on finalising the Ghana HIV and AIDS Bill; reviewing legislation that discriminate and enacting laws that reduce discrimination against KPs
- Work with duty-bearers (the Judicial Service and Commission and Human Rights and Administrative Justice and the Police Service) on protecting the rights of KPs
- Provide technical and material assistance for Law Enforcement Agencies (The Police Service and the Prison Service) to ensure respect of rights of KPs and protection from harassment and abuse by the general public and by the Services

themselves in the line of duty
- Work with MGCSP to address GBV and SBGBV
- Work with Ghana Health Service to ensure information and data on PLHIV in the custody of health workers remain confidential at all times
- Work with other stakeholders to provide technical assistance and material support for CSOs that promote and protect the rights of KPs.

7.9 Workplace Policies

HIV Workplace Policies and Programmes are important activities of the national HIV response. HIV workplace policies ensure fair treatment for employees and staff irrespective of their HIV status and workplace programmes enable staff and employees to have access to HIV prevention, treatment, care, and support services. Though more than 350 public sector MDAs and private sector firms have developed and are implementing HIV workplace policies, there are still gaps. These policies need to be revised. Additionally, HIV workplace policies and programmes are often lacking in the informal sector of the economy.

Output:

Public sector MDAs and MMDAs and large private sector firms have HIV Workplace policies and programmes

Strategy:

Support for the development and operationalisation of HIV workplace policies and programmes

Activities

- Work with Ministry of Employment and Labour Relations to provide technical assistance to public MDAs and MMDAs and private sector and large private sector firms to review or develop HIV Workplace policies
- Facilitate and support the development and operationalisation of HIV Workplace programmes in MDAs, MMDAs, and private sector firms
- Work with CSOs and ILO to facilitate the provision of HIV prevention information and services for artisans in the informal sector of the economy
- Strengthen capacity of Ministry of Employment and Labour Relations to monitor and enforce HIV workplace programmes.

8. Funding

8.1 Costing

Approach to Costing

The approach to the costing of the NSP was an activity based one using targets/outputs of the various programmatic intervention areas identified. As Ghana has signed up to the UNAIDS fast-track targets a scenario which models the achievement of these aspirational targets was costed. Consideration was also given to expanding funding sources for the NSP 2016-2020 to cover increased domestic and foreign private sector funding partners.

(i) Modelling National need to achieve the 90-90-90 fast-track treatment targets

The basic method of resource estimation was first to estimate the number of people in need of HIV and AIDS-related services in the target group. A coverage target was then established to estimate the population that would actually use the service. The next step was to estimate the unit cost of providing the intervention or service and this was used to calculate the total cost of the intervention. The unit cost for the costing was obtained from unit cost built over the years from various studies which include among others the following:

- *ART costing study in 2010;*
- *PMTCT costing study in 2011;*
- *MARPs costing study in 2012;*
- *NACP programme data; and*
- *GAC programme data*

The direct cost of the NSP is made up of two main components:

Prevention and Treatment

The Prevention programmes comprise HIV programmes for Key Populations; Behaviour Change Interventions; and Condom Promotion and Distribution. Similarly the Treatment category is made up of HIV Testing Services, PMTCT programmes and ART programmes.

Estimates for the various programme support areas under the NSP were obtained from the 2015 UNAIDS cost assumptions for Ghana in “Fast-Track Strategy: Country-Specific Targets and Resource Needs - Ghana”. The estimates of the expenses for programme support were given as a percentage of the direct cost (sum of the prevention and treatment cost) areas as follows:

- *Social Enablers, 8%;*
- *Programme Enablers, 14%;*
- *Synergies with Development Sectors*
- *Health System Strengthening, 6.1%;*
- *AIDS Education, 4.7%.*

Social enablers are made up of the following: Political commitment; enabling policy environment; Advocacy; Community mobilisation; and Stigma and discrimination. Coordination of national response; management of national response; monitoring and evaluation; and Research and special duties constitute the programme enablers. Synergies with development sectors include: Health system strengthening; community systems strengthening; School-based HIV education; Social protection programmes; HIV services for out of school youth; and HIV workplace programmes.

Estimated Financial Resources

The total cost of the NSP is estimated at US$494,645,660 for the period 2016 to 2020. This increases from US$87,755,280 in 2016 to a high US$106,714,456 in 2019 and then falls to US$106,646,467 in 2020 (see Table 8.1). Of the total resource need of US494, 645,660 for the period 2016 to 2020, Prevention forms 13.0%; Treatment, 61.2%; Critical Social and Programmatic Enablers, 17.5%; and Synergies with Development Sector, 8.0%.

The direct cost of the prevention and treatment programmes over the period is US$368,332,279 forming 74.5% of the total cost. Thus the indirect costs constitute the remaining 25.5%.

Table 8.1 - Cost Estimate by Intervention Areas, Ghana NSP 2016 - 2020

	(NATIONAL NEED-US$)					
	2016	2017	2018	2019	2020	TOTAL
TOTAL RESOURCES NEEDED	87,755,280	88,505,737	105,023,721	106,714,456	106,646,467	494,645,660
	65,088,663	66,260,064	77,901,638	78,983,466	80,098,448	368,332,279
PREVENTION	13,150,650	12,971,804	13,044,075	13,128,279	13,215,591	65,510,399
Intervention Area: Key Populations	9,466,500	9,466,500	9,466,500	9,466,500	9,466,500	47,332,500
Intervention Area: Behaviour Change Communication	982,631	729,682	726,917	724,706	722,936	3,886,872
Intervention Area: Condoms and Lubricants	2,701,519	2,775,622	2,850,658	2,937,073	3,026,155	14,291,027
TREATMENT	51,938,013	53,288,260	64,857,563	65,855,188	66,882,856	302,821,880
Intervention Area: HTS - HIV Testing Services	4,636,899	4,743,090	4,850,827	4,998,721	5,070,463	24,300,000
Intervention Area: PMTCT	4,513,730	4,824,610	5,146,641	5,479,733	5,823,706	25,788,420
Intervention Area: ART - Antiretroviral Treatment	42,787,383	43,720,560	54,860,095	55,376,734	55,988,687	252,733,459
CRITICAL SOCIAL AND PROGRAMMATIC ENABLERS	15,637,041	15,089,586	18,708,705	19,200,776	17,897,387	86,533,495
Intervention Area: Social Enablers	5,207,093	5,300,805	6,232,131	6,318,677	6,407,876	29,466,582
Intervention Area: Programme Enablers	10,429,948	9,788,781	12,476,574	12,882,098	11,489,512	57,066,913
SYNERGIES WITH DEVELOPMENT SECTORS	7,029,576	7,156,087	8,413,377	8,530,214	8,650,632	39,779,886

	2016	2017	2018	2019	2020	TOTAL
RESOURCES NEEDED National Need	87,755,280	88,505,737	105,023,721	106,714,456	106,646,467	494,645,660
RESOURCES AVAILABLE	56,516,840	70,276,849	93,903,524	83,194,164	85,330,425	389,221,801
GoG Contribution	5,783,248	6,939,898	30,452,878	32,118,453	34,117,114	109,411,620
Domestic Private Sector	1,033,592	1,136,951	1,250,646	1,375,711	1,513,282	6,310,181
International Private Sector	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000
Development Partner	47,700,000	60,200,000	60,200,000	47,700,000	47,700,000	263,500,000
RESOURCE NEED GAP	31,238,440	18,228,888	11,120,197	23,520,292	21,316,042	105,423,859

SOURCE / ASSUMPTIONS

(1) Annual GoG Budget releases (GAC, MoH, LEAP, DACF) includes 20% scale up per annum to reflect GoG,s commitment to fast-track targets. Add from 2019, $22 million per annum for ART from NHIS 10% ring fence.

(2) TGF-(88 million [2015 July to 2017] & 105 million from TGF for [2018-2020]. Add annual COPS of 12.5 million USD per annum & 25 million PEPFAR

(3) PEPFAR - Annual COPS of 12.5million USD per annum & 25 million special PEPFAR grant

(4) GAC-Resource Mobilization Strategy

8.2 Financing

Estimated Resource Need Gap

Table 8.2 shows the resource need gap between the National Need and the resources available. An amount of US$105,423,859 (21%) will be needed to close the gap.

The available resources were estimated using a mix of funding history and commitments made by various funding sources wherever applicable. Wherever no specific resource commitments were available from funding partners it was assumed that existing funding levels would remain constant.

Resources from Ghana Government cover all the programme management costs for clinical and community intervention partners (GAC, DACF, MoH) as well as institutionalised social protection programmes such as the LEAP (MGCSP) and the National Health Insurance scheme.

Contributions through the national health insurance scheme are restricted to the amounts earmarked for direct support to Antiretrovirals. This amount was estimated at 4% of the entire annual funding for the National Health Insurance System.

It is estimated that Ghana Government would scale up funding for HIV to the three front line institutions for community, clinical and social protection interventions by an average of 20% per annum over the five year period to achieve the fast-track targets. This commitment accounts for the steady rise in routine funding for GAC, MoH, (GHS, NHIS) and MGCSP to 2020. This commitment increases public funding for the national response by about 50% up from an average of 10% and below in the past decade. It is estimated that Government commitments would cater for about one third (28%) of available resources in the current NSP.

The international and domestic private sectors together account for only 4% of available resources and 3% of national resource needs. These funding targets are however significant and ambitious when compared against an average of 1% and below over the past decade.

A significant addition to the resources available for the national response is provided by additional PEPFAR resources allocated from a special 25 million USD grant in support of the ART programme for 2017 and 2018. This amount is additional to the annual support of 12.5 million USD from the US government which is expected to continue to 2020.

Potential sources of additional funding to close the funding gap include donations faith-based organisations, grants making and philanthropic organisations and from emerging donor countries otherwise known as BRICS (Brazil, Russia, India, China, South Africa)

The Global Fund remains the most significant funding source for the national response. Contributions from this funding source were estimated at an average of 35 million USD per year until 2020. This is based on country allocations under the new funding model grants which are currently being implemented for the period 2015-2017. It is estimated that funding from The Global Fund will remain constant between 2018 and 2020 as a result of the global commitment to meet the fast-track targets.

Measures have been put in place through the Resource Mobilisation Committee to address the funding gap of 21% reflected in Table 8.2. Further strategies will be explored and documented in the operational plans which will accompany this strategy. In this regard Ghana has agreed to support local production of antiretrovirals and to scale up the ART programme in a manner which bridges the funding gap without compromising the fast track 90-90-90 targets. It has also been estimated that if private sector contributions are tripled concurrently with the implementation of the above strategies the funding gap will be halved.

APPENDIX

I. Process for the Development of the NSP 2016-2020

The National HIV and AIDS Strategic Plan (NSP) 2011-2015 ended in December 2015. As a result, the Ghana AIDS Commission (GAC) embarked on a process of conducting an End Term Evaluation (ETE) of the NSP 2011-2015 and used the results to develop the new NSP for the period 2016-2020. The ETE was conducted to assess progress and performance of implementation of the NSP 2011-2015 and provide recommendations to direct the development and implementation of the next National Strategic Plan (NSP 2016-2020). A road map to guide the process was prepared and shared with all stakeholders with the aim of ensuring that they had a common understanding of the approach to strategic plan as well as their respective roles in the various stages of the process described schematically and in detail below.

Figure 4 - NSP Development Process

(a) Establishment of a Coordinating Mechanism

The development of a strategic plan that is evidence based and results oriented requires a well-coordinated mechanism. As a result, a coordination structure including a Steering Committee and Technical Working Groups was put in place to manage the entire process. The Steering Committee comprised a wide range of stakeholders (including GAC, UNAIDS, PEPFAR, the Country Coordination Mechanism, NAP+, and representatives from the Ministries of Health, Gender, Children and Social Protection, Finance, Justice and Attorney General's Department, the DG of the GHS, Representative

from the Ghana Business Coalition and Employee Wellbeing as well as the NSP Coordinator) with specific terms of reference.

The Steering Committee (SC) provided the overall policy guidance towards planning and decision-making on key issues. In all, the Steering Committee accomplished the following key tasks: a) agreed on the membership and the terms of reference (TOR) of the committee, b) approved the roadmap and terms of reference for all the thematic and lead consultants, c) validated the key findings of the ETE before presentation to stakeholders at the partnership forum, d) reviewed and approved the recommended priorities for the new NSP and e) reviewed and approved the strategies, outcomes, outputs and activities of the strategic plan.

The Technical Working Groups were also set up to lead the review of the NSP 2011-2015 as well as guide the development of the new NSP. The TWGs, which comprised of national level experts and stakeholders in the national response were organised according to the thematic areas of the national response. Thematic consultants led each TWG with technical expertise in the respective thematic areas. A Lead Consultant was also contracted to lead and direct the process. His duties included guiding the Thematic Consultants as well collating all write-ups from the thematic areas into a consolidated 2016-2020 NSP document. An NSP Coordinator was also contracted to manage an NSP Secretariat set up to support GAC to coordinate the entire process.

(b) Technical Working Group (TWG) Meetings with the Thematic Consultants

Before the commencement of the ETE and new NSP development process, a workshop was held to enlighten the TWGs and all the Consultants on the planning road map and the technical approach for the ETE as well as developing the strategic plan.

At every stage of the NSP development process, TWG meetings were held for the members to deliberate and agree on salient issues in their respective sectors. The meetings were facilitated by the thematic consultants in collaboration with stakeholders to ensure an all-inclusive process. All meetings held were documented; records of the agenda, minutes of meetings, list of names of participants and other relevant records have been kept to demonstrate stakeholder involvement. On an average, two to three TWG meetings were held every month from September 2015 to April 2016.

(c) Epidemiological Analysis and End Term Evaluation of the NSP 2011-2015

The analysis of the epidemic was conducted in 2014 as part of the development of the TB and HIV concept note to the Global Fund New Funding Model, and it formed

the basis for the development of the NSP. The data available from the epi-analysis and report were made available to the consultants from the beginning of the process to inform the development of the NSP 2016-2020.
An End Term Review/Evaluation (ETE) of NSP 2011-2015 was also undertaken covering all the key interventions in the NSP 2010-2015 as well as the enabling environment and systems for delivery of HIV and AIDS services. The process of the ETE comprised desk reviews, district and regional field visits by consultants and members of the TWGs.

The ETE was therefore a joint effort of government and stakeholders covering all programmes within the national response. The ETE identified the relevant areas, coverage, key achievements, gaps and challenges, best practices and lessons learnt under the NSP 2011-2015 which were used to analyse and describe the national situation of the epidemic considered when developing the strategies, interventions, activities, outputs and outcomes for the NSP 2016-2020.

(d) Zonal Consultations with Stakeholders

The key findings from the ETE were first presented to the SC for validation. The findings from the ETE were subsequently shared at the Ghana AIDS Commission's Partnership Forum and Business Meeting in November 2015 for their inputs.

Because regional stakeholder inputs were required to ensure that key findings of the ETE are validated and the needs of the regions and districts are adequately captured in the NSP 2016-2020, three zonal stakeholders' validation and consultative meetings were held in the regions with the goal of getting inputs from all stakeholders to develop a comprehensive NSP 2016-2020.

The consultative meetings were also extended to the key stakeholders that will be responsible for implementing the activities of the 2016-2020 NSP at the decentralised levels to enable them agree on the priority areas for the new NSP. This was also to enable all stakeholders at all levels to have a common understanding of how the programme activities will have to be rolled out each year to meet the appropriate 90 for that year.

(e) Situational analysis and Prioritisation

The epidemic analysis and ETE were synthesised to develop a situational analysis for the new NSP. The situational analysis identified the key characteristics of the HIV epidemic and the national response in Ghana and the key issues that should be addressed by the NSP. The priorities for the NSP 2016-2020 were then established based on the findings from the epi-analysis, ETE and relevant documents. This was a critical stage in the development process in which evidence-based priorities were identified on which the strategic plan was focused ensuring that the strategic plan

targeted critical aspects of the HIV epidemic in Ghana.

(f) Strategy design - impact, outcome, outputs and strategies

Led by the Thematic Consultants each TWG developed thematic reports with contents including the Situational analysis of the thematic area, Priorities for the NSP 2016-2020, Strategy design - impact, outcome, outputs and strategies, Results framework - indicators, baseline and targets.

These were subsequently ratifies through a comprehensive consultative process involving all key stakeholders and experts during a four day retreat. The retreat culminated in a Zero Draft NSP 2016-2020.

The thematic components of the Zero Draft NSP 2016-2020 were shared with the various TWGs for further review and inputs. The Thematic Consultants together with the Directors of GAC, Programme Manager of NACP, a Gender Expert, representatives from the Prisons and Police Services, Chairpersons of the TWGS and other national level experts in the national response then convened at a second retreat that lasted for three days to set the targets and fine tune the Draft NSP 2016-2020 based on comments and inputs received from the Steering Committee, members of the TWGs as well as other stakeholders and partners.

A national stakeholders' consultative meeting was convened to review the entire contents of the Draft NSP 2016-2020. Comments received from partners were also presented.

II. Members of the NSP Steering Committee

The Director-General, GAC, Chair
The Country Director, UNAIDS, Co-Chair
The Representative of the Ministry of Health (MoH)
The Representative of the Ministry of Gender, Children and Social Protection
The Representative of the Ministry of Finance
The Representative of the Ministry of Justice & Attorney General's Department
The Director General, Ghana Health Service (GHS)
The Chair, PEPFAR Ghana
The Chair, Country Coordinating Mechanism (CCM)
The Representative, Ghana Business Coalition For Employee Wellbeing
The President, Network of Association of Persons Living with HIV (NAP+ Ghana)
The Director for Policy & Planning, GAC
NSP Coordinator, GAC

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