HIV/AIDS NATIONAL STRATEGIC PLAN

2023/24 – 2026/27

October , 2023

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ACRONYMS

AGYW	Adolescent girls and young women
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ART	Anti-Retroviral Therapy
ARV	Anti-Retroviral
BCC	Behavioral Change Communication
BSS	Behavioral Surveillance Survey
CAG	Community ART Group
CALHIV	Children & adolescents living with HIV
CBOs	Community-Based Organizations
CCM	Country Coordination Mechanism
CCRDA	Consortium of Christian Relief and Development Association
CDC	Centers for Disease Control
CLM	Community led monitoring
CSOs	Civil Society Organizations
DBS	Dried Blood Spot
DHIS	District Health Information System
DIC	Drop in center
DRMS	Domestic resource mobilization strategy
DTG	Dolutegravir
EDHS	Ethiopian Demographic Health Survey
EFDA	Ethiopian Food & Drug Agency
EFY	Ethiopian Fiscal Year
EID	Early Infant Diagnosis
e-MTCT	Elimination of Mother-To-Child Transmission of HIV
EPHI	Ethiopian Public Health Institute
EHSP	Essential Health Service Package
EQA	External quality assurance
EPSA	Ethiopian Pharmaceutical Supply Agency
FGM	Female genital mutilation
FMOH	Federal Ministry of Health
FSW	Female Sex Workers
GBV	Gender based violence
GFATM	Global Fund for AIDS, Tuberculosis and Malaria
GFC7	Global Fund Cycle 7
GFR	Global Fund Request
EFDA	Ethiopian Food & Drug Administration
EPSA	Ethiopian Pharmaceutical Supply Agency
HAPCLEO	HIV/AIDS Prevention and Control Lead Executive Office
HAPCO	HIV/AIDS Prevention and Control Office
HCD	Human Centered Design
HCIMS	Health commodity management information system
HCT	HIV Counseling and Testing
HCW	Health care worker
HEI	HIV exposed infants
HEP	Health Extension Program
HEWs	Health Extension Workers

HIV	Human Immunodeficiency Virus
HIVST	HIV self testing
HMIS	Health Management Information System
HRAGYW	High risk adolescent girls & young women
HRIS	Human Resource Information System
HRST	HIV Risk screening tool
HTS	HIV testing service
HSDIP	National Health Sector Medium Term Development and Investment Plan
ICT	Index case testing
ISP	Internally displaced population
IGAs	Income Generating Activities
IPLS	Integrated Pharmaceutical Logistic System
KII	Key Informant Interviews
KPP	Key and Priority Population
LDD	Long distance drivers
LIS	Laboratory information system
LMIS	Laboratory management information system
MAT	Medically assisted therapy
MC	Male circumcision
MDT	Multi-disciplinary team
M&E	Monitoring and Evaluation
MIS	Management Information System
MMD	Multi-month distribution
MNCH	Maternal, Neonatal, and Child Health
MOE	Ministry of Education
MOH	Ministry of Health
MoJ	Ministry of Justice
MOLSA	Ministry of Labor and Social Affairs
MRIS	Multi-sectoral information system
MSG	Mother Support Group
MTCT	Mother-To-Child Transmission of HIV
MWCYA	Ministry of Women, Children and Youth Affairs
NGOs	Nongovernmental Organizations
NHWA	National Health Workforce Account
NSP	National Strategic Plan
OI	Opportunistic Infections
OST	Opioid substitution therapry
OVC	Orphan and Vulnerable Children
PBFW	Pregnant and breast feeding women
pCAD	Peer led community ART distribution
PEP	Post-Exposure Prophylaxis
PEPFAR	President Emergency Plan for AIDS Relief
PHC	Primary Health Care
PHEM	Public Health Emergency Management
PITC	Provider-Initiated Testing and Counseling
PLHIV	People Living With HIV/AIDS
PMTCT	Prevention of Mother-To-Child Transmission of HIV
PMIS	Pharmaceutical management information system

PNC	Post natal care
PNS	Partner notification service
PrEP	Pre exposure prophylaxis
PSI	Population Service International
PSM	Procurement and Supply Management
PSP	Peer support provider
PWID	People who inject drugs
RHB	Regional Health Bureau
RRF	Requisition and Report Forms
RSSH	Resilient & sustainable systems for health
RTK	Rapid Test Kit
SBCC	Social behavioral change communication
SGBV	Sexual gender based violence
SNNP	Southern Nations & Nationalities Peoples
SNS	Social Networking Strategy
SOP	Standard operating procedure
SRH	Sexual and Reproductive Health
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis
TPT	Tuberculosis Preventive Therapy
TWG	Technical Working Group
UN	United Nations
UNAIDS	Joint United Nations Program on AIDS
VCT	Voluntary Counseling and Testing
VfM	Value for money
VMMC	Voluntary male medical circumcision
WHO	World Health Organization
WoHO	Woreda Health Office

Foreword

Ethiopia has achieved an HIV epidemic control at national level. However, there remains critical work to be done in addressing equitable access to HIV services by all ages, population groups and geographic locations.

This HIV National Strategic Plan 2023-2027 provides directions for addressing important programmatic gaps, particularly in reaching key and priority populations, eliminating vertical transmission, and enhancing HIV case finding. The strategic plan is informed by an external program review, wide stakeholder consultation. It is also aligned with the Health Sector Medium Term Development and Investment Plan (2023-2026). Approaches and interventions have been adopted to reflect the most recent global strategies and guidelines. The NSP emphasizes the importance of public-sector collaboration with civil society organizations, affected populations, other sectoral ministries, the commercial sector, and development partners.

The goal of the strategic plan is to reduce new HIV infection and AIDS related mortality below 1 per 10,000 population across all geographic localities and population groups. Realizing this goal necessitates strong political commitment and leadership at all levels of government. Furthermore, it is essential to have a strong engagement with all stakeholders including the community.

The Ministry of Health encourages all stakeholders involved in the HIV response to collaborate in the implementation of the strategic plan.

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EXECUTIVE SUMMARY

Background

Ethiopia has achieved epidemic control at the national level. The number of new infections and AIDS-related death was <1 per 10,000 population and the incidence mortality ratio is <1in 2022. However, there are significant geographic and population variations, and closing such inequalities will be the country's most important focus during this strategic period.

The strategic plan was informed by national epidemiology and response analysis, national program review, and wider stakeholder consultation. The process was led by MOH and involved key stakeholders that includes government sectors, regional health bureaus and regional HIV prevention and control offices, UN agencies, PEPFAR, other development partners, and civic societies including PLHIV associations and networks and community representatives.

The guiding principles of the NSP are inclusiveness, gender responsiveness, value for money, multisectoral and partnership. Central to the approach is the recognition that communities are key partners in the response.

Strategic goal and objectives

Vision: An AIDS-Free Ethiopia

Goal: To attain and sustain HIV epidemic control by 2027, by reducing new HIV infections and AIDS mortality to less than 1 per 10,000 populations nationally, among sub national and sub population groups. Attainment of the strategic goal will be measured by the following indicators.

- The number of new HIV infections reduced to less than 1 per 10,000 population in national, subnational, and subpopulation groups.
- HIV-related deaths were reduced to less than 1 per 10,000 in national, subnational, and subpopulation groups.
- Incidence Mortality Ratio reduced to less than 1 national, subnational, and subpopulation groups.
- Percentage of child HIV infections from HIV- positive women delivering in the past 12 months reduced from 12% in 2022 to less than 5% by 2027.

The following are the Strategic Objectives in this NSP:

1. Reach 95% of Key and Priority populations with targeted combination HIV prevention interventions by 2027.
2. Attain Triple elimination of MTCT of HIV, Syphilis and Hepatitis B Virus by 2027
3. Enhance HIV case finding to attain 95% of PLHIV knowing their HIV status and linked to care by 2027.
4. Attain 98% treatment coverage among PLHIV who know their status and 98% of those on ART to achieve viral suppression across all population's groups and geographic areas.

5. Stigma and discrimination and gender-based violence will be reduced from 25% and 20% to <10% by 2027.
6. By 2027, a significant proportion of HIV testing, social enablers and HIV prevention services targeting KPPs in the 300 priority woredas will be delivered by CSO/CBOs/FBO/PLHIV associations.
7. Enhance generation and utilization of Strategic Information for an accelerated evidence-based response.
8. Ensure that there are resilient and sustainable systems for health and effective HIV response.
9. Mobilize resources and maximize efficiencies in allocation and utilization.

Geographic and population prioritization

The NSP is built upon geographic and population prioritization. Accordingly, there are 300 priority woredas (265 high incidence woredas, >0.03 incidence and 35 woredas that have been affected by conflict). The population prioritization identifies three key populations (Female sex workers, people who inject drugs, and prisoners) and seven priority populations (high risk adolescent girls and young women, long distance drivers, workers in hot spot areas, divorced and widowed men and women, sero-negative partners of PLHIV, high risk uniformed people, and people in humanitarian settings). In addition, people with disabilities and street children are people with special consideration.

Strategic interventions and service delivery models

Combination HIV prevention

Combination HIV prevention interventions are tailored to the different key and priority populations. The interventions include social behavioral change communication, condoms and lubricants, pre-exposure prophylaxis, post exposure prophylaxis, volunteer male medical circumcision, diagnosis and treatment of sexually transmitted infections and harm reduction services for people who inject drugs.

The service delivery models at health facilities and community level include drop-in-centers, key and priority population friendly clinics, the general HIV services of health facilities, adolescent and youth friendly services, peer service providers and mentor-based services, and integrated services at prison, workplaces, universities, uniformed people training centers, and humanitarian settings.

Mapping will be conducted using standardized tools to identify and reach key and priority populations at woreda level. Self-administered digital risk screening tool will be used to identify high risk adolescent girls and young women.

HIV case finding

HIV testing will be conducted at health facilities and community levels targeting high risks groups, especially the key and priority populations. The strategies for HIV case finding include provider-initiated HIV testing and counselling, index case testing, social network services, and

HIV self-test. The risk screening tool will be validated and used at health facilities to identify high risk groups.

Triple elimination of MTCT of HIV, Syphilis and Hepatitis B Virus

Triple elimination of MTCT of HIV, syphilis and hepatitis B virus services will be provided at across health facilities in the country. The interventions include scale up primary prevention for pregnant and breastfeeding women (risk screening, risk reduction counseling and education, condom, STI diagnosis and treatment, PrEP, and family planning); early initiation of ANC and universal screening of HIV, syphilis, and hepatitis; provision of optimized ART regimen for HIV positive PBFW and linkage to initiation of syphilis and hepatitis B prophylaxis/treatments; provide dual ARV prophylaxis for all HIV exposed infants; early infant diagnosis and linkage of HIV positive infants to HIV care and treatment. The program will strengthen the mother baby cohort follow-up and monitoring through mother support groups and improved data recording and reporting.

HIV care and treatment

HIV treatment will be provided for all HIV positive people through differentiated service delivery models at health facility and community levels. The country will continue to implement differentiated service delivery models including multi-month dispensing, fast track ART refill, and key population and adolescent differentiated service delivery model, community ART group, advanced HIV disease. Enhanced efforts will be made to improve access and quality of pediatric and adolescent HIV treatment. Pediatric and adolescent HIV treatment optimization will be strengthened to improve viral suppression. There will be improved access to treatment of co-morbidities including tuberculosis, viral hepatitis B and C, mental health, and cervical cancer.

Human rights and community engagement

The country will develop policy, strategy, and guidelines to enhance the efforts to reduce stigma and discrimination and human right violation targeting people living with HIV and key populations at health facilities, schools, prisons, and communities. Interventions to address gender inequalities and gender-based violence include development of policy and guidelines, building capacity of health sector, the law enforcement, media, and civil society organizations and other key sectors; provide health, social, and legal services for survivors of gender-based violence and empowerment of girls, women, and communities for prevention, reporting and management of gender inequalities and gender-based violence.

The country will strengthen the leadership of people living with HIV, key and priority populations and affected communities in the HIV responses. Community led monitoring will be scaled up to enhance policy, program performance, and service quality.

Strategic information and systems strengthening

The country will update the HIV policy, legal frameworks, and guidelines to ensure efficient coordination and implementation of the strategic plan.

Generation, analysis, reporting, and utilization of DHIS-II routine health service data from health facility will be strengthened through building the capacity of data managers, improving interoperability of DHIS platforms, data quality monitoring, and ensuring availability of information technology infrastructure at all levels. Routine community service data will be collected, analyzed, and reported integrated in the DHIS-II platform. There will be annual and semi-annual joint supportive supervision and review meetings at national and sub-national levels involving wider stakeholders. There will be mid-term and end term evaluation of the strategic plan.

Survey and surveillance will be conducted periodically to generate evidence that guide strategic and operational plans and polices.

Human resources for leadership programs and service will be strengthened at national, sub-national and health facility levels through recruitment of additional staff and capacity building and retention interventions.

Pharmaceutical supply chain management system will be strengthened through capacity building for forecasting, procurement, and supply chain management. This includes development of policy, strategy, guidelines and tools, recruitment, and training of staff, strengthening IPLS, and upgrading infrastructure.

The laboratory system will be strengthened through capacity building of staff, availing newer technologies (point of care and multiplex testing), improving efficiency of integrated sample transport, scaling up laboratory quality assurance, and improved laboratory management information system. There will be regular HIV drug resistance monitoring.

Financing the NSP

The NSP 2023-2027 reflects a prioritized and cost-effective response over the NSP period. The estimated resource needs for the strategic period is $ 1.1 billion which is an average of 275.2 million per year. Based on the current trend the expected available funding for HIV over the NSP period is estimated to be $ 918 million which is $230 million per annum. The estimated resources needed will be mobilized from donors and domestic sources. The country will implement sustainable and equitable health fund to mobilize domestic resources that finance the HIV and other health program.

Chapter 1 INTRODUCTION

1.1 Country context

Ethiopia is Africa's second most populous nation with an estimated population of 105.2 million, approximately 80 ethnic groups and languages, and a diverse geographic area of 1.127 million sq.km. About 77% of the population resides in rural areas. The country is characterized by rapid population growth (2.6%), with a total fertility rate of 4.6 births per woman. Sixty-five percent of the population is under 25 years and forty-seven per cent under 15 years of age **[1]**.

Ethiopia has an ethno-linguistic-based federal structure since 1991. The Federal Constitution was endorsed in 1994. There are 12 regional states and two city administrations. Each region is governed by its own constitution and regional council and is endowed with significant administrative authority/autonomy over political, economic, and social policies. The Ministry of Finance allocates the annual budget based on formulaic principles. Regional Councils allocate their own resources towards the various sectors. Regions are further sub-divided into more than 1000 woredas (districts) and 17,000 kebeles, the smallest local administrative unit.

Ethiopia has made substantial economic and social progress over the last 30 years. Between 2000 and 2020, Ethiopia's Human Development Index (HDI) value increased by 76% from 0.283 to 0.498. However, the most recent survey data (2019) for Ethiopia's Multidimensional Poverty Index (MPI) estimates 68.7% of the population is multidimensionally poor while an additional 18.4 percent are classified as vulnerable to multidimensional poverty. In 2021, Ethiopia's Gross Domestic Product was US$ 925.1 per capita, much lower than the average for other sub-Saharan countries of US$1,553 **[2]**.

In addition, there have been multiple crises arising from the COVID-19 pandemic, widespread conflict, and severe drought in various parts of the country over the past three years that have negatively impacted the health and economic situations. At the macroeconomic level, a shortage of foreign currency is a chronic foundational problem.

Ethiopia's Growth and Transformation Plan (GTP) provides an overarching framework for national development across all sectors. The Health Sector Medium Term Development and Investment Plan (HSDIP) 2023-2026, provides the framework for the health sector to support Ethiopia's overall growth and transformation and outlines a number of strategic directions. These include provision of equitable and quality comprehensive health service, improved health emergency and disaster risk management, community engagement and ownership, access to pharmaceutical and medical devices and their rational and proper use, regulatory systems, human resource development and management, informed decision making and innovations, digital health technology, health financing, governance and leadership, health

infrastructure, traditional medicine, health in all policies and strategies as well as private engagement in the sector **[3]**.

Ethiopia has made significant progress in health indices of the nation. Life expectancy at birth increased by 19.6 years to 65 years between 1990 and 2021. Neonatal, infant and under five mortality rates have dropped from 49 to 30 per 1000 live births, 97 to 43 per 1000 live births, and 166 to 55 per 1000 live births respectively over the period 2000 to 2019 **[4]**. Maternal mortality ratio (MMR) reduced from 871 in 2000 to 412/100,000 live births in 2016. Seventy four percent of pregnant women (PW) attend at least one antenatal visit, but they often present late in pregnancy. Skilled delivery increased from 5% in 2000 to 50% in 2016 **[5]**. However, there are wide regional disparities among many of the health indicators.

Ethiopia has a three-tiered health system. The primary level care is provided at primary hospitals, health centers and health posts, while secondary and the tertiary level care are provided at general hospitals, and specialized hospitals respectively. The health centers in urban areas serve a catchment population of 40,000 population while in rural areas they are intended to serve a catchment population of 15,000-25,000. In rural areas, primary health units include one health center with five satellite health posts each serving a catchment population of 3,000-5,000. The health extension program launched in 2003 has been a success in training and deploying more than 30, 000 health extension workers in health posts at 17,000 kebeles across the country. Primary hospitals, general hospitals and specialized hospitals serve catchment populations of 60-100,000, 1-1.5 million and 3.5-5.0 million respectively. The number of primary health care facilities increased from 3519 (356 health centers, 2330 health stations, and 833 health posts in 2000 to 22,403 (18,277 health posts, 3899 health centers, and 227 primary hospitals) in 2022 **[6]**.

Over the past decade, there have been major inputs into training health workers but there remain gaps. In 2020, Ethiopia had 1.04 doctors, 5.96 nurses, 1.74 midwives and 0.46 pharmacists per 10,000 population, giving an approximate 0.92 health professional/1,000 population, much less than the African average of 2.2/1,000, and five times less than the minimum threshold WHO recommended of 4.45/1,000 to meet the SDG health targets.

In Ethiopian fiscal year (EFY) 2014 (2021/22) the government allocated 13.8% of the total budget to the health sector **[7]**. The GOE's per capita allocation to health at $36.6, including recent COVID funding ($34 per capita without additional COVID funding) is well below the WHO sub-Saharan recommended per capita allocation of $86. Ethiopia's total health expenditure at 72 billion ETB (US$3.1 billion) accounting for 4.2% of the country's Gross Domestic Product (GDP), remains lower than the expected average of 5% for low-income countries, and well below the global average of 9.2% **[8]**. The main sources of finance for Ethiopia's total health expenditure is government (32.2%), external donors (33.9%), and households' out-of-pocket payments (30.5%). The share of direct household payments to health facilities for services is considerably higher than the global recommended target of 20% and has resulted in a significant number of households facing the effects of catastrophic health expenditure (4.2%) **[8].**

Ethiopia has put in place within its Constitution, appropriate legal and policy provisions to promote the rights of women and girls. The country has also ratified many of the international and continental agreements that promote and protect women's rights. In 2000 the Family Law was revised in which Ethiopian women are entitled to spousal property rights and gives women the right to access, use and control property, including land **[9]**. Labor law reforms ensure the equal participation and benefit of women in the labor force, prohibits discrimination based on sex and provides for extended maternity leave.

However, there has been limited enforcement of existing laws and policies on the rights of women. In the 2021/22 Human Development Index Report, Ethiopia ranks 129/191 in the gender inequality index. There are gender disparities in education and labour force participation: only 9.1% of girls versus 20.1% of boys have secondary education; female labour force participation (70.2% women, 83.6% men) **[10]**. Women's ability to access health services are limited to their low decision-making power at household levels **[11]**.

The Penal Code (revised in 2005) criminalizes acts of violence against women, including child marriage and abduction. However, child, early or forced marriages continue to be common practices. Ethiopia has the 14th highest prevalence of child marriage (40%), defined as marriage below the age of 18 years. However there have been impressive declines over the past decade **[12]**.

In Ethiopia violence against women remains a major challenge: among women aged 15-49, 23% have ever experienced physical violence and 10% have experienced sexual violence; thirty-four percent of ever-married women aged 15-49 have experienced spousal physical, sexual, or emotional violence[7]. The recent internal conflict in the country has led to an increase in people in need for GBV services from 3.5M in 2021, to 6.7M in 2023. Nationwide there are few facilities, predominately in urban areas only, which provide comprehensive GBV services. In 2021, 16,698 GBV survivors accessed or were referred to medical services, with women and girls accounting for most survivors **[13]**.

1.2 HIV Epidemic Context

Current HIV situation

The HIV epidemic in Ethiopia is mixed, with significant regional variations, concentrated in urban areas, and some geographic hotspots driven by key and priority populations. In 2022, the national HIV prevalence among adults (15+ years) is 0.91%, with the highest values in Gambella and Addis Ababa (3.7% and 3.1%, respectively) and the lowest in Somali region (<0.1%). An estimated 610,350 people are living with HIV (PLHIV), of whom 61% are women. Amhara, Oromia, and Addis Ababa account for 75% of PLHIV. The number of new infections and AIDS deaths in 2022 were estimated to be 8,257 and 11,322 respectively(Table 1) **[14]**.

The national HIV prevalence among 15–24-year-olds is 0.3% with Gambella and Addis Ababa having the highest rates (1.74% and 1.68%, respectively). The number of new infections by age group, shows that women aged 15-19 years were seven times more likely to be infected

(819 vs 116) than their male counterparts. Similarly, children under the age of five account for 24% of all new infections, because of vertical transmission from mother to child **[14]**.

TABLE 1 NUMBER OF HIV POPULATION AND HIV PREVALENCE BY REGIONAL DISTRIBUTION

Region	HIV population	HIV prevalence		New infection	AIDS Deaths
		Adult 15+	15-24 age group		
Addis Ababa	112,185	3.15	1.68	489	816
Affar	10,919	0.81	0.32	325	289
Amhara	165,955	0.9	0.34	1806	1,290
Benis Gumz	6,249	0.68	0.28	128	71
Dire Dawa	11,096	2.69	0.88	244	187
Gambela	13,395	3.71	1.74	313	256
Harari	5,580	2.55	0.69	52	31
Oromiya	158,152	0.55	0.2	2235	1,861
Sidama	24,306	0.77	0.31	1166	603
SNNP	47,716	0.38	0.14	673	660
Somali	7,079	0.17	0.08	250	262
Tigray	47,717	1.02	0.43	576	255
National	**610,350**	**0.91**	**0.28**	**8257**	**11,322**

Trend on New infections and AIDS deaths

Over the past 20 years, both new infections and AIDS-related deaths have significantly decreased in Ethiopia. The number of new infections declined by 85%, from 133,816 in 1994 to 8,257 in 2022 (a reduction of 85%). Similarly, AIDS related deaths declined by 93%, from 71,766 in 1994 to 11,322 in 2022(a reduction of 93%), which is largely attributed to introduction and scale up of ART program. According to estimates, the HIV incidence to mortality ratio was less than one in 2022 (0.73) **[15]**.

Trend on number of new infections by year and sex disaggregation (1970-2022)	**Trend on number of AIDS deaths by year and sex disaggregation (1970-2022)**

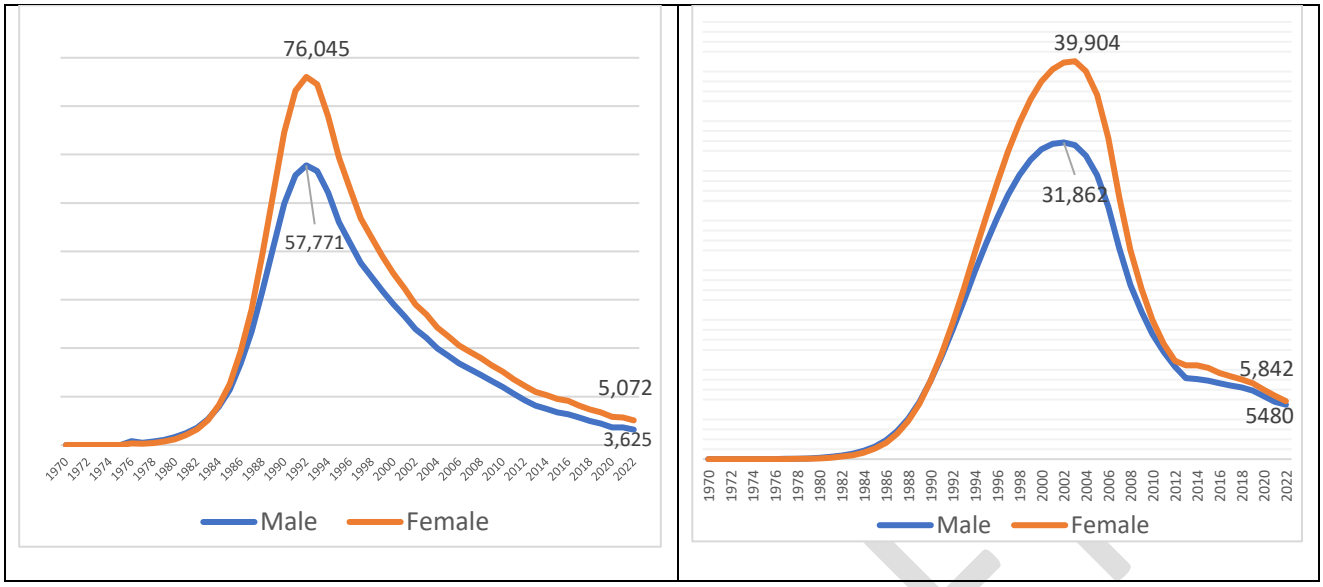


FIGURE 1TREND ON NUMBER OF NEW HIV INFECTIONS AND AIDS DEATH BY YEAR AND SEX DISAGGREGATION (1970-2022)

Mother-to-child HIV transmission has declined from 43% in 2001 to 12% in 2022 **[14]**. This decline is largely attributed to the introduction of ART and selection of DTG as the optimal ART regimen for pregnant and breastfeeding women in 2019 (Fig 2).

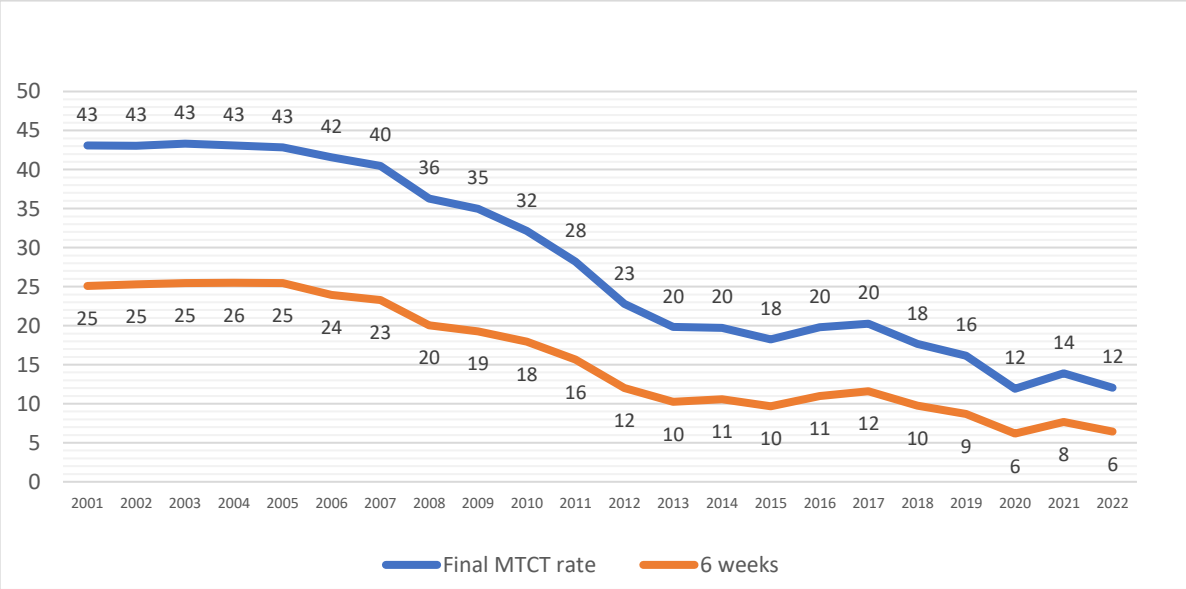


FIGURE 2 MOTHER TO CHILD TRANSMISSION AT SIX WEEKS AND FINNAL MTCT INLCUIDNG BREASTFEEDING

HIV in Key and Priority Populations (KPPs)

Key and priority populations(KPPs) are disproportionately affected by HIV epidemic and remain to be key drivers of the epidemic. Ethiopia defines three key populations (FSWs, PWID and Prisoners) and seven priority populations (high risk adolescent girls and young women, long distance drivers, workers in hot spot areas, divorced and widowed men and women, sero-negative partners of PLHIV, high risk uniformed people, and people in humanitarian

settings). HIV prevalence among female sex workers HIV prevalence among female sex workers (FSWs)has declined from 23% in 2013 **[16]** to 18% in 2020 **[17]**. The HIV prevalence among prisoners is 4.2% in 2014 **[18]**, 6% among People who inject drugs(PWIDs) in 2015 **[19]**, 4.6% among distance drivers **[16]**. Survey among uniformed people in 2018 indicated an HIV prevalence of 1.2% **[20]**. The EDHS 2016 report has shown HIV prevalence was 11.5% among widowed and 2.9% among divorced men and women **[5]**. Survey conducted in 2018 among adolescent girls and young women in Addis Ababa and Gamblla showed HIV prevalence of 2.1% **[21]**.

HIV risks and vulnerabilities

In Ethiopia, HIV transmission is largely heterosexual and there is low comprehensive knowledge about HIV and STIs. High risk behaviors include multiple sexual relationships including casual and paid sex, low use of condom during high-risk sex, STIs, needle sharing among PWID, low male circumcision in pockets of communities in Gambella region, alcohol and substance use, gender-based violence and other gender-related and socioeconomic factors contribute to HIV risk and vulnerabilities.

According to the latest EDHS 2016, only 20% of women and 38% of men 15-49 years had comprehensive knowledge about HIV. Only 20% of women and 51% of men who had a non-cohabiting partner in the past 12 months reported using a condom during last sexual intercourse with such a partner. The situation is similar with young people 15-24 years. Only 24% of women age 15-24 and 39% of men age 15-24 have comprehensive knowledge of HIV. Nine percent of women had their first sex before age of 15 years and 40% before age of 18 years. Condom use at last sex with a non-marital, non-cohabiting partner is 24% among young women and 55% among young men **[5]**.

The second round IBBS in 2020 revealed that the majority (95%) of FSWs have used condom at last sex with paying clients. However, only 26% of these FSWs used a condom at last sex with non-paying partners **[17]**.

About 4% of adults 15-49 years reported at least one STIs symptom in the 2016 EDHS **[5]** and only a third of them sought treatment. Similarly, the second round FSW IBBS revealed that 16.5% of FSWs had an STI symptom over the previous 12 months with only 64% of them seeking care from a health professional **[17]**.

Gender inequality and gender-based violence contributes to increased risk of HIV in Ethiopia. EDHS 2016 indicated that 20% of women had physical and/or Sexual Intimate Partner Violence in the last 12 months **[22]** (p291-293). Gender and economic inequalities drive many women to engage in transactional sex and sex work which bear a high risk of violence and HIV. About 21.1% and 13.3% of FSWs experienced physical and sexual violence respectively. More than a quarter of FSWs had ever experienced sexual assault **[17]**.

Male circumcision is a culture in Ethiopia and 91% of men aged 15-49 have been circumcised **[5]**. However, the rate of male circumcision was 72% in Gambella where HIV prevalence is the highest, and 84% in some SNNP districts where HIV prevalence is relatively low **[5]**.

Most (79%) of PWID reported access to safe needle and syringe mainly from pharmacies **[19]** (p26-39). About a third (18%-30%) of the PWID reported ever sharing needle and syringe **[23]**.

1.3 HIV/AIDS Response

Combination HIV Prevention

Combination HIV prevention has been at the core of HIV response in Ethiopia. Combination prevention interventions has been implemented at health facility and community levels that include social behavioral change communication (SBCC), condom and lubricants promotion and distribution, Pre exposure prophylaxis (PrEP), post exposure prophylaxis (PEP), voluntary male medical circumcision (VMMC), diagnosis and treatment of STIs, harm reduction for people who inject drugs, and prevention and management of Gender Based Violence.

Social behavioral change communication including targeted peer to peer and one-on-one education for KPP, public meetings, community dialogue, print and electronic SBCC materials distribution, documentaries, and TV/Radio spot messages have been conducted; Over five million youth and KPPs were reached with social behavioral change communication in 2022. However, the peer education, a multi-session social behavioral change communication, and demand creation interventions targeting KPPs were implemented on a very limited scale but were of poor quality. There was limited use of social and electronic media. There was scattered implementation within the school curriculum of HIV/SRH education with bits and pieces of information provided in different subjects. Therefore, school HIV education has been limited due to a lack of comprehensive HIV/SRH/life skill standalone subjects, lack of leadership commitment and budget, trained teachers, and support. There has been limited support for school clubs and media activities **[24]**.

Condoms are predominantly procured and distributed through free (59%) and social market approaches (40%), while the private market contributes only 1%. Free condoms are distributed targeting KPPs. The social marketing program and private sector reach the general population and KPPs in all woredas across the country. The country developed a condom strategy and guidelines in 2021 **[25]**. However, the strategy and guidelines were not implemented. The condom program is challenged by a recurrent shortage of condoms. Only 80 million of the 220 million male condoms planned for 2022 were procured and distributed **[24]**. The shortage of free condoms was largely related to bottlenecks with procurement procedures. There is a need to scale condom distribution through non-traditional outlets in hot spot areas and night hours **[24]**.

Ethiopia started rolling out PrEP in late 2019 targeting female sex workers and HIV sero-discordant couples. In 2022, PrEP service was provided to 21,684 individuals at high risk of acquiring HIV, 2014 HIV-negative partners of PLHIV, and 19,670 FSWs **[6]**. The gaps in PrEP include less than optimal coverage for the currently eligible populations (FSWs and discordant couples), and limited target groups. Oral PrEP is distributed in ART clinics and not yet largely integrated into FP/SRH/MCH clinics and community-based distribution. There is also significant stigma and discrimination and pill burden which is hindering PrEP service uptake and retention. PEP is limited to medical exposure and rape. People with non-medical exposure lack access to PrEP **[24]**.

Harm reduction targeting PWID was included in 2021 in the HIV NSP 2021-2025 but the program was not fully implemented. There have been efforts to provide HIV services including HIV testing and peer education. In Ethiopia needles and syringe are sold over the counter

without prescription. Most PWID access needles and syringes from private pharmacies. However, the majority of PWID do repeated use of needles and syringes, About a fifth of PWID ever shared needle and syringes **[23]**. Methadone and Naloxone were not on the National Essential Drug List **[26]** and there was no opioid substitution therapy.

VMMC program has been implemented in the Gambella region where the HIV prevalence is the highest and the circumcision rate is the lowest in the country. PEPFAR has been supporting the program and there have been 25,000 to 30,000 circumcisions a year **[6]**. However, the program is run as a vertical program and lacks integration with routine primary health care services. In addition, there are strong social and cultural barriers to circumcision that need strong community mobilization targeting community and religious leaders. Due to recent internal conflicts, there has been increased military recruitment. PEPFAR previously supported VMMC program targeting military personnel but this has stopped a few years back.

STI services are integrated in all inpatient and outpatient services in public and private health facilities using a syndromic approach with the purpose of expanding access to effective treatment even at health facilities with limited diagnostic capacity. In the 2014 EFY, 309,029 STI cases were diagnosed and treated at different health facilities of which 89% were tested for HIV with 6,057 (2.2%) identified as HIV positive **[6]**. However, many STIs go unreported. The STIs guideline is outdated and there is no recent STI drug resistance study to revise the guidelines. Although patients with diagnosed STIs are targeted for HIV testing, there are missed opportunities as well as shortages of STI treatment kits. Most health facilities implement partner notification and treatment services for partners of STI cases, but this is problematic with many clients refusing for fear of violence and adverse outcomes **[24]**.

The FSW program is one of the KPP programs that is performing better. However, the FSW population is not homogenous, and the program needs segmentation to better target the FSW groups most affected such as new entrants, the younger age group, those working from home, or through virtual platforms **[24]**.

High-risk adolescent girls and young women have been defined as one of the priority populations. However, there have been very limited programs targeting high-risk AGYW. There has been no nationally validated risk screening tool to identify high-risk AGYW. There has been no defined package of interventions and service delivery models to reach high-risk AGYW **[24]**.

Long-distance drivers divorced and widowed men and women, workers in hot spot areas, and sero-discordant couples are the other vulnerable groups defined in the NSP. However, there have been very limited programs due to a shortage of funds and a lack of skill and guidelines on how to map, estimate the size, identify and reach these populations.

The recency testing findings in 2022 showed that the proportion of recent infections among HIV-positive test results was the highest for uniformed people (13,7%) and AGYW (waitresses 13.3%) **[27]**. However, there have been limited HIV prevention programs targeting high-risk uninformed people.

Over the past three years, there has been widespread war and conflict which affected the western and northern parts of the country, especially the Tigray, Amhara, and Afar regions. The conflict destroyed and disrupted HIV services **[28]**. Hundreds of thousands of people were displaced and there have been reports of rising cases of SGBV. Internal population

displacements increase the vulnerability of people. There has been a very limited response to comprehensively address the increased risk of people in war and conflict-affected settings.

The KPP-friendly clinics are placed within public health facilities, DICs in hot spot areas; outreach programs and peer service providers have been used to reach KPPs especially female sex workers with services. DICs have been effective in reaching FSWs. However, there are only 65 DICs and most are supported by PEPFAR. There is a lack of a nationally defined standard for ART and non-ART DICs and the package of services and quality varies significantly. The effort to expand low-cost government-led DICs outlined in the NSP 2021-2025, was not realized due to lack of government-owned houses in hot spot areas and a lack of commitment from town administrations. The outreach programs were limited due to a shortage of funds and limited engagement of CSOs. The peer service program lacks defined standard training, service, and incentive packages **[24]**.

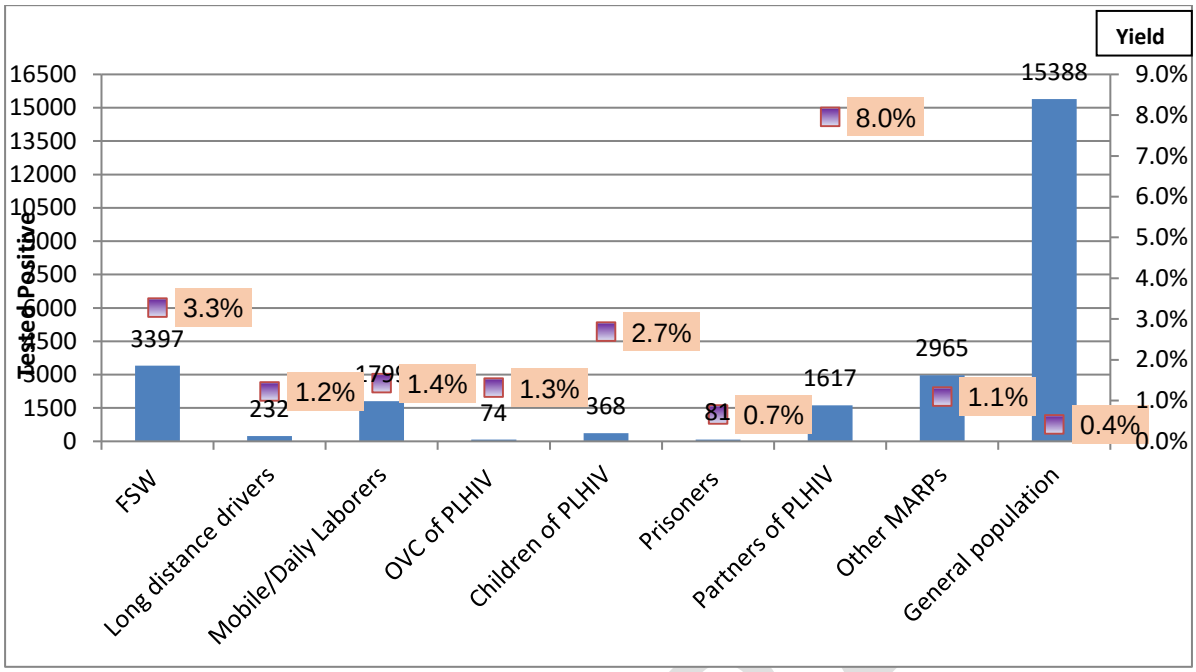
HIV Testing services : case finding

HIV testing services are offered through Index Case Testing and Partner Notification Services (ICT/PNS), Voluntary Counseling and Testing (VCT) and Provider Initiated Testing and Counseling (PITC) in outpatient departments, TB, family planning, maternal and child health clinics (ANC, delivery, postnatal services), inpatient departments, specialty clinics, KPPs/youth friendly clinics, and other health service delivery points as well as the option for HIV self-testing (HIVST). The PITC service is designed to be provided using a standardized risk screening tool for better yield and effectiveness of the program but this was used inconsistently **[24]**.

In EFY2014, an overall 7.2 million HIV tests were conducted, with a test yield of 0.5% and considerable regional variation where the test yield was 3.1 and 1.4 percent for Harari and Addis Ababa respectively it was 0.3%, 0.2% and 0.1% for Oromia, Sidama and Somail regions respectively.

More targeted testing (45, 596) through ICT provided a yield of 9.4%; VCT yield was 0.9%. Testing among KPPs showed consistently higher yields. However the number of tested performed was through ICT was few (fig 3).

FIGURE 3. TESTING AND YIELD BY POPULATION GROUPS (9 MONTHS 2015 EFY, 2022/23).



Index case testing (ICT) has been a high-yield testing modality. However, the number of index cases elicited and tested was low. Clients refuse or provide wrong addresses of contacts due to lack of disclosure, stigma, and discrimination. Providers also fear violence from contacts being elicited.

General provider-initiated testing and counseling (PITC) have low yield. The risk screening tools have not been validated and providers apply risk screening tools inconsistently in the inpatient and outpatient departments.

There has been limited engagement of CSOs and community-based programs in targeting KPPs and HIV Self-testing for KPPs has been underutilized. There is a gap in the report back of self-test results.

HIV Case Reporting and Recency Testing: Case based HIV surveillance started in 2018 to better target prevention services and identify hotspots of new infections. HIV case reporting with recency testing for recent infection (RTRI) is now integrated with the existing public health emergency management (PHEM) system. The proportion of recent infections among the total number of tests performed annually was reduced from 16.5% in 2019 to 8.6% in 2022. Of the people tested in 2022, respectively 10% and 5% of females and 7% of males were recent infections. The proportion of recent infections were higher for adolescents and youth 15-19 years and 20-24 years which are 19% and 14% respectively. Proportion of recent infections were the highest for people in uniformed services, waiter/waitresses. Female sex workers 14%, 13% and 11% respectively **[29]**.

Virtual Elimination of Mother to child transmission of HIV, Syphilis and Hepatitis

Currently, comprehensive PMTCT services are available in over 2,865 health facilities in an integrated one-stop approach using the maternal neonatal and child health (MNCH) platform.

The national ANC first and fourth attendance is 95% & 74% respectively in 2015 EC but many PW attend late in their pregnancies and there are regional variations. In 2021/2022 from the 3,608,240 expected pregnancies, 89.8% (3,059,999) pregnant women were tested for HIV. From the 17,636 estimated HIV-positive pregnant women, 14,008 (89.3%) HIV-positive pregnant women received ART for PMTCT **[7]**. The fact that Ethiopia is a large predominantly rural country with low national prevalence, presents programmatic challenges towards elimination of MTCT. Many of the health facilities are located in rural or semi-urban areas, the number of HIV+ pregnant women seen per month is often low. Health workers therefore can have difficulties in maintaining their skills in providing ART services for these women.

Although Ethiopia also integrated syphilis elimination in its HIV program in 2017, based on current WHO guidelines for dual syphilis and HIV testing, the gap in syphilis testing (69.8%) against a much higher HIV testing (89.8%), is yet to be addressed **[7]**.

The 2021 updated national comprehensive and integrated PMTCT guideline in line with WHO guidelines, endorses DTG based regimen as preferred first line ARVs for PBFW and women of childbearing potential. The country has also adopted the provision of enhanced postnatal prophylaxis (NVP+AZT) for the first 6 weeks and NVP alone for the following 6 weeks for all HIV Exposed Infants but the MOH annual report for 2021/22 noted that only 47% of HEI actually received enhance ART prophylaxis **[7]**.

The early identification of an HIV+ infant is critical for their survival. Testing of HIV exposed infants (HEI) can take place at a number of potential points: Even though, birth testing is not started yet, EID test should be done for HEIs at 4-6 weeks and at 9 months for those with a negative result at 6 weeks. Most health facilities collect and send Dried Blood Sample (DBS) for DNA PCR test but there is an extended turnaround time for results ranging from 2 to 3 months. In 2021-2022, 61.6% (9,657) of HIV exposed infants had a PCR testand there are gaps in linking HEI immediately after birth **[7]**. Additional gaps include failure to implement quality improvement interventions, gaps in maternal and HEI cohort monitoring analysis, shortage of supplies, reagents, and lack of trained staff.

In 2023 there are 498 GenXpert machines in country with a further 300 under procurement. Of these 180 machines have TB and EID platforms and a 51 are able to measure TB, EID and VL **[30]**. There is a need for optimizing the multiplex platform capacities of the GenXpert machines in the country.

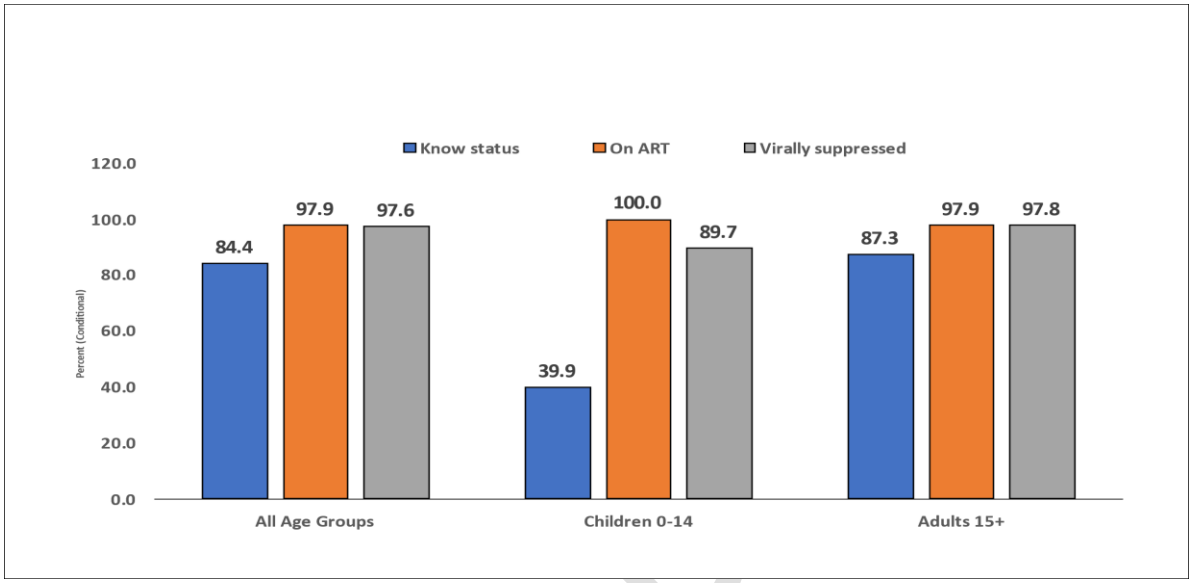
Mothers Support Groups (MSG) are available in most high volume public health facilities but the majority of these groups are donor supported challenging continuation when donor funds are withdrawn. Some regions have incorporated these peer mothers into their budget. A key recommendation from the program review is the expansion of MSG managed by civil society and PLHIV associations.

Care and treatment

In Ethiopia, free ART services have evolved from when they started in 2005, from CD4 based eligibility to “Treat All” positives combined with re-testing prior to ART initiation, and then to rapid ART initiation which was started in November 2016. ART services are provided in more

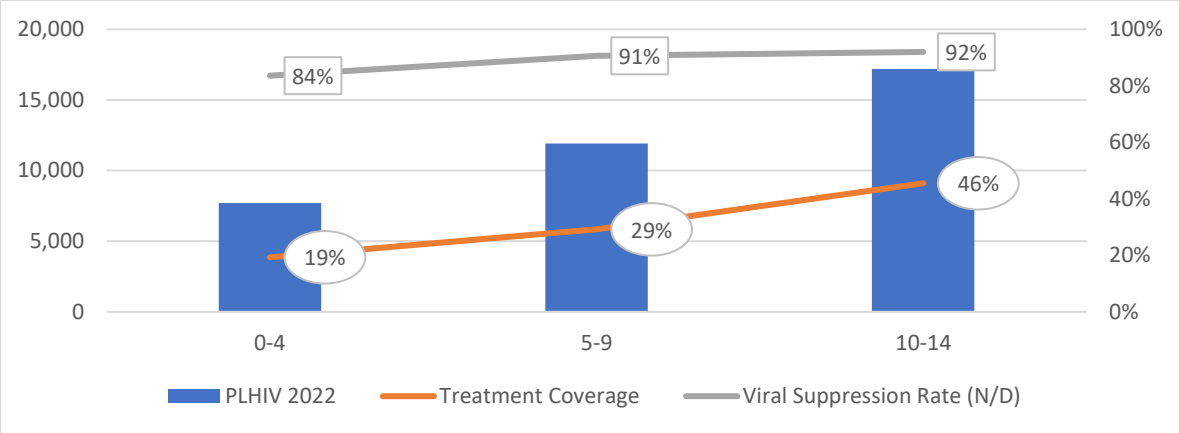
than 1,500 public, private and NGO health facilities and demonstrate a strong program with good referral and registration systems. Ethiopia has achieved the 2nd and 3rd 95 targets nationally but there remain gaps when disaggregated by adults and children.(Figure 4). Of the 84% of estimated PLHIVs who know their status, 98% of them were on ART, and 98% of those on ART were virally suppressed; once diagnosed as HIV+ there is good linkage and adherence to treatment **[30]**.

FIGURE 4. PROGRESS TO REACH 95-95-95 TREATMENT TARGETS, 2022 (SPECTRUM ESTIMATES, 2023).



Viral suppression among children 0-14 years is suboptimal as well. Further disaggregated age data among children using data from PEPFAR supported sites shows that only 19% for children 0-4 years, 29% for those aged 5-10 years and 46% for those 10-14 years old are on ART. Viral suppression until all <15 years is 90% but only 84% for children <5 years **[31]**. (Fig. 5). To address the poor pediatric performance, the MOH launched a surge campaign -Pediatric HIV Program Acceleration Initiative (PHPAI) **[32]**. Currently there are 103 health facilities involved in this initiative. It is too early to assess the results of this initiative. However, this activity has heightened attention for care providers of the need to rigorously follow all testing opportunities to identify CLHIV, minimize any missed opportunities and link into treatment. RHBs have increased their monitoring and supervision. However, there is also a need to revisit the SPECTRUM estimates of the number of CLHIV.

FIGURE-5. TREATMENT COVERAGE AND VIRAL SUPPRESSION AMONG CHILDREN, 2022 (PEPFAR SUPPORTED SITES).



The majority of ART services are provided by the public sector. Accompanied referrals have been effective at improving linkage into care and treatment; community- facility referral is taking shape because of ongoing linkage performance audit practices. Case managers, peer navigators and adherence supporters are positively assisting the ART services through promoting the treatment literacy/adherence and tracing of the lost-follow-up cases. In several regions there are good relationships with PLHIV associations and other CSOs.

Private facilities, especially in urban areas, provide free ART drugs and viral load testing through sample referral, with physician consultation provided on fee basis. However, private health facilities lack an adequate number of trained staff, case managers and adherence supporters and they have no links into the community. They are not getting adequate technical support, commonly lack drugs to manage opportunistic infections, and are not adequately involved in monitoring and review meetings. They also do not have strong system for tracing lost to follow up patients [24].

There has been continued expansion of differentiated service models. 6 month and 3- month MMD is almost universal and has been crucial in maintaining the treatment cohort during the COVID pandemic and the recent complex humanitarian emergencies and conflict when there was reduced access to facilities and major population displacements. Eighty two percent of adults are enrolled in 6-MMD **[30]**. Over the last two and a half years of conflict, there have been wide disruptions to health services, lack of a consistent drug supply, loss of medical records and considerable population movements. There was some cushion to treatment interruption because of the high 6-MMD use and some patents were able to get emergency refills through facilities near internally displaced camps. The true extent of treatment disruption will likely become more evident over the next year although there are an ongoing "Return-to-Care" efforts. Other less widespread DSD models include fast track refills, community ART groups, peer led ART distribution, and DSD models of adolescents, KPs and PBFW.

Ethiopia has a large refugee population, with refugee camps and their services under the management of the Administration for Refugee and Returnee Affairs (ARRA). ARVs for the refugee population have always been incorporated into the national forecasting quantities.

The national treatment cascade masks disparities among different KPP population and geographic variations. The pivotal role that lay cadres such as case managers, adherence supporters and MSGs, remains predominantly donor supported. However, moving forwards, the MOH is planning to develop competency standards for these cadres with a gradual absorption into the regular budget as resources permit.

Co-morbidity screening and management

- Tuberculosis: There is 100% screening of PLHIVs and LF-LAM testing available for diagnosis of TB in advanced HIV disease; increased access to and updated TB prevention regimens are available.
- Mental Health has been integrated in the updated policy guideline, training materials and monitoring tools **[33]**; there is an ongoing pilot implementation of MH services at selected health facilities and community sites.
- Cervical Cancer screening and treatment is available in 602 health facilities. Screening has reached 60% of eligible women **[34]**
- Viral Hepatitis: Prevalence of Hepatitis B and C among PLHIV is 9.3% and 5.6% respectively. PLHIVs are among the identified high-risk groups for systematic screening and treatment of viral hepatitis (B&C) and the services have been initiated for the management of Hepatitis B at ART clinics with referral for Hepatitis C.
- Nutritional support has been integrated into HIV services. Over 81,000 PLHIV received nutritional support in the first 9 months of 2015 EFY **[30]**. Although there are conflicting reports of lack of nutritional support in some areas.

There remain shortages, however in CrAg reagents to screen and drugs to treat for cryptococcal disease and a shortage of other drugs to treat opportunistic infections.

Human rights and Gender Response

Ethiopia ratified key global charters and conventions on women and children. The constitution and national legal frameworks including the revised family law recognize the rights of women and girls. However, implementation and enforcement of such laws have been a challenge **[35]**.

Currently, there are free legal services at selected federal, regional and woreda level courts for survivors of GBV and women and girls who need such services. The Women's Affairs offices provide counseling and legal support coordinated with police and family courts.

The health sector with support from partners and donors (UNFPA, PEPFAR, and the Global Fund) are providing free-of-charge first-line and comprehensive one-stop shopping GBV services at health facilities. However, comprehensiveness and quality are variable

Stigma and discrimination among PLHIV and key populations have been high in Ethiopia. A fourth (24%) of the PLHIV reported facing some form of stigma from their social environment because of their HIV status. Women (26%), less educated (32%), and key populations (32%) are more likely to face externalized stigma **[36]**. A significant proportion of PLHIV reported at least one form of stigma and discrimination in the health care settings seeking HIV (30%) and non-HIV services (42%). Female PLHIV and KPs living with HIV were more likely to face stigma and discrimination in the health care settings **[36]**. There is high self-stigma among PLHIV in Ethiopia, more than three-fourths (76%) of the PLHIV had at least one form of self-stigma, and 38% had self-discrimination for 12 months preceding the survey. Females (79%), the youngest age group 18 to 24 (90%) and KP (83%) were more likely to experience self-stigma as compared to their counterparts **[36]**.

Efforts to address stigma and discrimination have been very limited and there has been little progress between the 2011 first-round and 2020 second-round stigma index surveys **[36]**. There is a lack of solid legal frameworks and zero stigma policy in the health and education sectors to prevent and mitigate stigma and discrimination in health facilities and school settings. Anti-stigma media campaigns have been minimal over the past five years. There has been limited access to legal services and legal literacy training for PLHIV and KPs.

The HIV policy was issued in 1998 and it is outdated. The HIV policy has not been revised to address the current epidemic context, service delivery models, and issues. Therefore, it fails to adequately cover new HIV testing options, new treatment modalities, age of consent for HIV testing services (HTS), partner notification, school HIV programs, social network services, workplace HIV testing, HIV mainstreaming, and key and priority populations **[37]**. The MOH has opted to revise the policy and address issues within the MoH health Act being drafted.

Narcotic and psychotropic drug use is a crime in Ethiopia. Article 525 states act of Producing, Making, trafficking in or using Poisonous or Narcotic Psychotropic Substances is punishable with rigorous imprisonment for not less than five years, and a fine not exceeding one hundred thousand Birr. Similarly, though female sex work has been there since ages, the 2004 EFDRE Penal Code Articles 846c and 635 identify prostitution as immoral in one way or another **[38]** (p214). The legal and social context in Ethiopia bears a challenge to programs that empower key populations and encourages access to HIV services. In addition to the policy and legal barriers, there are widespread cultural and social barriers to HIV services among key populations.

Community led services and monitoring

Civil society organizations, community-based and community-led organizations, including PLHIV associations have an essential role to play in the HIV response at all levels. It is critical to ensure the involvement of CSOs, CBOs, and affected and infected communities in the policy and strategy formulation, planning, implementation, monitoring, and evaluation of the response at all levels.

The capacity and engagement of CSOs/CBOs in the national HIV response have been limited. There has been support the PLHIV association and networks and they were represented in the national and regional coordination platforms. However, the CSOs have been fragmented and lack the ability to make meaningfully influence programs and policies.

There have been CSOs engaged in HIV service delivery including HIV testing, social enablers and prevention as well as adherence support. However, there is no data to accurately quantify their contributions. In addition, CSOs do not have strong mechanisms for monitoring and reporting HIV program activities at the community level. Lack of standard guidelines, or coordination structures, that involves KPPs, PLHIVs, and the affected communities has limited the few c (CLM) activities to monitoring service quality, and it has not been designed in a way that identifies, tracks, and addresses policy and programmatic barriers. There was no digital platforms and applications to collect, warehouse, analyze, and report CLM data.

Strategic information

Ethiopia implemented HMIS/DHIS2 to collect key health sector indicators and collect, process and report data from all health facilities through an electronic platform, from the health facility to national level. Although there are strong monitoring and evaluation systems, there are concerns about the quality of HIV data mainly on ART and ANC/PMCT data in terms of completeness and timeliness. The weak quality of data affects national and sub-national HIV estimates, projections, planning, and timely action. When the data is generated, there is still a lack of analysis and utilization of the data for decision-making. Hence, it is important for the country to improve the data quality and data use at different levels through annual workshops at national and regional levels as well as supporting and involving HIT's, data managers, and M&E officers. As part of the HIV monitoring and evaluation, the country regularly holds joint supportive supervision and joint review meeting to monitor the performance of HIV services.

Community-level HIV program data was collected through MRIS which was very weak with low coverage and quality. The Reform of FHAPCO created a situation where non-health sector and community-level actors' HIV services. Data visualization tools and dashboards are also underutilized for real-time Key Performance Indicators tracking. There is a need to integrate the community-based HIV services indicators into the DHIS2 platform.

Ethiopia identified key and priority populations but there is sparse data on size estimations of these groups, except for the recent survey on FSWs. Hence, there is a need to conduct IBBS among AGYW, long distance drivers, workers in hot spot areas and prisoners in order to make evidence based informed decisions. A survey of STI prevalence and STI drug resistance has not been conducted in a long time. This is needed to inform guideline updating and program implementation.

Health Systems strengthening

National HIV Policy , strategy and coordination systems

The National HIV response is coordinated under MoH which has regional, zonal, and woreda health offices and health facilities to execute its mandate to coordinate and deliver services. There are national health and HIV/AIDS policies, strategies, guidelines and standard operating procedures for programs and service delivery. There are inadequate governance and coordination structures for the multi-sectoral response at key non-health sectors at national and sub-national levels. Within the national governance structure, there are relevant program management staff at all levels to coordinate the response.

Pharmacutical supplies and logistics systems.

There are procurement policies and guidelines for pharmaceuticals and the implementation of procurement framework agreements which contributed to the reduction of lead time and price. In line with this most of the HIV program commodities are procured through agreements renewed every three years. There exists a local capacity to procure large volumes of commodities that meet the national demand though there are still procurement related bottlenecks contributing to frequent stockouts of some commodities.There is an annual forecasting and quarterly supply planning exercises for HIV program commodities. There is a problem with quality of data (consumption, diagnostics, service, and morbidity data) for the forecasting exercise and to guide the inventory management system. Such data quality problems lead to low forecast accuracy and is one of the contributors to the wastage due to expiry and frequent stockout of commodities.

The Ethiopian Pharmaceutical Procurement Service (EPSS) has the capacity to deliver program commodities, in an integrated manner, to all health facilities either directly or through oreda health offices. The number of direct delivery sites is increasing, currently 70% of health facilities being reached directly [34]. There is a national system, Integrated Pharmaceutical Logistics System (IPLS) to guide storage and distribution practices and the inventory system though it is a decade old and needs updating.

There is a functional Health Commodities Management Information System (HCMIS) for monitoring of the supply chain; manual records (bin cards) are also used to complement the electronic system. Implementation of an electronic inventory management (Dagu) at some facilities is a positive move to ensure end-to-end visibility though there is limitation in the coverage and it is not fully functional.

Laboratory system

A significant achievement has been obtained using the Global Fund investment for building a strong and responsive laboratory system and service which supported the three disease programs, in the previous grants. However, there is still a gap in the EID and VL service uptake and Turn Around Time (TAT).

1.4 The NSP development process

The development of the HIV NSP 2021-2025 is carried out under the leadership Executive Officer of the HIV/AIDS Prevention and Control Lead Executive Office (HAPCLEO) in the MOH. A concept note was developed to guide the process, outlining approaches and timelines. Various defined coordination platforms were established, and international and local consultants were hired to facilitate the NSP revision process. The reason that a program review was taken at this time is to assess the impact of the multiple events that have occurred in the country over the past two and a half years. Additionally, the timespan of the NSP has been extended to 2026/27 in order to align with the Global Fund for AIDS, TB and Malaria (GFATM) funding cycles.

The development process has taken into consideration updated epidemiologic and program performance data through document review on HIV epidemiology and program performance, information gathered through field visits to health facilities, community services, key informant interviews, and outputs from a 3-day participatory appraisal workshop supplemented by program performance data. Teams visited 10 regions/city administrations in the country: Afar, Amhara, Oromia, SNNP, Sidama, Southwest Ethiopia People's, Gambella, Harari regions and Addis Ababa and Dire Dawa City Administration and 203 people were interviewed using a qualitative guided questionnaire. Twenty four health facilities comprising of government and private hospitals and public health centers and 9 drop-in centers (DIC) were visited **[24]**. The program review findings contributed towards revision of the NSP through a 3 day workshop with participants from the MOH, civil society, unilateral and bilateral donors. This NSP was finally validated in a 2-day multistakeholder workshop.

Chapter 2 Strategic Framework: Vision, Goal and Guiding Principles

Vision: An AIDS free Ethiopia

Mission: Institute effective HIV/AIDS prevention and control programs; coordinate the national HIV/AIDS response, strengthen health systems, programmatic and social enablers to ensure sustained epidemic control in the foreseeable future.

Goal: To attain and sustain HIV epidemic control by 2027, by reducing new HIV infections and AIDS mortality to less than 1 per 10,000 populations nationally, among sub national and sub population groups

Expected impact results:

a) **Number of new HIV infections reduced to less than 1 per 10,000 population in national, subnational, and subpopulation groups.**

b) **HIV-related deaths were reduced to less than 1 per 10,000 in national, subnational, and subpopulation groups.**

c) **Incidence Mortality Ratio reduced to less than 1 national, subnational, and subpopulation groups.**

d) **Percentage of child HIV infections from HIV- positive women delivering in the past 12 months reduced from 12% in 2022 to less than 5% by 2027**

Guiding Principles: The NSP will be implemented with adherence to the following guiding principles:

a) **Multi-sectoral**: A multi-sectoral approach and partnership that builds on HIV being the responsibility of all sectors and constituencies.

b) **Inclusiveness**: An inclusive and people-centered approach that recognizes different prevention options that an individual may choose at different stages of their lives.

c) **Community Led:** Recognition that communities are pivotal and key partners in the HIV response.

d) **Gender Responsiveness**: A gender-sensitive approach that caters for the different needs of women, girls, men and boys in accessing HIV information and related services.

e) **Value for Money (VfM)**: Furthermore, The NSP will be delivered through a Value for Money (VfM) Framework, that defines how to maximize and sustain equitable and quality health outputs, outcomes and impacts in a constrained economic and financial environment[i].The VfM Framework comprises 5 dimensions: equity, economy, effectiveness, allocative and technical efficiencies, and sustainability which will be applied during the design, execution and evaluation of HIV programs included in this NSP.

Chapter 3 Combination HIV Prevention

Strategic Objective 1: Reach 95% of Key and Priority populations with targeted combination HIV prevention interventions by 2027.

Result 1: Comprehensive knowledge about HIV and AIDS reached 50% by 2027 for key and priority populations,

Result 2: Condom use among key and priority in the past 12 months populations engaged in risky sexual behavior reached 90% by 2027.

3.1 Population and Geographic Prioritization

3.1.1. Geographic Prioritization

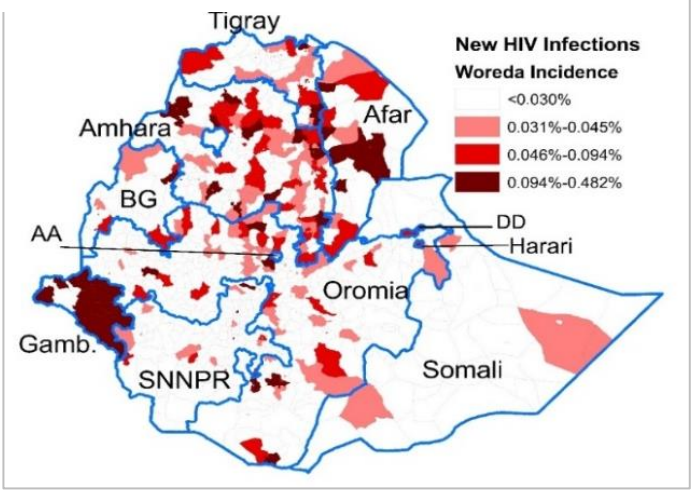
The country has about 1,076 woredas. Based on HIV incidence estimates from the Naomi model in 2020 and recent program data from regions (Annex 4), woredas are categorized into three geographic priority areas:

High (265): Woredas with HIV incidence of ≥0.03% of people aged 15-49.

Medium (326): Woredas with HIV incidence of 0.01- 0.029% of people aged 15-49.

Low (485): Woredas with HIV incidence of < 0.01% of people aged 15-49.

FIGURE 4. WOREDA LEVEL HIV INCIDENCE (SPECTRUM ESTIMATES 2019).



In addition, 35 woredas affected by war and conflict and which were not included under high incidence woredas will be selected from Afar, Amhara, Benishangul Gumuz, Oromia, and Tigray regions and considered as high priority woredas to be supported by donor programs including the Global Fund support. These additional woredas are considered hotspots because there are risk factors that can lead to increased new HIV infections: a) because there are a high number of IDPs, refugees and returnees; b) because of disruption to livelihoods as a result of conflict leaving women at greater risk of transactional sex as a means of survival; and, c) because of a high incidence of sexual gender based violence during the conflict. The criteria for selection of the 35

additional conflicts affected priority woredas from the conflict affected regions of Afar, Amhara, Benishangul Gumuz, Oromia, and Tigray regions will be applied step wise as follows:

- First, woredas affected by conflict and which were medium incidence woredas based on the 2020 Naomi estimate will be selected.
- Second, woredas with incidence rate, closer to higher incidence (incidence 0.02% - 0.029%) will be selected.
- Third, woredas with highest estimated PLHIV population, with IDPs, and longer duration of conflict will be selected.

Thus, a total of 300 woredas will be considered as high priority woredas. These woredas will be reached through comprehensive HIV prevention interventions targeting KPPs. The low burden areas will be reached through integrated and sustainable HIV prevention interventions mainstreamed in the health and non-health sector programs and through media and community initiatives. Medium burden woredas, in addition to the services listed for the low burden areas, will also have some of the HIV services for the key and priority population groups integrated into sustainable service delivery models. Based on evidence, woredas may shift from one category to the other, and the response will also be also tailored accordingly.

Special consideration and high priority will be given to war affected regions especially Tigray region due to the impact of sustained and long period of conflict, disruption of supplies and services and unmatched recovery efforts. There will be studies/assessments to understand the current epidemic and response context and impact of the conflict. HIV Services will be integrated with recovery efforts.

KEY POPULATIONS:

- Female Sex Workers (FSW)
- Prisoners
- People who inject drugs (PWID)

PRIORITY POPULATIONS:

- Widowed and divorced men and women
- Long distance drivers
- Workers in hot spot areas
- High risk adolescent girls and young women
- Sero-negative partners of PLHIV
- People in humanitarian settings
- High-risk uniformed men and women

POPULATIONS WITH SPECIAL NEEDS:

- People with disability
- Homeless and street-based children, adolescents, and youth

3.1.2. Population Prioritization

Defining Key and Priority Populations (KPPs), and other Special Populations.

The following population groups are defined as Key Populations, Priority Populations and other Special Populations taking into consideration local epidemiology, HIV prevalence, high risk behaviors, increased morbidity and mortality or higher vulnerabilities.

Key Populations (Operational definitions)

Female Sex Workers are defined as women who regularly or occasionally exchange sex for money in drinking establishments, night clubs, local drink houses, “khat” and ‘’shisha’’ houses, “on the street”, around military and refugee camps,

construction sites, trade routes, red-light districts, and at their homes. A sex worker can be self-identified or identified by others as sex worker.

They can be further categorized by where they work as:

Venue-based: female sex workers stationed in hotels and bars,

Street based: female sex workers who are mobile or street based,

Home based: female sex workers stationed at home, 'areque' and 'tella' houses and 'khat' and 'shisha' houses,

Phone/SMS/social media based: female sex workers who can be accessed and accept sexual appointment through telephone call and social media.

The non-paying clients of FSWs will be addressed as part of the HIV program that targets FSW.

Prisoners: are all people detained in a criminal justice and prison facility, including adult and juvenile males and females, during the investigation of a crime, while awaiting trial, after conviction, before sentencing and after sentencing.

People who inject drugs (PWID): are those men and women, who, because of using injectable drugs are at high risk of acquiring HIV infection. They require special arrangements to access HIV and harm reduction services.

Priority Populations

Long Distance Drivers: Long distance drivers are drivers who are obliged to regularly travel on the road that involves overnight stay out of their home. This group includes heavy/medium truck drivers, bus drivers, and tour-car drivers.

Widowed and divorced men and women: Widowed men and women are those whose spouses have died and who have not remarried. Divorced men and women are those who have legally dissolved or terminated a marriage under the rule of law of the country and not remarried. High risk widows are those who are sexually active, have multiple sexual partners, are involved in petty trade and selling local drinks.

Workers in hotspot areas: Workers in hotspot areas are those populations who work in workplaces with greater than 500 workforce, which have high HIV burden (if data is available >3%), high number of FSWs around the workplaces, poor access to HIV and other health services, those which are far from home.

This mostly includes large construction projects, industrial parks, factories/industries, commercial farms and sugar plantations, dry ports, mega projects (i.e., electric dams), mining, other investment and infrastructure development projects. These sites are characterized by the fact that people working in these sites are likely to be migrant laborers away from their homes with some disposable income. These sites will therefore attract female sex workers. These conditions result in the potential for risk behaviors associated with the acquisition and spread of HIV. Surveys will be conducted to further inform HIV programming in workplaces.

HIV sero-negative partners of PLHIV: PLHIV: People who have been tested for HIV and are found positive.

PLHIV Partners: People who have sexual relationships with PLHIVs that includes spousal and non-spousal partners.

Discordant couples are those in which one spousal partner is HIV positive.

High risk adolescent girls and young women (HRAGYWs): These are defined as females aged between 10-24 years who are sexually active (defined as having sex at least once in the past 12 months) and who met one or more of the following characteristics in the past 12 months:

- Have multiple sexual partners or sex with non-regular partner.
- Are involved in transactional sex or are victims of sexual exploitation (irregular exchange of sex for money or materials)
- Are involved in substance abuse (heavy use of alcohol, or other illicit drugs)
- Have a history of sexually transmitted disease, unintended pregnancy or abortion.

This group of adolescents and young women are found in higher learning institutions, high schools, night school or work as waitresses, domestic workers or are out of school including those unemployed, and girls who are working (coffee sellers, petty traders) or living on streets.

People in humanitarian settings: Humanitarian settings: include drought affected areas, conflict and post conflict areas, natural and man-made disaster affected settings.

Humanitarian setting population groups include:

Internally displaced people are persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, natural disasters, etc.

Refugees: populations who have been forced to flee their country because of persecution, war or violence.

Returnees: are those populations who returned to their residential places in large numbers, both from abroad and domestic.

High-risk uniformed men and women : High-risk uniformed men and women are those on active/frontline duty, and new military and police recruits. A 2018 Department of Defense (DOD) study showed an HIV prevalence of 1.2% **[20]**. In addition, the case based surveillance results show 13.73% of the newly identified HIV positive men and women with uniform had recent infection. Recent conflict events in Ethiopia have also resulted in huge influx of youth into uniformed services, most of which remain unaddressed with HIV prevention services.

Population with special needs

People with disabilities, especially youth and adolescent girls and young women, have increased vulnerabilities to HIV and GBV. They also have decreased access to HIV prevention information and services and unaddressed SRH needs. This NSP will give special consideration

with regards to the manner by which HIV and SRH services for people with disabilities are made more accessible. It is recommended that studies are conducted to inform the national HIV response as to the special needs of these vulnerable populations.

Homeless and street-based children, adolescents and youth are those for whom it is not possible to live in a safe environment with a relative and who have no other safe alternative living arrangement. They live on the streets in urban areas. These populations have not been targeted with HIV response but are vulnerable to HIV/STI infection and GBV. The national surveys and surveillances have also missed these population groups and there is no well documented data to understand the size of this population, the HIV burden and access to HIV/SRH services; GBV and illicit drug use are also common (khat, smoking, alcohol, sniffing additive glues etc.).

Size Estimation of Key and Priority Populations

There are major data gaps in estimating the size of key and priority populations. The following estimates of the size of the various KPPs was done using existing scanty data and assumptions

TABLE 2. ESTIMATED SIZE OF KEY AND PRIORITY POPULATIONS.

KPP	HIV Prevalence	Size Estimation	
		2020	2027
Female Sex Workers	18.7% **[17]**	210,000	240,000
Prisoners	4.2% **[39]**	86,500	86,500
People who inject drugs	6% **[19]**	11,000	9,000
Widowed divorced men and women	11% Widowed and 2.9% Divorced **[5]**	956,475	1,114,931
Distance Drivers	4.6% **[16]**	65,000	85,000
Workers in Hot spot areas	1.3% of workers tested in 2021 were HIV positive **[40]**	840,000	1,050,000
HIV-negative partners of PLHIV	3.9% of PLHV partners tested in 2021 were HIV positive **[40]**	206,841	234,599
High-risk adolescent girls and young women	2.1% **[21]**	338,341	378,134

High-Risk Uniformed Services	1.2% **[20]**	TBD	TBD
People in humanitarian settings	Data not available*	TBD	TBD

There is an urgent need to carry out both quantitative and qualitative surveys for people in humanitarian settings and high-risk uniformed people.

3.2 Strategic interventions

During the period of 2023-2027, packages of combination HIV prevention will be delivered through differentiated service delivery platforms to the different key and priority populations. Table 3 summarizes the integrated packages of services along the continuum of care for key and priority populations.

TABLE 3. SUMMARY OF INTEGRATED SERVICE PACKAGES BY POPULATION GROUP, VENUE AND GEOGRAPHICAL PRIORITIZATION.

Population Group	**Integrated service package (what)**	**Venue/ service delivery platform (How)**	**Where**
Female sex workers (FSW)	• SBCC including peer-based and small group learning. • Condom promotion and distribution, including lubricants for FSWs. • Pre-exposure Prophylaxis (PrEP) • Post-exposure Prophylaxis (PEP) • Screening and treatment of STIs • SRH services • HIV testing (PITC, ICT, SNS, HIVST) • Screening/management for Hepatitis B and C • GBV services • ART • U=U messaging • VL testing • Economic empowerment	• Drop-in Centers (DICs) • KP-friendly clinics • Targeted outreach to streets, bars, hotels, brothel houses and FSWs group homes etc. including moonlight outreaches. • Peer service Providers (trained FSWs) • FP/SRH clinics for SRH, STIs, PrEP and PEP services • ART clinics • PMTCT clinics • Virtual safe spaces	300 high incidence woredas
People Who inject drugs (PWID)	• Medically assisted therapy (MAT) including opioid substitution therapy (OST) • Drug overdose treatment • Clean Needle and syringe through private pharmacies and social marketing • SBCC including peer-based and small group learning. • Condom promotion and distribution. • Pre-exposure Prophylaxis (PrEP) • Post-exposure Prophylaxis (PEP) • Screening and treatment of STIs • HIV testing (PITC, ICT, HIVST)	• Drop-in Centers (DICs) • Public and private health facility mental health Units addiction rehabilitation services • Peer service Providers (trained PWIDs) • KP-friendly clinics • FP/SRH clinics for SRH, STIs, PrEP and PEP services • ART clinics • PMTCT clinics • Virtual safe spaces	Addis Ababa and 4 towns

	• Screening/management for Hepatitis B and C • Hepatitis B vaccination for negative PWID • SRH services • GBV services • ART • U=U messaging • VL testing		
Prisoners	• SBCC including peer-based and small group learning. • HIV testing • Screening and treatment of STIs • Screening/management for Hepatitis B and C • TB screening • Screening and treatment of mental illness • Referral for ART • Condoms on release from prison	• Prison clinics HIV referrals to Health facility HIV services • Public health Facility – SRH, STIs, HIV testing, PMTCT, and ART services • Peer service providers (trained prisoners)	Correctional facilities across the country
High Risk AGYW	• SBCC (peer based, small group learning) • Condom promotion and distribution, i) • Screening and treatment of STIs • Psychosocial peer support • SRH services • HIV testing (ICT, SNS, HIVST) • Screening/management for Hepatitis B and C • GBV services • Post exposure prophylaxis (PEP) • ART (either on site or through referral) • U=U messaging • VL testing • Economic empowerment	• Adolescent friendly clinics/spaces in public health facilities • Drop-in Centers (DICs) • KP-friendly clinics • Targeted outreach to streets, hotels, caffes, broker houses and night schools etc. • Peer service Providers (trained HRAGYW) • FP/SRH clinics for SRH, STIs, PrEP and PEP services • Universities clinics HIV services • ART clinics • PMTCT clinics	300 high incidence woredas
Sero discordant partners	• SBCC including one to one counselling and group education. • Condoms • Pre-exposure Prophylaxis (PrEP) • Post-exposure Prophylaxis (PEP)	• Public health Facility – SRH, STIs, HIV testing, PMTCT, and ART services • PLHIV association peer services	Across the country
Widows/ers & separated	• SBCC (peer based, small group learning) • Condom promotion and distribution, including lubricants. • Post-exposure Prophylaxis (PEP) • Screening and treatment of STIs • SRH services • HIV testing (PITC, ICT, HIVST) • Screening/management for Hepatitis B and C • ART (either on site or through referral)	• Public health Facility – SRH, STIs, HIV testing, PMTCT, and ART services • Community outreach by community health workers • Peer service providers • Saving associations and groups	300 high incidence woredas

	• U=U messaging • VL testing • Economic empowerment		
Lond distance drivers	• SBCC (peer based, small group learning) • Condom promotion and distribution • Post-exposure Prophylaxis (PEP) • Screening and treatment of STIs • HIV testing (PITC, ICT, HIVST) • Screening/management for Hepatitis B and C • ART (either on site or through referral) • U=U messaging	• Public health facilities – SRH, STIs, HIV testing, and ART services • Outreach/mobile clinics at Truck stops run by CSOs.	The Ethio-Djibuti, Metema-Sudan, Addis-Mombassa and other long Road corridors
Workers in Hot spot areas	• SBCC including peer based small group learning. • Condom promotion and distribution • Screening and treatment of STIs • HIV testing (PITC, ICT, HIVST) • Post-exposure Prophylaxis (PEP) • ART • PMTCT • GBV services • Screening/management for Hepatitis B and C	• Public health facilities – SRH, STIs, HIV testing, and ART services • Workplace Clinics HIV services • Outreach HIV services at hot spot workplaces • Peer service providers (trained workers to serve as peer providers)	Hot spot work places
People in humanitarian settings	• SBCC • Condom promotion and distribution • HIV testing (PITC, ICT, HIVST) • Post-exposure Prophylaxis (PEP) • Screening and treatment of STIs • GBV services • Mental health screening • Screening/management for Hepatitis B and C • ART • PMTCT	• Refugee and IDP camp clinics HIV services • Public health Facility – SRH, STIs, HIV testing, PMTCT, and ART services • Targeted outreach to humanitarian settings • Mobile clinics at humanitarian settings	35 woredas affected by conflict
High risk uniformed persons	• SBCC including peer based small group learning • Condom promotion and distribution • VMMC • Screening and treatment of STIs • HIV testing (PITC, ICT, HIVST) • Post-exposure Prophylaxis (PEP) • Screening/management for Hepatitis B and C • GBV services • ART	• Ethiopian Defense Force Services Federal/Regional police camps clinics/hospitals HIV services • Public health Facility – SRH, STIs, HIV testing, PMTCT, and ART services • Peer providers in training camps and on mission (trained uniformed people to serve as PSPs)	Uniformed people training centers and camps
High risk HIV negative PBFW (in addition to	• SBCC including one to one counselling and group education. • HIV retesting based on risk during pregnancy. • PrEP	• Public health facilities MNCH services • Community outreach – house to house services by HEWs.	Across the country

PMTCT service package)	• Post-exposure Prophylaxis (PEP) • Condoms	• Community services by Mother support groups	

During the period of 2021-2027, combination HIV prevention interventions will be implemented in the three incidence levels of woredas (high, medium and low incidence woredas) as shown in Tables 4, 5 and 6.

TABLE 4. FOR HIGH PRIORITY WOREDAS (>0.03% HIV INCIDENCE, CONFLICT AFFECTED WOREDAS, AND HUMANITARIAN SETTINGS).

Prevention interventions	**Service Delivery models**
1. Intensive social behavioral change communication and demand creation 2. HIV education through Print and electronic mass and social media 3. Condom promotion and distribution, including lubricants for FSWs 4. Pre-exposure Prophylaxis (PrEP) 5. Post-exposure Prophylaxis (PEP) 6. Strengthen U=U 7. Voluntary medical male circumcision (VMMC) in selected geographic areas with high prevalence and low circumcision rate 8. Harm reduction including opioid substitution therapy 9. Screening and treatment of sexually transmitted infections 10. Blood safety and Infection prevention practices at health facilities 11. Prevention and management of Gender based violence. 12. Economic empowerment of women; especially high risk adolescents and young girls 13. Empowerment of communities' implementers and KPPs 14. Integration of HIV education into Intra- and extracurricular school, HLI , Uniformed People training Centers .	KPP friendly Clinics within health facilities Friendly services at the general HIV services Drop in centers (DIC) Adolescent and Youth (AY) friendly Clinic Peer service Providers Medication assisted therapy (MAT) Clinic -for PWID Virtual Safe Space (VSS) Integrated HIV services in prisons, work places, humanitarian settings, for uniformed people where they are deployed, and higher learning institutions Integrated into other health services (mental health, TB, Hepatitis, SRH) Targeted outreach program Social marketing (condoms, HIVST, STI packs), private sector and CSO service delivery outlets Health Post and community activities of Health extension workers HIV integrated into social and economic sectors (mainstreaming)

TABLE 5. FOR MEDIUM PRIORITY WOREDAS (HIV INCIDENCE OF 0.01-0.03%).

Prevention interventions	Service delivery models
1. Social Behavioral change communication and demand creation 2. HIV education through Print and electronic mass and social media 3. Condom promotion and distribution, 4. Pre-exposure Prophylaxis (PrEP) 5. Post-exposure Prophylaxis (PEP) 6. Strengthen U=U 7. Screening and treatment of sexually transmitted infections 8. Blood safety and Infection Prevention Practices at health facilities 9. Prevention of Gender based violence integrating with other sectors. 10. Integration of HIV education into Intra- and extracurricular school, HLI , Uniformed People training Centers	Friendly services at general HIV services Integrated HIV prevention services in prisons, workplace, and higher learning institution clinics Adolescent and Youth (AY) friendly Clinic HIV interventions integrated into other health services (mental health, TB, Hepatitis, SRH) Social marketing (condoms, HIVST, STI packs), private sector and CSO service delivery outlets HIV integrated in social and economic sector (mainstreaming) Youth Centers Health Post and community activities of Health extension program extension workers

TABLE 6. FOR LOW PRIORITY WOREDAS (HIV INCIDENCE <0.01%).

Prevention interventions	Service delivery models
1. Demand creation SBCC through HEP and CCC 2. SBCC through mass and social media 3. Condom promotion and distribution 4. Screening and treatment of sexually transmitted infections 5. Pre-exposure Prophylaxis (PrEP) 6. Post-exposure Prophylaxis (PEP) 7. Blood safety and Infection Prevention Practices at health facilities 8. Integration of HIV education into Intra- and extracurricular school, higher learning institutions, uniformed People training Centers.	Integrated HIV prevention services (Prison, workplace, and higher learning institution clinics) HIV interventions integrated into other health services (mental health, TB, Hepatitis, SRH) Social marketing (condoms, HIVST, STI packs), private sector and CSO service delivery outlets HIV integrated in social and economic sector (mainstreaming) Youth Center Health Post and community activities of Health extension program extension workers

3.2.1. Social behavioral change communication and demand creation

Expected Result 1: Proportion of key and priority populations reached with HIV prevention programs with a defined package of services increased to 95% by 2027.

Expected Result 2: Percentage of key and priority populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission increased to 60% by 2027.

Expected Result 3: Percentage of young women and men aged 15-24 who have had sexual intercourse before the age of 15 reduced from 9% for females and 1% males to 5% and 0.5% respectively by 2027.

Intensive behavioral change communication interventions (SBCC) will be implemented targeting key, priority populations in the 300 priority woredas. This will be mostly peer based and facilitated small group learning with at least 85% of the intended sessions implemented over two to three months by community level implementers.

Demand creation interventions will include any communication targeting KPPs, in-school and the general population through mass media (radio and television), mini-media, print media (leaflets, posters, magazines and newspaper), social media and interactive digital applications.

Creative social media and interactive applications will be optimized to reach large group of KPPs and general population (mainly youth) to create demand and raise awareness about HIV/SRH prevention, HIV testing, care and treatment, consolidated through integration and strengthening of community level implementers.

Integration of HIV prevention into the school curriculum will be implemented nationally targeting adolescents and youth in school. All schools across the country will implement curricular and extracurricular activities to educate adolescents and youth about HIV and safe sexual practices. Colleges and universities across the country will implement a credited course on HIV, SRH, life skills and gender as part of the first semester first year academic program. Schools will have extracurricular HIV prevention education and activities through mini-media and clubs. Training centers, colleges and universities of the uniformed people across the country will also implement HIV, SRH, life skills and gender education through intra/ extracurricular approaches including mini-media and clubs.

Disability friendly HIV education messages will be developed and distributed through various communication modalities including the mass media, electronic, print and social media platforms.

Street based children, adolescents and youth will be reached through CSOs with tailored and standardized HIV messages and educations.

3.2.2. Condom promotion and distribution

Expected Results 1: Percentage of adults aged 15–49 who used condoms during their last high risk sex act in the past 12 months increased from 20% for females and 51% males to 50% in females and 70% in males and 50% in females by 2027.

Expected Results 2: Result 2: Condom use among key and priority populations engaged in risky sexual behavior reached 90% by 2027

The ongoing and long standing issues in relation to condom procurement, distribution and use will be addressed as follows:

- Assess the bottlenecks for the implementation of the condom strategy and address identified challenges across all levels.
- Revitalize the condom program coordination platform which includes MOH leadership, EPSA, EFDA, MOH/HIV LEO, and development partners.
- Develop/revise condom procurement policy that balances price and quality of condoms.
- Ensure pre-shipment quality assessment of condoms under the procurement pipeline.
- Establish an option of innovative condom procurement mechanisms such as pooled procurement by procuring agencies (through outsourcing to experienced procuring organizations/partners).
- Provide support and incentives for private sector engagement in the condom market.
- Build the national condom program capacity, improve coordination and monitoring that includes training of program people at national and regional levels. Implement the condom strategy and guidelines. Ensure coordinated condom procurement and distribution for HIV and FP programs.
- Mobilize resources for free condoms and lubricants.
- Strengthen condom supplies management and tracking for real-time stock monitoring through integration of condom distribution into the LMIS. This requires establishing a system of condom distribution between health facilities which receive condom from the health sector and community implementers, in order to ensure access to free condom distribution for the KPP who may not come to Health facilities.
- Reduce maldistribution through real time monitoring and re-distribution mechanisms.
- Widely disseminate the condom strategy and translate into action.

The condom program will be implemented through a total market approach. Free condoms will be distributed targeting KPPs. The social marketing program and private sector will reach the general population and KPPs in all woredas across the country. Condom-compatible lubricants shall be distributed to FSWs through the social marketing and private sectors.

Condom demand creation will be the central theme of all social behavioral change communication interventions targeting key and priority populations as well as the general population.

Free condom distribution to key and priority populations will be conducted through DICs, peer service providers, door to door distributions at hot spot areas, health workers outreach programs, distribution at hotels and bars as well as hotspot workplaces, and truck stops. . CSOs will be engaged in the distribution of condom through non-traditional outlets.

3.2.3. Pre exposure Prophylaxis (PrEP)

Expected Result: 15 % of FSWs, PWID, high risk PBFW, and 75% of sero discordant couples (not attaining viral suppression), will receive oral PrEP at least once during the last 12 months by 2027

PrEP will be provided to people at substantial risk of acquiring HIV which in the Ethiopian context are female sex workers, HIV negative partners of people living with HIV (PLHIV) who are not virally suppressed, PWID and high-risk PBFW. Activities to increase PrEP among the sub-group of FSWs who are considered at greater risk of acquiring infection either because of non-consistent condom use or as victims of repeated gender-based violence will be undertaken through peer supporters and CSOs. Demand creation and service delivery will ensure that HIV negative partners of non-virally suppressed PLHIVs on ART are at substantial risk of infection, have the option to take PrEP.

PrEP will be integrated in ART, MNCH/PMTCT, FP, DICs, medical assisted treatment (MAT) and KPP friendly clinics. In addition, community-based PrEP initiation and refill will be introduced as per the WHO simplified guidelines for PrEP.

Additional eligibility criteria and target population for PrEP will be defined in the service delivery guidelines and can be updated as appropriate.

Repackaging of the oral PrEP will be done either through the suppliers or in country to minimize stigma and discrimination due to the similarity of PrEP and ART bottles.

Expanded PrEP options will be made available in addition to oral PrEP, such as long acting PrEP as these new options become more readily available and registered in the country.

3.2.4. Post-exposure prophylaxis (PEP)

PEP will be offered and initiated for people with medical and non-medical accidental exposure and for victims of rape. Non- medical exposures will include condom breakage, sex without a condom, exposure to body fluids with a person of known HIV Positive or unknown HIV status. The detailed eligibility criteria for PEP will be further described in the national comprehensive HIV Prevention, Care and Treatment guideline.

3.2.5. Harm reduction Services

Expected Result 1: Percentage of PWID benefiting from two or more harm reduction prevention interventions increased from 0% to 60% by 2027. Expected Result 2: Percentage of eligible PWID receiving Opioid Substitution Therapy increased from 0% to 30% by 2027

The revision process of this NSP has galvanized momentum towards getting this program off the ground. A multi-sectoral approach to address policy issues around developing a program for people with injecting drug and illicit drug use will be undertaken. A national coordination mechanism (TWG) on PWID will be strengthened. It will be led by the MOH and consider a membership including law enforcement bodies, Ministry of Justice (MoJ), United Nations Organization on Drugs and Crime, CSOs implementing PWID programs and other relevant sectors A national biobehavioral survey is currently underway to estimate the size of this population including HIV and Hepatitis prevalence, as well as behavioral characteristics in order to guide program development, and monitor progress. The MOH and partners will develop national PWID guidelines, providers training package, SOPs, and job aids. Advocacy will be conducted with MoJ, law enforcement bodies, and other relevant stakeholders.

This will lay the groundwork for a step-by-step introduction of harm reduction programs including opioid substitution therapy (OST). Combination HIV prevention/harm reduction services will be provided to PWID through community (DICs and peer service providers) in both public and private facility-based services. Initially, a pilot in Addis Ababa through CSOs' community-based services will provide harm reduction service. CSOs will train peers and providers on harm reduction (SBCC) and peer supporters (PSPs) will provide HIV prevention demand creation and linkage to HIV/OST services. The service package for PWID, delivered by CSOs through the DIC, will include condoms, HIV testing and treatment, STIs, and viral hepatitis screening, diagnosis and treatment, PrEP, and PEP In addition, Hepatitis B vaccination should be offered to HIV negative PWIDs. For those that are interested in rehabilitation, they will be referred to addiction centers for OST and detoxification. CSOs through their PSPs and PWID champions will use virtual safe spaces for demand creation. Public health facility KPP friendly clinics will target PWIDs in places where DICs are not available. The opioid substitution therapy will be integrated in these selected mental health services and Drop-in-Centers (DICs) through integrated efforts from governmental, non-governmental and civil society organizations. Selected government owned mental health centers will be capacitated to pilot and scale-up Opioid Substitution Therapy. OST will be provided by trained provider and there will be appropriate monitoring to avoid misuse.

Drugs used in substitution therapy and overdose management (methadone, buprenorphine, and naloxone) will be included in the national approved essential list of drugs.

In Ethiopia, the majority of PWID access clean needles and syringes from private pharmacies. Accordingly, mapping of pharmacies at PWID hotspot areas will be conducted and orientation

and training will be given for pharmacy experts for them to provide needles and syringes in the same way that these are supplied to the general population. They will also be made aware of nearby PWID programs and encourage linkage.

The program will implement prevention and demand reduction interventions that includes targeted SBCC targeting the public/community especially adolescents and youth through mass media and school-based systems on substance abuse.

Multi-sectoral collaboration will be used for supply reduction which includes controlling tracking and controlled disposal of illicit drugs confiscated at all country points of entry and circulation. There will be intensified effort to prevent the expansion, circulation, and use of illicit and injection drug use across the country involving the Ministry of Health, regulatory agencies, law enforcement sectors, the transport sector and others.

3.2.6. Voluntary medical male circumcision (VMMC)

Expected Result: % of males aged 15-49 circumcised at Gambella and selected woredas of SNNP region increased from 72% to 90% by 2027

Voluntary medical male circumcision will be implemented and integrated in primary health care facilities as part of minor procedures within the surgical services. targeting male infants and men 10-49 years in high HIV prevalence and low circumcision prevalence settings (Gambella region and selected woredas in SNNP). Primary health care facility staff will be trained to undertake routine male circumcision services at the health facilities. The health facilities will be equipped with required equipment and supplies.

SBCC strategy will be designed to address male circumcision (MC), which includes the use of community dialogue sessions, the engagement of influencers/tribal leaders and promotion through clients' testimony.

MC will be re-initiated in military setups (uniformed men), especially among new recruits (in selected sites where new recruits are enrolled). Addressing MC backlog through a campaign-based modality will be implemented.

Studies to assess MC overage in Gambella and an HIV prevalence survey in South-West region where the MC rate is low will be conducted. Civil society organizations will support community mobilization and demand creation at community level.

Regional health bureaus, woreda health offices and health facilities will lead and implement the services in collaboration with development partners. Civil society organizations will support community mobilization and demand creation at community level.

3.2.7. Screening and treatment of sexually transmitted infections

Expected result 1: Percent of people 15-49 years with STIs treated increased from 17% to 75% by 2027.

Expected result 2: Percent of FSWs with STIS treated increased from 64% to 95% by 2027.

Active screening and treatment of STIs using a syndromic approach will be provided to KPP particularly FSWs, high risk adolescent girls and young women and their partners integrated through community and health facility level service delivery outlets. Currently, a syndromic approach will be used to screen and treat STIs. There is a need to build the capacity of HCWs on syndromic management and guidelines and manuals will be distributed to health facilities for all population groups. Additionally, the manuals will improve the utilization of a STI risk scoring tool to improve the accuracy of vaginal discharge caused by STIs.

Etiologic diagnosis and management of STIs will be introduced and scaled up through phased and mixed approaches via public-private facilities that have the diagnostic capacity. The national STI treatment guideline will be revised based on global recommendations and any emerging information from national surveys and surveillance, including drug resistance data.

STI diagnosis will also be scaled up through community (DICs) and facility (KP friendly clinics) platforms. STI screening, diagnosis and treatment will be strengthened at youth development centers and prison settings.

STIs program management will be strengthened with the assignment of focal persons at all levels including health facilities. Resources will be made available to provide free STIs treatment kits for KPPs, the development and distribution of communication materials, job aids and provider training.

3.2.8. Economic empowerment of vulnerable women

Economic empowerment interventions (job creation, vocational skills training and income generating schemes) will target disadvantaged women, especially adolescent girls and young women, in the 300 priority woredas as a structural HIV prevention intervention, integrated with economic empowerment initiatives of other key sectors.

HIV risk and status will be integrated into the selection criteria of beneficiaries by job creation bureaus (vulnerable women, FSW, high risk AGYWs). There will be advocacy for the inclusion of vulnerable groups (KPPs) and vulnerable youth into transformative economic empowerment schemes, which are led by the private sector in collaboration with relevant government sectors (job creation) as an approach to developing Public Private Partnerships (PPP).

The scope of Community Care Coalitions (3C) will be expanded to address economic empowerment of vulnerable women and girls, at selected hotspot areas, and economic strengthening programs through KP friendly clinics and DICs will also be strengthened.

3.3 Mapping and identification of KPPs

Key to designing targeted and effective programs is conducting mapping, identification and size estimation of KPPs at woreda level in each of the 300 high incidence woredas. The objective of the mapping is to identify and locate the areas for interventions where key and priority populations concentrate (live or work), estimate the size of KPPs and ensure HIV services are available and accessible in that woreda. The mapping and size estimation will be used for targeted HIV prevention, care and treatment program planning and implementation of community and facility-based interventions.

The MOH, in collaboration with partners will develop specific protocols and SOPs, and tools for mapping and identification of KPPs that will guide all actors at woreda level. Regional and woreda program staff and CSOs will be trained on the SoPs and tools.

Female sex workers: Woreda health offices in collaboration with CSOs will lead mapping of FSWs. The mapping will locate the bars, hotels and night clubs, local drinking houses and streets and houses of FSWs. The mapping exercise will estimate the size of FSWs in the areas. In addition, web-based platforms that connect FSWs and their clients online in big cities should be identified and targeted.

PWID: Mapping and size estimation of PWID will be conducted by woreda health offices in collaboration with the CSOs and peer educators. The mapping exercise will employ a seed referral method to identify and map areas where PWID collect and use drugs. The mapping exercise will also identify PWID services available in the area.

Prisoners: Woreda health offices, in collaboration with CSOs and prisons will determine average number of prisoners in each of the correction facilities disaggregated by gender. In addition, the mapping will include data on availability of combination HIV prevention interventions for each setting.

High risk adolescent girls and young women (HRAGYW): Woreda health offices, in collaboration with CSOs, HEWs, schools/universities, and peers will map of high-risk adolescent girls. Mapping will be targeted to high-risk higher learning institution students, domestic workers, waitresses and cleaners at café and hotels and girls on street carrying out petty trade and/or living on street. Mapping of these population groups should focus on areas where there is transactional sex and include night schools, broker houses and other hotspots.

MOH in collaboration with development partners will develop and validate an android based digital self-risk screening tool for AGYW. The tool will score risk and link high risk AGYW to available services.

Widowed or divorced women: Woreda health office in collaboration with CSOs and health extension workers will map households in the community where high risk widowed and divorced women live. This mapping will help identify those widowed or divorced women who are sexually active, have multiple sexual partners, are involved in petty trade and selling local

drinks. The mapping should have clusters of houses by small geographic localities such as 'gotte', villages and kebeles.

Workplace Hotspot areas: Woreda health offices in collaboration with CSOs and woreda administrations will map hot spot work places – housing, road, dam or other construction projects, big farms (coffee, sugar, fruit, sesame etc.), industrial parks and other mega projects located in the woreda that attract large number of young workers (> 500 staff), where there are FSWs around the camps or work places and HIV prevalence is high (>3%) based on service records. The mapping will also describe the availability of combination HIV prevention interventions in each hot spot workplace.

Transport routes and long distance drivers: CSOs will identify and map high risk transport corridors and truck stops. CSOs will map the hotels where distance drivers stay overnight. CSOs will estimate size and design interventions based on the mapping and size estimation.

HIV negative partners of PLHIV: CSOs/PLHIV associations in collaboration with ART clinics and PLHIV associations to map, will estimate the size and identify HIV negative partners of PLHIV.

Periodic surveys will be conducted for comprehensive KPPs size estimation and mapping.

3.4 KPPs Service Delivery Models

In order to reach key and priority populations, a mix of client centered service delivery models will include the following:

Key and Priority Population friendly clinics:

These are HIV/SRH clinics within public health facilities which provide one stop shopping HIV/SRH services for key and priority populations. There will be at least one KPP friendly clinic in each of the 300 woredas. There will be minimum standards for the KPP clinic and defined service packages (for specific KPPs) to ensure the quality and friendliness of services.

The KPP friendly clinics will provide comprehensive services (SBCC, counseling, condom, HIV testing, PrEP, STIs screening and treatment, family planning and referral linkages for treatment and PMTCT). The KPP friendly clinic will integrate and serve FSWs, high risk AGYW, PWID as well as other KPPs based on their preference. KPP clinics serving PWIDs will have additional mental health professional support and should be closely linked with the nearby addiction rehabilitation treatment centers.

There is a need to strengthen the infrastructure, human-resources, and capacity of the KPP friendly clinics and staffing. In order to offer conducive services for KPPs, the KPP friendly clinic will be open during off working hours, weekends and linked with peer service providers and community mobilizers to create demand and mobilize KPP to attend for services. Bi-directional referrals between communities and CSO and CBOs working in the community will be strengthened.

HIV services at Health Facilities

The HIV service delivery outlets of health facilities will be made friendly for KPPs through training of service providers to respond for needs of KPP who prefer to use the general HIV service delivery outlets. At least one health facility in the 300 priority woredas as well as across the medium incidence woredas will have friendly services delivered through the general HIV service delivery outlets. Health facilities will use risk screening tools at all outpatient and inpatient outlets to identify KPPs and provide or link them to combination HIV prevention services. Referral linkages with the peer service providers, community level services and KPP friendly clinics will be strengthened. A Zero stigma policy will be implemented in health facilities providing general HIV service delivery.

Drop-in-Centers (DICs)

CSO-led DICs will provide comprehensive behavioral, bio-medical and structural interventions to key and priority populations especially FSWs, high risk AGYW and PWID at hot spot areas of selected towns. The DICs will be implemented by CSOs in partnership with government and development partners. DICs will have referral linkages to KPP-friendly health facilities. DICs will provide comprehensive HIV/SRH services (SBCC, counseling, condom, HIV testing, PrEP, STIs screening and treatment, PEP, family planning and provision of or referral linkage for treatment and PMTCT) and have a set of minimum standards, so as to provide integrated services to FSWs, PWID, high-risk AGYW. In addition, DICs will provide or link to social services available in the community or by development partners.

MOH and other development partners should increase the capacity of the CSOs working with KPPs to enable them to lead HIV community programs.

Targeted outreach program:

DICs and KPP friendly clinics will have regular outreach programs to reach KPPs at nearby hotspots, schools, prisons, workplaces, and humanitarian settings. Targeted outreach HIV services will be led by a health worker, peer service providers and community mobilizers. Civil society organizations and development partners will lead outreach services. KPP targeted outreach programs will be implemented in all the 300 priority woredas.

Peer Service Providers (PSP) program:

CSOs will recruit, train, assign and manage PSPs linked with DICs and KPP friendly clinics. There will be at least 30 trained peer service providers per woreda working full time with a monthly standard incentive package in all the 300 priority woredas to standardize and enhance the community-based response.

PSPs will deliver a standard package of services (SBBC especially peer education, condom, HIV self-testing, information and referral for PrEP and referral linkage for other HIV prevention and treatment services). The PSPs will support health facilities, KPP friendly clinics and DICs with adherence support and tracing of lost to follow ups.

Mentor based programs high risk AGYW and High risk divorced and widowed women.

Mentor-based HIV prevention program will be introduced targeting high-risk AGYW and high risk widowed and divorced women in the 300 priority woredas and 50 higher learning

institutions. The mentors will deliver package of combination prevention interventions through one to one and small group settings to high risk AGYW, and high risk divorced widowed women. MoH will develop mentor-based high-risk widowed and divorced women prevention program service package, manual, and guidelines. MoH in collaboration with CSOs and partners will train mentors on the mentor-based program. CSOs will recruit deploy, and monitor performance of mentors and mentor-based services for high-risk AGYW and widowed and divorced women. Mentors will deliver one-to-one and small group education, counseling, life skills, and services including condom, PEP, HIVST, STIs, FP/SRH and referral linkage.

Social marketing and private sector services delivery:

Condoms will be distributed through social marketing and private sector outlets (pharmacies, shops, hotels and bars, peer service providers) targeting the general population in all woredas. Lubricants targeting FSWs will be distributed through pharmacie, DICs and private facilities. Private pharmacies in PWID hot spot areas will be trained and engaged in counseling, and linkage of PWID to harm redaction services at MAT clinics, DICs, KP clinics, private and public facility HIV services.

Integrated HIV services for Prisoners:

Health facilities in prisons and juvenile correctional centers will have integrated HIV prevention services. Prison HIV and health services will be strengthened to deliver HIV and health services including general medical examination, HIV counseling and testing, TB screening, STI screening, and treatment, viral hepatitis screening, diagnosis and treatment and Hepatitis B vaccination for HIV positive prisoners, and screening of other communicable and non-communicable diseases. There will be provision for treatment referral as indicated. In addition, condoms shall be provided on release from prisons. The following will be interventions to strengthen integrated HIV services in prisons.

- Conduct an assessment of the HIV service delivery capacity of prison facilities.
- Conduct federal and regional level advocacy workshops with health office, prison administration, and CSOs.
- Develop national health service delivery standards for prisons.
- Train prison administration focal persons on the health service delivery standards
- Train service providers from federal and regional prisons on comprehensive HIV prevention, care and treatment
- Provide communication and demand creation materials for federal and regional prisons including quarterly bulletins that entertain and educate prisoners in the 126 prison facilities. Print and distribute bulletins quarterly.
- Provide commodities, supplies, job aids and reporting forms for prison facilities to conduct STIs, HIV testing, treatment, and referral linkage to ART, TB screening and treatment, viral hepatitis screening, treatment and vaccination, and mental health screening and management.
- Conduct monitoring supervision and review meetings with prison facilities.

Integrated HIV services at hot spot workplaces:

There will be a national assessment to map hot spot workplaces across the country. All hot spot workplaces with a total of 500 or more staff, shall have at least a clinic run by the employer that provides integrated health and HIV services. The package of services includes SBCC (peer-based and mini-media in multiple languages), condoms, GBV prevention, HIV counselling and testing, STI screening and treatment, screening for TB, hepatitis screening, diagnosis, and referral/treatment and SRH services. There will be opportunities to build upon to experiences of the malaria program to expand prevention and screening services for both TB and HIV in seasonal hotspots attracting significant numbers of migrant labor.

Workplaces/projects will finance and manage integrated HIV and health services at workplaces. Any opportunities for synergistic programs with the malaria and TB programs will be explored. CSOs, RHB/Woreda health offices and development partners will support and build capacity of the workplaces HIV programs in hot spot workplaces. Advocacy with relevant sectors, including private employers, will be strengthened and an accountability policy framework will be put in place.

The following will be interventions to strengthen integration of combination HIV prevention at hot spot workplaces.

- Conduct assessment of hotspot workplaces HIV service delivery capacity
- Develop integrated health service standards for workplace HIV/SRH and health services.
- Conduct advocacy workshops at the national and regional level with employers and other stakeholders,
- Update the policy for workplace HIV programs that enforce employers to provide comprehensive HIV prevention services,
- Train service providers from hotspot workplaces
- Provide equipment, commodities, supplies and drugs for HIV/SRH and TB services including condom, HIV testing and STIs treatment for hotspot workplaces clinics,

Integrated HIV services for uninformed people

Uniformed people under the Ethiopian Defense forces and federal and regional police will be provided HIV services integrated with their health care facilities MOH will provide technical support, HIV/AIDS logistics, commodities, and supplies to health care services of National Defense Forces and the Federal Police. Partners and donors will provide technical and financial support for Ethiopian Defense forces and Federal/regional police. The Uniformed Services HIV program will focus on high-risk groups that include new recruits and those deployed away from home. Combination HIV prevention includes SBCC, condoms, HIV and hepatitis counseling and testing, VMMC, STI screening diagnosis and treatment, PEP, HIV, and hepatitis treatment services.

There will be integration of HIV/AIDS, gender, human rights and health education in the training curriculum for uniformed people.

Integrated HIV services in Humanitarian settings

People in humanitarian settings include people in areas affected by drought, war and conflict, and other natural and man-made disasters who may have had to move from their regular place of residence.

Leadership and coordination of HIV response for people in humanitarian settings will be strengthened with the development of a policy framework, guidelines, training packages, SOPs and job aids on HIV/GBV/VH prevention, care, support, and treatment.

The MOH to be represented in the national emergency taskforces at EPHI and other emergency coordination structures. HIV will be mainstreamed in the national emergency Preparedness and response plan. Emergency Preparedness and response teams will be established and trained on HIV response across regions/humanitarian settings.

The impact of the conflict and war on the HIV program in the affected areas will be assessed. MOH collaboration with war affected regions and partners will develop a rapid response plan for rapid scale-up and restoration of HIV services in war-affected areas. The capacity of the health facilities in or near humanitarian settings including IDP camps, will be built with human resources, training, equipment, supplies, and drugs to provide comprehensive HIV/SRH/GBV services. In addition, community outreach and peer service providers programs will be strengthened, and the emergency response platforms will be used to deliver HIV/SRH/SGBV services.

Integrated HIV services in higher learning institutions (HLI)

HIV services at private and public higher learning institutions will be strengthened to provide combination HIV prevention services to young people particularly high risk AGYW. The following interventions will be conducted to strengthen integration:

- Conduct assessment of HIV services and curricular activities in public and private HLI.
- Conduct IBBS among higher learning institution students.
- Conduct high-level advocacy workshops with the leadership of public and private HLI. to strengthen HIV services in clinics and curricular integration.
- Conduct training HIV focal persons on HIV mainstreaming service packages and guidelines.
- Conduct training of health service providers from higher learning institutions clinics on the national comprehensive HIV prevention, care, and treatment guidelines.
- Provide a comprehensive package of HIV prevention care and treatment services at the university clinics.
- Conduct curricular review and integration of the 2-credit hour HIV/SRH/Life skills course for freshman students.
- Develop mentor based high risk AGYW discussion session guide.
- Develop mentor's service package and SOP that defines their roles and package of services.
- Recruit, train, and deploy three mentors (female fresh university graduates) of high-risk AGYW per HLI to screen, identify, and deliver a package of services linked with the student clinics for high-risk AGYW in the public and private HLI.
- Establish condom distribution outlets including condom depots.
- Provide commodities and supplies including condoms for public and private HLI. .

HIV services integrated with Social and economic sector (HIV Mainstreaming):

MOH will identify strategic sectors for mainstreaming. The MOH will develop a Mainstreaming Directive and get approval of the Ministry of Justice. MOH will conduct capacity assessment and high-level advocacy with strategic sectors. MOH will develop mainstreaming service packages and implementation guidelines and build capacity of strategic sectors to implement HIV mainstreaming.

The strategic sectors will allocate up to 0.2% of their annual budget to HIV prevention programs and implement HIV prevention interventions targeting KPPs and the general population. The HIV prevention interventions include SBCC, condom and HIV testing services; sectors will assign staff and facilities to implement these HIV prevention interventions. The strategic sectors can collaborate with civil society organizations and the private sector to implement HIV prevention interventions through social contracting arrangements.

Integration of HIV in health facility and community level health services

Strengthening integration of comprehensive HIV service in the different HIV service delivery outlets at health facility and community levels includes development of implementation guidelines for integration of HIV services at health facility and community level, training of program people on the integration guidelines, orientation of providers at service delivery outlets and monitoring of implementation of service integration.

- Strengthen integration of HIV risk screening, HIV testing, PrEP, PEP, Hepatitis, STIs, and GBV diagnosis and treatment in FP/MCH clinics.
- Strengthen integration of HIV risk screening, HIV testing, STIs, and GBV diagnosis and treatment in outpatient and inpatient services.
- Strengthen integration of HIV risk screening, HIV testing, PrEP, PEP, Hepatitis, STIs, and GBV diagnosis and treatment in adolescents and youth SRH clinics.
- Strengthen integration of FP, Cervical cancer PrEP, PEP, Hepatitis, STIs, mental health and GBV diagnosis and treatment, non-communicable disease (NCD) screening in the ART clinic
- Strengthen integration of HIV testing, PrEP, PEP, Hepatitis, STIs, mental health and GBV diagnosis and treatment, FP and SRH in outreach and community services for KPPs.

3.5 General Population Interventions and service delivery models

Expected Result: Percentage of women and men aged 15-49 who both correctly identify ways of preventing sexual transmission of HIV and who reject major misconceptions about HIV transmission increased from 20% for females and 38% males currently, to at least 60% for males and 50% for females respectively by 2027.

Although the focus of targeted prevention activities in the NSP is mainly on KPPs and the 300 high incidence woredas, targeted HIV prevention services will also be available in the medium incidence woredas, integrated into existing service delivery models. These include general HIV service outlets in health facilities, through health extension workers and community care coalition programs, mass and social media, as well as school HIV programs.

In the low HIV burden woredas, basic HIV prevention interventions will be implemented targeting the general population. Such interventions will be delivered through health facilities and community outlets by health and non-health sectors, and community and civil society actors. These HIV prevention interventions targeting general population include:

- Social Behavioral change communication and demand creation through mass media (national and local/regional public and private radio and television).
- Curricular and extracurricular activities in schools (Mini-media, clubs) supported through the Ministry of Education including the use of available school electronic platforms (radio and plasma screen).
- Use of risk screening tools at higher learning institutions and high schools to identify high risk AGYW and provide intensive behavioral change communication and condom as well referral linkage to health facilities.
- Revitalize and scale integration of a credited HIV/SRH/gender/life skill course in the higher learning institutions and revise the high schools' curricular HIV content to make it interactive and skills focused.
- Scale-up of Community Care Coalitions and allocation of funds to HIV prevention especially SBCC.
- Material development both print and audio visual as well as the use of social media and interactive digital applications.
- Integrate HIV program into the health extension program performance monitoring scorecard.
- Strengthen targeted HIV mainstreaming in key sectors.
- Use national events to create demand for combination HIV prevention services among the general population.
- Education through the involvement of inter-religious council and religious institutions
- Condom distribution mainly through social marketing and private sector while free condoms are distributed to those who cannot afford to buy.
- HIV testing at public and private health facilities on fee bases.
- PEP services at public and private health facilities across the country
- STIs diagnosis and treatment at public and private health facilities across the country
- PMTCT services for all pregnant women through public and private health facilities across the country

Chapter 4 Triple elimination of MTCT of HIV, Syphilis and Hepatitis B

Strategic Objective 2: Attain Triple elimination of MTCT of HIV, Syphilis and Hepatitis B Virus by 2027

4.1 Context

Reaching elimination of mother to child transmission of HIV, Syphilis and Hepatitis B Virus within the Ethiopian context presents significant challenges outlined in section 2.3 above. Several key changes have recently been made in order to improve MTCT outcomes. The DTG based regimen was introduced in 2019 as a preferred regimen for pregnant and breast-feeding women (PBFW) and women of childbearing age. The country has also adopted the provision of enhanced postnatal prophylaxis (NVP+AZT) for the first 6 weeks and NVP alone for the following 6 weeks for all HIV Exposed Infants. The Government of Ethiopia has endorsed and is committed to achieving the triple elimination of MTCT of HIV, HBV, and syphilis by 2027.

4.2 Strategic Interventions and Service delivery models

Expected result 1: Mother-to-child transmission of HIV during pregnancy, childbirth and breastfeeding reduced to less than 5% by 2027.

Expected result 2: Percentage of PBFW living with HIV who are on ART increased from 85% to 95% by 2027.

Expected result 3: At least 98% of PBFW living with HIV are virally suppressed at labor and delivery by 2027.

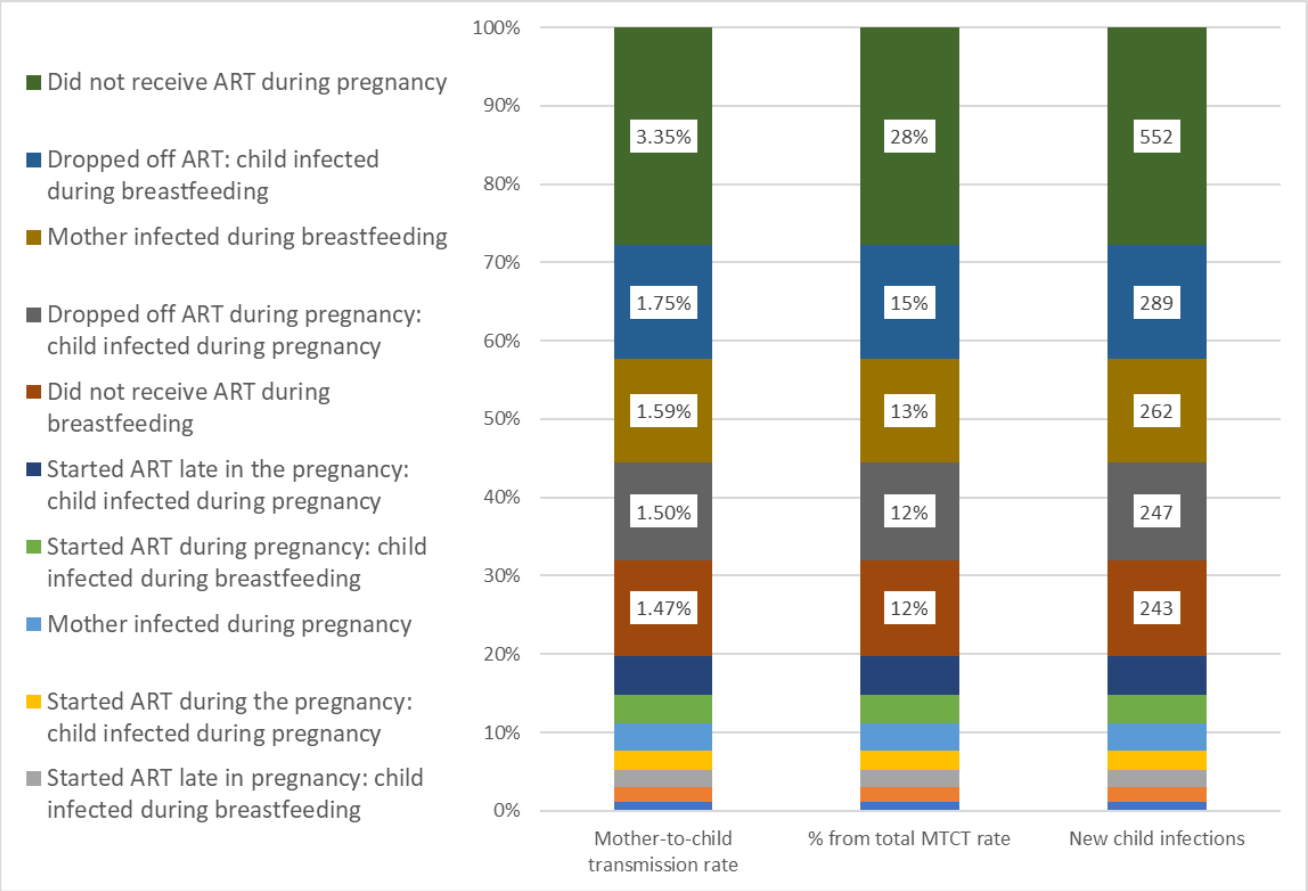
Expected Result 4: Percentage of infants born to women living with HIV receiving a virological test for HIV within 2 months (and 12 months) of birth increased from 62% to 95% by 2027

Triple elimination of MTCT of HIV, syphilis and hepatitis B requires early screening and the initiation of relevant treatment both among pregnant women and their partners. The successful prevention of MTCT of HIV depends not only on primary prevention of HIV infection among girls and women of childbearing age, but on detecting maternal infection early, preferably before pregnancy, and initiating and sustaining lifelong ART treatment with viral load suppression, whilst also providing prevention and care programs for male partners. Routine antenatal screening for syphilis and hepatitis B similarly provides opportunities for treatment of both conditions. Strengthening the health system to address vertical transmission of HIV, syphilis and HBV serves also to improve a broad range of MCH services and outcomes. All infants and young children exposed to HIV, Syphilis and/or HBV should be provided with prevention and care services, including access to early screening, appropriate prophylaxis, routine immunization, follow-up and treatment where indicated.

In line with global guidance service standards, the PMTCT program should include human rights in relation to equitable access to SRH services and ANC; pregnant women's autonomy in decision-making; informed consent for HIV, syphilis and HBV testing and treatment; respect for privacy and confidentiality; adequately addressing violence, abuse and coercive practices; and ensuring meaningful participation of recipients of care in the design and delivery of programs.

As Ethiopia attempts to move towards the elimination of vertical transmission of HIV, the key is to examine where, along the continuum of pregnancy and breast-feeding infection and transmission is taking pace. Women tend to attend ANC late in their pregnancy, thus detection of HIV infection prior to pregnancy and the initiation of ART is the most effective means of preventing MTCT. SPECTRUM estimates show that 80% of the estimated 1,985 HIV infections in infants arose from women who never started ART during pregnancy and breast feeding, or who started ART late or dropped off ART during pregnancy or in mothers who got infected during breast feeding. Approximately half of the current 12% MTCT rate occurs during the breast-feeding period. (See Fig 21). This data indicates points of potential intervention to prevent MTCT among PBFW. Health workers must be adequately trained in comprehensive ART services and there must be enhanced implementation of continuous quality improvement and mentorship.

FIGURE 5. PMTCT CASCADE SPECTRUM 2022.



The following strategies will be employed in PMTCT services, and offered in over 2,865 health facilities at MNCH clinics nationwide:

- Scale up primary prevention for PBFW through improved health literacy.
- Utilize HIVST to reach PBFW at the community level through the HEP and MSGs
- Encourage the early initiation of ANC through demand creation through the HEP
- Use a validated risk screening tool to identify to identify high risk HIV negative PBFW and provide condoms, link to PrEP and repeat HIV testing.
- Enhance PrEP provision for sero-discordant partners at MNCH.
- Strengthen family planning services among HIV positive women of reproductive age.
- Strengthen the roll out Dual HIV and syphilis testing.
- Universal screening of pregnant women for HIV, Syphilis, and HBV
- Strengthen couple counseling and disclosure.
- Strengthen index case testing in the PMTCT setting through self-testing for partner and biological children greater than 2 years of age.
- Strengthen provision of optimized ART regimen for PBFW and linkage to initiation of syphilis and hepatitis B prophylaxis/treatments
- Linkage and retention support for HIV positive pregnant and breastfeeding women (from both PMTCT only sites, ART sites and community)
- Enhance community led services and greater involvement of recipients of care to design person centered differentiated services.
- Strengthen and sustain Mothers Support Groups (MSG) to support the adherence and retention in care at least at the high burden geographic areas.
- Strengthen and scale up POC viral load testing for pregnant and lactating mothers.
- Strengthen facility-community collaboration to improve the PMTCT continuum of care, promote greater male involvement, partner testing, and disclosure.
- Strengthen and scale up POC testing for EID for HEI; Networking POC EID health facilities with other PMTCT sites, strengthen GenXpert connectivity, consider other POC EID and VL platforms in remote facilities, and Improve sample referral transport and the timely return of results.
- Scale-up HBV Birth dose vaccination for all infants as part of the national immunization program.
- Strengthen the referral network between PMTCT and ART sites (linking HIV + mothers to nearby ART clinics after completion of lactation and infants for ART initiation)
- Provision of enhanced dual (AZT+NVP) and cotrimoxazole prophylaxis for all HEI for improved outcome.
- Strengthen follow-up PMTCT maternal and HEI cohort to monitor retention and outcome.
- Reinforce nutritional support for eligible HIV + pregnant, lactating women and HEI.
- Transition of the PMTCT program data from paper based to an automated electronic system such as EMR-ART.
- Enhance utilization of PMTCT dashboard to review performance quarterly.

- Encourage greater involvement of ART/PMTCT services in private health facilities.
- Tailor maternal and HEI indicators disaggregation in DHIS2 and adjust denominators per the global guidance.
- Undertake periodic ANC sentinel surveillance and evaluation of PMTCT program.

As the MTCT improves over the course of this NSP, the country will apply for validation for the path-to-elimination. The already established Validation committee will work to ensure there is timely application and validation. Details on the roll out/expansion for the national EMTCT of HIV, syphilis and HBV will be addressed through the EMTCT strategic plan.

Early Infant Diagnosis and Management of HIV exposed Infants

In 2023, there are 27 PCR machines working but all are not working to capacity. There are 498 GenXpert machines with the potential to expand their diagnostic platforms to include EID. Conventional PCR machines have the capacity to test for HPV, viral load, EID and Hepatitis B and C on a batch basis thereby having a longer turnaround time (TAT) for results. Currently there are 181 GenXpert machines carrying out both TB and early infant diagnosis and 50 machines who additionally carry out viral load for PBFW and those patients on ART with suspected high viral loads. For sites without these diagnostic capacities, samples are transported either through the Ethiopian postal service or other alternate sample mechanisms. This leads to delays in getting results back to clients. There are ongoing needs for network optimization and to better understand decreasing the TAT for results.

The protocol for enhanced postnatal prophylaxis for HEI was not routinely followed in all facilities; of those HEI only 53% received ARV prophylaxis in 2022/23. There is a need to monitor improved ARV prophylaxis for HEI.

In this NSP period the following will be implemented:

- Expansion of EID services both through multiplex platforms and greater access to new POC technologies will result in an EID coverage of 95%. Consideration will be given to other WHO EID diagnostic POC platforms.
- Improve integrated sample referral transport and timely return of results.
- Ensure HIV exposed infants receive dual Prophylaxis (AZT+NVP) and cotrimoxazole syrup.
- Ensure linkage of mother-infant pairs to care and treatment
- Adjustments in DHIS2 to track mother-baby pairs on ART treatment.

Chapter 5 HIV Testing

Strategic Objective 3: Enhance HIV case finding to attain 95% of PLHIV knowing their HIV status and linked to care by 2027.

Expected Result 1: Percentage of women and men aged 15+ years living with HIV who know their HIV status increased from 87% to 95% by 2027.

Expected Result 2: Percentage of HIV-positive results among the total HIV tests performed for case finding during the reporting period increased from 0.9% to at least 2% by 2027.

Expected result 3: >95% of all people with newly diagnosed HIV infection will be linked to and initiated on antiretroviral treatment by 2027.

5.1 Context

HIV testing services will be available at both facility and community testing sites. In 2022 (EFY 2014) a total of 7.2 million HIV tests were conducted with an overall low-test yield of 0.5%. The low yield is partly due to universal testing of pregnant women which is in line with the national guideline (testing for prevention). Annually an estimated 3.5 million pregnancies are expected in the country.

Current data indicates that the primary hurdle to achieving the 3 95's remains in case finding. High yield case finding modalities such as index case testing, social network strategy, risk-based provider-initiated testing and counseling (PITC) using a risk screening tool, and HIV self-testing (HIVST) have been adopted and implemented. Despite these efforts, there are notable quality and implementation gaps to optimize case finding.

Testing sites are available in health facilities and community settings. Adult, pediatrics, and adolescent HIV risk screening tools (HRST) are in place with variable use but there is a need to validate these HRSTs. Validation will help ensure whether the tools are appropriate in identifying with adequate sensitivity and specificity, those who need HIV testing. The free and targeted HIV testing services will prioritize KPPs, children, at risk adolescent girls and young women (AGYW) and pregnant women.

In addition to free HTS services at SDPs within health facilities using a HRST, HIV testing services will also be available to the general public on a fee basis through voluntary counseling and testing service outlets at public and private facilities. This will be implemented by integrating the HIV test kits into the revolving drug fund (RDF) modality of the public facilities and allowing private facilities to procure HIV test kits. SOPs will be developed to support a standardized national implementation for the fee-based HIV testing.

HIV self-testing (HIVST) will be expanded through community based distributions at hotspots areas and workplaces, humanitarian settings and through CSOs, DICs and peer service providers, social marketing outlets, and through health facilities integrated distribution (OPDs, ART, KPP friendly clinics and FP clinics and ANC).

5.2 Population and Geographic Priorities

To optimize HIV case finding, geographic and population prioritization, approaches will be implemented using high yield testing modalities such as index case testing, social network strategy (SNS) for KPPs and risk-based testing among adults, and children. Emphasis will be given to AGYW. Testing will also occur as follow-up for PrEP, those undergoing VMMC, and those attending TB and STIs clinics. Testing for prevention will be implemented for all pregnant women. A risk screening tool will be applied to identify and re-test high risk PBFW. For those eligible HIV negative populations, linkage will be made to PrEP where appropriate.

The priority for HIV testing will be KPPs key and priority populations in the 300 high burden woredas. These woredas will be provided with ongoing, intensive site support, supervision, and monitoring through establishment of town/woreda/regional teams. Vigorous optimization in the rest of the country will be based on use of a risk screening tool both for adults and children administered at various entry points within health facilities.

5.3 Case finding strategic interventions.

HIV testing and case finding will use the following interventions:

Index case testing: Index case testing will be offered to all index cases to elicit and test sexual partners and biological children of PLHIV. This will be supported with ongoing chart reviews to update the family tree to offer ICT service for new family members. ICT minimum requirements will be fulfilled by all ICT services providing health facilities nationally. ICT services will be utilized as an opportunity to engage and re-engage known positive contacts of index cases who have not started or might have discontinued ART.

Urban health facilities will utilize targeted community outreach by integrating with urban health extension workers to find and link elicited contacts of index cases. Moreover, inter-facility and facility-community collaboration with community implementing partners will be used to enhance case finding through ICT service provision at community level. Client level referral tracking, linkage and audit will be conducted in Catchment Area Meetings (CAMs) to minimize missed opportunities in testing of elicited contacts.

A system for cross-jurisdiction contact tracing and referral for ICT will be established to address contacts who reside in a different locality from the index case.

Social Network Strategy (SNS) is a recruitment strategy using social network connections to locate individuals at the highest risk for HIV who are unaware of their HIV status and provide HIV counseling, testing, and referral services. SNS can be particularly useful in finding key and

priority populations that have limited access to HIV testing. These target populations will include FSWs, PWIDs, and high risk AGYW. SNS will be scaled up in the KP-friendly clinics and community DICs in the 300 woredas using a peer led approach near KPP hotspots. Peer service providers will ensure linkage to health facilities for those testing positive. Regular monitoring, quality control and auditing will be conducted to minimize repeat testers.

Provider initiated testing and counseling (PITC) is offered in all health facilities at various service entry points (e.g., inpatient, outpatient, TB and STI clinics, malnutrition and postnatal clinics), based on the results of application of the risk screening tool. The risk screening tools currently in use for adults, children and adolescents will be validated. Moreover, an assessment will be conducted to determine the implementation challenges of the risk screening tools utilization. Risk based PITC will be strengthened through creating awareness and ownership and enforcing accountability as part of routine patient care in service delivery points.

Voluntary counseling and testing (VCT): VCT services, including pre-marital testing will be available on fee basis to the general population at public and private health facilities. This will be implemented by integrating the HIV test kits into the revolving drug fund (RDF) of public facilities and allowing private facilities to procure HIV test kits. SOPs will be developed to support a standardized national implementation and financial aspects. As demand creation activities are strengthened and HIVST is scaled up, clients who learn their risk behavior and clients who self-tested and need confirmatory testing may opt to come to the VCT clinics. Standardized implementation will be guided by SOP that will be developed through engagement of all stakeholders.

HIV Self-testing: Self-testing will be available through free, social and private market approaches to expand access. HIVST will be distributed without charge for KPPs at health facility and in community settings. Self-testing will be scaled up at community level through outreach to hot pot areas and workplaces, DICs, and humanitarian settings. In addition, community-based distribution of HIVST will be implemented targeting PBFW who are not attending or delayed of ANC and PNC services at health facilities. HIVST will be distributed at health facilities to sexual contacts of PLHIV and KPPs. Moreover, caregiver assisted HIVST will be scaled up to reach 2-15 years old untested children of index cases. Tailored demand-creation strategies will be implemented to enhance the uptake of HIVST.

HIV testing integrated with MNCH is offered to all pregnant and breast-feeding women with unknown HIV status attending antenatal care, labor and delivery and postnatal care. In line with Ethiopia's strategy towards triple elimination of HIV, syphilis, and Hepatitis B, universal testing will be offered to pregnant women. Pregnant women will be tested at least once with subsequent tests at labor and delivery and during the breast-feeding period based on risk.

Early Infant Diagnosis (EID) for HIV Exposed Infants will be expanded using both conventional and point of care platforms. HIV testing conducted at ANC clinics, which is testing for prevention, will be monitored separately from testing for case finding.

Voluntary Medical Male Circumcision (VMMC): Voluntary HIV testing service will be available and be offered to all individuals eligible for circumcision. HIV testing in VMMC settings will be done for prevention purposes, and not primarily for case finding. However, sites will make sure to establish relationships with ART sites to assure that immediate linkage to treatment is available for those who test HIV positive. HIV negative males at significant risk of acquiring HIV will also be linked to other prevention services.

Pre-Exposure Prophylaxis (PrEP): HIV testing will be offered and done for all eligible clients for PrEP initially and at every refill visit. If HIV seroconversion is detected among individuals taking PrEP, the individual will immediately be linked to HIV treatment services.

In order to implement these optimized targeted testing approaches, health workers will be trained on the different HIV testing strategies (PITC, ICT, SNS, HIVST etc.), improved counseling techniques in ICT elicitation, and counseling of children and adolescents for HIV testing. To improve the quality and performance of case finding, ongoing capacity building activities through training, mentoring, onsite coaching, supportive supervision, and review meetings will be conducted. Community-facility collaboration will be strengthened to enhance case finding and linkage.

TABLE 7. HTS SUMMARY: MODALITY, TARGET AND SERVICE DELIVERY OUTLET.

Intervention	Target Population	Indicator		Service delivery location/outlet
Index Case Testing	PLHIV, their sexual partners and their biological children <19 years	Proportion of sexual partners and biological children aged <19 tested for HIV		Health facility & outreach/community based
Social Network Strategy	KPs	Number of KPPs tested through SNS		Health facility DICs, and outreach
PITC	Clients receiving health services	Number of tests with disaggregation age and sex		Heath facilities – multiple entry points (TB, STI. In patient, malnutrition wards)
VCT	General population	Disaggregation by population group by age and sex		
HIV Self-Testing	KPP, Contacts of index cases	# of kits distributed		Public health facility-based distribution, social marketing and private sector outlets
		# returning for confirmatory test		
	Testing for Prevention			
Testing in PMTCT service	Pregnant mothers	Initial and follow up tests, positive, ART initiation		Health facilities

Intervention	Target Population	Indicator		Service delivery location/outlet
Testing in VMMC service	Uncircumcised males in Gambella and selected areas in SNNP	# Persons receiving VMMC service tested for HIV		Health facilities
Testing in PrEP service	FSWs Discordant couples, PWID, high risk PBFW	# FSWs, discordant couple PWID tested for HIV		PrEP providing facilities

5.4 Linkage to Care and Treatment

The HIV testing cycle will only be considered complete when there is linkage of HIV positive people to care and treatment immediately or within a maximum of 7 days. The following strategies will be used to ensure linkage to care and treatment: a) accompanied referral for linkage; b) written referral; c) linkage tracking and auditing. Peer service providers, CSOs and CBOs have a critical role to play in linking those testing positive to care and treatment. Community education and demand creation, including education on minimizing repeat testing and addressing stigma and discrimination is needed. Referral directories will be made available to all testers and there should be active involvement of PLHIV Associations. To monitor successful linkage, a closed loop and auditing system of incoming and outgoing referrals should be in place with a quality assurance mechanism for monitoring and accountability.

Chapter 6 Care and Treatment

Strategic Objective 4: Attain 98% treatment coverage among PLHIV who know their status and 98% of those on ART to achieve viral suppression across all population's groups and geographic areas.

6.1 Context

Ethiopia has made excellent progress towards achieving the 2nd and 3rd 95s. As of December 2022, of the estimated PLHIV 84.4% know their status, 98% of those who know their status were on ART and 98% were virally suppressed. However, this result masks inequities across regions, populations groups and when disaggregated by age. The 2022 national HIV guidelines recommend universal rapid (preferably same day) ART initiation for all. In line with the latest WHO guidelines, there has been optimization of ART regimens with the introduction of fixed dose combination tenofovir, lamivudine and dolutegravir (TLD), 10mg DTG, lower dose Efavirenz (EFV), and phasing out of Nevirapine (NVP).

Ninety six percent of ART services are provided at public facilities while private facilities contribute 4%. Though private facilities have greater potential to support the national program, they lack an adequate number of trained staff, case managers and adherence supporters, adequate technical support, commonly lack drugs to manage opportunistic infections. They are not adequately involved in monitoring and review meetings and do not have strong system for tracing lost to follow up patients.

6.2. Strategic Interventions

6.2.1. Improving adherence and retention in care

Viral suppression among adults on treatment remains high suggesting that adherence to treatment is good. However further improvements can be achieved by using the following approaches:

a. Ensure delivery of person-centered care, including but not limited to, extended working hours, weekend services.
b. Ensure HIV care and treatment services delivery points are staffed with trained and skilled healthcare providers without gaps or interruption.
c. Maintain the involvement of case managers and adherence supporters within the system and devise ways to optimize adherence in private health facilities.
d. Improve the quality of counselling services, including using local languages at the time of ART initiation and ongoing counselling a critical point during patient care, also encouraging disclosure of HIV status.
e. Optimize implementation of differentiated service delivery models and increase model mix.

f. Design and prepare service packages to retain clients in care at humanitarian settings.
g. Improve documentation of patients' contact information (Client's physical/telephone address & contacts,) and ensure patients understand the relevance of providing an accurate address.
h. Enhance facility-community collaboration and trace LTFU.
i. Greater involvement of PLHIVs and their associations

Pharmacovigilance

a. Sensitize healthcare providers on early reporting of adverse events and side effect.
b. Strengthen the collaboration between MOH and Ethiopian Food and Drug Administration (EFDA) to take appropriate action on adverse drug events.

6.2.2. Viral Load Coverage and Suppression

Ethiopia has gradually increased viral load testing coverage currently at 82% with high VL suppression rates of 98% in 2022. However, there are disparities both in coverage and VLS rates across regions. Demand creation for viral load testing and client education on adherence are critical to maintain viral suppression. Over the period covered by this NSP the target is to reach at least 98% viral load suppression among all population groups in all regions.

Improvement is particularly needed to shorten turnaround time for viral load results. This requires a) a more efficient sample transport system; b) same-day high viral load result notification to expedite patient notification; c) increasing access to POC viral load machines (e.g. GenXpert); and, d) expansion of electronic test order and result reporting. Timely management of patients with high VL needs to be emphasized.

6.2.3. Undetectable = Untransmitable (U=U)

Undetectable = Untransmitable (U=U) or the Amharic equivalent "የማይታይ መጠን = የተገታ መተላለፍ (የ=የ) is when HIV positive person taking ART and achieves undetectable viral load levels (<50 copies/ml) that is maintained at least for 6 months, and the risk of transmitting HIV through sex is significantly reduced.

U=U/"የ=የ"/ has a potential to provide an additional reason for PLHIV to adhere to their ART and maintain undetectable viral load for the fact that it will enable them to protect their sexual partner. However, there is a concern in communities that U=U/"የ=የ"/ could be misunderstood as a cure or as a status that does not change over time up on degree of adherence to treatment. Moreover, the access and practice of regular viral load testing is another concern for an indiscriminate promotion of U=U/"የ=የ"/ among PLHIV. Therefore,

implementation of comprehensive communication strategy and scale up of access to viral load testing will be critical to address the concern regarding U=U.

U=U/"Ꝑ=Ꝑ" promotion and communication strategy will be implemented which includes communication through mainstream media (TV and Radio), social media, digital applications and print media (leaflets and posters) and through health facility and community-based HIV services mainly at the ART clinics. All U=U/"Ꝑ=Ꝑ"/ communication and counseling will continue emphasizing safe sexual practices including condom use as primary prevention measure among PLHIV and their sexual partners.

Capacity of health workers, media personnel and community leaders (PLHIV associations) will be built through orientation and training sessions, guidelines and communication materials.

Impact of U=U/"Ꝑ=Ꝑ"/ communication on the PLHIV adherence to treatment, viral load suppression and condom use will be monitored through periodic assessments and operational research.

6.3. Children and adolescents lagging behind.

Expected Results 1: % of children < 15 years who are on ART increased from 40% to 95% by 2027.

Expected Result 2: % of all children < 15 years on ART who are virologically suppressed increased from 90% to 95% by 2027

Child Services

Identification of HIV+ infants and children and linkage into care and treatment for children and adolescents lag behind the progress made in adults. Accurate data is difficult to find. However, based a calculation using the PEPFAR FY2022 Annual Program Report for Ethiopia and the 2023 Round HIV Spectrum estimates, only an estimated 19% for children 0-4 years, 29% for those aged 5-10 years and 46% for those 10-14 years old are on treatment. Viral suppression among children <15 years is 90%, but program data indicates that VLS for children < 5 years is much lower at 84% [34]. In order to address the poor performance of services for children <15year, the MOH launched a Pediatric HIV Program Acceleration Initiative (PHPAI) in November 2022 **[32]**. Currently there are 103 health facilities involved in this initiative. This activity has heightened attention for care providers of the need to rigorously follow all testing opportunities to identify CLHIV, minimize any missed opportunities and link into treatment. RHBs have increased their monitoring and supervision. However, here is also a need to revisit the SPECTRUM estimates of the number of CLHIV.

There are also regional variations on treatment coverage for children and adolescents. This is as a result of a number of different cultural, social, and economic factors as well as health systems factors which include:

Parents/caretakers/community:

- Children rely on their parents/caretakers for access to HIV testing and treatment.
- Lack of or delay in disclosure of parental status and/or disclosure to the child
- Parental sense of guilt, concerns about inadvertent disclosure by the child and fear of social rejection and isolation
- Male decision-making roles that affect the utilization of healthcare services for women and children
- Cost of clinic visits both as a financial and time burden
- Stigma and inadequate knowledge and information about HIV in children
- Inadequate community-based support

Health system:

- Inadequate pediatric and adolescent friendly spaces/clinics,
- Limited capacity among primary health care workers to treat children and adolescents.
- Limited access and availability of pediatric formulations and regimens
- Low EID coverage and delays in getting results back,
- Absence of nutritional support
- Sub-optimal linkage to treatment
- Gaps in age-appropriate disclosure practice

Based on SPECTRUM modeling which estimates the MTCT rate in 2022 to be 12% with a PMTCT coverage of 67%, 24% of all new infections occur in children <4 years. Apart from the obvious need to improve MTCT, early detection for at-risk children and early treatment for those living with the virus are crucial to saving lives.

Global data on reductions in AIDS-related deaths among children and adolescents are steepest among children aged 0 to 9 years (a 60% decline since 2010), reflecting both improvement in efforts to prevent new vertical infections and efforts to diagnose and treat children in the months following childbirth and during breastfeeding [41]. Ethiopia specific data indicates rates of mortality/those currently on treatment among adults was 0.28% but for children <5 years this was 0.96% with a rate of 0.12% for those between 5-15 years [34].

To further understand specific factors leading to the poorer performance in the detection, care and treatment of children and adolescents, human-centered design which is a problem-solving framework grounded in empathy and understanding, should be used. Applying HCD specifically in pediatric HIV testing and treatment will provide a platform to recognize not only the types of experiences clients want but also how to design the delivery of their desired experience to improve pediatric outcomes along the entire continuum of care. Information from this will also allow for more innovative communication and testing strategies for children and improve care and treatment service delivery.

Testing modalities will emphasize will index case testing, improved EID and targeted PITC at critical entry points where sick children are seen at health facilities. All positive children will be linked into care and treatment and initiated on optimized pediatric regimens in accordance with the latest WHO guidelines. Where possible, in facilities with larger patient loads, child friendly clinics/areas will be created.

Procurement of pediatric formulations remains challenging with worldwide production constraints leading to supply shortages. The Government of Ethiopia will explore options through the Global Fund such as pooled procurement.

In addition to improved case finding, strategies to improve pediatric outcomes will include:

- Family-centered care with harmonized appointment schedules especially when parents are enrolled for Differentiated Service Models
- Specific pediatric & adolescent clinics/spaces with conducive working hours
- Scaling up POC-EID with shorter TAT, preferably same day results
- Optimization of pediatric regimens in line with WHO Guidelines
- Parent/caretaker adherence education
- Health worker capacity building (through training, mentoring, case conferences, etc.) for care and treatment of children and addressing disclosure.
- Emphasis on OI screening, prophylaxis and treatment (TPT and CPT)
- Diversify options for differentiated service delivery models for children.
- Psychosocial support and peer support groups
- Working with Community Care Coalition to reach OVCs and provide HIV care and support services.
- Education through audiovisual media outlets
- Adopting best global experiences

Adolescent Services

Although there has been a decline in pediatric mortality of 60%, as noted above, among adolescents (aged 10–19 years), progress is slower. Girls and young women are disproportionately affected by HIV: eight-eight per cent of new infections among 10–19-year-olds are among girls and 77% of new infections among 15-24 year olds are among young women **[14]**. There are a number of reports which indicate significant mortality among ALHIV between 10-24 years with worse outcome for those who enter into care >15 years with non-perinatally acquired HIV infection versus those who were infected perinatally. These large cohort studies point to the need to differentiate when HIV infection is acquired among adolescents and emphasize the ongoing need for prevention, early testing and entering into effective care and treatment **[42, 43]**. A recent Lancet review **[44]** found that the mental

health burden for adolescents living with HIV is high, contributing to low quality of life and challenges with adherence to antiretroviral therapy. In sub-Saharan settings where over 90% of adolescents LHIV reside, mental health provision is scarce, infrastructure and skilled providers are missing. Options for a combination of economic and social interventions and scalable delivery models that include task sharing, primary care integration, strengthening families, and a pyramid of provision that differentiates between levels of need, from prevention to the care of severe disorders. If an adolescent is HIV positive, there are additional triggers which can predispose the adolescent to feelings of anxiety, depression and even possible suicide. The training of health workers can facilitate them having an important role in identifying mental illness among adolescents living with HIV **[45]**.

Ethiopia has few adolescent friendly health facility services and health workers require additional training in order to address specific issues among adolescents with HIV, especially in relation to disclosure, mental health and sexual reproductive health services. Adolescents living with HIV do not like being seen with children or adults - they prefer their own space/clinic. A further barrier is providing services which require parental consent. HIV testing can be provided to adolescents from 14 years of age . Although SRH services are available, such as family planning services, there are bottlenecks which impede access other SRH services, including health worker attitudes. . Another key sensitive point is when adolescents are old enough to be transitioned to the adult clinic. The exact time for this transition should be discussed with the adolescent and not be entirely dictated by age alone. However, once in treatment, the most recent VLS rates are encouraging at 93% for 15-19 year olds.

This NSP provides a number of options for health facilities and other stakeholders to improve outcomes for adolescent HIV care and treatment. These include:

<u>Adolescent HIV Clinic Day</u>: Selected health facility ART clinics in urban towns will dedicate one of the five working days and Saturday as adolescent HIV clinic days

- Specific day within the general HIV clinic setup on which only ALHIV are offered care and treatment.
- Operates within the same infrastructure as the adult clinic.

<u>Adolescent HIV clinic</u>:

- Health facilities which already have functional adolescent and youth friendly clinics will integrate HIV care and treatment services for HIV positive adolescents and youth to provide a comprehensive adolescent HIV/ART clinic.

Over the period of this NSP, there will be an increase in access and quality of adolescent services and compliance with the eight standards outlined in the WHO technical brief **[46]**: adolescent health literacy, community support, an appropriate package of services, providers' competence, equity and non-discrimination, data and quality improvement and adolescent participation. The following will be the minimum package of services delivered at adolescent and youth friendly clinics or adolescent clinic days.

- Health literacy, information on reproductive health issues, body and environmental hygiene
- Counseling on sexual relations and safe sex
- Life skills education
- Condoms
- Treatment (ART) and adherence counseling
- Pregnancy testing
- Psychosocial support such as interventions that involve adolescents and their caregivers: family-based interventions to promote mental health and prevent negative behavior (such as nonadherence) among adolescents with HIV, which are designed to strengthen communication, problem-solving and negotiation skills for both adolescents and caregivers ; peer support and social networks, which are peer-driven interventions involving multiple intervention components to target adolescents and young adults living with HIV and improve outcomes, including adherence to treatment, retention in care and suppression of viral loads; and digital means used to introduce new information and deliver behavior change skills.
- Counseling on alcohol and substance abuse
- Counseling on mental health
- Counseling & management of sexual abuse
- Sexual Reproductive health services (e.g., Antenatal care, safe deliveries, post-natal care, STI prevention, screening, and treatment; family planning method and Post abortion care)
- Referral and follow up.
- Lack of transition clinics to plan with adolescents as they age out to adult care.

Better outcomes can be achieved through involving adolescents themselves in the planning, delivery and monitoring of the services they receive. Additionally, HIV positive adolescents support groups and adolescent peer service providers can play a critical role in providing adherence support, promoting positive living, promoting access to services, identifying and reaching key populations of adolescents in their communities and engaging in, community participation and advocacy. These key complementary activities should be primarily provided through CSOs. The role of the following approaches/groups should also be examined, and promising experiences expanded:

- Adolescent and Youth Peer-to-Peer support groups
- Involvement of Adolescent (youth) ambassadors
- Adolescent Adherence supporters
- Greater participation of Associations of ALHIV

6.4. Management of co-infections and co-morbidities

The screening of co-infections is an integral part of the care and treatment service package, as is nutritional assessment.

Co-infection screening cannot take place without an uninterrupted supply of key laboratory screening diagnostics and other supplies. This is of critical importance in the treatment of patients with advanced HIV disease (AHD). Results from EPHIA showed that 22% of patients were presenting with advanced HIV disease (CD4 <200 cells/mm^3). Screening tests should include improved availability of CD4, CrAG, screening for TB (see section 4.2.4.) and Hepatitis B and C (see Section 4.4.6.).

Treatment of diagnosed co-infections requires an uninterrupted supply of both fee based and free OI drugs. Options and criteria to create access to OI drugs without charge for PLHIVs will be developed. Co-infections and conditions that require particular attention are:

6.4.1. Cryptococcal infection

- All adults and adolescents and children with CD4<100 cells/mm^3 will be routinely screened for cryptococcal infection with additional consideration for screening those with CD4 <200 cells/mm^3
- Those screening positive for CrAg will be provided fluconazole preventive therapy.
- Clients with confirmed cryptococcal disease will be provided with cryptococcal treatment according to WHO guidelines (e.g., fluconazole and liposomal amphotericin B)

6.4.2. Cervical cancer

In 2015, MOH introduced cervical cancer (CxCa) screening and treatment for all women between 30-49 years irrespective of their HIV status. However national scale up has been hampered by some of key programmatic challenges. These include, suboptimal demand creation at community; lack of awareness and knowledge among HCWs coupled with the inability to maintain trained health workers at different levels of the health system; lack of capacity for preventive equipment maintenance and troubleshooting resulting in frequent equipment failure; frequent shortage of medical supplies and accessories; lack of capacity to introduce new technologies; poor referral networking; and, lack of system for mentorship, coaching and quality improvement; and, stigma.

There has been significant scaleup of screening and treatment since the HIV Impact Assessment (EPHIA) in 2017-2018, which showed that in urban areas, only 16% of HIV-positive women aged 30-49 years reported being screened for cervical cancer. MOH data indicates that cervical cancer screening is available in 1330 health facilities, 505 which are supported in PEPFAR maintained regions and 97 in regions being transitioned out from PEPFAR support.

Cervical cancer screening uptake of WLHIV is 52.5% among maintained regions and 20% among transitional regions and 12% for the general population. Recent PEPFAR program data shows 60% of eligible WLHIV were screened with a VIA positivity rate of 6% of which 92% were treated **[34]**.

To increase the uptake and treatment of cervical cancer screening services, community-based organizations (LIPs, PLHIV associations, etc.) will promote the use of these services and link HIV+ women to the nearest health facility where this services is available. HSTP II aims to increase cervical screening among all 30–49-year-old women from 5% to 40% by 2026 **[3]**. The National HIV guidelines will align with WHO guidelines to screen all WLHIV aged between 25-49 and those WLHIV over 50 years who have never been screened. Efforts will be made to achieve the 2025 global target reaching 90% vaccinated, 90% screened and 90% access to treatment.

6.4.3. Mental Health

Increasing recognition of mental health conditions, especially depression among PLHIVs, warrants screening, assessment and management as part of the package of services offered in ART clinics. A recent meta-analysis of depression among PLHIV in Ethiopia found a prevalence of 37% **[47]**. The national HIV guidelines have noted the increased risk of mental health conditions among PLHIVs and have included a basic screening tool, adapted from New York State Dept of Health AIDS Institute, which has been translated into several of the local languages **[33]**. Some case managers and adherence supporters placed in ART clinics have been trained in this tool and the National HIV Guidelines have included mental health training for ART providers with criteria for referral. However, capacity is very limited within the country and efforts will be made to scale up and strengthen these services.

Advocacy and resource mobilization activities are needed to access nutritional supplies and therapeutic options for malnourished PLHIV on treatment and there should be strengthened linkages to available community based nutritional support services.

As the PLHIV cohort ages and remains on prolonged ART, screening and management of concurrent comorbidities becomes increasingly relevant. Opportunities to integrate the management of non-communicable disease with ART clinics will be explored in high volume sites.

6.4.4. Tuberculosis Co-infection

Result 1: Percentage of eligible people living with HIV newly enrolled in HIV care started on TB preventive therapy increased from 67% to 95% by 2027.

Result 2: % of PLHIV on ART who completed a course of TB preventive treatment among those who initiated TPT.

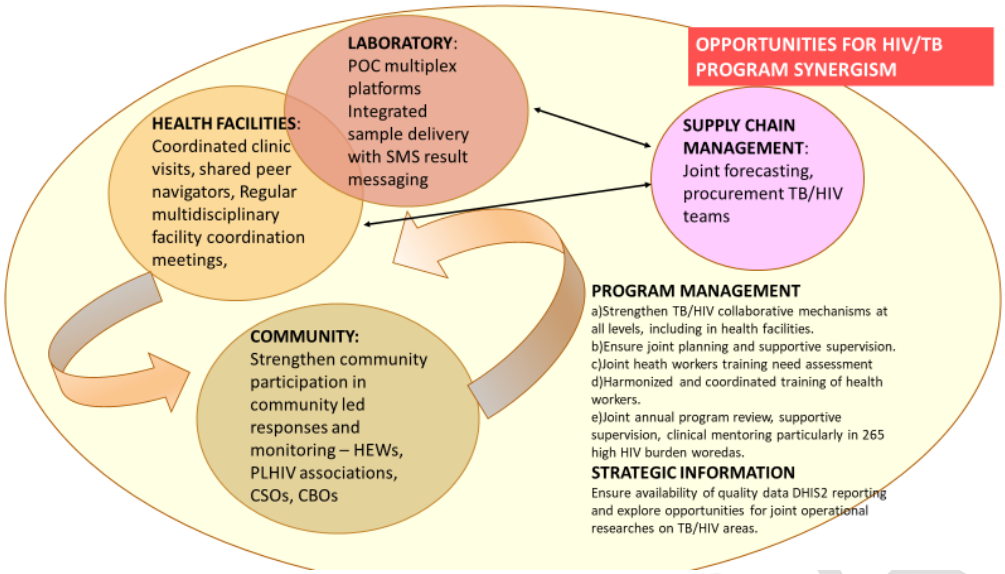
Interventions to optimize TB /HIV care includes:

a. Improve access to newer TB screening and diagnostic tests (program data shows that yield from symptom screening among PLHIV currently receiving ART is around 1%), integrated sample referral systems, functioning laboratory systems for more sensitive tests. Timely diagnosis of TB among PLHIV by improved turnaround time for test results and new POC diagnostic tests (XpertMTB/Rif Ultra, Urine LAM).
b. Current data shows that HIV testing coverage among active TB cases is more than 90%. Efforts will be maintained to continue high level of HIV testing coverage among TB patients and link positives to ART.
c. Adopting models of patient centered care such as anti-TB and ART optimization, cotrimoxazole preventive therapy for TB patients who are also HIV+, integrating TB case finding, TPT initiation and follow up, adherence support within the service delivery models.
d. Strengthening TPT uptake and course completion by demand creation for TPT, strengthening TPT adherence, patient follow-up and pharmacovigilance, ensuring adequate and uninterrupted supplies of TPT drugs.
e. Ensure adequate and uninterrupted supplies of TPT drugs, strengthen TPT uptake.
f. Ensure TB infection prevention and control.
g. Strengthening patient follow-up and pharmacovigilance

About 20% of drug resistance TB patients are co-infected with HIV with the risk of high mortality. Co-infection of non-drug resistant TB is around 4%. For those patients with drug resistant TB and co-infected with HIV, a specific DSD model will be developed which is focused to maintain good treatment whilst decreasing out of pocket cost and other barriers when such co-infected patients have multiple clinic appointments at different facilities.

Building on the concept of value for money, synergies between the TB and HIV programs include improved integration at health facility level, improving efficiencies within the laboratory diagnostic platform and integrated sample transport system, efficiencies within the supply chain, synergistic interventions at community level building on the HEP, PLHIV associations and peer supporters and integrated program planning, supervision, monitoring and evaluation (Fig 27).

FIGURE 6. OPPORTUNITIES FOR TB/HIV PROGRAM SYNERGISM.



6.4.5. HIV and Hepatitis B and C Co-infection

HIV profoundly impacts on the course of hepatitis B and C virus infection, resulting in higher rates of chronic hepatitis infection, accelerated fibrosis progression with increased risk of cirrhosis and hepatocellular carcinoma, and higher liver-related mortality compared with people who do not have HIV. This NSP expands the integrated management of HIV and viral hepatitis infection with early diagnosis and treatment of both HIV infection and viral hepatitis infection.

A comprehensive approach, including engaging leadership at federal and regional levels, is required in managing HIV and hepatitis B & C co-infection which includes:

- Integrating HIV, HBV and HCV infection prevention interventions (SBCC)
- Scaling-up the HBV and HCV screening/testing among PLHIV
- Provision of hepatitis B vaccination for non-immune HIV positive clients
- Ensuring provision of tenofovir-based regimen for PLHIV who are co-infected with hepatitis B (provided there is no contraindication to tenofovir)
- Linking PLHIV who are co-infected with hepatitis C to viral hepatitis treatment services.
- Strengthen the monitoring of adherence to hepatitis treatment.
- Strengthen the integration/linkages between HIV services and viral hepatitis services.
- Integrate the diagnostic platforms and laboratory services used for other diseases (for diagnosis and treatment monitoring)
    - multi-disease serological rapid tests (HIV, Hepatitis, Syphilis)

- multi-disease platforms for viral load testing (GeneXpert, conventional viral load testing machines)

- Ensure inclusion of key HIV and hepatitis indicators in to DHIS-2 and improve data quality and use at all levels.

6.5. Advanced HIV Disease

People with advanced HIV disease (AHD) are at high risk of death, even after starting ART, with this risk increasing with decreasing CD4 cell count. Relying on clinical staging alone risks missing substantial numbers of people living with HIV with severe immune suppression. The most common causes of death are TB, severe bacterial infections and cryptococcal meningitis. The WHO AHD package has been adopted and detailed in the national guidelines for comprehensive prevention, care, and treatment. A separate AHD DSD implementation manual has also been developed along with AHD DSD recording and reporting tools.

A package of interventions including CD4 measurement ad screening for CrAg, treatment and/or prophylaxis for major opportunistic infections, rapid ART initiation and intensified adherence support interventions will be offered to everyone presenting with advanced HIV disease. This should include those who are re-engaging in care after a period of interruption. CD4 testing for eligible patients, will be expanded but prioritization will be given to newly initiating ART, those with treatment failure, and those returning to treatment after a period of discontinuation for prompt CD4 testing and evaluation for AHD and its management. In addition, all CLHIV less than five years old are considered to have AHD at the time of diagnosis until they are virally suppressed and will be prioritized for CD4 testing and evaluation.

6.6. Models of service delivery

Integration of services is outlined in the National HIV Guidelines and defined by the provision of various service components in one physical locality. Family planning is offered in all in the ART clinics, screening for comorbidities and coinfections, screening and treatment of TB. screening and management of cervical cancer in facilities. The development of chronic care clinics which also screen and manage NCDs (cardiovascular disease diabetes, cancers and chronic respiratory disease) currently in 10 hospitals, will be scaled up as the prevalence of NCDs is determined.

As national guidelines evolved to initiate ART for all people living with HIV regardless of clinical and immune status, differentiated service delivery has become a critical component of recognizing the diverse service needs of people. Differentiated service delivery takes into consideration how often a patient needs to come, where they need to come to get services, by whom these services are provided and what the service package should comprise. Current models of care being offered to stable adult clients on ART include 3 and 6 monthly refills,

fast track pharmacy refills, peer led community ART distribution, community-based ART service delivery and differentiated delivery models specific for adolescents, KPs and PBFW. Over the period of this NSP, there should be improved data on the use of the different models and evaluation and costing of DSD models in order to better understand their effectiveness and efficiencies from both the service delivery aspect as well as client perceptions.

Private health facilities have role to play in providing and complementing HIV care and treatment services, ensuring that they are supported to follow national guidelines and also comply with providing service reports into the health information system.

CHAPTER 7 Social Enablers for HIV response

Strategic Objective 5: Stigma and discrimination and gender-based violence will be reduced from 25% and 20% to <10% by 2027.

The multi-sectoral and social nature of the HIV epidemic highlights underlying critical social and programmatic situations and circumstances which, if not addressed, can diminish efforts to maximize the reach and impacts of Ethiopia's HIV/AIDS response.

7.1. Gender and Gender-Based Violence

Expected Result: Percent of women who ever experienced sexual and gender-based violence reduced from 20% in 2019 to 10% by 2027

Gender inequalities and gender-based violence place girls and women particularly at increased risk of HIV infection as described in relevant sections throughout this NSP. Young women with disabilities face even higher risks.

The span and scope of addressing gender inequalities and gender-based violence is broader than just within the health sector. It requires multi-sectoral responses, investments and should include gender responsive programing and budgeting in the HIV response. This includes training of program people on gender-responsive and gender-transformative HIV programming and implementation.

The following interventions will be addressed over the NSP period:

Through the health sector response:

- Training of health workers on first line and comprehensive management of GBV
- Build capacity of health facilities to provide comprehensive and age appropriate GBV services including equipment, commodities and supplies.
- Empowerment of women in health sector management including assignment to leadership roles
- Provide comprehensive services in health facilities for survivors of GBV that includes but not limited to medico legal examination, HIV, STIs and Pregnancy testing, PEP, Emergency contraception, treatment for STIs, counseling, referral for social and legal services.
- Ensure that youth friendly clinics at health facilities are able to provide comprehensive post violence care for adolescents and youth
- Strengthen CSO led DICs and SRH clinics girls' friendly and provide integrated services including psychosocial support, HIV, SRH and GBV related services.

- Strengthen linkage between health, legal and psycho- social support services for GBV survivors.
- Ensure that there are gender disaggregated indicators to track progress in service access, new infection and AIDS related mortality.

Through a multi-sectoral response:

- Establish National and Regional taskforces to coordinate the implementation of comprehensive GBV services including prevention across all levels.
- Assess and identify bottlenecks that hinder full enforcement of current laws and policies to design interventions that foster effective implementation and/or legal and policy reforms.
- Develop or reform laws and law enforcement practices on age of consent, domestic violence, sexual consent, early child marriage.
- Conduct advocacy campaign and sensitization to reduce HIV- related gender discrimination, harmful gender norms and violence against women and girls in all their diversity.
- Implement interventions that address the underlying/structural (social, cultural, and economic) causes of gender inequality including harmful traditional practices and social norms that perpetuate gender inequality.
- Provide training for decision makers, law enforcement bodies, media personnel, employers of hot spot workplaces and Bar/Hotel owners and civil society actors about the existing national policy and legal instruments to ensure gender equality and women empowerment, and to protect the rights of women and girls.
- Train and organize FSWs and high-risk adolescent girls to identify, prevent and respond for SGBV that includes group help and justice for victims of SGBV.
- Build institutional capacity of women networks and association and organizations of women living with HIV, woman most affected by HIV to ensure women's and girls' voices are heard and define meaningful participation of survivors of gender-based violence including women living with HIV.
- Train and support paralegals and women lawyers' association to provide legal services for women, high risk AGYW and FSWs and survivors of SGBV.
- Strengthen girls' clubs in schools and youth centers.
- Build capacity of program managers (training) at all levels to identify, analyze root cause and act on gender disparities in service access and HIV burden.
- Provide vocational skills and entrepreneurship training for vulnerable AGYW and provide start-up capital to establish IGAs.
- Establish and expand safe spaces for GBV victims or vulnerable women.
- CSOs/CBOs will undertake community dialogue on promoting gender equality and reducing GBV.

- CSOs/CBOs will use community scorecards to monitor the GBV response in their community.
- Conduct violence against women national survey and disseminate findings.

7.2. Stigma and discrimination

Expected Result 1: Percent of PLHIV who experienced stigma and discrimination in social sphere in the preceding 12 months reduced from 32% in 2021 to 10% by 2027.

Expected Result 2: Percent of PLHIV who experienced stigma and discrimination in health care setting in the preceding 12 months reduced from 42% in 2021 to 10% by 2027.

Ethiopia Stigma Index survey carried out in 2021 indicated that 32% of people living with HIV experienced some form of stigma or discrimination in their social environment in the last 12 months. These included being forbidden from participating in public/social events, household chores such as cooking, eating together, and sleeping in the same room. The index of self-stigma and discrimination due to HIV status was high (38%) during the 12 months prior to the survey. Females' respondents reported higher self-stigma and discrimination as compared to their counterparts (41%), youngest age group 18 to 24 (47%) and Key Population (43%). There is high stigma and discrimination by healthcare facility staffs for clients seeking services on non-HIV related services (42%) and HIV care and services (30%) **[36]**

Interventions to decrease stigma and discrimination will include:

- Assess, strengthen and enforce laws to mitigate stigma and discrimination. Train law enforcement bodies on the anti-stigma and discrimination laws and provisions.
- Assess policy and legal gaps and limitations of enforcing available laws and policies in addressing stigma and discrimination, human rights related problems and address the gaps accordingly.
- Conduct mass and social media campaigns in the dissemination of messages of anti-stigma and discrimination.
- Conduct knows your rights training to PLHIV and KPs to improve literacy regarding policy and legal-related issues to enable them cope with stigma and discrimination and mitigate its impact including justice.
- Establish National and Regional taskforces to coordinate the implementation of interventions to address issues of stigma and discrimination, human rights, and HIV AIDS across all levels.
- Sector ministries (MOH / MoE) to develop and implement S&D, HR violations, Zero tolerance policy in health facilities and schools. Health facilities to assign a focal person or a team to monitor, receive, investigate and act on S&D and human rights violations.
- Build capacity of health facilities, schools, and community-level HIV service providers as well as the relevant experts/teachers in schools and higher education institutes to

minimize stigma and discrimination, non-consented disclosure and to improve for better support to enable the PLHIV to disclose their HIV status to whomever they prefer.

- Integrate coping with and acting on Stigma and discrimination, consented disclosure in all health services through counselling, peer-based and media education for PLHIV and KPPs.
- Integrate human rights, stigma and discrimination-related issues in the activities of community actors including the CSOs, peer groups, DICs, as well as service providers.
- Build the capacity of PLHIV associations to ensure more effective advocacy, social and legal support to PLHIV including the prevention and mitigation of the effect of stigma and discrimination.
- Establish and scaleup or Strengthen community-level support groups involving PLHIV associations and PLHIV in the KP groups.
- Scale up peer support among the PLHIV across all levels for mutual support and sharing of experiences to improve consented disclosure, focusing on the female so that the PLHIV benefit from the positive effects of disclosure.
- Scale up adolescent PLHIV-friendly HIV services at community and health facility levels to address the stigma and discrimination issues related to adolescent PLHIV, as well as other gaps of accessing HIV services.

7.3. Embracing a Human rights approach to the HIV response

Expected Result: Reduce the legal and policy barriers to KPP and PLHIV service access by 2027

Human rights-related barriers include HIV-related stigma and discrimination; punitive laws, policies and practices; gender inequality and gender-based violence continue to keep behind the people in need from accessing vital HIV services. These barriers can be overcome by implementing and scaling up recognized, well-defined, and evidence-based programs. In partnership with CSOs and CBOs and other government sectors (e.g. Ministry of Women's Affairs, Human Rights Commission), the following interventions will be implemented to ensure human rights are respected and protected in HIV service provision and reduce barriers to HIV services.

- Build healthcare providers' capacity on human rights and medical ethics related to HIV that includes training of healthcare providers, including facility and non-facility based, healthcare administrators and healthcare regulators on non-discrimination, the duty to treat, informed consent and confidentiality, violence prevention and treatment.
- Develop institutional policies and accountability mechanisms for healthcare facilities to respect and protect human rights.

- Assess policy and regulatory challenges to address human rights in HIV services and service barriers, revise policies and legal frameworks for better addressing human rights in HIV service provision and access.
- Conduct advocacy and dialogue on policy and regulatory frameworks that hinder Human rights in HIV services provision and access.
- Conduct community mobilization, advocacy, community-led outreach campaigns to address harmful gender norms and stereotypes and other program-related human right barriers.
- Conduct sensitization of law and policy makers, parliamentarians to advocate for better policy formulation that alleviates human resight violation.
- Provide sensitization and training to law-enforcement agents the General Attorney Office, judges, prosecutors, police, and traditional and religious leaders on legal, health, and human rights aspects of HIV, KPP including gender-and age-based discrimination, inequity on violence prevention as well as their relation to HIV.
- Conduct discussions to facilitate referral linkages among service providers, law enforcement bodies, to support effective intersectoral referral linkages for different services (health, legal, psychosocial services
- Train prison personnel (both in prisons for women and men) on public health, human rights, HIV and HIV/TB responses.
- Ensure Legal Literacy (“Know Your Rights") among the PLHIV and KPP.
- Conduct legal/patients’ rights literacy training and education for key and priority populations through mass media, social media, and digital platforms as well as integrated to peer learning.
- Mobilize KPP and empower them to ensure they demand and receive services through clubs, support groups, saving and credit associations, and contribute to their awareness, monitoring, and enforcing human rights principles in programs and HIV services.
- Establish crisis response mechanisms to prevent abuse, including gender-based violence at workplaces, bars, and hotels as well as women groups in the community.
- CSOs/CBOs provide HIV-related legal services to PLHIV and KPPs.
- Provide legal information, referrals, advice through peer paralegal community support systems and institutional support mechanisms, including lawyer’s associations, PLHIV associations, and KPP support groups /clubs.
- Provide legal services and counseling for women and girls and KPP through institutional and community arbitration, and dispute settlement mechanisms.
- Support the establishment of various forms of community dispute resolution, including engagement of traditional leaders and customary law in support of people affected by HIV and KPP
- Monitoring HIV service delivery quality in terms of stigma, discrimination and human right violation.

Chapter 8 Community System strengthening (CSS)

Strategic Objective 6: By 2027 a significant proportion of HIV testing, of social enablers and of HIV prevention services will be delivered by CSO/CBOs/FBO/PLHIV associations.

Civil society organizations and community-based and community-led organizations, including PLHIV Associations have an essential role to play in the HIV response at all levels. It is critical to ensure the involvement of CSOs, CBOs and affected and infected communities in the policy and strategy formulation, planning, implementation, monitoring and evaluation of the response at all levels. FBOs play a vital role in addressing major programmatic challenges that appear to retain the clients already enrolled on ART, minimizing loss from the program, and making progress towards growing the treatment cohort.

Community system strengthening has the following four pillars:

- Community engagement, leadership, and capacity building
- Community led monitoring.
- Community led research and advocacy.
- Community engagement linkage and coordination

8.1 Community engagement, leadership, and capacity building

- Build the leadership capacity of CSOs, CBOs, affected and infected communities through training on HIV response policy, strategy, planning, service delivery, and monitoring.
- Ensure engagement of CSOs/CBOs/FBOs in the implementation of facility and community-based HIV prevention, care, and treatment interventions targeting PLHIV, CAYLHIV, key and priority populations.
- Ensure representation, participation, and engagement of community actors in high-level health advisory or governing bodies, oversight committees including NAC, RAC, TWGs, Task forces, CCM, the Management board and other decision-making forums.
- Support CSOs/CBOs/FBOs in the development of strategy, governance and policy documents, such as human resource and finance policies, manuals and procedures, resource mobilization strategies and social dialogue strategies
- Build CSOs/CBOs leadership, human resources, technical and financial capacity including office space, human resource and office utilities to run their operations.
- Develop and implement a social contracting policy and guidelines to facilitate the provision of small grants to CSOs/CBOs to increase their capacity in health service delivery.
- Organize and empower PLHIV including Children, adolescents and youth living with HIV (CAYLHIV), Key and priority populations through associations, clubs, saving groups, and peer support groups with Legal registration of community organizations.

8.2 Community-led monitoring

Community Led Monitoring (CLM) is an intervention through which communities systematically and routinely collect and analyse data at policy and strategy level, programming, and service delivery levels. CLM collects data at policy, strategy, and program levels to identify key bottlenecks and barriers. The CLM data collected at the policy and program level will help to ensure accountability and address policy and program-level barriers. When implemented at the health facility level, community-led monitoring and research can provide deep insights on targeted action to improve patient experience and the overall quality of care, resulting in better health outcomes for individuals and the broader community. The strength of CLM rests in that it is owned and conducted by community and civil society organizations. The ability to continuously track unique community-generated data and report back on a set of indicators that matter most to service users is powerful.

In Ethiopia, community-led monitoring has been pilot tested to monitor the quality of services at KPP-friendly clinics. However, there is no standard guideline, or coordination structure, did not strongly involve KPPs, PLHIVs, and the affected community. CLM was limited to monitoring service quality, and it has not been designed in a way it identifies, tracks, and addresses policy and programmatic barriers.

CLM will be complementary to national health management information systems (HMIS) and, together, these data can also inform national strategic and operational planning for HIV, programs to improve overall implementation and mitigate programmatic risks. CLM data can also be compiled and triangulated with government data over time for a more comprehensive picture of service delivery.

The following activities will be implemented to strengthen community-led monitoring,

- Establish a CLM task force at the national and regional level that is chaired by national and regional PLHIV networks involving a range of where CSOs, CBOs, KPPs groups, PLHIVs, MOH, RHBs, health care facilities, UN agencies, donors and development partners.
- CLM taskforce at local and national levels to oversee the conceptualization and design of the CLM and to review and act on CLM findings.
- Develop CLM national strategy, guidelines, and data collection and compilation tools to monitor, identify and address policy, program, and service gaps and barriers.
- Avail digital tools and equipment including appropriate technologies for data management and storage.
- Building community capacity on the use of appropriate new information communication and coordination tools and technologies, including digital tools.
- Provide human resource (staffing), technical (training) technological and financial capacity of CSOs, CBOs, KPPs, and PLHIVs associations to implement CLM.
- Adopt , implement and monitor a digital CLM platform.
- Establish dedicated local project governance, field management, and operational and technical support to ensure the smooth functioning of the E-Monitor CLM platform.

- Co-create, community response protocols and process, implement, and scale up, a digital CLM platform that can be tailored to the local context.
- Provide technical assistance to CSOs leading CLM for the development of a data warehouse to bring CLM data from multiple sources such as facility surveys and scores cards, and other mobile and excel based data sources.
- Provide a real-time CLM dashboard and response module for multiple stakeholders to take prompt action on the ground and promote evidence-based decision-making.
- Perform an annual assessment of needs, issues, and impact of CLM activities.

8.3 Community Led Research and advocacy

- Conduct qualitative, quantitative, and operational community-led research and assessments of program implementation (e.g., shadow reports).
- Community-led mapping of legal, policy, and other barriers that hinder/limit community responses (including barriers that impede registration, and funding of community organizations).
- Provide technical support and training to build CSOs' capacity for policy and service access and quality advocacy.
- Conduct data-driven advocacy: Support CSOs/CBOs community-led advocacy activities, such as using community-led monitoring data to influence decision-making around, laws, regulations, or policies that limit the registration and/or operation of community organizations, engagement, and representation in policy processes, accountability mechanisms, and processes and in the development of local, regional and national health and disease-specific strategies and plans,
- Support CSOs production of advocacy materials including the production, publication, and dissemination of reports and communication materials based on the CLM and community-led research.
- Mobilize resources to implement CLM, community-led research, and advocacy.
- Consolidate learnings, develop case studies, advocacy and policy documents.
- Conduct quarterly stakeholder meetings with national HIV program managers, health facility managers, health providers, and other CLM implementers in the country on CLM findings and address policy, program, and service-related bottlenecks and barriers.

8.4 Community engagement linkage and coordination

- Building community capacity on the use of appropriate new information communication and coordination tools and technologies, including digital tools.
- Community-led development/revision of strategies, plans, tools, resources and messages for social mobilization.

- Mapping of community-led and community-based organizations and networks and their service packages
- Creation and/or strengthening of platforms that improve coordination, joint planning and effective linkages between communities and formal health systems, other health actors and broader movements such as human rights and women's movements.
- Establishing or strengthening formal agreements between community-led service providers and health facilities or private health service providers, linkages with community health worker associations, joint outreach activities and bi-directional referral mechanisms between health and community-led service delivery points.
- Representation, participation and engagement of community actors in high-level health advisory or governing bodies.

Chapter 9 Monitoring and Evaluation, Surveillance and Knowledge Management

Strategic Objective 7: Enhance generation and utilization of Strategic Information for an accelerated evidence-based response.

This section describes the gaps and challenges regarding the M&E and Surveillance systems and provides strategies for addressing the identified issues.

9.1 Context

The MOH and its partners have made major progress in rolling out systems and tools to generate and manage strategic information. EMRs rollout at higher volume health facilities has been effective in supporting the implementation of HIV prevention, care and treatment programs. Viral Load indicators have also been integrated from EPHI's central electronic database for Viral Load and EID which collects data from the VL testing centers in the country. The patient monitoring system remains a strong data source for monitoring HIV care and treatment service and has been integrated into the DHIS2. In addition, several HIV surveys and surveillance activities have been conducted, while stakeholders have deployed and trained human resources for M&E.

However, obtaining reliable and high-quality data for decision-making is still a challenge:

- Lack of unique patient identification and tracking systems.
- Lack of interoperability between different data systems
- There is a parallel data system and reporting requirement (DHIS2 and DATIM)
- Lack of disaggregated routine program data by age, gender, and population groups such as KPPs
- Lack of integration of community-level HIV prevention, care, and treatment data into DHIS2
- Limited data quality monitoring and improvement
- Incomplete transition to electronic data formats and incomplete reporting
- Limited capacity and interconnectivity of the data system at the facility level
- There is a scarcity of survey and surveillance data particularly for key and priority populations.
- Delayed publishing and dissemination of survey, surveillance, and program reports
- Limited coordination and difficulty in access to up-to-date data among the institutions generating data and programs that utilize such data for decision-making.
- Inadequate human resources for SI at lower levels

Program Objective

The overall objective of strategic information, surveillance and knowledge management is to provide comprehensive, timely and accurate data to inform policy, planning, services delivery and resource allocation for the NSP period – 2023/24 -2026/27.

The monitoring, evaluation, surveillance and knowledge management section has three (3) primary objectives:

1. To track the inputs, outputs, outcomes and impacts outlined in the NSP.

2. To ensure a systematic process for generating, collecting, analyzing, synthesizing, and sharing knowledge to inform the progress of the NSP.

3. To provide timely data to meet reporting obligations in line with national and international commitments.

Target Population

The target audience for M&E includes the following:

- National HIV/AIDS program officers
- Regional health management teams
- Development partners (bi-lateral and multi-lateral)
- Other key stakeholders from NGOs and academic institutions
- Other organizations responsible for planning and implementation of HIV prevention and treatment services

9.2 Strategic Interventions

- Integrate the various data sources and systems.
- Ensure interoperability of different data systems and establish a data warehouse.
- Ensure disaggregated routine program data (DHIS2) by age, gender, geographic, and population groups such as KPPs.
- Integrate community-level HIV prevention, care, and treatment data (MRIS) into DHIS2
- Strengthen data quality monitoring and improvement.
- Expedite the transition to electronic data formats and ensure complete reporting.
- Build IT capacity (computers and internet) and SI human resources at all levels, especially at the facility level.
- Strengthen capacity and culture for improved data analysis and information use for decision making.
- Conduct survey and surveillance which includes.
  - Ethiopian Demographic Health Survey (DHS) – conducted every 5 years.
  - SPECTRUM modeling
  - Population-based HIV Impact Assessment (PHIA)

  - Burial sentinel surveillance
  - Integrated biological behavior surveys in key populations (IBBS)
  - HIV case-based surveillance: HIV Case Reporting and Recency Testing
  - HIV drug resistance survey
  - STIS drug resistance survey
- Ensure timely publishing and dissemination of survey, surveillance, and program reports.
- Strengthen coordination and ensure easy access to up-to-date data among the institutions generating data and programs that utilize such data for decision-making.
- Establish unique patient identification and tracking systems.
- Regularly mapping hotspots to enable better segmentation of populations, granularity, and differentiation of service delivery
- Improving compliance in reporting through increased timeliness, accuracy, and consistency/standardization of data
- Enhancing data analysis and use for patient care and data-driven decision-making, including data modelling, machine learning, and predictions.
- Engaging private facilities in the implementation of the national health information system (DHIS2)

Health Information System scale-up and sustainability plan:

Stakeholders will collaborate to develop a Health Information System scale up and sustainability plan, (M&E systems). Besides the integration of data and patient tracking systems (using unique identifiers for patient tracking,), computerization of the HMIS system will be expanded to all health facilities, and private facilities with a large volume of patients also linked to feed into DHIS2. This will entail a nationwide capacity-building process. Data and information-sharing systems will be created at all levels based on the NSP Program Results coordination framework. An automated dashboard updating key indicators on a quarterly basis will be shared with all stakeholders through DHIS2, available on mobile phones, tablets, and computers.

Integration of eMRIS into DHIS2

Using the HMIS scale-up and sustainability plan e-MRIS will be integrated into the routine DHIS2 in collaboration with partners. This will require the MOH to address the following important issues:

- Selecting key indicators reportable at the community level
- Developing reporting tools
- Defining points of data collection and entry
- Identifying the required human resource
- Identifying options of integration with DHIS2 (Through integrated App, Separate instance on DHIS2, Revising the existing DHIS2 to accommodate community indicators)
- Identifying other options like integrating the MRIS into e-CHIS

Health Information System Integration with DHIS2 (EMR, LMIS, HRIS, and FMIS)

The existing disparate HIS systems need to be integrated and interoperable with one another. This interoperability of systems requires the following key preconditions.

- Availability of Master Facility Registry
- Implementation of unique identifiers like National ID, Master Patient Index
- Availability of system interoperability standards

Linking records on the individuals from testing, care and treatment, laboratory services and pharmacy will generate the data set for granular site management across the entire clinical cascade – within and between facilities. More than 700 health facilities are using Electronic Medical Records (EMR ART) kept at ART clinics to capture patient enrolment and follow-up information. The EMR ART records are regularly updated at ART clinics.

As Ethiopia reaches HIV Epidemic Control, using accurate, de-duplicated, and de-identified patient-level information becomes paramount for monitoring the performance of the clinical cascade, and supporting longitudinal case-based surveillance.

Granular Mapping and availing Strategic Information for Key and Priority Populations

MOH and EPHI will revise the HIV surveillance roadmap and follow the WHO recommendations to match with the current epidemic situation of Ethiopia, focusing surveys and surveillance activities on key populations and identify if there are other at-risk groups, while ensuring that bio-behavioral surveys to be conducted including size estimations.

Build capacity and Enhance Data Quality

MOH will develop and implement data quality assessment, monitoring, and feedback strategies, and ensure capacity at various levels to improve the quality and use of data. Data quality assessment practices should be regularly implemented among stakeholders, including sector ministries, and implementing partners. Moreover, different data quality and performance review forums will be employed at all levels.

Integrating, and digitizing data collection tools

A standard set of data collection tools will gradually be expanded to be used by all stakeholders for routine monitoring purposes. The system will gradually be evolved and transitioned into an electronic system. Data will increasingly be individualized through the expansion of EMR and DHIS2 to enable more accurate information collection and analysis for use in decision-making and program improvement.

Enhanced Data Analysis, dissemination, and Use

MOH and all partners will work to improve data quality, analysis, and use at all levels. Reports will be analyzed and summarized monthly and quarterly. The regular monitoring information

system will be complemented by targeted periodic performance reviews, supportive supervision, and mid-term and end-term program reviews.

Human Resource Capacity and Skills

The Ministry will design a sustainable human resource strategy for M&E and HIT officers in terms of structure/position and future career development. Moreover, continuous capacity-building activities will be employed to strengthen data analysis and information use culture at all levels. Such as to,

1) Implement the revised human resources structure for M&E considering donor funding and solicit the integration of regional M&E positions into the government staff structure.

2) Strengthen RME and epidemiology division collaboration and identify synergies and collaboration areas.

3) Conduct ongoing structured mentoring and training program for M&E staff to accommodate data analysis and information use.

Data from routine program performance from Monitoring and evaluation findings will be timely disseminated to stakeholders using different channels. Survey and surveillance reports will be disseminated and shared in a timely manner to all stakeholders. Consideration will be given to the development of a data portal where all HIV program, survey, and surveillance data will be shared with stakeholders and the public.

Results Framework

A Results Framework outlining baselines, annual targets, and standardizing indicators to be collected for performance is annexed to this plan. (Annex 1)

Knowledge Management

1) Develop a systematic and structured way of analyzing, synthesizing, and sharing knowledge on the status of the HIV/AIDS epidemic in Ethiopia.
2) Develop data and information use guidelines for the national and sub-national levels.

9.3 Monitoring and Evaluation Plan

The M&E Plan (Strategic Information) embedded in this NSP Outlines Indicator Definitions, Reference Sheets and Measurement, a description of data collection, analysis and management processes, as well as the systems strengthening and resources required to monitor, evaluate and report on the NSP as implementations are being carried out. The ministries involved will roll out a systematic way of updating the M&E plans in line with programmatic adjustments and emerging data needs during the implementation of the NSP. The M&E plan among other strategic information functions, will include:

- Engaging strategic plans for the collection, management, analysis and use of non-routine information from the joint AIDS/TB Program Reviews; Evaluations, Surveys such as EPHIA and DHS; IBBS and Size Estimation of FSW, LDD and other key and priority populations; HIV Recency Testing, community participatory reviews at federal, regional and Woreda level, and partner reviews, among others.
- Guides on continuous data quality assurance mechanisms and Related Supportive Supervision and Mentoring; the M&E will assess progress and performance including how information will be used to improve policies and future implementation.
- Strategically creates how M&E systems will be coordinated, within each strategic objective, accountability for results at each level and data flow through the HMIS and other database.
- Describes processes to identify corrective measures and feedback to communities, facilities, Woredas, sectors and funders.
- This also includes how monthly, quarterly, semi-annual, annual and multi-year information products (reports, newsletters; dashboards, and other)/newsletters and reports will be disseminated, and their intended purpose and use at community, Woreda and national level to improve the HIV and other health Program Performance.

Chapter 10 Health Systems

Strategic Objective 8: Ensure that there are resilient and sustainable systems for health and effective HIV response.

The six building blocks of health systems underpin the health system's efforts to address the HIV epidemic.

10.1 Supply Chain System

There have been several significant achievements made in the supply chain management of HIV commodities. These include a logistics coordination platform both at national and regional levels; a downstream supply chain coordination done through technical working groups and cluster meetings; an increasing number of health facilities reached by EPSA hubs directly; and the implementation of an Integrated Pharmaceutical Logistics System (IPLS). In addition:

- There is regular annual forecasting and quarterly supply planning.
- Quantification and procurement are centralized, which helps the efficient use of program resources.
- The availability of procurement policy and guidelines for pharmaceuticals and the implementation of procurement framework agreements
- Existence of local capacity to procure large volumes of commodities.
- There is a functional Health Commodities Management Information System (HCMIS) in addition to the manual records (bin cards)
- Implementation of Pharmaceuticals Management Information (PMIS) at health facilities enable to generate patient and medicine information. This helps track and reduce medication errors in health facilities and provide ART regimen data which is used for the national quantification of ARVs.
- Implementation of ARV Drug Use Evaluation (DUE) in health facilities for relative new ART regimens. DUE assesses and measures medicine use practices to ascertain if they are in compliance with the national treatment guidelines.
- Implementation of pharmacovigilance activities: pharmacovigilance guideline and training materials, provision of training. Presence of multiple safety reporting mechanisms (manual, mobile app, email, etc.). The manual ADE reporting form (Yellow Form) is printed and made available in the facilities.

Strategic Interventions envisaged in this NSP are:

A. ***Improve the availability of HIV pharmaceuticals at Service delivery points:***

- Revitalize the coordination system and strengthen the collaboration and coordination between program and supply chain stakeholders at all levels.
- Introduce a system which facilitates expedited clearance and quality control approval of HIV commodities at ports of entry.

- Put in place a national inventory system for medical equipment in the health system and develop a proper disposal system for obsolete medical equipment.
- Improve data quality for routine supply chain management decision making and forecast accuracy through data quality assurance and regular monitoring of consumption and service data.
- Develop an incentive mechanism to enhance local pharmaceuticals production capacity.
- Strengthen market shaping activities and optimize the procurement and contract management processes.
- Ensure end-to-end data visibility of HIV pharmaceuticals by expanding the HCMIS and DAGU-2, improve quality of reports through RRF data analysis and feedback, mentorship, and supportive supervision.
- Strengthen capacity building activities including training, supportive supervisions, and mentorship.
- Address the need for HIV testing kit by the general population by allocating budget or introducing alternate algorithm kit which can be availed through commercial means.
- Enhance the collaboration and coordination between program and supply chain personnel at all levels for efficient implementation of new initiatives and overall program activities.
- Strengthen the implementation of national pharmaceutical monitoring and evaluation framework.
- Further Expand access to ARVs by the involvement of community pharmacies in provision of ART dispensing services through provision of supportive policy and clear guidance on issue like dispensing fees, distribution of ARVs, referral system, LMIS, etc.

*B. **Pharmaceuticals Management and Information System***

Effective and efficient management of an HIV care and treatment program requires continuous availability of up-to-date, accurate and reliable patient and product information. This can be addressed through the following key interventions which are crucial for capturing, maintaining, and reporting of data at all levels.

- Expand and reinforce PMIS implementation across health facilities through scaling up of ePMIS, promoting PMIS tool utilization and enhancing data aggregation and use, to ensure informed decision making on the routine patient follow-up.
- Enhance the generation of patient and regimen information, actual dispensed data of ARVs and related medicines.
- Introduce and strengthen data triangulation mechanisms for HIV RTK, Viral load/EID, and other supplies utilization at service delivery points.

*C. **Improve the rational use of HIV pharmaceuticals.***

- Ensure systematic and regular monitoring of the prescribing, dispensing and use practice by implementing drug use studies such as drug utilization evaluation.
- Strengthen Pharmacovigilance of ARVs to produce the required level of information to the program. This can be done by availing adequate financial support, training, supportive supervision, and timely acknowledgement of adverse drug event reporters.

- Enhance antiretroviral treatment outcomes and adherence through availing separate rooms for privacy of the counselling service and assigning dedicated pharmacy professionals with the required capacity in all ART sites.

10.2 Laboratory System

Laboratory testing plays a crucial role in the detection and follow-up of disease progression in HIV positive individuals. There has been a significant achievement in improving the laboratory system which includes service level agreements for machine placement and maintenance, availability of integrated specimen transport system and back-up laboratory services, establishment of national, regional, and sub-regional EQA centers, an electronic database for VL and EID and Laboratory Management Information System (LMIS).

Currently there are different multiplex testing technologies for early infant diagnosis (EID) viral load, TB, HPV, hepatitis, COVID 19 and other molecular tests, including CD4, clinical chemistry and hematology that provides services for ART clients. Depending on the level of the health facility, testing services are provided on-site or through sample referral network in the geographic catchment area and referral laboratory system. As a result of these improvements, there are significant achievements in the HIV-related laboratory services towards reaching the third 95 goals. However, there are still unmet needs in the areas of national HIV related laboratory programs such as viral load testing coverage where there remain regional and population related variations, early infant diagnosis, EQA program implementation, quality monitoring, program coordination, waste disposal, supply chain, human resources, equipment maintenance, and sample referral and result return.

This NSP incorporates the following key strategic interventions to foster HIV related laboratory service provisions and to improve the qualities of laboratory services.

Strategic Interventions:

- Rationalize placement of POC multiplex testing technologies for lower volume health facilities to facilitate one stop shopping for EID/Viral Load, TB, HPV and other HIV related testing services.
- Strengthen the existing POC and conventional multiplex testing technologies for high load health facilities through an integrated sample referral system.
- Improve viral load coverage through integrating sample collection date with patient clinical visit and medication pick-up dates, promoting the concept of U=U, implementations of DBS/PCR viral load for children
- Use SMS to remind clients of VL appointment dates and notify results directly to the clients.
- Strengthen integrated sample referral with the TB program using appropriate cold chain and temperature monitoring, proper packaging; explore alternative sample

courier services for hard-to-reach sites, including possibilities of involving public private partnerships (PPP); explore options for centralized EID testing at conventional sites as sample numbers decrease; scale-up the electronic requesting and result returning (ETORR) system to improve TAT of results with regular performance monitoring.

- Ensure availability of uninterrupted laboratory testing services by availing reagents/supplies, diagnostic network optimization and enforcing vendors to provide machine maintenance based on their service level agreements.
- Improve the laboratory data capturing, data quality and utilization for decision making, synchronize Point-Of-Care (POC) data to the national data repository, and capacitate the national EID/VL data base to accommodate other HIV related indicators as needed.
- Improve program coordination and alignment at all levels including lab-clinic interface, incorporating teams from all thematic areas during mentorship, joint supportive supervision, and program reviews.
- Strengthen Antiretroviral (ARV) drug resistance surveillance as part of a regular program monitoring including early warning indicators (EWI) of HIV drug resistance.
- Incorporate Antiretroviral (ARV) drug resistance testing as part of routine patient monitoring.
- Re-initiate clinical chemistry and hematology services for patients with advanced HIV disease and procure the necessary reagents and supplies.
- Improve the quality of laboratory services by strengthening the national PT production, expand the capacity of EQA centers and improve EQA implementation practice, monitor of EQA activities, initiate lot testing and post market surveillance.
- Implement proper waste management and disposal practices including molecular waste by infrastructure investment, engaging other sectors through a multisectoral approach while also exploring outsourcing to the private sector.
- Strengthen the lablab infrastructure, right size skilled laboratory staff and sample couriers through mentorship, training, program monitoring and joint supportive supervision.
- Ensure availability of an alternative HIV test kit algorithm to prevent interruption of testing services that can potentially happen due to issues related with suppliers of the first algorithm.

10.3 Policy, Strategy, and guidelines

Some Relevant Policies and Guidelines

- National HIV/AIDS Policy 1998
- National Policy on Women (1993)
- Health Sector Transformation Plan 2021-2025
- Comprehensive HIV prevention, testing, care, and treatment.
- Condom Strategy 2019
- National Condom Program Implementation Guidelines
- Domestic Resource Mobilization Strategy 2020
- Resilience Health and Equity Fund

Ethiopia's apparent success in mitigating the impact of HIV is made possible by political commitment at the highest-level of leadership, meaningful contribution of sectors, development partners, CSOs and CBOs. Such commitments were expressed, among others, by way of issuing an AIDS Policy, establishing a national organ (the National AIDS Council) to coordinate the response to the epidemic and setting up governance and coordination mechanisms at national, subnational and community levels.

The national guidelines for HIV care and treatment are predominantly in line with WHO guidelines and encompass a broad range of protocols that include HIV testing services, linkage to treatment and care, the initiation, monitoring and follow up of patients on ART, and management of opportunistic infections affecting PLHIV and guidance for service delivery.

Ethiopia issued its AIDS Policy in 1998. The AIDS Policy, which was developed twenty-five years ago, does not currently reflect the new program initiatives adopted to respond to the current HIV and AIDS epidemic. Currently, the MOH envisages to address key HIV related policy gaps through an integrated approach with the revision of the national Health Policy and its newly PrEPared Health Act.

To ensure that this new Health Act identifies and addresses policy barriers to HIV services and ensures that these are reflected within the new legislations, an in-depth HIV policy analysis should be conducted. A few issues related with HIV services that may require policy updates include:

- Stigma and discrimination in schools, health care settings, employment and workplaces.
- The minimum age of consent for HIV testing and disclosure of status.
- Parental refusal to disclose children's HIV status and initiate treatment.
- Provider protection as a possible reprisal from sex partner or index case while providing partner notification service.
- Index case client protection against IPV (intimate partner violence) particularly for female index cases during disclosure and partner notification
- A regulation on assignment of university entrant youth on ART.

There have been HIV multi-sectoral responses since the beginning of the epidemic. However, there has been lack of solid legal frameworks to support its implementation. There is a need

to assess policy and legal environment and strengthen policy and legal frameworks for effective implementation, and accountability in the AIDS response in strategic sectors.

Additionally, there is a need to examine gaps in enforcement of relevant laws affecting gender, gender-based violence, stigma and discrimination and human rights violations.

10.4 Governance, leadership, coordination, and accountability

The National and Regional AIDS Councils (NAC/RAC), with multi-sectoral membership, are the highest national and regional bodies overseeing the country's response to HIV/AIDS. These structures have been either nonfunctional or weak in recent years because of leadership complacency. Revitalizing the councils is important to galvanize HIV response efforts, engage communities and ensure accountability at all levels.

The recent integration of FHAPCO into the MOH has consolidated the health sector and multisectoral responses. Some regions have already adopted a similar structure to that of the MOH. However, some regions did not align the HIV coordination structure with MOH. This could create challenges in communication and coordination with MOH. Thus, it is very critical to align regional and national level coordination structures. For these national and regional coordination structures to be effective, it is vital to strengthen human resources and build capacity to respond to the epidemic effectively and efficiently.

There should be a nationally aligned plan, periodic joint review meetings, monitoring, and evaluation to coordinate the HIV response between health and non-health sector actors led by the MOH. Moreover, integrating the woreda based and multi-sectoral planning and review process needs to be strengthened to ensure one plan and one monitoring framework.

Attention shall be given to strengthening the National Prevention Advisory Group and other Technical Working Groups to ensure optimizing the quality of programing and coordination among the government, CSOs and development partners at federal, regional and sub regional and community level.

There will be revitalization of partnership forums in line with the current program initiatives to ensure coordination and synergy among different intersectoral actors at all levels. It is also important to engage PLHIV Associations, KPPs, CSOs, CBOs, in the planning, implementation, monitoring and evaluation of the HIV/AIDS response at all levels.

10.5 Human Resources for Health

Without adequate human resources there cannot be an effective HIV response. There needs to be a coordinated human resource deployment plan to effectively lead and coordinate the HIV response at all levels. This shall include the co-opting of identified lay cadres such as peer adherence supporters, case managers and MSGs who have an important role in assisting

linkage of newly identified HIV+ people and supporting ongoing care and treatment. The MOH shall consider competency requirements for these lay cadres with the aim of absorbing within the health sector structure as resources allow. To oversee the HIV prevention, care and treatment program, there must be adequate staffing at the MOH and RHBs.

Sub-regional (zone and woreda level) structures will be strengthened with adequate staffing of the required academic background and experience for the HIV program response. These personnel shall receive incentives package similar with other parallel departments within the same office.

The health extension program has defined HIV as one of the packages for health extension workers. However, health extension workers to date had very minimal engagement in the implementation of community-based HIV prevention, care and treatment services. Therefore, it is essential that the role of health extension workers in HIV response be strengthened through revision of the HIV modules and introducing accountability mechanisms.

There will be capacity building training for program staff at national, regional and sub regional levels including the familiarization of this HIV/AIDS strategic plan, management of HIV AIDS program, HIV AIDS Programs for key and priority populations and other key issues.

There will be training and support to health care workers delivering HIV/AIDS prevention, care and treatment programs at facility and community levels. Health workers will participate in experience sharing and benchmarking of best practices.

10.6 Multi-sectoral Collaboration

The multi-sectoral HIV/AIDs response will be strengthened in strategic sectors that will have significant impact on the HIV epidemic and the response. In line with the current nature of the epidemic and with the focus of this NSP to address the key drivers of the epidemic, it is essential that key sectors and their regional and sub-regional counterparts are involved in the response. The sectors are selected by the comparative advantages they bring to address HIV prevention interventions across segments of the general population or key and priority population groups.

Current lack of ownership and commitment by the leadership, poor planning and investment of the allocated budget for interventions, lack of enforcing activities and accountability, monitoring and evaluation result in leaving out the populations for which mainstreaming the HIV response is critical.

Sectors which have mainstreamed HIV are required to ensure meaningful planning on HIV, allocate budget for the execution of the HIV plan, have in place a structure and assign staff to carry out the HIV plan, conduct risk assessment, and monitor and evaluate the implementation of their HIV response.

MOH will identify and support strategic sectors to ensure commitment of leadership and an appropriate structure, staffing and budget for HIV mainstreaming. Mainstreaming in the strategic sectors will contribute to deliver HIV prevention and care to KPPs and affected communities within the mandates of these strategic sectors.

MOH will develop a mainstreaming policy and legal framework to ensure commitment and accountability by the highest leadership of respective sectors at a level to assign staff, develop annual plans, allocate budget and implement HIV prevention and care interventions targeting KPPs and AGYW.

MOH will build capacity of strategic sectors in the planning, implementation and monitoring, evaluation and reporting of their HIV interventions. MOH will support strategic sectors to integrate HIV indicators in the routine information systems of key sectors and support strategic sectors to use the existing reporting system.

10.7 Private Sector engagement

The private sector plays a very critical role in the implementation of the National HIV/AIDS strategic plan. The private for-profit sector delivers e health services in the country, especially in urban areas. Therefore, there will be support and coordination with the private sector at all levels to increase their involvement the HIV prevention, care and treatment interventions at health facility and community levels.

Though the private health sector has been playing a significant role in delivery of health and HIV services, the potential has been underutilized and the HIV services delivered are under reported. There is a need to assess and map the private sectors players and identify challenges to their meaningful participation in the HIV response.

MOH will strengthen the coordination platforms of the private health sector and ensure their engagement in all national and sub-national policy and technical coordination platforms. The private health sector will be engaged in the national and sub-national joint planning, monitoring, and reporting system.

Private health facilities will continue to deliver HIV prevention, care and treatment services. The private health facilities, including private pharmacies will provide HTS to the general population on fee basis. Private health facilities will provide HTS and STIs service to KPPs, PMTCT and ART services, and TB and comorbidity, diagnosis and treatment through public private partnership arrangements.

In Ethiopia most PWID access clean needles and syringe through private pharmacies, Therefore, private pharmacies will be entry points to care for PWIDs, Private pharmacies in hot spot areas will be trained and supported to facilitate entry to cate to PWIDs.

Private and parastatal companies in key sectors should be actively involved in protecting their workforce as well as the KPPs around the project areas. These private sectors include construction, flower farms, textile and other factories, companies operating in emerging industrial zones. The Privatization and Public Enterprises Supervising Agency will be involved in any policy setting on the implementation of HIV mainstreaming across key private sectors.

All private entities should engage in initiatives for the reduction of stigma and discrimination and gender-based violence.

The private sector will be involved in domestic resource mobilization.

To capture the services provided by the private sector, private health facilities and pharmacies shall receive supportive supervision and training in reporting the delivery of HIV services. Additionally, the role of private employers will be captured as part of the measurement of the multisectoral response.

Chapter 11 Resource Mobilization, allocation and utilization Strategic

Objective 9: Mobilize resources and maximize efficiencies in allocation and utilization.

11.1 Context

Ethiopia has had an annual economic growth rate of 10% over the past 15 years and growth was projected to remain at around 7-8% for the foreseeable future. However, the country has experienced a number of economic challenges including the global economic downtown from the COVID-19 pandemic, internal conflict and war, natural disasters (drought and floods), the aftermath of Russia and of Ukraine war on commodity prices and scarce foreign reserves. Real GDP growth fell to 5.3% in 2022 from 5.6% in 2021 but remained above East Africa's average (4.7% in 2021 and 4.4% in 2022). Inflation rose rapidly to 33.8% for 2022 but is projected to decline to 28.1% in 2023 and 20.1% in 2024, following the peace dividend (Africa Development Bank Group, 2023). The macro-economic and fiscal context points to constrained fiscal space for increased government expenditure on health and HIV for the remaining NSP period.

Notwithstanding this economic context, Ethiopia has established ambitious goals for health spending and domestic resource mobilization for health as part of its Health Sector Transformation Plan IV that has been formulated for 2020/21 – 2024/25. In recent years Ethiopia has dramatically increased domestic government expenditure on health, primarily through increased allocations at the regional and local levels and a renewed focus on primary healthcare. Total health spending during 2016/17 was $3.1 billion, a 45% increase in nominal terms from $2.5 billion in 2013/14 **[48]**, but still only 3.2 percent of GDP (2017) which is very low compared to other East African countries.

A report on achieving sustainable health finance in Ethiopia Prepared by the GoE and the Global Fund, describes how Ethiopia's health sector needs are significant. At current levels of budgetary prioritization, government resources alone will leave a financing gap of as much as US$2.5 billion annually—or more than 50% of the resource need—by 2020 (pre-COVID-19) **[48]**. The report advocates for an increasing the amount of resources allocated to health but notably focusing on "more health for the money" through focusing on strategies to achieve budget efficiencies, allocative efficiencies and technical efficiencies in the health sector.

11.2 Investment trends for the HIV program

Over half (53.6%) of government spending on health goes into the areas of infectious and parasitic diseases (up from 46.5% in 2015, World Bank, 2016). According to the 2019/20 NHA,

HIV accounts for 13.2% of total health expenditure, which compares with malaria at 11.6% and reproductive health at 12%.

The vast majority of spending on HIV is sourced from external partners (comprising 80-90% of HIV funding), primarily PEPFAR and the Global Fund, although this has been decreasing in recent years due to the international trend of declining donor investments in HIV **[49]**. and increased commitment by the GoE in domestic financing of health programs. Funding from external partners declined by more than half from 2011 to 2017 ($197 million in 2017) but has stabilised from 2017 to 2022 at approximately $200 million per annum).

Expenditure analysis for 2021 shows that approximately 80% ($192 million out of a total of $236 million), of the national HIV program expenditure was financed through external partners, demonstrating the increasing proportional contribution domestic funding of the national HIV program. Out-of-pocket expenditure accounted for 2% of total HIV spending in 2016/17.Donor funding primarily supports provision of antiretroviral therapy (ART), which accounted for 60% of total PEPFAR and Global Fund financing for HIV in 2016 (PEPFAR, 2018). The Global Fund procures all antiretroviral drugs and almost all rapid test kits, while PEPFAR support is primarily focused on improving quality of clinical care and treatment, procurement of viral load monitoring and early infant diagnostics, community-based care; key populations prevention, targeted VMMC in Gambella, and support for orphans and vulnerable children.

11.3 Available funding for the HIV programs

A resource mapping exercise was undertaken to determine current sources and levels of funding for the HIV response and to project expected funding for the upcoming period of the NSP.

Ethiopia has experienced a decline in PEPFAR funding since 2017, when $150 million was spent. PEPFAR's planned funding for 2023 is $106 million and, it is expected that funding from PEPFAR will stabilise from 2024/25 to 2026/27 at $100 million per annum.

The Global Fund average annual budget for Ethiopia was approximately $81 million per annum for the period 2021 to 2024 and a slightly lower allocation of $80 million per annum has been allocated by the CCM for the period 2025-2027 (after deduction a $18 million contribution to RSSH).

Several other development partners play a role in supporting the Ethiopia HIV response, including UNAIDS, WHO, UNFPA and these contributions have been aggregated and estimated at approximately $6 million per annum and expected to remain stable over the NSP period.

Domestic resources for HIV comprise funding from the public sector (health and other sectors) and the private sector. Domestic funding for HIV is based on baseline public expenditure on HIV and a 2% contribution from the government sector offices and is aligned with the government's co-financing commitment to the Global Fund for the period 2021-2023. Domestic funding is forecasted by the writing team to increase by 5% per annum for the years 2024/25 – 2026/27, in line with the government's commitment to increasing domestic resources for HIV.

The expected available funding for HIV over the extended NSP period is shown in table 6 below. Available funding is fairly constant at an average amount of $228 million per annum, which is significantly below the resources needed to achieve the coverage and impact targets of the HIV NSP.

TABLE 8. PROJECTED FUNDING (USD, MILLIONS) BY SOURCE, 2021/22 - 2026/27.

Source	2021	2022	2023	2024	2025	2026
Domestic sources	34	35	37	39	40	42
PEPFAR	91	98	106	100	100	100
Global Fund	100	83	86	84	80	80
Other external partners	5	5	6	6	6	6
Total	**230**	**222**	**234**	**229**	**226**	**228**

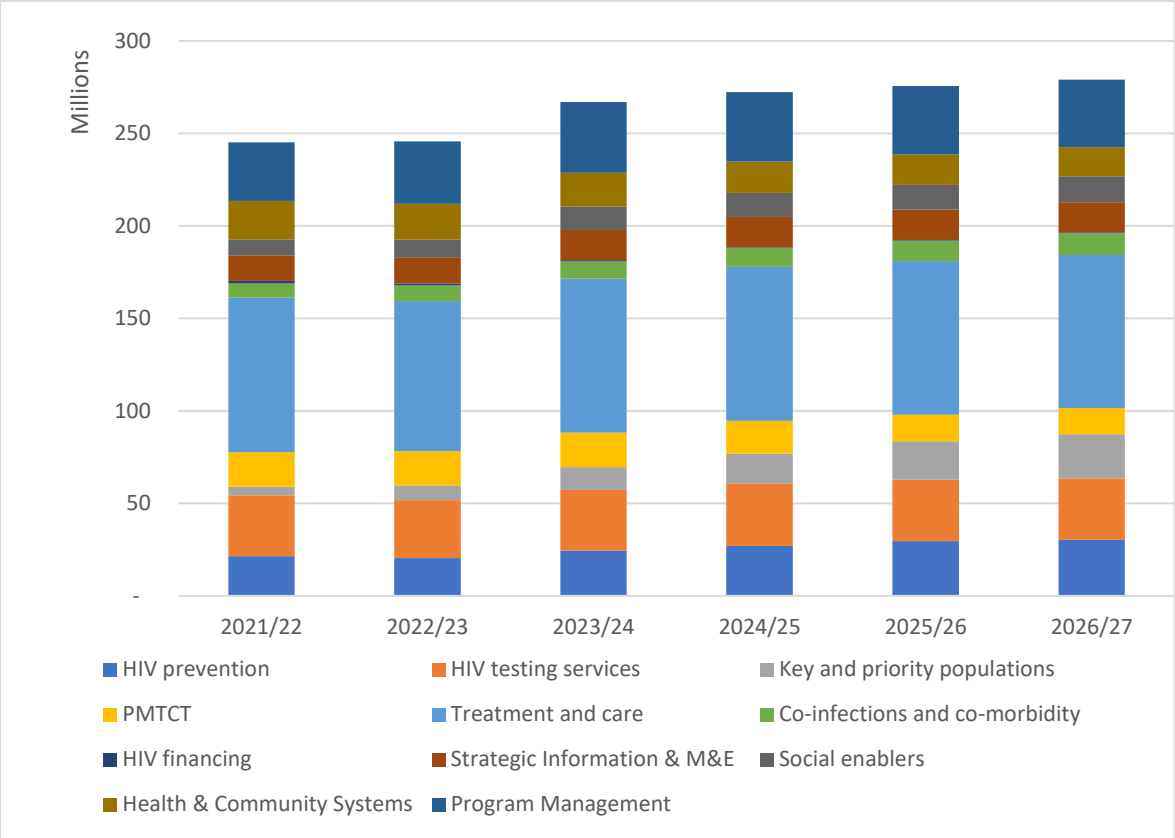
11.4 Resource needs to implement the NSP

The NSP 2023-2027 reflects a prioritized and cost-effective response over the NSP period. The resources required to achieve the NSP goals are calibrated to the latest investment case modeling for Ethiopia that used the Goals models to guide a cost effective and allocatively efficient response.

The Resource Needs Model was used as the primary tool to estimate the financial costs of implementing the NSP. The costs for each intervention are estimated as the population in need of the service multiplied by the coverage (the percentage using the service) multiplied by the unit costs. Unit costs were computed from a mix of sources, primarily published studies, MOH and development partner budgets, MOH procurement and expenditure data and additional ingredients-based costing for some interventions. For some interventions, efficiency savings were factored into the unit cost computations to reflect planned technical efficiency interventions by government (for instance community led delivery models for key and priority populations and efficiency gains in procurement and distribution of ARVs and

condoms). Interventions for most social and program enablers were estimated as annual fixed costs.

FIGURE 7. ANNUAL RESOURCE NEEDS FOR HIV 2021 – 2026 (USD).



The annual resource needs for the NSP increases from $245 million in 2021 to $279 million in 2026/27 (all years in 2023 prices). This annual increase is largely driven by scaling up combination prevention services to key and priority populations, whilst strengthening community and health system components and ensuring that PLHIV remain on treatment and virally suppressed.

Over the NSP implementation period, prevention interventions will drive 22% of financial resource needs, HIV testing 12%, and care and treatment services, 31%.

The annual cost of prevention increases significantly over the 6-year period (over 50% growth) as coverage of combination prevention services for key and priority populations is rapidly scaled up. Resource needs for HIV testing is relatively stable over the period as more targeted testing strategies to increase testing yields are implemented.

The resources required for care and treatment as a percentage of total resource needs decreases significantly in this NSP compared to previous NSPs due to the lower drug prices negotiated and the more efficient 1st line regimen.

Additional increases in resource needs would be needed to scale up programs to reduce stigma and address violence against women. The cost of OVC support interventions decline by 22% as the number of AIDS-related orphans is projected to decline.

Resource requirements for diagnosis and treatment of co-infections including hepatitis B and C and Tuberculosis as well as for cervical cancer screening increase from $7 million in year 1 to $11.8 million in year 6.

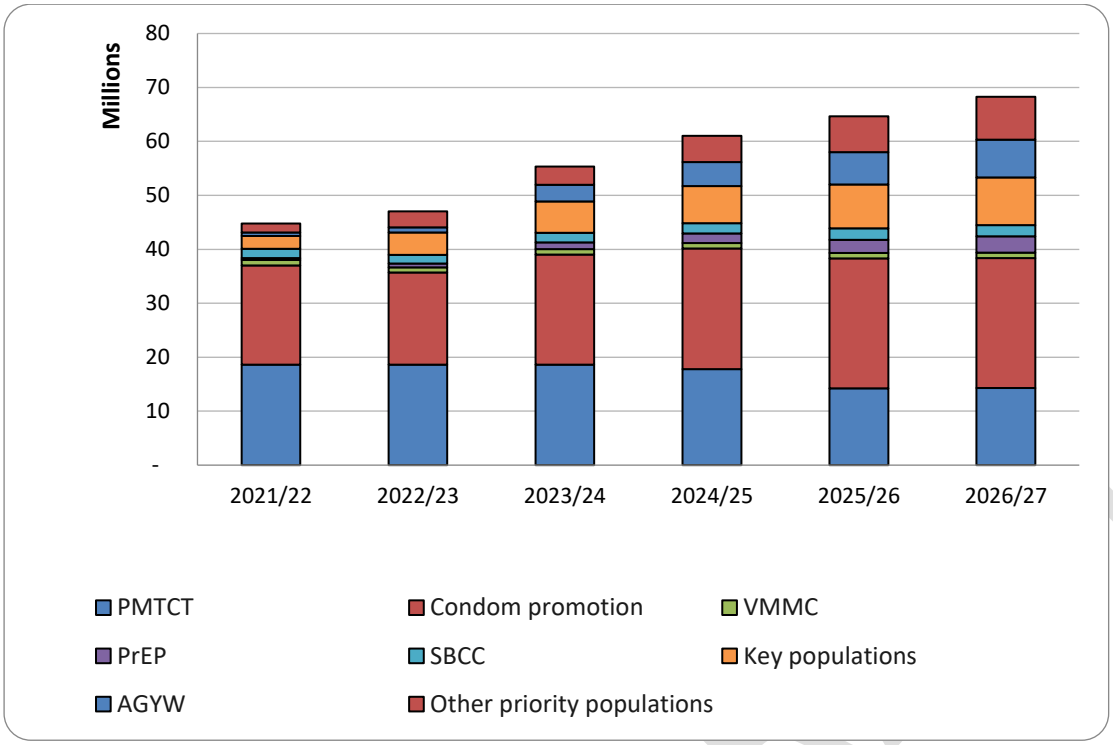
The NSP calls for greater investment in the 5 pillars of prevention, and in particular combination prevention programs for key and priority populations.

Biomedical prevention interventions, including PrEP, PEP, VMMC, condoms and PMTCT comprise 72% of the total prevention related resource needs. Combination prevention outreach to key population drives 11% of total prevention resource needs and AGYW and other priority populations 15% of total prevention resource needs.

TABLE 9. PREVENTION INTERVENTION RESOURCE NEEDS (USD).

	2021	2023	2026
PMTCT	18 633 155	18 647 031	14 265 782
Condom promotion	18 369 156	20 365 333	24 105 333
VMMC	997 400	997 400	997 400
PrEP	370 513	1 290 152	3 040 571
PEP			
SBCC	1 723 572	1 778 263	2 067 594
Key populations	2 364 400	5 781 050	8 837 463
AGYW	667 413	3 075 316	7 020 608
Other priority populations	1 635 779	3 381 151	7 946 484
Total	**44 761 388**	**55 315 695**	**68 281 236**

FIGURE 8. PREVENTION RESOURCE NEEDS FOR HIV 2021 – 2026 (USD).



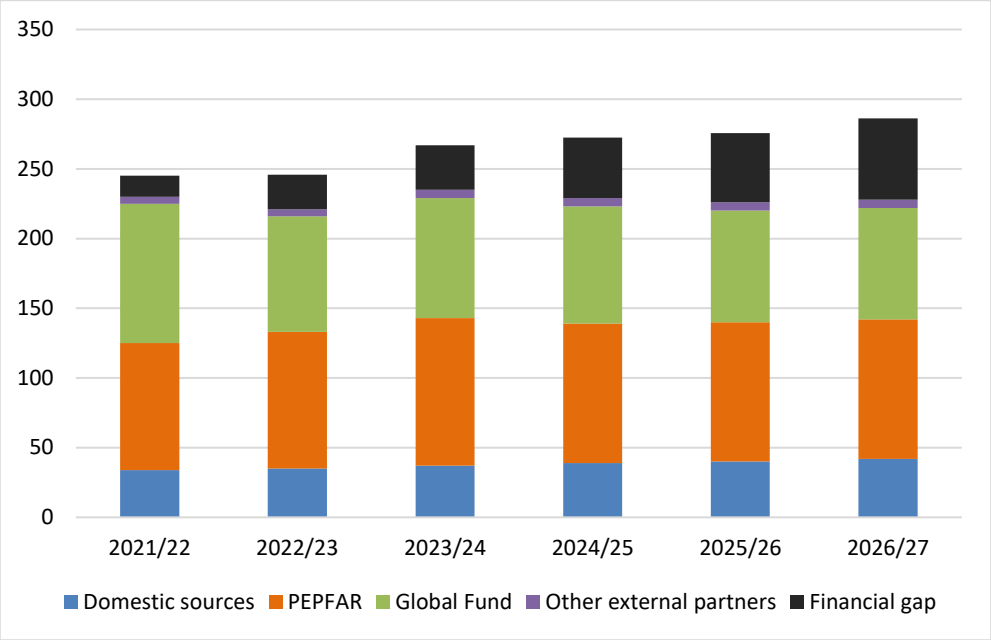
Financial gap

The annual funding gap is calculated by comparing available funding with financial resource needs over the period of the NSP.

The figure 30 below shows that the financial gap increases steeply from $15 million in year 1 to $58 million in year 6, as universal coverage of key and priority populations are reached with services from the 5 pillars of prevention as Ethiopia maintains 95% of PLHIV with life-long ART.

However, if domestic resources are mobilized through the activities of the planned MOH Resilience and Equity Health Fund, then this funding gap could be materially reduced. It should also be noted that a portion of service delivery/ program funding may be available but not be fully accounted for in the HIV funding forecast, as some resources for HIV are not readily identifiable in other public primary health care or central health care worker budgets.

FIGURE 9. RESOURCE NEEDS, AVAILABLE FUNDING AND GAP (USD $ MILLIONS).



11.5 Sustainable financing of the response

The financial gap analysis shows that it is critical, for the sustainability of the HIV program, that the GoE successfully achieves, and more ideally, exceeds its domestic resource mobilization targets, whilst its development partners continue to invest sufficiently and in a well-coordinated manner with GoE.

Meeting the challenge of fully funding the NSP within severely constrained fiscal space will require a combination of approaches, namely:

1. Mobilize additional domestic funding for the HIV programs from the planned MOH Resilience and Equity Health Fund (RHEF), through the following funding streams:
    - Funds collected from the sin (excise) taxes.
    - Resources mobilized from Corporate Social Responsibility
    - Mainstreaming resources from sector ministries
2. Improve allocative and technical efficiencies in the HIV program and health system

3. Support capacity building efforts of implementing agents to address barriers to full absorption of funds during budget execution

These strategic approaches are further elaborated below:

Mobilize and prioritize the allocation of funding for the HIV programs from the resilience and health equity fund (RHEF)

The purpose of the Resilience and Equity Health Fund is to create a mechanism of mobilizing additional resources for equitable health service provision in the form of a trust fund (which is additional to the regular budget allocated to health). The funds will be used to improved equity, fund exempted services including a package of care for HIV and as a contingency for health emergencies. Resources will be mobilized from governmental sectors, private institutions, philanthropists and the diaspora communities to substitute declining external funds for health. The RHEF will mobilize funding from the following sources.

1.1. Funds collected from the sin (excise) taxes.

If government commits to earmark certain percentage of taxes collected from products and services that are harmful for health and the environment, it will provide significant contribution to filling the gap that currently exists on fully financing exempted services, ensuring equity and building resilient health system.

1.2. Resources mobilized from Corporate Social Responsibility

Corporate social responsibility (CSR) will be one of the potential sources for resilience and equity fund. The CSR levy will be in addition to all the existing taxes and will be applied to pre- or after-tax income. The exact tax liability for each company/enterprise will be calculated by the MOR (or its regional offices) based on each company's annual financial statement. The CSR levy will be collected by the MOR and transferred to REF.

1.3. Mainstreaming resources from sector ministries

For several years, the government of Ethiopia has been collecting 0.2% of public sector employees' payroll for the AIDS Fund which has been mobilizing about 1 million USD per year from national, regional and woreda level governments. The MOH and other relevant stakeholders plan to enroll private sector employees into this contribution and integrate this fund with the REHF. It was estimated that total value of resources mobilized through the AIDS Fund will be $36 million from 2020–2025. Of this amount, $21 million (59%) will come from the public sector and $15 million (41%) from the private sector.

The plan is to enroll at least 40% of the private employees by 2025, which will have the revenue collection potential of about $5.1 million from the private sector and $7.4 million from the public sector annually from 2025 onwards.

Improve allocative and technical efficiencies in service delivery

Allocative and technical efficiency are two dimensions of the Value for Money Framework adopted by the NSP.

Allocative efficiency

Allocative efficiency refers to allocating investments by intervention, geographic area and population to maximize cost-effectiveness and impact of the HIV program.

The core programs of HIV testing, treatment, VMMC, condoms and prevention services for key populations have shown to avert substantial numbers of new infections and AIDS deaths if an appropriate enabling environment is in place. Modeling of the impact of implementing the NSP as part of the Ethiopia Investment Case for HIV (2020) demonstrated that it could avert 31,000 new infections during the period at a cost per infection averted (undiscounted) of approximately $11,000 is unlikely to have changed significantly.

Testing and treatment are the most cost-effective interventions since they are together cost saving over the period 2023/24-2026/27.

While treatment programs are needed everywhere there are PLHIV, prevention programs will be more cost-effective in the high incidence woredas defined as an incidence ≥0.03%. These 300 woredas account for about one-third of all new infections and thus constitute a geographic core where prevention interventions should be scaled up first to achieve maximum cost-effectiveness.

Using surveillance to strategically target high-value, high-impact interventions towards woredas and priority populations where impact will be greatest will increase the allocative efficiency of the response.

Technical efficiencies

Technical efficiency refers to optimizing the delivery of each service to provide quality outputs at the lowest possible cost. Improving the efficiency of the delivery of HIV services will result in improved outcomes and, in some settings, financial savings which can be re-invested into NSP programs.

Strategies that will be prioritized to achieve greater technical efficiencies and thereby improve the return on investments include more targeted testing, expanding differentiated ART, and establishing additional adherence clubs in facilities and communities. Table 11 below summarizes current efforts and opportunities for further technical efficiency gains in the national HIV program.

- Support capacity building efforts of implementing agents to address barriers to full absorption of funds during budget execution.
- Strengthen partnerships: Collaborate with local NGOs, community-based organizations, and other stakeholders to leverage additional resources, including financial contributions, technical expertise, and in-kind support.
- Program efficiency and optimization: Conduct a thorough review of program implementation processes and identify areas where efficiency gains can be made. This may involve streamlining administrative procedures, reducing duplication of efforts, optimizing supply chain management, and implementing cost-saving measures without compromising the quality of services.
- Enhanced monitoring and evaluation: Strengthen monitoring and evaluation systems to improve data collection, analysis, and reporting. Accurate and timely data can help

program implementers demonstrate the impact of their interventions, justify resource needs, and identify areas for improvement, which can, in turn, support increased budget utilization.

- Program innovation: Encourage innovation in program design and implementation to maximize the impact of available resources. Explore new approaches, technologies, and interventions that can enhance program efficiency, cost-effectiveness, and reach a broader population in need of HIV/AIDS services.

TABLE 10. INITIATIVES TO REALIZE TECHNICAL EFFICIENCY SAVINGS.

Population/ Service Area	Economy/ technical efficiency intervention	Explanation
Scale up services for key populations	Flexible and efficient CSO led models of delivery in communities	Fixed Drop-In Centers for KPs may be inefficient in some areas that have lower demand. CSOs are better placed for demand creation, linkage to care and adherence support, leading to increased productivity of resources and intervention outcomes. Moving towards universal access for key and priority populations would generate efficiencies through scale.
Scale up services for key and priority populations	Integration of HIV prevention into community activities	Integration of HIV prevention into Community Care Coalition activities, as well as into activities of community associations and religious structures
	Strengthen public sector mainstreaming of HIV through civil society support	Ensure non-health sector interventions for HIV by other public agencies are optimized and more targeted through facilitation from experienced civil society partners
	Community-based adherence	PLHIV associations and networks to increase treatment literacy and support to increase the cost-effectiveness of ART
	Community-led monitoring	Community-led monitoring should reduce stock-outs, stigma and discrimination and increase targeted investments to improve effectiveness and impact of HIV program
PMTCT	Integrating PMTCT with MNCH services as well as PMTCT+ with ART.	Continue integration of PMTCT with other clinical HIV and MNCH services Universal HIV testing of pregnant mothers ensures a human-rights approach to HIV prevention and care (In 2018, only 43% of facilities had 1 or more HIV+PW. Of those facilities, 65% had <10 cases).

Population/ Service Area	Economy/ technical efficiency intervention	Explanation
PrEP	Scale up intervention in eligible groups	Efficiencies expected through scale and integration with other clinical prevention services. Increase efficiency of program through enrolling those with substantial risk and use peer service providers for recruitment, screening and adherence support.
VMMC	Integration	Transition from vertical program to integration into primary health care service
HTS	Index case testing Risk assessment screening tool	Scale up index case testing and Partner Notification Strategy Increase HIV yield through PITC with the rigorous use of a Risk screening tool for all ages
ART	Scale up switch to most cost-effective 1st line regimen (TLD)	Efficiency savings already achieved from unit cost reductions in drugs and commodities through higher volumes and better demand predictability provided by MOH to suppliers.
ART	Differentiated Service Delivery: Multi-month scripting Community Pick-up Points Appointment Spacing Model	Early experiences in Ethiopia and regional studies show potential for reducing program costs and Out-of-pocket expenditure and improving quality of care **[50]**.
Health system	Integration of services	Integration of TPT into HIV clinical care package HIV testing integrated with TB/STIs/VMMC Several studies show increased cost effectiveness and cost savings from integrating HTS, ANC, PMTCT, FP, HIV care etc., although mostly at a pilot level or modeled **[51]**.
Health system	Procurement and supply chain management	Continue process to integrate pharmaceutical and logistics management, including RDT kits and condoms. Refine quantification assumptions and increase forecast accuracy. Expand long-term framework contracts for HIV commodities and medicines to prevent supply chain disruptions, reduce emergency procurement and reduce stock expiry

Population/ Service Area	Economy/ technical efficiency intervention	Explanation
Health system	HRH Optimization and productivity at PHC facility level	Levels of efficiency vary significantly across districts, and a study showed that up to 50% may be inefficient **[52]**. For instance, absenteeism in the health sector In Ethiopia is around 10%, far lower than other countries in sub-Saharan Arica **[53]**
Health system	Improve budget efficiency	Strengthen co-ordination and joint planning with development partners to ensure optimal allocation and utilization of resources. Strengthen PFM to ensure that allocated funds are expended on the intended budget area. Routinize monitoring of VfM across interventions and at a system level and management actions for bottlenecks and inefficiencies identified.

11.6 Coordinating strategic investments with external partners

Although the GoE is committed to increasing the domestic share of funding for HIV over the NSP period based on available fiscal space, development partners should continue to play a pivotal role in investing in strategic areas of the HIV response to support Ethiopia in attaining and maintaining epidemic control. The Global Fund and PEPFAR are expected to continue playing an important but decreasingly prominent role in financing medicines, health commodities and laboratory reagents, whilst consistently supporting the scale up of prevention programs for KPPs. The partners should, together with the Ministry of Health, ensure that there are no disruptions to HIV programs due to economic shocks or sudden reprioritization decisions.

The MOH will play a central role in coordinating planning and investments between GoE and its partners to ensure that funding is efficiently allocated and spent.

The MOH will ensure the appropriate structure and staffing will be in place and tasked to mobilize and utilize both domestic and external resources. Through the structures of the RHEF, there will be several tools to achieve sustainable financing of the HIV response, including robust monitoring and reporting systems, capable governance structures and indicators to measure VfM across the dimensions of economy, efficiency, effectiveness, equity, and sustainability.

Investing in financial systems and capacity

1. **Strengthen government capacity for financial management and sustainability management.**

The MOH in coordination with other key partners, will strengthen capacity at all levels of government and across sectors to implement the RHEF and to monitor the sustainability of the response. High-level coordination, including with broader health financing efforts and donors, also will be critical to ensure success of the strategy.

Advocacy and capacity building interventions to implement the RHEF will be conducted across the various levels. The follow up and feedback mechanisms will also be standardized and implemented. The interface of the MOH REHF resource mobilization structures with the regional and sub-regional level similar structures of health and Ministry of Finance and Economic Development will be designed for more efficient implementation of the strategy.

2. Promote transparency and accountability in financial management and improve resource tracking and monitoring.

In addition to NHA and NASA studies on health and HIV expenditure, the MOH will develop a standardized tool for routine tracking HIV allocations and expenditures. It will also develop an online dashboard and database for HIV financing and programmatic data and reporting, with analytic and data visualization capabilities.

Implementation of the domestic resource mobilization and sustainable financing strategies will be overseen by MOH and its partners, guided by supportive legal framework and an implementation road map, which defines a set of activities and responsible parties to implement each initiative.

The initiatives to be pursued under this sustainability agenda will represent a critical step in achieving self-sufficiency and long-term sustainability for addressing the HIV epidemic in Ethiopia.

TABLE 11. PUBLIC RESOURCE MOBILIZATION TARGETS FROM THE PLANNED REHF (US$ MILLIONS) [48].

Finance source category	2022/23	2023/24	2024/25	2025/26	Total	Remarks
AIDS Fund(s)	4.6	6.6	9.2	12.6	33.00	0.2% from public and 0.2% from private employee
Targeted mainstreaming	5.6	6.3	7	7.9	26.80	Mainstreaming budget from sectors
Earmarked tax for CSR	16.8	18.5	20.4	22.5	78.2	Earmarked tax from selected for profit institutions having more than 100 ETB million revenue generation capacity per year

Earmarked sin tax from alcohol and tobacco[1]	310.33	372.40	446.88	536.26	1,665.87	Sin tax projection with 5-10% additional from alcohol and tobacco
Total	337.33	403.8	483.48	579.26	1,803.87	

[1] Medium scenario (20% annual increase in excise tax revenues) was used to estimate resources to be generated from excise taxes (See annex table for more details).

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Annexes

ANNEX 1 : ETHIOPIA HIV NSP 2023/4-2026/27 RESULTS FRAMEWORK

ANNEX	Indicators	Disaggregation	Baseline	Data Source	Target	Target	Target	Target
Level			2022		2023/24	2024/25	2025/26	2026/27
Impact	Number of new HIV infections	(Further disaggregation by Woreda - see incidence Mapping)	8,300	Spectrum Estimates	7300	6500	5600	4800
			0.01%	Spectrum Estimates	0.008	0.007	0.006	0.005
		Female 15+ Years	4,100	Spectrum Estimates	3700	3400	3000	2700
		Male 15+ Years	2200	"	1,900	1,700	1,500	1,300
		Children 0-14 Years	2,000	Spectrum Estimates	1700	1400	1100	800
		Number of new infection by Region (all ages)						
		Addis Ababa	500	Spectrum Estimates	325	300	250	200
		Affar	500	Spectrum Estimates	325	275	250	200

		Amhara	1,500	Spectrum Estimates	1300	1200	1050	1000
		Benis Gumz	100	Spectrum Estimates	70	65	60	50
		Dire Dawa	500	Spectrum Estimates	325	300	250	200
		Gambela	500	Spectrum Estimates	325	300	250	200
		Harari	100	Spectrum Estimates	70	65	60	50
		Oromiya	1,600	Spectrum Estimates	1350	1200	1100	1050
		Sidama	870	Spectrum Estimates	700	650	600	550
		SNNP	500	Spectrum Estimates	325	300	250	200
		Somali	200	Spectrum Estimates	160	145	130	100
		Tigray	500	Spectrum Estimates	325	300	250	200
	Percentage of people living with HIV (Prevalence)	Disaggregated by age, gender, location and KPs (FSW, PWID)	0.91 Adults 15+	Spectrum Estimates	0.71	0.65	0.6	0.55
			573,538	Spectrum Estimates	660,678	657,971	654,712	662,958

		FSW	18.7%	IBBS 2020, EPHI	18%	17%	16%	15%
	TB/HIV mortality rate per 100,000 population	All	22	WHO Global TB Report 2018	19	16	15	11
	Number of AIDS-related deaths	All	11,000	Spectrum Estimates	10,500	10,000	9,300	8,500
		Male	4,400	Spectrum Estimates	4300	4200	3900	3500
		Female	5,100	Spectrum Estimates	4800	4500	4200	4000
		Children (0-14)	1,500	Spectrum Estimates	1400	1300	1200	1000
	Incidence Mortality Ratio (IMR)	All	0.75	Spectrum Estimates	0.70	0.65	0.60	0.56
	% of people living with HIV in the reporting period with suppressed viral loads (≤1000 copies/mL)	Adults (15-64)	84%	Spectrum Estimates for 2022	84%	84%	86%	86%
		Children 0-14	36%	Spectrum Estimates for 2022	45%	55%	70%	86%

	Percentage of people living with HIV and on ART who are virologically suppressed	All	98%	Spectrum Estimates for 2022	98%	98%	98%	98%
		Adolescents 15-24	93%	MOH Annual Report 2014 DHIS2	92%	93%	94%	95%
		Children 0-14	90%	Spectrum Estimates for 2022; MOH Annual Report EFY 2014 DHIS2	90%	93%	95%	95%
	Percent MTCT past 12 months	All	12%	Spectrum Estimates	10%	8%	6%	5%
Strategic Objective 1: Reach 95% of Key and Priority populations with targeted combination HIV prevention interventions by 2027								
SBCC Result: Comprehensive knowledge about HIV and AIDS reached at least 70% by 2027								
Outcome	Percentage of women and men aged 15-49 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions	Adults (15 – 49): Male	38%	DHS 2016	45%	50%	55%	60%
		Adults (15 – 49): Female	20%	DHS 2016	25%	30%	40%	50%
		Young People (15 – 24): Male	39%	DHS 2016	45%	50%	55%	60%
		Young People (15 – 24): Female	24%	DHS 2016	25%	30%	40%	50%

	about HIV transmission							
	Percentage of 15-24 who have sex before age 15	Males	1%	DHS 2016	0.75%	0.65%	0.50%	0.50%
		Females	9%	DHS 2016	7%	6%	5%	4%
Coverage	% 15 – 24 reached with HIV prevention programmes during the last 12 months (e.g. school and out of school SBCC including Peer or life skills education)	Sex	23%	Calculated based on MOH2014 EFY annual Report in absolute number	40%	50%	60%	70%
coverage	Number of 15 – 24 reached with HIV prevention programmes during the last 12 months (e.g. school and out of school SBCC including Peer or life skills education)		5.1M	MOH2014 EFY annual Report	9M	11.5M	14M	16.5M

Voluntary Medical Male Circumcision (VMMC)								
Result: 90% of Men 15-29 in High HIV incidence settings (Gambela) are circumcised by 2027								
Outcome	% of males aged 15-49 circumcised at Gambella and Selected woredas of SNNP region	Young men 15 - 29	72%	DHS 2016	83%	85%	90%	90%
		Adult men 15-49 (-21% medically, rest traditionally)	72%	DHS 2016	80%	85%	90%	90%
Coverage	Number of medically circumcised Men 10+ years	10+ Years	26,737	MOH2014 EFY annual Report	14,300	15,000	16,000	18,000
	Number and % of circumcised males experiencing adverse events	male infants circumcised medically	0.36%	PEPFAR Program data	0.20%	0.15%	0.10%	0.10%
Condoms- Utilization and distribution								
Result: Condom use at last sex with non-regular sexual partner among general population reached at 50% % by 2025								
Outcome	% of people who used condoms during their last high-risk sex act	Adults (15-49): Females	20%	DHS 2016	35%	45%	50%	50%
		Adults (15-49): Male - Av both sexes 41%	51%	Population Survey	60%	65%	70%	70%

	the last 12 months [3]							
Coverage	Number of male and female condoms distributed annually	Male Condoms	80.6 M	MOH2014 EFY annual Report	250 M	279.7 M	318M	362.7 M
		Female Condoms	DNA		2M	2M	2M	2M
Pre-exposure prophylaxis (PrEP)								
Percent of eligible people on PrEP by 2027								
Coverage	% of eligible people who initiated oral PrEP during the reporting period	All	1%					15%
Coverage	% and Number of eligible people who received oral PrEP at least once during the last 12 months	Discordant couple (% of eligible partners of PLHIV who have not attained viral suppression N=10,350 in 2022 N=10,228 in 2027)	19%	Calculated from MOH2014 EFY annual Report	30%	45%	60%	75%
		Discordant couple (number)	2014	DHIS2	3,250	5,000	6,900	8,800

		High risk Pregnant and Breastfeeding women (PBFW)	0%	Program data	1%	2%	3%	5%
		High risk PBFW number	0		810	1,620	2,430	4,050
		PWID (% of HIV negative PWID on PrEP target HIV -ve in 2022 9400 & 8000 in 2027)	0%	No Baseline (No PWID PrEP Program)	1%	2%	3%	5%
		PWID on PrEP Number	0	Program data	90	173	250	400
		FSWs (% of all HIV negative FSWs target HIV -Ve =182040 in 2022 & 201,720 in 2027)	11%	Program Data (No recent size estimate)	12%	13%	14%	15%
		FSWs (number)	19,670	MOH Annual Report 2014EFY	22,435	24.944	27,552	30,258
Key and priority populations Results								
Result 1: Comprehensive knowledge about HIV and AIDS reached 50% by 2027 for key and priority populations								
Result 2: Condom use among key and priority populations engaged in risky sexual behavior reached 90% by 2027								
Result 3: 95% for key and Priority populations will be reached with defined package of prevention services by 2027								

Outcome	% KPP Members reached with a defined packages of HIV prevention services	FSW ([Denominators: 228,000 in 2023 and 246,000 in 2027])	70.0%	IBBS 2020	75%	80%	90%	95%
					171,000	187,200	216,000	233,700
		Prisoners *(Prison Administration)	58%	Prison survey 2015	70%	80%	90%	95%
					60550	69200	77850	82175
		PWID [Denominators is 10,000 in 2023 and 8850 in 2027, 0.13% of adults in Spectrum pop projection]	N/A	IBBS 2015	20%	40%	60%	70%
					2000	3850	5500	6200
		Long distance drivers [Denominators: 77000 in 2020; 89,000 in 2027]	55%	IBBS 2013	60%	75%	90%	95%
					46,200	60,750	76,500	84,550
		Widowed and divorced men and women [Denominators:	24%	DHS 2016	40%	60%	80%	95%

		1,046,000 in 2023 and 1,14180,0 by 2027]						
					418,400	645,600	891,945	1,084,706
		Workers in hot spot areas [Estimated at 840,000 in 2020 and 1,088,000 in 2027]	20%	DHS 2016	40%	60%	80%	95%
					384,800	601,200	840,000	1,033,600
		High risk adolescent girls and young women [Denominators: 358550 in 2023 and 371,500 by 2027]	24%	DHS 2016	40%	60%	80%	95%
					143,417	218,967	297,036	353,000
Outcome	Percentage of key populations reporting use of a condom with their most recent partner	FSW condom use at last sex with Paying and non-paying clients	Paying 95.3%	IBBS 2020	99%	99%	99%	99%
			Non Paying 26.4%	IBBS 2020	55%	70%	90%	95%
		LDD condom use at last sex with non-regular partner	84%	IBBS 2013	90%	93%	95%	95%

		Widowed and divorced men and women condom use at last sex (15-49)	31%	DHS 2016	40%	50%	60%	70%
		Workers at hot spot areas condom use at last sex with non-regular partner (15-49 men and women)	41%	DHS 2016	45%	50%	60%	70%
		High risk adolescents and young women condom use at last sex with non-regular partner	22%	DHS 2016	40%	50%	60%	70%
	% of PWID who received at least two more harm reduction Prevention	PWID	DNA		20%	30%	840%	60%
	% PWID receiving OPIOID Substitution Therapy	PWID	DNA		0%	10%	20%	30%
	Number of PWID receiving OPIOID Substitution Therapy				0	960	1840	2660

Coverage	Percentage of key and Priority populations reached with Social Behaviour Change Communication or peer education sessions (cumulative)	KPP	NA	MRIS	40%	60%	80%	95%
Coverage	Percent of people 15-49 years with STIs treated	Adults 15-49	17%	Program Report 2022 (MOH 2014 EFY)	30%	45%	60%	75%
		Number	303,994	Program Report 2022 (MOH 2014 EFY)	304,000	560,350	861,500	1,177,400
	Percent of FSWs with STIs treated	Female sex workers	64%	IBBS 2020	75%	80%	90%	95%
		Number	22733	IBBS	27360	29952	34560	37392
Strategic Objective 2: Attain virtual elimination of MTCT of HIV and Syphilis by 2027								
Elimination of Mother to Child Transmission (eMTCT)								
Result 1: Mother-to-child transmission of HIV during pregnancy, childbirth and breastfeeding reduced to less than 5% by 2027								

Result 2: Access to lifesaving treatment for HIV+ pregnant women increased to 100% by 2027 and AIDS-related maternal deaths substantially reduced								
Coverage	Percentage of infants born to women living with HIV receiving a virological test for HIV within 12 months of birth	All	62% (9,746)	MOH 2014 EFY Report	70%	80%	90%	95%
Coverage	Percentage of infants born to women living with HIV receiving a virological test for HIV within 2 months of birth	All	44.04%	MOH 2014 EFY Report	50%	55%	65%	75%
Coverage	Percentage of HIV+ pregnant women who received antiretroviral therapy to reduce the risk of mother to child transmission	All	89%	MOH 2014 EFY Report	90%	92%	94%	95%

Coverage	% of expectant mothers living with HIV who are virally suppressed at labour, delivery and postpartum	All	98%	Spectrum estimate for adult women	98%	98%	98%	98%
Coverage	Percentage of pregnant women who know their HIV status	All	90%	MOH 2014 EFY Report	92%	94%	95%	95%
Coverage	Percentage of women accessing antenatal care services who were tested for syphilis	All	71.4%	MOH 2014 EFY Report	80%	85%	90%	95%
Coverage	% of HIV+ women aged 15-49 years who have their need for family planning satisfied with modern methods	All modern methods	41%	Ethiopian Mini-DHS 2019	50%	60%	70%	80%

Coverage	% of HEI receiving enhanced postnatal (dual) prophylaxis	All	47%	MOH 2014 EFY Report	60%	70%	80%	90%
Strategic Objective 3: Enhance HIV case finding to attain 95% of PLHIV knowing their HIV status and linked to care by 2027								
DIFFERENTIATED HTS								
HTS Result: HIV testing, and counselling services scaled up and at least 95% people who know their HIV status by 2027								
Result 3: 95% for key populations will know their HIV status by 2027								
Coverage	Number of women and men who received an HIV test in the last 12 months and who know their results	Number	8,024,936	Program Report	7.36 M	7.46 M	7.57 M	7.04 M
Coverage	% of women and men aged 15-59 years living with HIV who know their HIV status	Adults (15-59)	84%	Spectrum Estimates, 2023	88%	90%	92%	95%
		Young People (15 – 24):	85%	Spectrum Estimates, 2023	88%	90%	92%	95%
Coverage		FSW	70%	IBBS 2020	75%	80%	90%	95%

	Percentage and Number of key populations who received an HIV test in the last 12 months and who know the results				140,220	153,504	177,120	191,634
		Prisoners	58%	Prisons report 2015	70%	80%	90%	95%
					57,500	65,750	73,950	78,066
		PWID	N/A	IBBS 2020	20%	40%	60%	70%
					1,880	3,610	5,189	5,834
		Long distance drivers	55%	IBBS 2013	70%	80%	90%	95%
					51,205	61,560	72,675	80,323
		Widowed divorced men and women	24%	DHS 2016	40%	50%	60%	70%
					372,376	478, 820	595,373	711,339
		Workers in hot spot areas	20%	DHS 2016	40%	60%	80%	95%
					373,256	589,176	823,200	1,012,928
		High risk adolescents and young women	18%	DHS 2016	40%	60%	80%	95%
					139,115	212,400	288,125	342,410
	Percentage of HIV-positive results among the total HIV tests performed during the reporting period	Gender, Community testing (mobile testing, community VCT) Facility testing (ANC clinics, FP clinics, TB clinics, VCT centres, other)	0.50%	MOH 2014EFY annual Report	0.8%	1.2%	1.6%	2%

Strategic 4 Attain 95% treatment coverage among PLHIV who know their status and 95% of those on ART to achieve viral suppression across all populations groups and geographic areas								
Result 1: At least 95% of Adult and Children living with HIV who know their status receiving antiretroviral treatment by 2025								
Outcome	95-95-95	All	87-98-98	Spectrum Estimates of all PLHV2023	88-98-98	90-98-98	95-98-98	95-98-98
	% of all people living with HIV who know their HIV status, % of all people with diagnosed HIV infection who received antiretroviral therapy and % of all people receiving antiretroviral therapy who have viral suppression	Adults (15-64): Female	89-88-97		90-99-99	94-99-99	95-99-99	90-99-99
		Adults (15-64): Male	85-81-85		90-95-95	94-95-95	95-95-95	90-95-95
		Children <15	40- 40-36		80-90-90	94-95-95	95-95-95	80-85-88
					50-95-95	70-95-95	80-95-95	95-95-95
		Children 0-4 years	26%		50-95-95	70-95-95	80-95-95	95-95-95
		Children 5-10 years	46%		60-95-95	75-95-95	85-95-95	95-95-95
		Children 11-14	58%		70-95-95	80-95-95	90-95-95	95-95-95
Outcome	Percentage all of adults and children living with HIV infection receiving antiretroviral therapy at the end of the	(15-49, >15 & region)	84%	Spectrum Estimates 2023	88%	90%	93%	95%

	reporting period (To be disaggregate by region) 95-90-86							
	Number on treatment	Numbers on ART (All ages)	461,194	MOH 2014 EFY Report (Tigray not reported)	527,371	532,335	543,601	547,872
					90%	91%	94%	97%
		Adults (15+)	448,278	MOH 2014 EFY Report (Tigray not reported)	509,968	514,768	525,662	536,670
		26% for children 0-4			86%	87%	90%	95%
		Numbers, 1-4			1,880	1,183	986	2,528
		46% for those aged 5-10 years			75%	85%	95%	95%
		Numbers, 0-14	12,916	MOH 2014 EFY Report (Tigray not reported)	17,403	17,567	17,939	18,315
		58% for those 11-14			59%	67%	76%	86%
Outcome	Percentage PLHIV on ART who are	Gender, Age	98.0%	MOH 2014 EFY Report	98%	98%	98%	98%

	virologically suppressed			(Tigray not reported)				
	Number				534,585	558,253	569,602	505,139
Outcome	% of all PLHIV who are virologically suppressed	Gender, Age (Including not VL tested)	81.1%	SPECTRUM 2023	85%	90%	90%	90%
	% VL tests		80.0%	MOH 2014 EFY Report (Tigray not reported)	85%	90%	90%	90%
	Number VL tests		366,915	MOH 2014 EFY Report (Tigray not reported)	488,600	528,872	539,623	449,013
Tuberculosis and Hepatitis								
TB deaths in people living with HIV reduced by 75% by 2027								
Outcome	Percentage of HIV-positive new and relapse TB patients on ARV therapy during TB treatment	Adults (15+): Male and Female	59% (WHO,2021)	(DHIS2)	80%	90%	95%	100%
Coverage	Percentage of people living with HIV who	All People	>95%	(DHIS2)	100%	100%	100%	100%

	are screened for TB in HIV settings							
Coverage	Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV	All	97%	TB Program	98%	99%	99%	100%
Coverage	Percentage of people on ART (newly enrolled plus already on ART) in HIV care started on TB Preventive Therapy	Adults (15+): Male and Female; Children under 15	87%	(DHIS2)	90%	95%	95%	95%
Coverage	% of PLHIV on ART who completed any course of TB preventive treatment among those who initiated TPT	All	65%	Program Reports; DHIS2/SMART CARE	85%	90%	95%	100%

Coverage	% People on ART who were screened for Hepatitis B OR/AND C during the reporting period	Sex Age (<15 and 15+ years)	<1%	Program Reports; DHIS2	20%	40%	65%	85%
Coverage	% people On ART tested positive for hepatitis B surface antigen (HBV) OR/AND hepatitis C surface antigen (HCV) infection	Sex Age (<15 and 15+ years)	<5%	Program Reports; DHIS3	20%	40%	65%	85%
Coverage	Proportion of people coinfected with HIV and Hepatitis C virus (HCV) starting HCV treatment	Sex Age (<15 and 15+ years) People who inject drugs	<5%	Program Reports; DHIS2	20%	40%	65%	70%
Strategic Objective 5: Stigma and discrimination and gender-based violence will be reduced from 25% and 20% to <10% by 2027								
Reduce Stigma and discrimination <10% and GBV <10% by 2027								

Outcome	% of PLHIV and KPP who reported at least one form of stigma and discrimination in the preceding 12 Months (community or health facility settings)	Disaggregated for FSW, PWID and AGYM	32%	Stigma Index 2021	25%	20%	15%	<10%
Outcome	Proportion of women aged 15-49 who reported experiencing physical or sexual violence from a male intimate partner in the past 12 months	Adults Females (15-49)	19.8%	Gender link GBV Indicator - UN 2019	18%	15%	12%	10%
Outcome	Ethiopia Gender Inequality index (value)		0.52	Human Development Report 2021/22		0.3985		0.289 [5]
Coverage	Percentage of people living with HIV who	Disaggregated for FSW, PWID and AGYM	24%	Stigma Index survey 2020	20%	15%	10%	<10%

	report experiencing stigma and discrimination in the general community in the last 12 months							
Coverage	Percentage of people living with HIV who report experiencing stigma and discrimination in the health facility in the last 12 months	Disaggregated for FSW, PWID and AGYM	42%	Stigma Index survey 2020	30%	20%	15%	<10%
Coverage	% of women and girls who experienced physical or sexual violence from an intimate partner.	Adults Females (15-49)	33%	DHS 2016	20%	15%	10%	<10%
75 % of PLHIV and OVCs, at risk of and affected by HIV and in need benefit from HIV-sensitive social protection by 2027								
Outcome	% Orphans and vulnerable	Target is AIDS Orphans supported;	DNA (100%)	MOH 2014 EFY Report	90%	90%	90%	90%

	children 0-17 years in need who received basic external support (300,000)	Denominator is Total AIDS Orphans						
			317,079		270	270	270	270
Coverage	% PLHIV on nutrition support that are malnourished / undernourished	Nutrition Status (Severely) malnourished children and adults - at risk of morbidity or mortality; medically defined as 'Wasted'. Targets are PLHIV on ART	26%	Alebel et al. FMOH/ UNICEF. BMC (2020)	25%	30%	35%	35%
			123954		35,702	42,843	49,983	57,124
Coverage	High risk AGYW benefited from economic and other empowerment programs in preceding 12 months	High Risk AGYW	10%	MOH 2014 EFY report	15%	20%	25%	25%
			39,915.00		53,781	54,742	74,259	74,316
Strategic Objective 6 : C By 2027 significant proportion of HIV testing, of social enablers and of HIV prevention services will be delivered by CSO/CBOs/FBO/PLHIV associations.								
Coverage	Percentage of HIV testing, social enablers and prevention services	DNA	DNA	(DHIS2)/ CHIS/ CLM Report/ PEPFAR	10-15-20%	15-20-25	20-25-30%	20-30-40%

	delivered by CSO/CBOs							
Coverage	Percentage of community care coalitions that integrated a package of prevention interventions in their service	DNA	DNA	(DHIS2)/ CHIS/ CLM Report/ PEPFAR	65%	80%	90%	95%
Coverage	Number of CSOs/CBOs engaged in community led monitoring in high burden woredas	Woreda (At least 1 per highest incidence Woreda)	DNA	(DHIS2)/ CHIS/ CLM Report/ PEPFAR	150	200	265	265
Strategic Objective 7: Enhance generation and utilization of Strategic Information for an accelerated evidence-based response								
Coverage	Completeness of facility reporting: Percentage of expected facility monthly reports (for the reporting period) that are actually received	All	88%	DHIS2	85%	90%	90%	80%

Coverage	Percentage of health facilities timely submitting reports within DHIS2	All	63%	(DHIS2)	70%	75%	80%	90%
Coverage	Percentage of planned surveys and surveillances conducted, and reports released on time (within 3 months of finalization)	All	<80%	Program report (HAPCO/ EPHI)	80%	90%	95%	100%
Coverage	Percentage of Woredas that produce periodic analytical report(s) as per nationally agreed plan and reporting format during the reporting period	High Burden, Medium Burden, Low Burden	DNA	Program Reports; DHIS2	85%	90%	90%	95%

Coverage	Percentage of facilities which record and submit data using the electronic information system	All	89%	DHIS2	95%	98%	98%	95%
Strategic Objective 9: Mobilize resources and maximize efficiencies in allocation and utilization								
Coverage	% of HIV Program (NSP) Budget funded by domestic sources	ALL	11%	NASA / NHA; Annual National Budget	13%	14%	15%	16%
Coverage	Proportion of population with large household expenditure (over 20%) on health as a share of total household expenditure or income (catastrophic spending on health)	All	>20%	NHA/ NASA	<15%	12%	10%	<10%

Outcome	Percentage in-country utilization of disbursed funds (i.e. in-country disbursement utilization)	Disaggregated by source of funding and implementer type (public or community)	70%	NHA/Program Expenditure Report	90%	90%	95%	95%
Coverage	Proportion of community health workers who are trained on predefined package of on HIV prevention and treatment	All	50% of 70000 (HEW, CHW)	MOH Health Extension Programme	70%	90%	90%	90%
Coverage	% Percentage of health facilities with tracer medicines for the three diseases available on the day of the visit or day of reporting	Main ARV regimens, AL, TB, and Azithromycin, COVID-19 Test Kits		Global Health Supply Chain monitoring report. Health facility, Hospital	100%	100%	100%	100%
		HIV Test Kits			100%	100%	100%	100%
		Viral Load Reagents			96%	100%	100%	100%

ANNEX 2 The Investment Case Analysis

The NSP was informed by Investment Case modelling produced by Spectrum Goals (Aviner, Ethiopia output, 2020) to prioritize the most cost-effective interventions whilst investing in critical social and program enablers, including rights-based programming to achieve this.

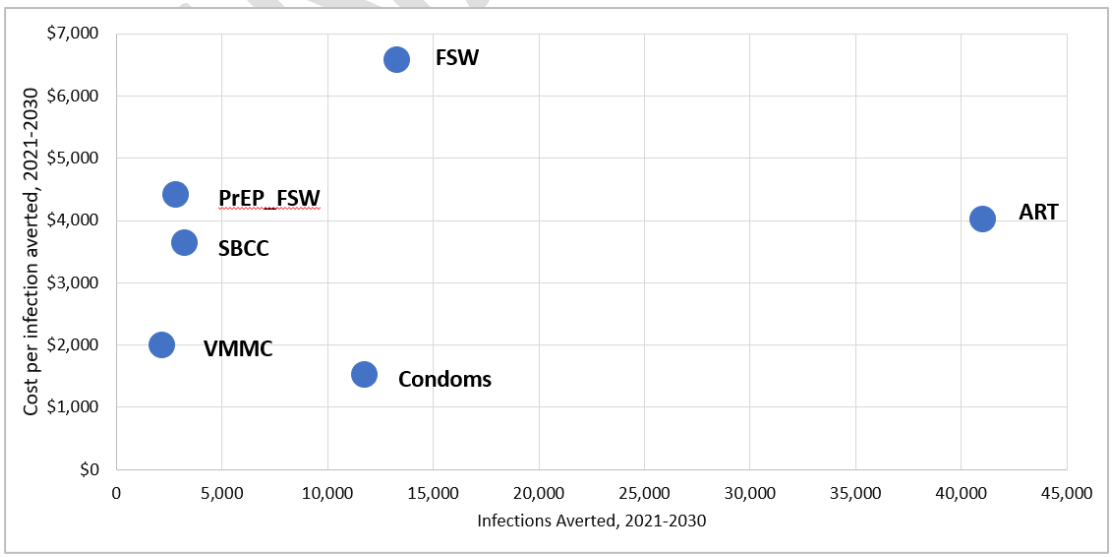
TABLE A : SELECTION OF PRIORITY INTERVENTIONS AND YEAR 5 COVERAGE TARGETS IN THE NSP

Intervention	Coverage: 2025
Key and priority populations targeted combination prevention	90%
High risk AGYW targeted combination prevention	90%
Condom programming	254 million
VMMC	95%
PMTCT	95%
Differentiated Testing	7.56 million
Treatment and care (PLHIV)	90%

The choice of investment strategies in this NSP are built upon evidence-based options using the GOALS modeling in Spectrum to estimate the cost, impact and cost-effectiveness of alternative HIV interventions (Fig A).

Interventions that demonstrated evidence to be most cost effective, using the Goals model and other available evidence, were prioritized for scale up. These interventions included combination prevention interventions targeting female sex workers, PrEP, condoms, VMMC, SBCC and differentiated ART.

FIG A: COST PER INFECTION AVERTED BY INTERVENTION

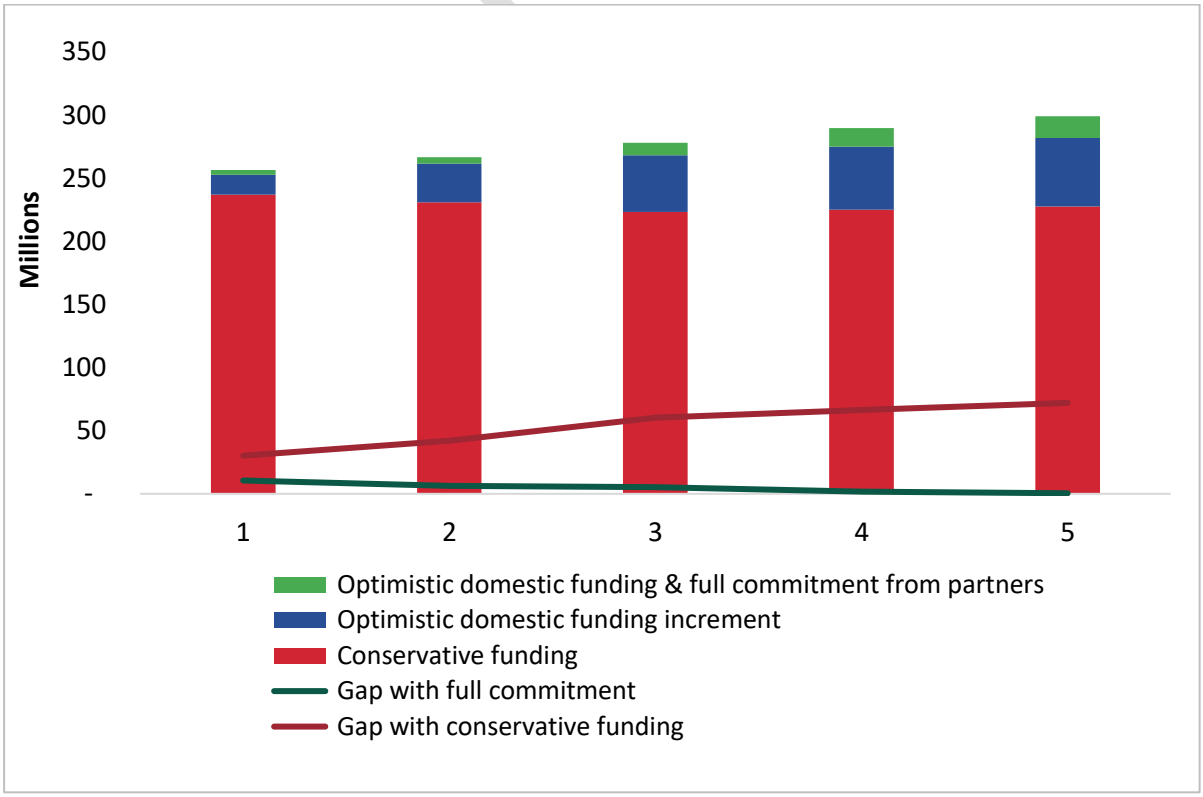


In moving forwards, dependent on available funding, choices will need to be made on the focus on the optimum basket of interventions for maximum public health impact within the available funding envelope. Results are based on the following funding scenarios which have developed by building on a full costing of the NSP and an assessment of the funding landscape (Table B) and shown graphically in Fig B.

TABLE B : FUNDING SCENARIOS

Conservative funding	• Domestic finance constrained by COVID-19 but increases from 2% pa to 5% growth pa by 2025. • PEPFAR fund - 10% decline pa until 2025 and then remain constant. • GF and all other partners fund will remain constant
Optimistic domestic funding	• Domestic finance constrained by COVID-19 but increases to 5% growth by 2025. • PEPFAR fund - 5% decline pa until 2025 and then remain constant. • GF and all other partners fund will remain constant
Optimistic domestic funding & full partner commitment	• Domestic finance constrained by COVID-19 but increases to 5% growth pa by 2025. • PEPFAR, GF and other development partners constant at 2021 levels

FIG **B**: RESOURCE NEEDS, FUNDING AND GAP BY SCENARIO (USD)

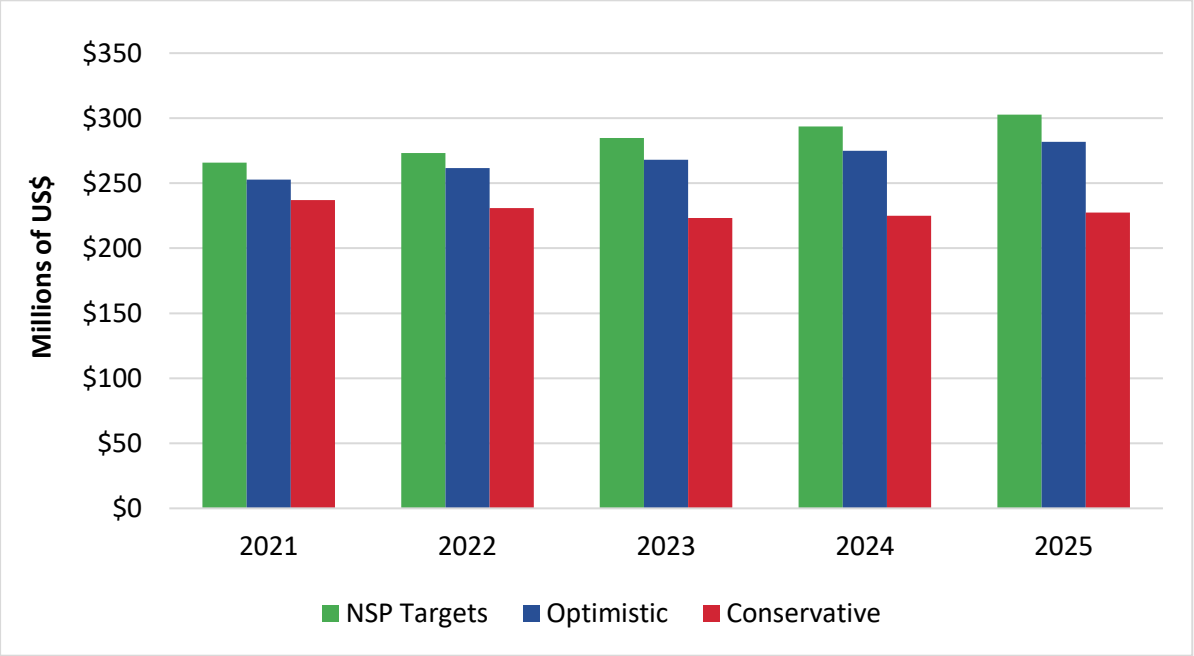


Interestingly, the funding gap is reduced by 72% with the additional funding from the optimistic domestic funding scenario and the NSP is almost fully affordable with optimistic domestic funding and continued donor support at 2020 levels. If the latter scenario is achieved, 9,842 HIV infections may be averted according to Goals modeling.

TABLE C: NSP FUNDING REQUIRED BY SCENARIO, 2021-2025

	2021	2022	2023	2024	2025
Optimistic and full commitment	$253	$273	$285	$294	$303
Optimistic	$253	$262	$268	$275	$282
Conservative	$237	$231	$223	$225	$228

FIGURE C: FUNDING AVAILABLE AND REQUIRED



With Ethiopia so close to reaching epidemic control, sustained funding and the targeted focus outlined in this NSP, with bring definitive results as shown in the graphs D & E below.

FIGURE D: NEW INFECTIONS BASED ON FUNDING SCENARIOS

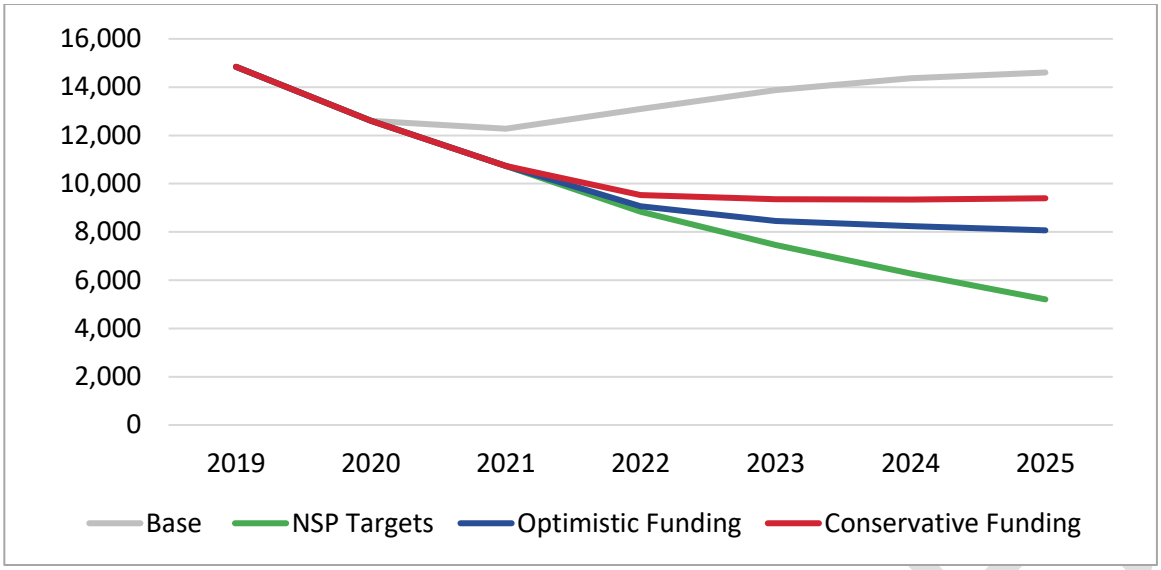
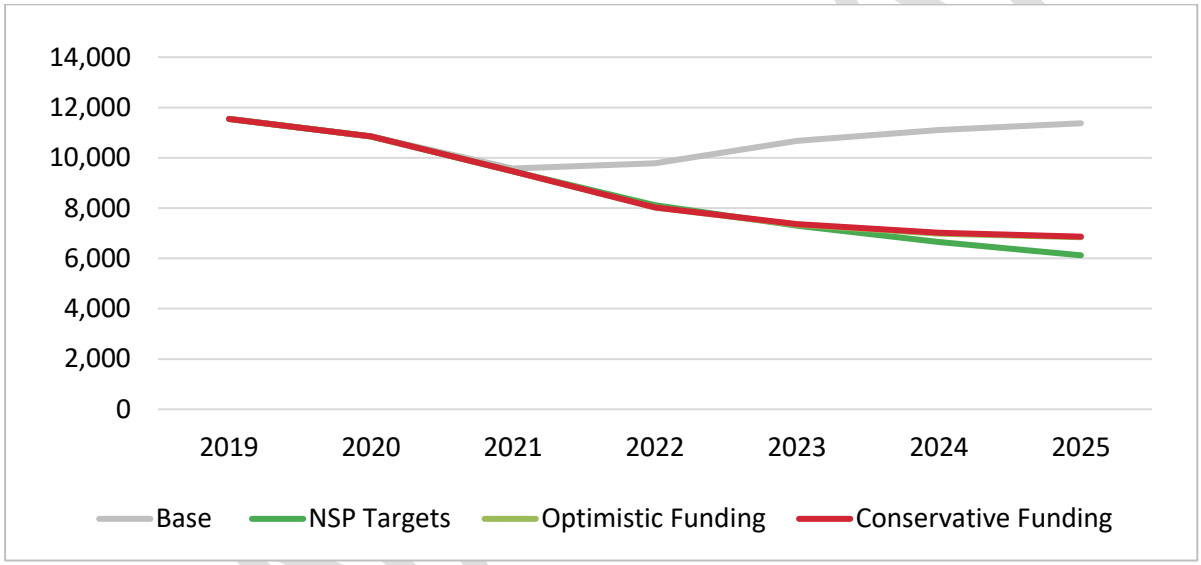


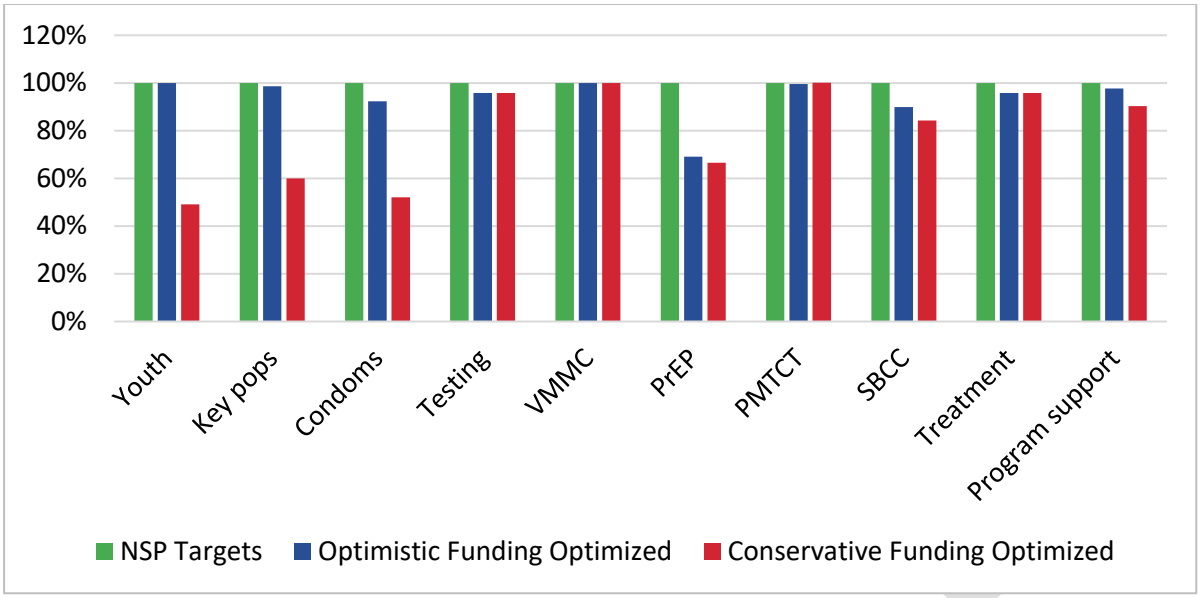
FIG **E**: THE IMPACT FUNDING SCENARIOS ON AIDS DEATHS BASED



This modeling exercise provides the foundation upon which, on review of performance and funding availability, optimization of interventions has the effect of achieving better results within constrained funding.

If the NSP program had to be optimized further to align with reduced funding, the modeling suggests that in the Optimistic Funding scenario funding for VMMC, PMTCT and youth could be maintained with small reductions in treatment, testing and, condoms and SBCC and a larger reduction in PrEP. For the Conservative Funding scenario, the optimization suggests large decreases in funding for youth, KPPs, condoms, PrEP and SBCC and only minor reductions in treatment and testing. Under this scenario, there are slightly more people on ART because there are more new infections and people in need of treatment (Fig F).

FIG **F**: RATIO OF FUNDING 2021-2025 BY FUNDING SCENARIO



[1]HIV Draft Domestic Resource Mobilization and Sustainability Strategy 2020-2025 MOH, FHAPCO 2020

ANNEX 3: Financial Resource Needs Estimates for the Ethiopia NSP for HIV/AIDS 2021-2026

Intervention	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	
PMTCT	18,633,155	18,597,504	18,647,031	17,768,813	14,235,111	14,265,782	
VMMC	997,400	997,400	997,400	997,400	997,400	997,400	
Condom promotion (General pop + KPPs)	**18,369,156**	**17,086,333**	**20,365,333**	**22,373,333**	**24,105,333**	**24,105,333**	
Condoms and condom promotion	17,437,930	16,118,000	19,102,000	21,040,000	22,742,000	22,742,000	
Female condoms	800,000	800,000	800,000				
Condom lubricant	131,226	168,333	463,333	533,333	563,333	563,333	
SBCC (General Population)	**1,723,572**	**1,604,051**	**1,778,263**	**1,900,476**	**2,107,888**	**2,067,594**	
Mass media & BCC	1,040,628	915,752	999,002	1,082,253	1,248,753	1,165,503	
HIV prevention: schools, universities and pp with special needs	682,944	688,299	779,261	818,224	859,135	902,092	
STI diagnosis and treatment	3,248,335	3,905,498	4,598,976	5,245,783	5,947,618	6,685,217	
Testing Services	32,900,162	31,284,751	32,896,939	33,631,278	33,255,263	33,344,183	
Testing: PITC (less ANC HTC)	4,437,515	4,467,161	4,524,976	4,279,271	3,154,471	3,209,467	
Testing: Community level testing	19,105,234	20,018,917	22,316,350	22,958,340	23,814,096	23,916,634	

Testing: RDT kits	8,291,074	5,039,051	4,970,005	4,903,816	4,369,481	4,407,950	
Testing: Self-test kits	1,066,339	1,759,622	1,085,608	1,489,851	1,917,215	1,810,133	
ART Treatment and care	**83,643,257**	**81,165,748**	**83,196,072**	**83,217,783**	**83,075,134**	**82,657,544**	
Adult ART: first line ARVs	23,095,740	22,913,273	23,411,323	23,309,004	23,272,054	23,272,054	
Adult ART: second line ARVs	7,758,829	7,686,714	7,878,616	7,869,052	7,869,052	7,869,052	
Adult ART: third line ARVs	1,090,293	842,562	863,597	862,549	862,549	862,549	
Adult ART: service delivery	30,426,780	31,200,000	31,978,920	31,940,100	31,940,100	31,940,100	
Adult ART: laboratory testing	15,213,390	12,376,000	12,684,972	12,669,573	12,669,573	12,669,573	
Pediatric ART: ARVs	3,253,879	3,316,489	3,378,959	3,468,995	3,379,098	3,125,752	
Pediatric ART: service delivery	1,550,406	1,580,238	1,610,004	1,652,904	1,610,070	1,489,356	
Pediatric ART: laboratory testing	610,766	569,843	580,577	596,047	580,601	537,071	
Psychological treatment and support service	643,174	680,628	809,104	849,560	892,037	892,037	
Opportunistic infections & co-morbidities	**4,287,013**	**4,504,983**	**4,792,526**	**4,971,642**	**5,104,864**	**5,116,745**	
TB Preventative Therapy	789,339	789,340	789,341	789,342	789,343	789,344	
Cervical cancer screening & diagnosis	3,423,013	3,510,000	3,597,629	3,593,261	3,593,261	3,593,261	
Hepatitis C - diagnosis and treatment	$11,638	$46,371	$188,064	$199,945	$211,826	$223,707	
Hepatitis B - diagnosis and treatment	$63,023	$159,272	$217,492	$389,094	$510,433	$510,433	

PrEP	**370,513**	**712,143**	**1,290,152**	**1,790,893**	**2,435,467**	**3,040,571**	
PrEP - Sex workers	278,167	597,812	1,000,144	1,297,845	1,752,760	2,097,291	
PrEP - PWID	-	-	18,397	50,174	58,537	83,624	
PrEP - Discordant couples	92,346	114,331	217,423	334,496	461,605	588,713	
PrEP - Pregnant women and breastfeeding	-	-	54,188	108,377	162,565	270,942	
Key and priority populations	**4,667,592**	**8,011,692**	**12,237,516**	**16,174,647**	**20,762,034**	**30,825,163**	
FSW services	1,744,225	2,987,793	4,602,816	5,038,872	5,814,084	6,290,515	
PWID services	146,559	564,524	542,812	1,042,199	1,498,161	1,684,590	
Prisoners	473,615	556,884	635,422	816,971	816,971	862,358	
Long distance truck drivers	143,804	306,666	442,907	582,393	733,384	810,557	
Widowed/divorced	586,378	852,540	1,144,569	1,766,094	2,439,991	2,967,306	
Mobile and resident workers	629,435	1,326,279	1,052,653	1,644,634	2,297,892	2,827,501	
Discordant couples	276,163	463,880	741,022	846,882	1,143,145	1,341,119	
Programs for AGYW	***667,413***	***953,126***	***3,075,316***	***4,436,602***	***6,018,407***	***7,020,608***	
SRH & family planning	123,690	175,906	518,095	791,017	1,073,043	1,275,213	
Parenting/care giver programs	59,919	85,214	250,980	383,192	519,813	617,750	

Educational subsidy	128,398	182,602	537,815	821,125	1,113,885	1,323,751	
Economic empowerment	93,816	134,467	508,386	517,463	701,957	702,494	
Peer-led prevention outreach	239,677	343,529	1,154,487	1,762,648	2,391,094	2,841,597	
Community norms change	21,913	31,408	105,553	161,157	218,614	259,803	
Social enablers (reduce stigma, discrimination and GBV)	2,881,640	3,049,447	3,653,489	3,836,163	4,027,971	4,108,531	
Nutritional support	-	-	2,757,965	2,915,288	3,078,578	3,724,619	
OVC	5,797,820	6,391,304	6,209,879	6,209,879	6,209,879	6,209,879	
DRM and sustainable financing	1,388,340	1,103,755	676,877	463,439	463,439	463,439	
Strategic information, research and M&E	13,819,903	14,129,832	16,339,453	16,339,453	16,339,453	16,339,453	
Program enablers	20,805,737	19,457,167	18,373,934	17,010,512	16,546,631	15,641,804	
Program management	31,596,146	33,735,661	38,129,671	37,505,427	37,020,187	36,555,327	
TOTAL	**245,129,741**	**245,737,269**	**266,941,479**	**272,352,210**	**275,712,251**	**286,148,586**	
Notes for the Resource Needs Estimates of the Ethiopia NSP for HIV 2020-2026							

• The NSP Resource Needs Model has been updated using the revised NSP and latest targets. The RNM applies 2023 prices to all years.
• Interventions, population sizes, coverage, unit costs and enablers provided for in the RNM were aligned with the NSP and its M&E Framework. Additional costed items were added to the RNM summary sheet if there was no provision in the RNM, for instance Cervical Cancer Screening.
• The costs for each intervention are estimated as the population in need of the service multiplied by the coverage (the percentage actually using the service) multiplied by the unit costs.
• Unit costs were computed from a mix of sources, primarily published studies, MOH and development partner budgets, micro costing from service providers, MOH procurement and expenditure data and additional ingredients-based costing for some interventions.
• Interventions for most social and program enablers were estimated as annual fixed costs based on retrospective analysis of funder and program agent expenditure and budgets. Program Enablers include above-site activity costs incurred by Development Partners as well as HIV specific health and community strengthening activities planned by the Government of Ethiopia.

Intervention	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	
HIV prevention	21,460,641	20,399,927	24,431,148	27,062,103	29,646,088	30,210,899	
HIV testing services	32,900,162	31,284,751	32,896,939	33,631,278	33,255,263	33,344,183	
Key and priority populations	4,667,592	8,011,692	12,237,516	16,174,647	20,762,034	30,825,163	
PMTCT	18,633,155	18,597,504	18,647,031	17,768,813	14,235,111	14,265,782	
Treatment and care	83,643,257	81,165,748	83,196,072	83,217,783	83,075,134	82,657,544	
Co-infections and co-morbidity	7,535,348	8,410,481	9,391,502	10,217,425	11,052,482	11,801,962	
HIV financing	1,388,340	1,103,755	676,877	463,439	463,439	463,439	
Strategic Information & M&E	13,819,903	14,129,832	16,339,453	16,339,453	16,339,453	16,339,453	
Social enablers	8,679,460	9,440,751	12,621,334	12,961,331	13,316,429	14,043,029	

Health & Community Systems	20,805,737	19,457,167	18,373,934	17,010,512	16,546,631	15,641,804	
Program Management	31,596,146	33,735,661	38,129,671	37,505,427	37,020,187	36,555,327	
	245,129,741	**245,737,269**	**266,941,479**	**272,352,210**	**275,712,251**	**286,148,586**	
Prevention interventions	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**2025/26**	**2026/27**	
PMTCT	18,633,155	18,597,504	18,647,031	17,768,813	14,235,111	14,265,782	102,147,395
Condom promotion	18,369,156	17,086,333	20,365,333	22,373,333	24,105,333	24,105,333	126,404,823
VMMC	997,400	997,400	997,400	997,400	997,400	997,400	5,984,400
PrEP	370,513	712,143	1,290,152	1,790,893	2,435,467	3,040,571	9,639,739
SBCC	1,723,572	1,604,051	1,778,263	1,900,476	2,107,888	2,067,594	11,181,845
Key populations	2,364,400	4,109,201	5,781,050	6,898,042	8,129,215	8,837,463	36,119,371
AGYW	667,413	953,126	3,075,316	4,436,602	6,018,407	7,020,608	22,171,472
Other priority populations	1,635,779	2,949,365	3,381,151	4,840,004	6,614,412	7,946,484	27,367,195
	44,761,388	**47,009,123**	**55,315,695**	**61,005,563**	**64,643,233**	**68,281,236**	**341,016,239**

ANNEX 4 Illustrative List of High Priority Woredas

The list below is based on the 2020 Naomi woreda incidence used in the 2021-2025NSP. For the 2023-2027 NSP, each region will review the illustrative list below and re-define their high priority woreda based on local information. There are an additional 35 conflict affected woredas based on the criteria indicated

Region/City Administration	No. of High Incidence Woreda	Number of Zones containing woredas	Remark
Addis Ababa	48	10	All sub-cities of AA contain high incidence woredas
Afar	13	5	All zones in the region
Amhara	72	14	Zones and towns
Benishangul gumuz	8	4	All three zones and Assosa Town
Dire Dawa	6	NA	The Naomi model considers Dire Dawa as one woreda, hence based on HTS yield during 2012 EFY, the highest 6 woredas selected
Gambella	11	5	All 3 zones, Gambella town and Itang special zone
Harari	4	NA	The Naomi model considers Harari as one woreda, hence based on HTS yield during 2012 EFY, the highest 4 woredas selected
Oromia	54	28	From 18 Zones, 9 towns and one special zone
Sidama	4	NA	Two of them are considered from regional HB suggestion based on HTS yield
SNNP	17	11	Seven /7/ woredas are prioritized and put in to High incidence based on regional HTS yield data
Somali	5	4	Three Zones and Jigjiga town
Tigray	23	7	Six Zones and one special Zone
Total	265		

[i] Value for Money. Technical Brief. Global Fund, 2019