Federal Democratic Republic of Ethiopia
Ministry of Health

National Strategic Plan for the Elimination of Mother to Child Transmission of HIV and Syphilis (EMTCT of HIV & S)

(2017-2020)

May, 2017

Addis Ababa, Ethiopia

Preface

The Government of Ethiopia is committed to the Elimination of Mother to Child Transmission of HIV and Syphilis (EMTCT of HIV & S). To realize this, the first EMTCT strategic plan was developed for the period from 2013-2015 and has been implemented to achieve the national and global targets. To accelerate the achievements gained in the past and respond to the challenges faced by ensuring the provisions of integrated and quality services, this dual elimination strategy is developed for the period from 2017-2020.

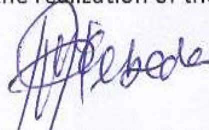
The adoption of option B+ (test and treat), which has helped in increasing the national ART coverage among HIV+ pregnant, laboring and lactating women, will be given due emphasis in this strategic plan. The implementation of the strategic plan will also serve as a vehicle for the achievement of the targets of the national health policy, the Health Sector Transformation Plan (HSTP), the Growth and Transformation Plan (GTP-II) and the global Sustainable Development Goals (SDGs).

In congruent with the global recommendations, other countries' experiences, and the implementation of the last strategic plan, high-impact interventions were identified in line with the four pronged approach along the PMTCT continuum of care, which incorporated congenital syphilis for the dual elimination. Strengthening the health care system is also put at the center of the strategic plan to ensure strong partners' coordination, sustainability and country ownership.

On behalf of the Ministry of Health, I would like to thank all the partners, stakeholders and the PMTCT-TWG for their continued support during the preparation of this strategic plan.

The Ministry would like to extend special thanks to the FHAPCO, RHB, EPHI, PFSA, WHO, UNICEF, UNAIDS, CDC, ICAP, USAID, PHSP, IFHP, CHAI, NNPWE, NEP+, UNFPA, JHU-CCP, and others, who have been contributing to the implementation of the EMTCT of HIV and syphilis in the country.

Finally, I would like to urge all the partners to sustain their support and engagement in the implementation of the strategic plan and use it as a guiding framework for all their future endeavors for the realization of the elimination of MTCT of HIV and syphilis in Ethiopia.



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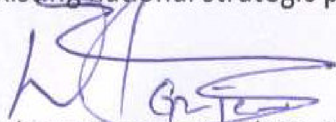
Acknowledgment

Ethiopia has laid out the first EMTCT strategic plan (2013-2015) to enhance the prevention of mother to child transmission of HIV, which has brought significant achievements in recent years. This is the second strategic plan that is prepared as a continuation of the first strategic Plan for the period from 2017-2020 to advance the efforts towards the elimination of mother-to-child transmission of HIV and syphilis in an integrated fashion. This integrated and dual elimination strategic plan calls for the concerted efforts of all stakeholders in a coordinated manner.

The strategic plan is developed by the active engagement of partners and stakeholders working in Governmental and Non-Governmental organizations at various levels, including at the National, Regional and Facility level for the Elimination of Mother-to-Child Transmission of HIV and Syphilis in Ethiopia. The Ministry of Health would like to extend its appreciation to all organizations, institutions and individuals, who provided their technical inputs and resources for the development of this comprehensive and quality strategic plan.

The Ministry of Health extends its special thanks to the PMTCT Technical Working Group (TWG) for their tireless contribution and engagement throughout the process of the development of the strategic plan. The Ministry would also like to pay tribute to the consultants for their contribution in shaping the strategic plan to be aligned with the global directions and the existing national strategic plans.



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Acronyms and abbreviations

ANC	Ante Natal Care
ARM	Annual Review Meeting
ART	Anti-Retroviral Treatment
ARVs	Anti-Retro Viral Drugs
BCC	Behavioural Change Communication
CD4	Cluster of Differentiation 4
CHIS	Community Health Information System
CPR	Contraceptive Prevalence Rate
CPT	Cotrimoxazole Preventive Therapy
CQI	Continuous Quality Improvement
DBS	Dried Blood Spot
DCCM	Demand Creation & Community Mobilization
DESD	Dual Elimination Strategic Document
EDHS	Ethiopian Demographic and Health Survey
EFY	Ethiopian Fiscal Year
EPHI	Ethiopian Public Health Institute
EID	Early Infant Diagnosis
EMDHS	Ethiopian Mini-Demographic & Health Survey
EMTCT	Elimination of Mother To Child Transmission
EPI	Expanded Program of Immunization
FMHACAE	Food, Medicine & Health Care Administration and Control Authority of Ethiopia
MOH	Ministry of Health
FP	Family Planning
GAPR	Global AIDS Progress Report
GTP	Growth and Transformation Plan
HAPCO	HIV AND AIDS Prevention and Control Office
HAD	Health Development Army
HC	Health Center
HCW	Health Care Worker
HEI	HIV Exposed Infant
HEP	Health Extension Program
HEW	Health Extension Worker
HF	Health Facility
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HO	Health Officer
HP	Health Post
HSDP	Health Sector Development Plan
HSTP	Health Sector Transformation Plan
HTC	HIV Testing and Counselling
HTP	Harmful Traditional Practice
IEC	Information Education and Communication
IEOS	Integrated Emergency Obstetrics and Surgery
IFRRF	Internal Facility Requisition Report Form
IGME	Inter-Agency Group for Mortality Estimation
INH	Isoniazid
IRT	Integrated Refresher Training
L&D	Labor and Delivery
LARC	Long Acting Reversible Contraceptive
LMIS	Logistics Management Information System
MDGs	Millennium Development Goals
MNCH	Maternal, Newborn and Child Health
MTCT	Mother to Child Transmission
MUAC	Mid Upper Arm Circumference
PCR	Polymerase Chain Reaction
PFSA	Pharmaceutical Fund and Supply Agency
PHCU	Primary Health Care Unit
PHDP	Positive Health Dignity and Prevention
PLMU	Pharmaceutical Logistics Management Unit
PNC	Post Natal Care
PMTCT	Prevention of Mother to Child Transmission
PoCT	Point of Care Testing
RHB	Regional Health Bureau
RRF	Reporting and Requisition Form
SBA	Skilled Birth Attendant
SBCC	Social Behavioural Change Communication
SNNPR	Southern Nations, Nationalities and People Region
STI	Sexually Transmitted Infection
TAG	Technical Advisory Group
TB	Tuberculosis
TWG	Technical Working Group
VCT	Voluntary Counselling and Testing
WorHO	Woreda Health Office
ZHD	Zonal Health Department

Executive summary

National Prevention of Mother To Child Transmission (PMTCT) of HIV program had been implemented in Ethiopia since 2001 using single dose Nevirapine. The PMTCT guideline was later updated to provide a more effective regimen using combined regimen (AZT and Nevirapine) in 2007. Since 2013, the Option B+ PMTCT program has been implemented in all hospitals and majority of the health centers providing Maternal Newborn and Child Health (MNCH) services in the country.

Ethiopia developed the first EMTCT strategic plan for 2013-2015 to achieve the national and global targets. In the strategy, the adoption of option B+ has helped to increase the national ART coverage among HIV+ women to 56% (UNAIDS,2016). Despite the increasing trend in PMTCT coverage, improvement in quality of service and national decrement of new HIV infections, the program has not met the target for elimination.

In a related move to sustain and increase the momentum achieved in the previous years, to respond to the challenges in the Elimination of Mother To Child Transmission of HIV and Syphilis (EMTCT of HIV & S) and to ensure the provisions of quality services, the Ministry of Health (MOH) has prepared this Four – Year strategic plan for the period from 2017 - 2020. This is in line with the HSTP (2016-2020), and it is a continuation of the previous three-year (2013-2015) strategic plan. In developing the strategic plan, a rigorous process of situational analysis and priority setting have been done. Particularly, bottleneck analysis was conducted through group discussions with providers and service recipients. Besides interviews with program managers and experts in the technical working groups were conducted to identify strengths, gaps and further bottlenecks in service provision. Desk reviews of different published and grey international and national literature were also done, including other countries' experiences.

The strategic plan outlines the importance of scaling up of community engagement through Women Development Armies (WDAs) and the Health Extension Program (HEP); and strengthening health facility-community linkage for HIV and syphilis testing so that women obtaining ANC services at health posts can receive the full range of antenatal laboratory tests, including for HIV and syphilis. Moreover, building the capacity of Health extension workers (HCWs), especially on administering option B+; and supporting Health Extension Workers and Health Development Army through mentoring and supervision by government health institutions, engaging MSG members to contribute to counseling their peers for family planning, adherence to treatment, skilled delivery and HIV Exposed Infant follow up at health facility and exercising their rights and responsibilities to the planned interventions has got emphasis.

In addition, the plan detailed activities aimed towards strengthening the logistics and supply system; improve quality through better integration of PMTCT, including Early Infant Diagnosis (EID) within maternal, newborn and child health platform; PMTCT site expansion and optimizing PMTCT services in areas with highest numbers of HIV positive women. The EMTCT Plan identifying high prevalence areas and prioritizes elimination activities in urban, Peri-urban and HIV hot spot areas including Mega project. The plan also indicated how the regular monitoring and evaluation through HMIS and PMTCT cohort monitoring take place in high yield health facilities through phase approach.

1. Introduction

1.1. Background

Ethiopia is a country of many nations and nationalities with diverse culture and societal values hosting currently an estimated population of more than 94.3 million based on projection from the 2007 census. About 79.8% of the population lives in rural areas making Ethiopia one of the least urbanized countries in the world. About 45 % are under 15 years and women in the reproductive ages constitute 23% of the population. Rural women still have an average of three more births per woman compared to urban women. Overall, even with the fertility decline, the population is still growing at an annual rate of 2.6% (Table 1).

Human Immunodeficiency Virus (HIV) has been one of the major public health problems in Ethiopia since the first evidence of infection was identified in 1984. The country is in a low generalized epidemic status with a prevalence of 1.5% according to the Ethiopian Demographic Health Survey. There is, however, high heterogeneity with varying predominance by residence (4.2% in urban and 0.6% rural), region (ranging from 0.9% in SNNPR to 6.5% in Gambella) and gender (1.9% adult women, 1% adult men) (CSA and ORC Macro, 2012).

The predominant mode of transmission of pediatrics HIV infection is through Mother-to-Child Transmission with an average rate of 32% for years, while the 2016 Global AIDS Progress Report (GAPR) for Ethiopia gives an overall estimate of 18.1% (UNAIDS 2016). Although the prevalence of HIV among pregnant population is declining parallel to that of the general population, the most ANC sentinel surveillance disclosed that the prevalence is still higher in this group of population (1.2%) (UNAIDS, 2016). Nationally, a total of about 30,062 HIV positive pregnant women require PMTCT in the year 2017 (Figure 1) (EPHI, 2017).

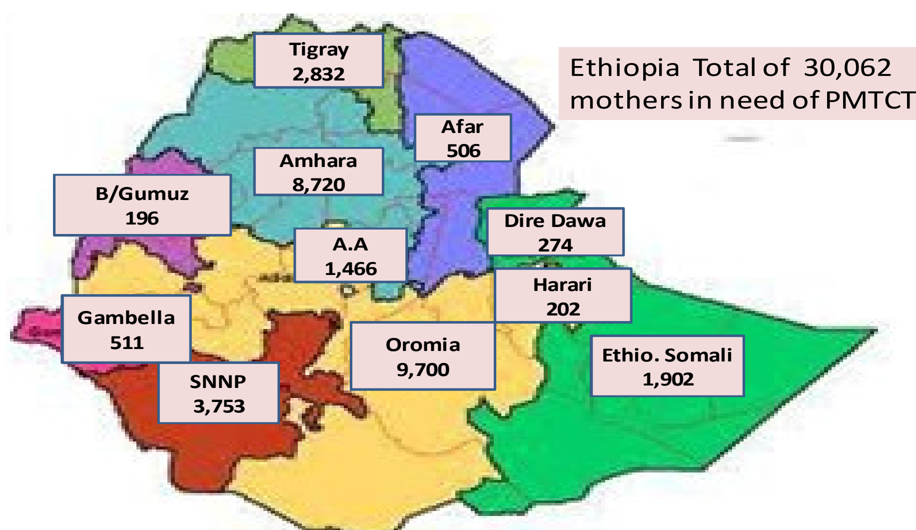

Figure 1: Pregnant women needing PMTCT services in Ethiopia in 2017 (Source: EPHI, 2017)

Table 1: Country demographic and epidemiological profile	
Demographic Data • Projected total population for 2017 = 94.3 million • Annual Population Growth rate = 2.6% • Estimated number of annual births= 2.9 million • Population 15-49 years= (47%) • Population under 5 years= (15.9 %) • MMR=412/100,000 live births (EDHS 2016) • Under 5 mortality=67/1000 live births (EDHS 2016) • Infant mortality=48/100live births (EDHS 2016) • Neonatal mortality=29/100live births (EDHS 2016) • CPR=36% (EDHS 2016) • ANC coverage 1st visit = 98.4 % (HMIS, 2016) • ANC4+ coverage = 76% (HMIS, 2016) • Skilled deliveries =72.7% (HMIS, 2016) • Measles immunization coverage = 97.2% (HMIS, 2016) • Pentavalent 3 coverage = 97.6% (HMIS, 2016) • Fully immunized = 90.9 (HMIS, 2016) • Rates of exclusive breastfeeding at 6 months : 32% (EDHS, 2011)	**HIV and AIDS Data** • Estimated Number of people living with HIV and AIDS in 2017 = 722,248 (EPHI, 2017) • Estimated number of people needing ART = 581,832 (EPHI, 2016) • HIV prevalence among pregnant women = 1.2% (ANC sentinel: UNAIDS, 2015) • Syphilis prevalence among pregnant women 2.1% (UNAIDS progress report, 2015) • Estimated number of HIV positive pregnant women needing PMTCT in 2017= 30,062 (EPHI, 2017) • % of HIV positive pregnant, delivering and postnatal women receiving ARVs for PMTCT= 56% (UNAIDS-GAPR, 2016) • Estimated transmission at 6 weeks, 2014= (6%) (UNAIDS-GAPR, 2016) • Estimated transmission rate at 18 months including breastfeeding = 18.1% (UNAIDS-GAPR, 2016)

1.2. Organization of the Health Care Delivery System

The health care delivery in Ethiopia is organized in a three-tier: Primary, Secondary and Tertiary levels. The primary level comprises of a primary hospital (serving 60,000-100,000 people), health centers (15,000-25,000 people) and their satellite Health Posts (3,000-5,000 people) in rural settings and health center (40,000 people) in urban settings. A health center and health posts in the rural setting form a Primary Health Care Unit (PHCU). The secondary level comprises of a General Hospital serving 1-1.5 million people; while the tertiary level is having a Specialized Hospital covering 3.5-5 million people. There is a referral system operating among the health facilities within and between the tiers based on the catchment network model. There is also a rapid expansion of the private for profit sector, which contributes a sizable share in the health service coverage and utilization.

1.3. Health Service expansion interventions and initiatives

The country has registered a tremendous result in terms of expanding the health service through development, rehabilitation and maintenance of the health infrastructure. As a result, a total of 16,563 Health posts, 3,531 Public Health Centers and 247 Public Hospitals have been rendering services to populations within their designated catchments as per their minimum standards (HMIS report 2016). Progressive introduction of various initiatives such as health management and Information system (HMIS), health care financing system, supply chain management system and regulatory system have all contributed to shape the health sector into a more responsive sector.

1.4. Community Engagement

The Health Extension Program (HEP) and Women Development Army (WDA) network are the two levels of community engagement in the health system of Ethiopia. These programs enhanced community ownership in the process of empowerment to produce its own health. Currently, there are nearly 38,000 government paid urban and rural health extension workers (HEWs), whose responsibilities include, increasing community awareness on disease promotion and prevention, including HIV AND AIDS and PMTCT among others. Women Development Army (WDA) is a One-to-five community network, which is engaged in disease promotion and prevention activities at household and community levels, including the regular coordination of structured Community Dialogue Sessions under the guidance of the HEWs.

2. Situation of PMTCT in Ethiopia

2.1. The HIV and PMTCT responses

There has been a strong multi-sectoral national response to HIV AND AIDS under the leadership of the Ministry Of Health-Federal HIV and AIDS Prevention and Control Office (MOH-FHAPCO) with the support of development partners. The response has been guided by the national HIV and AIDS policy endorsed in 1998 and the successive strategic plans and returns to investments on prevention, treatment, care and support have been promising. The introduction of rapid HIV tests and ART in the early 2000's with the support of the Global Fund and PEPFAR revolutionized the diagnosis, treatment, care and support to HIV and AIDS.

Prevention of Mother-to-Child Transmission of HIV services started in 2001; but, progressed slowly. However, with the adoption of the WHO's successive recommendations, the country was able to reduce the number of children newly infected with HIV by more than 50% between 2009 and 2012. In 2013 the MOH developed the national strategic plan for elimination of MTCT of HIV, the forerunner of this strategic document, echoing the global move to eliminate pediatric HIV infection and keep their mothers alive (WHO, 2014). This has galvanized the momentum of the national engagement against mother-to-child transmission of HIV. Currently, over 2868 health facilitates (247(100%) hospitals and 2621 (74%) of health Centers) reported to provide PMTCT, all provide option B+. The pregnant mothers are considered during the estimation of HIV positive mothers needing PMTCT services in the country though there are health centers which are not providing PMTCT services in Oromia, Amhara and Somali regions. The current experience shows few have started giving HIV testing to the pregnant mothers and linking the mothers identified to be HIV positive to the nearby PMTCT sites.

Providing appropriate contraception for women living with HIV, who either want to postpone or stop child birth, and avoiding unmet need is one of the four pronged PMTCT approaches. However, with CPR of about 72% (HMIS 2016) and unmet need of 25% (DHS, 2016), unwanted or mistimed pregnancy might have contributed to the high number of pregnancy among women living with HIV in the country. According to recent national estimates, more than 30,000 HIV positive pregnant women and same

number of HEI are expected annually over the next 5 years, suggesting for high need for primary prevention and contraception (EPHI, 2017).

The ANC, delivery, PNC and ART are the entry points for PMTCT, with improving trends recently. According to the national Health Services Statistics from the HMIS report 2015/16 (2008 EFY), 98.4% and 76% of pregnant women had at least one and at least four ANC visits, respectively. About 72.7% of deliveries were attended by skilled health personnel and 89.3% had PNC checkups (MOH, 2016).

As a result, the proportion of pregnant women counseled and tested for the prevention of mother to child transmission (PMTCT) of HIV increased from 37% in 2005 EYF (2012/13) to 95.0% in 2008 EFY (2015/16); however, the 2009 EFY's mid-year report shows slight reduction to 85%. Whereas, the percentage of HIV-positive women who received efficacious Antiretroviral therapy during pregnancy, delivery and postpartum (including linked from ART and new Option B+ starters) increased from about 26% in EFY 2005 (2012/13) to 62% in EFY 2008 (2015/16) and slight reduction in the mid-year report of 2009 EFY (57%). As can be seen from the graph below, in all the years the cascade of PMTC continuum decreases with significant dropouts – high ANC and testing; but low ART coverage (Figure 2).

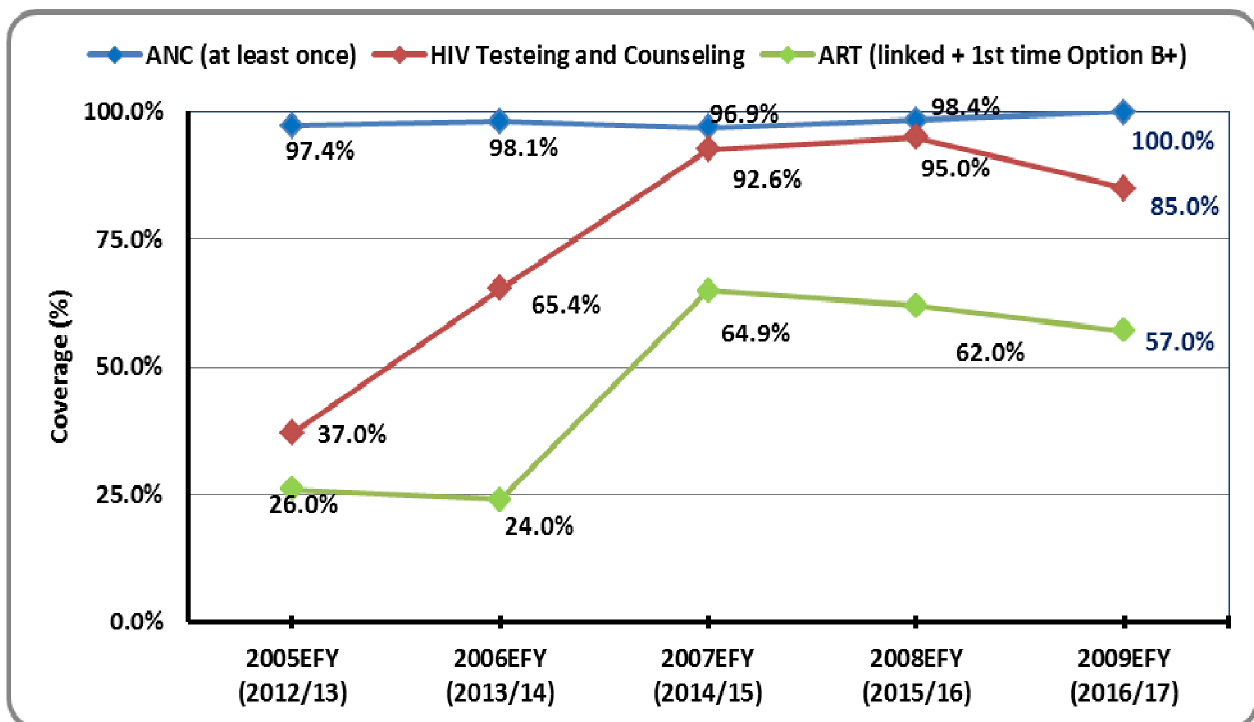

Figure 2: Trends in Coverage of PMTCT Continuum in Ethiopia (MOH-HMIS 2013-2017)
NB. *The data presented for 2009 EFY in the graph refer to 6 months' (mid-year) report*

Though the national coverage of counseling and testing for PMTCT during ANC is high, there is significant regional variation ranging from 42.5% in Somali to 100% in Oromia, Harari, Addis Ababa, and Dire Dawa (MOH-HMIS report, 2016). The ART coverage also shows big regional disparities.

The testing for HIV, averting transmission, and following up of HIV exposed infants till final status determination remain huge challenges. The problem is clearly evident with the proportions for infant ARV prophylaxis, Early Infant Diagnosis (EID) virologic test and cotrimoxazole prophylaxis for HEI are 41%, 25% and 29%, respectively as of December 2014 (GAPER, 2016). The 2009 EFY (2016/17) mid-year report from the HMIS shows similar findings in which only 30.5% of exposed infants received confirmatory test at 18 months and 30% of positive infants received ARV.

The main reasons for the high dropouts in the PMTCT continuum of care include, fear of stigma and discrimination, lack of sufficient mother-baby pair tracking mechanisms after delivery and low male partners involvement. The immediate consequences of these problems are the continued risk of postnatal HIV transmission (during breastfeeding period) and the likelihood for those infected prenatally and during labor and delivery to develop Pediatrics AIDS and die unattended before their first anniversary.

The multiagency site level PMTCT support exercise has also brought the findings indicated in the Table 2 below. As per the data collected from the ANC and Mother-baby pair cohort register, 6399 HIV positive mothers found registered on the cohort register; but, 47% were not registered in the ANC register. This shows weak services integration and many mothers might have missed the desired MCH services by getting focused antenatal services, after they have reached MCH platform. Out of the data collected from 13 health facilities about 76 mothers and their children were lost from their appointment (Source: Multi-agency study).

Table 2: Level of integration, lost to follow ups, death HEI & MSG information from visited health facilities of HIV "HOT SPOT" Towns in 7 regions of Ethiopia, July 2005 to October 2009.

Characteristics	**Oromia**	**Somali**	**Amhara**	**B/ Gumuz**	**Tigray**	**D/Dawa**	**Harer**	**Total**
# of sites from which data were collected	11	3	11	2	10	5	3	**45**
# of HIV positive mothers registered in ANC	1007	143			1319	321	210	**3000**
# of HIV positive mothers in the mother-baby pair cohort register	1088	157	2771	174	1650	287	272	**6399**
• On pregnancy	242	35						**277**
• Lactating on follow up	691	63						**754**
• Lost To Follow-up (LTF)	65	11						**76**
• Transferred Out (TO)	287	44						**331**

As seen in the Table 3 below, 4703 HIV exposed infants were followed for over three years period and 64 children were found to be HIV positive through DNA/PCR at 2 months, between 2-12 months, and anti-body test at 18 months of age. This shows that the test positivity among these children was 1.5%. This suggests that the improvement of the situation of lost to follow up to appointments by HIV positive

mothers and adherence to treatment need expanding trainings such as treatment literacy for mother mentors and improving role of MSGs and PMTCT Cohort monitoring for the mothers and HEI in high yield health facilities.

Table 3: Level of integration, lost to follow ups, death HEI & MSG Information from visited health facilities of HIV HOT SPOT TOWNs in 7 regions of Ethiopia, July 2005 to October 2009.

Characteristics	Oromia	Somali	Amhara	B/Gumuz	Tigray	D/ Dawa	Harer	Total
Abortion		4						**4**
still birth & IUFD, neonatal death		2						**2**
Refusal	9	3						**12**
Total # of HIV exposed Infants registered in the PMTCT register	930	98	1965	114	1230	183	183	**4703**
Death of HEI	8	1						**9**
Total # of HIV positive children identified and liked with ART unit	18	1	22	0	15	2	6	**64**
HEI Discharged Negative	477	39						**516**
Availability of MSG Approach for PMTCT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Total mother mentors	21	6	29	3	22	14	3	**98**
Total MSG members	1256	37	833	20	329	150	117	**2742**

Despite the increasing trends in the PMTCT coverage, the rate of MTCT of HIV has long been very high in the country. The challenges remain in maintaining women on antiretroviral treatment throughout the breastfeeding period, as the six-week mother-to-child transmission rate of 6% rises to 18.1% after breastfeeding ends (UNAIDS-GAPR report, 2016)

2.2. Health care system bottlenecks

In light of the country's commitment to eliminate the new pediatric HIV infections and congenital syphilis, Ethiopia has made remarkable efforts by putting in place leadership and good governance, services delivery and financing thorough partnership. The country has prepared an operational plan for rolling out of the options; has prepared updated and generic training materials and have provided trainings to health care providers in all regions. Necessary logistics, including ARVs, have been procured and distributed to ART sites. New M & E tool that emphasizes longitudinal follow up of mother infant pair is also initiated. Mentoring teams actively support health facilities across country and can serve as site level facilitators of option B+ implementation. Existing assessments indicate that the bottlenecks for the implementation of PMTCT of HIV and syphilis exist both at the supply as well as demand side.

- ***Supply side bottlenecks***
  - Some basic infrastructure, including lack of 24 hours electricity and water supplies, communication and referral means in some health facilities

- Poor supply Chain management system for PMTCT commodities for PMTCT only sites (ARV drugs, OI drugs, HIV test kits)
- Frequent facility level Stock outs of HIV and syphilis test kits and OI drugs
- Poor integration of FP with PMTCT and ART programs
- Skill gaps of the available human resources on PMTCT and EID
- Attrition of human resources trained on PMTCT and other related subjects
- Problem of access to CD4 count, viral load and EID testing sites and high turnaround time (TAT) for EID and result communication to facilities.
- About a quarter of health centers are not providing PMTCT.
- Limited access to women friendly services to manage victims of GBV, including rape.
- Low coverage of testing for STI including HIV, syphilis & hepatitis among pregnant women and partners
- Weak referral linkages between community and facility as well as facility to facility
- Lack of transportation from community to facility
- Poor nutritional assessment and management due to low access to Therapeutic feeding

- ***Demand side bottlenecks***
  - Though uptake of HIV testing at ANC has increased recently, uptake of ART (option B+ PMTCT) is low.
  - Risky feeding practices of HIV exposed infants (low exclusive breastfeeding)
  - Stigma and discrimination is acting as a barrier for continuation after giving birth.
  - Lost to follow-up/poor retention in PMTCT health care cascade
  - High unmet need of FP and poor condom utilizations with poor negotiation skills.
  - low utilization of EID services and pediatric care
  - High adolescent pregnancy and low women/girls empowerment indicates high risk practice.
  - Low partner's testing coverage

2.3. Elimination of congenital syphilis

Syphilis remains to be a global problem with an estimated 12 million people infected each year. On the contrary, there exist effective measures of prevention and relatively cheaper diagnostic and treatment options. A fetus can acquire congenital syphilis from an infected pregnant women resulting in serious pregnancy outcomes in 80% of cases which range from abortion to serious dimorphism if death is escaped in one way or another. An estimated two million pregnancies are affected annually; approximately 25% of these pregnancies end up in stillbirth or spontaneous abortion, and in a further 25%, the newborn has a low birth weight or serious infection, both of which are associated with an increased risk of perinatal death.

Contrary to the above facts, the magnitude of the problem had been underestimated at all levels (WHO, 2007a). It was only in 2007 that the WHO launched an initiative for the global elimination of congenital syphilis. The overarching global goal of the initiative was the elimination of congenital syphilis as a public health problem, which could be achieved through reduction of prevalence of syphilis in pregnant

women and the prevention of mother-to-child transmission of syphilis. The strategic plan focuses on sustained political commitment and advocacy; access to, and quality of, maternal and newborn health services; screening and treating pregnant women and their partners and establishing surveillance, monitoring and evaluation systems (WHO, 2007b).

Syphilis has been a well-known health problem in Ethiopia. Some studies reported that the sero-prevalence of syphilis among pregnant women has long been about 3.4% and had declined to about 2.1% in 2015 (GAPER report, 2016). However, it is more prevalent in young and urban pregnant women (Abate, 2014, EPHI 2015). Syphilis screening and treatment is a universal routine practice in ANC settings in Ethiopia; however, the 2009 EFY (6 months HMIS report) show that about 40.5% of pregnant women were screened and treated for syphilis. As it is true for other countries, the building blocks for elimination of congenital syphilis are already in place in Ethiopia. Hence, it is very crucial to look for HIV-Syphilis co-testing (dual-testing) approaches.

2.4. Dual Elimination Strategy

Elimination is defined as reduction to zero of the incidence of disease or infection in a defined geographical area. However, because both HIV and Syphilis remain a public health issue and PMTCT measures are highly but not 100% effective, currently it is not feasible to reduce MTCT of HIV and congenital syphilis infection to zero. Therefore, the goal for EMTCT initiatives is to reduce MTCT to a very low level, such that it is no longer a public health problem (<50 per 100,000 live births). Alternatively, elimination of MTCT of HIV is defined as transmission rate of <2% for non-breastfeeding and <5% for breastfeeding infants (WHO, 2007 b, WHO 2014).

A harmonized approach to eliminating MTCT of HIV and syphilis is generally encouraged. Many countries have already embarked on activities and initiatives towards dual elimination of MTCT of HIV and syphilis using the advantage of the similarity of the control interventions necessary to prevent the transmission of both infections in pregnancy that makes it feasible to establish an integrated approach. Additionally, an integrated approach can strengthen the health systems via improving the integration, efficiency, and quality of HIV and STI programming within maternal and child health (MCH) prevention, treatment, and care services. The availability of facility based integrated maternal (Antenatal to Postnatal) and PMTCT service in Ethiopia also provides a fertile platform to implement the dual elimination initiative.

This Dual Elimination Strategic plan is therefore setting a framework to guide the engagement of elimination of MTCT of HIV and syphilis at national, regional, district and community levels. The MOH recognizes that the burden of both infections among pregnant women is not uniform across the board in the nation. Hot-spot areas with higher proportion of expected HIV and/or syphilis positive women should be supported exceptionally in their response endeavor.

2.5. SWOT Analysis

The strengths and weaknesses in the past implementation and the opportunities to be exploited and anticipated threats in the future are summarized below.

Table 4: SWOT analysis of the situation of PMTCT of HIV & S program implementation

Areas	Strengths (S)	Weaknesses (W)
Program Impact	– Improved primary prevention that lead to significant reduction of new infection (incidence)	– High number of pregnant women needing PMTCT annually (>30,000, with about 1.2% prevalence) – High MTCT rate of HIV (18.1% at 18 months after breastfeeding) – High syphilis prevalence among pregnant women (2.1%)
Intervention coverage	– ANC coverage (at least once) is high as entry point for PMTCT – High HIV test uptake during ANC (95%)	– Significant dropouts along the PMTCT continuum – Low coverage of ART (Option B+) among HIV positives – Low coverage of exposed infants prophylaxis – Significant regional variations in uptake of test and ART. – Low uptake of contraceptives and high unmet need – Low coverage of EID
Health System	– Expansion of services and integration of PMMTCT of HIV& Syphilis improving – Leadership commitment in preparing strategies, guidelines and resource mobilization and adequate supply of ART drugs – Some improvements in human power development – M & E tools developed PMTCT data integrated in to the HMIS – Good engagement of partners	– Insufficient PMTCT financing, weak donor attraction and dwindling of the existing partners – Some health centers are not providing PMTCT services – Gaps in facility readiness to provide 24hours a day and 7 days a week (problem of electricity, water…) – Inadequate access to CD4 and viral load determination – Inadequate access to EID testing and other OI diagnosing laboratories and delay in sample collection and obtaining results – Turnover of trained staff, and some providers not trained – Gaps in program impact data tracking system at the population level (e.g MTCT rate for HIV and Syphilis, and maternal death due to HIV). – Mother-baby cohort registration initiated, but not analyzed and used for actions.
Community	- High awareness on HIV in general and PMTCT to some extent - Existence of community based interventions by HEWs and WDAs	- Low initiation for services use - Stigma and discrimination leading to low disclosure - Poor male partner's engagement and low disclosure, in turn, leading to discontinuation (dropouts) - Problem of transport and low socio-economic status to pay when it is available - Limited community based PMTCT services (community based test for pregnant women)
Opportunities (O)		**Threats (T)**
- Good governance and leadership at higher level (Good attention to HIV program in general) - Existence of interested multilateral, bilateral and NGO partners - Existence of well-organized community structures to install community based PMTCT. - Advent of new point of care diagnostic technologies for EID		- Few natural disasters (drought in Afar and Somali) in some regions may lead to attention diversion - Donor fatigue

3. Strategic framework

3.1. Guiding Principles

The implementation of this strategic plan will base on the following key guiding principles.

- ***Equity:*** Equity in health is the absence of avoidable or remediable differences among populations or groups defined socially, economically, demographically, or geographically. Thus, this principle deals with reducing disparities between regions and groups with different levels of underlying social advantage/disadvantage in the provision of quality EMTCT of HIV and syphilis services. Access to services should prioritize HIV positive pregnant women for HAART and syphilis treatment and left behind group of population for highly required services.

- ***Right based approach:*** Health providers and service delivery points must uphold the rights of all persons irrespective of their HIV status, to the highest attainable standard of health including the right of persons with HIV to decide on the number and timing of having children. A rights-based approach would ensure that women, men, and young people have the right to information enabling them to protect themselves against HIV and syphilis infections, information on where to seek appropriate care, the right to know the results of their tests, and the right to seek and receive effective treatment in a confidential and non-judgmental way.

- ***Quality focused:*** The services to be delivered will have high quality to meet clients' needs and ensure satisfaction.

- ***Gender sensitive/responsiveness:*** Male partners' should be involved and be encouraged to participate in EMTCT programmes and services. EMTCT of HIV and syphilis interventions need to be gender sensitive and responsive.

- ***Service Integration:*** EMTCT of HIV and S services must be provided integrated with other MNCH services.

- ***Family Focused:*** EMTCT of HIV and S services should be used as an entry points to HIV care for family by using family matrix.

- ***Adolescent and Youth sensitive:*** EMTCT of HIV and Syphilis responses within this strategic plan should be sensitive and responsive to the needs of adolescents and young people.
- ***Community involvement and mobilization:*** Engaging the community from the start and making them part of the program should be ensured to enhance the elimination activities-supply and demand.

- ***Country ownership, leadership and accountability:*** The strategic plan should be implemented with a real sense of country ownership, local, regional and national leadership and mutual accountability.

- ***Partnership and coordination:*** Cooperation and collaboration among partners to ensure efficiency in financial, technical and human resource allocation and utilization will also be the values of this strategic plan.

3.2. Vision

- To see HIV and syphilis infection free Ethiopian children with alive and healthy mothers.

3.3. Goal

- To eliminate new pediatrics HIV infection due to MTCT and congenital syphilis by 2020 and keep their mothers alive.

3.4. Strategic Objectives

1. Improve access and utilization of quality EMTCT of HIV and Syphilis Services.
2. Improve leadership, governance and partnership for comprehensive EMTCT of HIV and Syphilis services.
3. Improve human resources capacity for the provision of quality services for the EMTCT of HIV and Syphilis.
4. Strengthen the Logistics and supply chain management system to ensure continuous availability of logistics, medical supplies and commodities for EMTCT of HIV and Syphilis.
5. Strengthen the enabling environment (infrastructure) to improve the delivery of comprehensive and integrated EMTCT of HIV and Syphilis services.
6. Improve resource mobilization and financing of the EMTCT of HIV and Syphilis program.
7. Enhance community ownership for the demand creation and EMTCT of HIV and Syphilis.
8. Improve the quality of data generation, utilization and effective monitoring and evaluation of EMTCT of HIV and Syphilis program.

3.5. Primary Targets

3.5.1. Primary Impact targets by the end of 2020

- Reduce new pediatrics HIV infection due to MTCT to <50 cases per 100,000 live births
- Reduce the national rate of MTCT of HIV from 18% to less than 5%
- Reduce HIV related maternal death by 50%
- Reduce the rate of congenital syphilis to ≤ 50 per 100,000 live births

3.5.2. Primary process/ service coverage targets by the end of 2020

- Maintain ANC coverage (at least one visit) to > 95%
- Increase coverage of HIV testing among pregnant women to ≥95%
- Increase ART coverage (Option B+) for HIV-positive pregnant women to ≥95%
- Increase the coverage of ARV prophylaxis among exposed infants to ≥95%.
- Increase coverage of Early Infant Diagnosis (EID) among HIV exposed infant's to ≥95%.
- Increase the coverage of ART among HIV positive infants to ≥95%.
- Increase coverage of syphilis testing during pregnancy to ≥95%
- Increase the coverage of treatment of syphilis-seropositive pregnant women to ≥95%.
- Reduce unmet need for modern FP among married HIV positive women to 0%

4. Strategies, key performance targets and key interventions

4.1. Strategic Objective 1: Improve access and utilization of quality EMTCT of HIV and Syphilis services.

Strategy 1.1: Improving access to EMTCT of HIV & S service package by designing community-based approaches for reaching targeted population, focusing on primary prevention and unwanted pregnancy among HIV positive women

Key Performance targets by the end of 2020:

- Sustain ANC (at least one visit) coverage of ≥95%.
- Maintain coverage of counseling and testing for HIV and syphilis among 15-49 women at ≥95%
- Reduce incidence of HIV and syphilis among reproductive age women by 50%.
- Reduce unmet need for modern FP among HIV positive married women to 0%.
- HIV and Syphilis co-testing (dual testing) by HEWs is initiated at health posts level in Ethiopia

Key interventions:

- Provide community based SBCC to increase knowledge of the general community, with particular focus on women of child bearing age for the primary prevention of HIV and syphilis among reproductive age women.
- Conduct community-based counseling and testing campaigns for all reproductive age women by using the Health Extension Workers (HEWs) and by the support from community-based platforms like Women Development Armies (WDAs).
- Initiate HIV and Syphilis co-testing (dual testing) for better coverage and efficient use of resources instead of separate test for both infections at the health post level.
- Track and link potential PMTCT clients (mother-to-be and young girls) through health extension program (Urban and rural HEWs) for effective utilization of health service that will serve as the primary prevention as well as entry point for the PMTCT.
- Use mother support groups to promote FP for HIV positives (peers), adherence, nutrition, feeding options, share experience in screening for STIs, cervical cancer and other OIs.
- Provide PITC for all reproductive age group females and their partners at FP and youth friendly service outlets and link with PMTCT services.
- Utilize all possible existing opportunities to provide information and increase knowledge and demand for PMTCT, including youth centers, school health services and University clinics.

Strategy 1.2: Provide integrated quality EMTCT of HIV and syphilis services for pregnant women within the RMNCH platform

Key Performance targets by 2020

- Sustain the coverage of HIV and syphilis testing and counseling among pregnant women to ≥95%
- Increase ART coverage (linked from ART + test and treat—Option B+) for HIV-positive pregnant women to ≥95%
- Increase the coverage of treatment of syphilis-seropositive pregnant women to ≥95%

Key interventions:

- Provide routine quality counseling and testing for HIV and syphilis for all ANC attending pregnant women
- Provide ART to all HIV positive pregnant women, laboring and lactating women as soon as diagnosis is made.
- Provide routine quality counseling and testing for HIV and syphilis for mothers coming for labor and delivery as well as PNC without attending ANC and implement option B+ accordingly
- Provide appropriate treatment for all pregnant women positive for syphilis
- Provide Co-trimoxazole prophylaxis treatment to HIV positive mothers
- Encourage partner testing and couple counseling for HIV and syphilis, and linkage of sero-discordant male partners with positive results to ART services to prevent infection of the HIV negative women and give appropriate treatment for the partner if positive for syphilis
- Scale-up mother support group to each facility to promote FP for HIV positives (peers), adherence, nutrition, feeding options, share experience in screening for STIs, cervical CA and other OIs.
- Provide health education sessions and counseling on family planning to reduce the unmet need among reproductive age group.
- Provide pregnancy counseling for women living with HIV who wish to have children
- Provide services of integrated FP, sexually transmitted infections, TB screening and INH prophylaxis treatment, within PMTCT/MNCH service and link suspected cases of TB to TB clinics for further investigations and treatment.
- Implement continues Quality Improvement (CQI) interventions at each facility.
- Strengthen mother baby cohort registration and Scale up of the analysis

Strategy 1.3: Provide integrated quality prevention of MTCT of HIV and syphilis for all exposed infants.

Key Performance targets by 2020

- Increase Exclusive breast feeding among exposed infants to ≥95%
- Increase the coverage of ARV prophylaxis among exposed infants to ≥95%.
- Increasing the coverage of DNA-PCR test done at 2 months to >95%.
- Increase the coverage of ART among HIV positive infants to ≥95%.
- Increasing the proportion of HEI discharged negative at the end of 18 months to 95%.

Key interventions:

- Promote and ensure exclusive breast feeding for all infants born to HIV positive mothers for the first 6 months and gradual shift to complimentary feeding
- Provide all HIV-exposed infants with ARV prophylaxis in line with the national guideline.
- Provide Co-trimoxazole prophylaxis treatment to all HIV-exposed infants
- Scale up Early Infant Diagnosis (EID) services by introducing new point of care testing (POCT) technologies to improve access to all HIV-exposed infants, and utilize Short Message Service (SMS) printers for rapid result communication.

- Immediately link HIV positive children to ART clinic as soon as status is determined for initiation of ART
- Ensure newborns delivered to syphilis diagnosed or suspected women are getting appropriate care including treatment.
- Strengthen the use of mother baby cohort registration and analysis of HEI cohot for

Strategy 1.4: Provide mentorship to all EMTCT sites, addressing HIV AND AIDS, syphilis and other MNCH service delivery

Key Performance targets by the end of 2020:

- Standard mentorship and graduation criteria prepared
- Adequate number of health workers trained on mentorship
- All PMTCT sites with need has got mentorship

Key interventions:

- Develop mechanism and strengthen clinical and system mentorship
- Standardize mentorship and graduation criteria
- Train appropriate health staffs from public as well as private facilities, including hospitals, health centres, health posts and universities
- Conduct regular and integrated mentorship to all PMTCT sites.
- Support facilities in implementing CQI.
- Support the implementation of PMTCT cohort registration, monitoring and analysis.

4.2. Strategic Objective 2: Improve leadership, governance and partnership for comprehensive EMTCT of HIV and syphilis Services.

Strategy 2.1: Strengthen the capacity of health managers at all levels to enable them plan, organize, control and lead the delivery of quality EMTCT of HIV & S services

Key Performance targets by the end of 2020:

- All Regions, Zones, Woredas and kebeles will have the capacity to plan and deliver EMTCT of HIV & S
- All Regions, Zones, Woredas and Kebeles will have strategic plan (2017-2020) by 2017
- All Regions, Zones, Woredas and Kebeles will have annual operational plan for EMTCT of HIV & S
- All regions will have established EMTCT of HIV & Syphilis Team
- Functional EMTCT structure from the region to the community level will be in place

Key interventions:

- Provide technical support to all Regions, Zones and Woredas to adopt regional strategic plans in line with the national EMTCT strategic plan including cost estimate, financial mapping in collaboration with key stakeholders.

- Support regions, Zones, Woredas and kebeles to have EMTCT focal person and to establish multi-sectorial EMTCT Team at each level and put functional structure in place.
- Capacitate Woreda health program managers on EMTCT program management including conducting supportive supervision and monitoring processes.
- Organize in-country experience sharing events for managers at national, regional, zonal, woreda levels and document lessons learned.
- Develop/update guidelines, implementation manuals, training packages, SOPs and job aids for the mangers at different levels and provide trainings.

Strategy 2.2: Strengthen advocacy to enhance leadership commitment for resource mobilization and implementation of the comprehensive and integrated EMTCT of HIV & syphilis.

Key Performance targets by the end of 2020:

- The strategic plan is endorsed by the MOH at national level by June 2017
- All the regions have adapted and launched the targeted Regional EMTCT strategic plan by 2017
- The budget is mobilized and secured (allocated) as per the plan

Key interventions:

- Conduct National, Regional, Zonal and Woreda levels launching of the EMTCT of HIV & syphilis strategic plan.
- Advocate to ensure that EMTCT of HIV and syphilis programs are among the top priority agendas in government accountability structures at kebele, woreda, regional and federal level.
- Advocate for sufficient resource mobilization and increasing government health expenditure for EMTCT of HIV and congenital syphilis.
- Continue to advocate for prioritization of the comprehensive and integrated EMTCT strategy as a critical health development agenda in social standing committee of the parliament and National and Regional Governments' councils with the involvement of Political Champions and women living with HIV.
- Advocate for EMTCT of HIV and congenital syphilis strategic service delivery in all public and private facilities to promote equitable services

Strategy 2.3: Strengthen multi-sectoral response and coordination through partnership and networking among stakeholders

Key Performance targets by the end of 2020:

- Stakeholders' mapping done by 2017
- Strong multispectral EMTCT-TWG (Steering committee) exists

Key interventions:

- Map stakeholders and partners working on EMTCT of HIV and syphilis at different levels

- Strengthen multi-sectoral collaboration and response among GOs, NGOs, CBOs, FBOS, Private Sectors, Developmental partners and International Organizations for better and shared responsibility and accountability for the delivery of quality EMTCT of HIV and Syphilis services.
- The Joint-steering committee conducts quarterly meetings to harmonize, coordinate and evaluate EMTCT of HIV and Syphilis Implementation at national level, including resource mobilization/allocation/utilization.
- Facilitate the public-private partnership with special attention to 'hot spot' areas, towns and urban settings where HIV and syphilis prevalence is high.
- Provide technical support with special attention to 'hot spot' areas, mega projects, private health sectors, towns and urban settings where HIV prevalence is high in building capacity of sites to diagnose and treat HIV and syphilis among pregnant women, their children and adolescents.
- Involve and build capacities of local Faith Based Organizations, CBOs and other community Organization in demand creation and delivery of PMTCT services.

4.3. Strategic Objective 3: Improve human resource capacity for the provision of quality EMTCT of HIV and Syphilis

Strategy 3.1 Ensure that the pre-service training curricula of the health professionals addressed competencies to provide EMTCT of HIV and Syphilis services.

Key Performance targets by the end of 2020:

- Core competencies on EMTCT of HIV & Syphilis developed for all health disciplines
- Core competencies on EMTCT of HIV & Syphilis integrated in to curricula of all health disciplines and delivered

Key interventions:

- Support the development of competencies for the different cadres (disciplines) of health professionals on EMTCT of HIV & Syphilis in collaboration with MoE and universities.
- Support the revisions of training curricula and integration of all the EMTCT of HIV & Syphilis competencies in to the relevant courses of all undergraduate and graduate health fields in collaboration with The MoE and universities.
- Follow, monitor and ensure that all the Higher Learning Institutions (HLIs), including universities, regional health colleges and private health colleges have integrated the PMTCT training core competencies in to the pre service training curricula in collaboration with the MoE.

Strategy 3.2: Build the capacity of health workers to ensure delivery of quality EMTCT of HIV and Syphilis within the MNCH platform.

Key Performance targets by the end of 2020:

- Updated minimum standard for trained health workers on EMTCT of HIV & Syphilis for all service delivery points exist.

- All the service delivery points have the minimum number of staff trained on EMTCT of HIV & Syphilis.
- Updated in-service and on-job training manual/modules on EMTCT of HIV & Syphilis available

Key interventions:

- Avail the updated minimum standard number of staff trained on EMTCT of HIV & Syphilis at all levels of delivery points
- Update in-service and on-job training manual/modules on EMTCT of HIV & Syphilis available
- Assess national training needs of health professionals on EMTCT of HIV & Syphilis at all levels of delivery points
- Provide the in-service and on-job training of health professionals to build their capacity on Comprehensive and Integrated EMTCT, including maternal EMTCT cohort monitoring, HEI EMTCT cohort monitoring, and Continues Quality Improvement (CQI) approaches.
- Identifying and motivating best performing health professionals and model health institutions for their best achievements in EMTCT and MNCH by applying performance based evaluation.
- Develop National and Regional EMTCT staff training data base to capture the trained human capital and avail training list.

4.4. Strategic Objective 4: Strengthen the Logistics and Supply Chain Management System (LSCMS) to ensure continuous availability of logistics, medical supplies and commodities for EMTCT of HIV and Syphilis.

Strategy 4.1: Strengthen joint planning for quantification, forecasting, procurement, storage and distribution of commodities for EMTCT of HIV and Syphilis.

Key Performance targets by the end of 2020:

- Functional Technical Advisory Group will be in place
- Joint annual/operational plan is in place
- All facilities have the required logistics and supplies all year-round as per their standards

Key interventions:

- Revitalize a functional Technical Advisory Group led by PFSA/ RHB/ PFSA Regional Hubs that include relevant stakeholders to advise and provide technical support to effectively and efficiently manage the existing pharmaceutical and supply management system in the country at different levels for comprehensive integrated PMTCT service package.
- Coordinate stakeholders and partners' monthly meetings to create common concerns about issues and solutions for shortages or interruptions in essential supplies, including HIV and syphilis test kits.
- Conduct joint rapid assessment of the comprehensive and integrated PMTCT Logistics and supplies management systems

- Execute joint forecasting and quantification exercise that take into account gender equity and adolescents with the contribution of all actors in technical as well as financial support at all levels.
- Provide regular technical updates on forecasting and supply management to managers at national, regional, sub-hubs and relevant stakeholders to ensure sustained stock of essential medications (RTC, ARVs, Reagents…)
- Submit timely accurate reports on pharmaceutics supplies by health facilities.

Strategy 4.2: Strengthen the capacity of PFSA and regional Hubs in supply management systems to effectively use distribution mechanisms for drugs, supplies & commodities for EMTCT of HIV & Syphilis.

Key Performance targets by the end of 2020:

- Strong PFSA and Regional Hubs function in all regions
- All health facilities have at least 1 pharmacist trained on EMTCT LSCMS
- How facilities providing EMTCT will have the necessary diagnostics (DBS bundles and EID testing reagents)

Key interventions:

- Ensure a reliable and integrated PMTCT supplies and commodities at all levels, with particular emphasis on the lowest level (giving special focus for PMTCT only sites)
- Train pharmacy professionals & health care providers to strengthen the use of IFRRF & RRF
- Map Woredas and health facilities for strengthening supply chain management system for EMTCT of HIV and Syphilis.
- Strengthen advocacy for the allocation of sufficient budget for the EMTCT logistics, supplies and commodities and timely procurement and distribution.
- Ensure that all the facilities have no interruption of drugs, supplies and commodities to provide EMTCT of HIV and Syphilis services.
- Support the capacity of the PFSA/regional hubs to distribute the EMTCT supplies and commodities down the health facility level.

4.5. Strategic Objective 5: Strengthen the enabling environment (infrastructure) to improve the delivery of comprehensive and integrated PMTCT of HIV and Syphilis

Strategy 5.1: Improve infrastructure for quality comprehensive and integrated EMTCT and STIs services

Key Performance targets by the end of 2020:

- All health facilities have the capacity to provide quality Prevention of MTCT of HIV and prevention and treatment Syphilis as per the standard
- Standard referral tool from health post to health center will be developed
- CQI will be functional at all health facilities offering EMTCT of HIV AND SYPHILIS

Key interventions:

- Renovate and reorganize the health facilities and fulfill essential equipment needs and avail trained human resource at all health facilities for the delivery of quality and comprehensive EMTCT and STI service.
- Use continuous quality improvement and/or assurance (CQI/A) tools in facilities to improve quality of EMTCT and CS service delivery.
- Develop standardized tool to improve the referral between health post and health centers and ensure their utilization.
- Ensure that all facilities will have updated Facility Standards, the implementation strategy, and appropriate supervision mechanisms.
- Ensure that all the facilities are equipped with necessary facilities that enable them render quality EMTCT services as per the standard, including laboratory facilities, toilet facilities, waste disposal facilities, 24 hours serving electricity backed up by generator or solar and continuous water supply.

4.6. Strategic Objective 6: Improve resource mobilization and financing of the EMTCT of HIV and Syphilis program.

Strategy 6.1: Improve budget allocation for EMTCT of HIV and syphilis by coordinating partners.

Key Performance targets by the end of 2020:

- Sufficient budget is allocated to EMTCT of HIV and syphilis program

Key interventions:

- Advocate for increased budgets from the government health expenditures for the EMTCT of HIV and syphilis program implementation.
- Mobilize resources to fill funding gaps at country level by strengthening the existing bilateral and multilateral partners/donors and searching for new partners.
- Implement community and social health insurance schemes for the provision of free EMTCT services and to ensure equity.

4.7. Strategic Objective 7: Enhance community ownership for the demand creation and EMTCT of HIV and syphilis.

Strategy 7.1: Strengthen capacities of HEWs & WDAs to ensure the involvement and participation of individuals, families and communities in EMTCT of HIV & syphilis.

Key Performance targets by the end of 2020:

- Competencies on EMTCT of HIV & syphilis for HEWs integrated in to the IRT modules
- All HEWs trained on EMTCT of HIV & syphilis as part of the IRT
- All clients seeking service for the EMTCT of HIV and syphilis will revive free of charge
- Monthly community based meetings organized all year round

Key interventions:

- Ensure that all the HEWs and HDAs have appropriate knowledge, skill and attitude to educate and transform the behavior of the community on EMTCT of HIV and syphilis.
- Conduct competency based training on interpersonal communication skills for HEWs and WDAs to effectively communicate, establish trust and motivate the community to utilize EMTCT of HIV and syphilis services.
- Orient the HEWs, PLHIV Associations and peer educators to support mothers on adherence package service.
- Support free maternal and new born PMTCT/MNCH services so that cost shouldn't be a barrier.
- Conduct monthly community level meetings coordinated by HEWs & WDAs with all pregnant women, religious leaders & other opinion leaders to discuss on EMTCT of HIV & syphilis.

Strategy 7.2: Promote EMTCT of HIV and syphilis focused mass media messages to increase community awareness and behavior change.

Key Performance targets by the end of 2020:

- Standard mass media messages on EMTCT of HIV and syphilis produced
- Mass media messages on EMTCT of HIV & syphilis delivered to the community on regular basis
- Local Media (eg. FM and community radios) disseminate regular EMTCT of HIV and syphilis messages.

Key interventions:

- Support regions to develop and transmit tailored media messages in their respective official local languages
- Conduct mass media campaign through developing key messages and airing through radio, TV and media programs in major local languages.
- Involve Artists, drama and film producers in national forums for incorporation of characters using PMTCT services.
- Enhance sharing of best practices and case studies through media that promote behavior change among the community.

Strategy 7.3: Enhance the participation of the general community in EMTCT of HIV and syphilis, including prevention, treatment, care and support.

Key Performance targets by the end of 2020:

- Key community leaders engaged in the EMTCT of HIV and syphilis interventions
- Reminder digital telecommunication technologies for PMTCT introduced

Key interventions:

- Sensitize and support key community leaders and religious leaders' to enhance their support and participation in to promoting EMTCT service utilization by the community.

- Assist communities to establish community support for HIV positive pregnant women and their family through HDAs or other traditional structures. Example: Idir, PLHIV group/associations to provide support, including transport for pregnant women to reach health facility for ANC, Delivery, and PNC.
- Introduce and expand use of digital telecommunication technologies to make reminders to pregnant women to visit ANC, Delivery, and PNC in the PMTCT/MNCH platform.
- Support communities to combat stigma, discrimination, and enhance disclosure and adherence to treatment, facilitate referral and linkage to health facilities and other support systems through HDA, and working with religious and community leaders.
- Increase knowledge (HIV prevention, testing, treatment literacy…) among spouses/partners and family members, as well as address HIV-related stigma and gender inequalities in decision making through health education by the health extension workers.
- Conduct Advocacy workshop for religious and community leaders about the EMTCT of HIV and Syphilis.

4.8. Strategic Objective 8: Improve the quality of data generation, utilization and effective monitoring and evaluation of EMTCT of HIV and Syphilis programs.

Strategy 8.1: Strengthen Integration of M & E framework for EMTCT of HIV and Syphilis with overall health sector M & E

Key Performance targets by the end of 2020:

- M & E data collection tools revised and EMTCT of HIV and Syphilis indicators incorporated
- All health facilities will have trained staff trained on EMTCT of HIV and Syphilis data management
- All facilities started the maternal PMTCT cohort analysis using maternal dashboard and HEI PMTCT cohort analysis using HEI dashboard.

Key interventions:

- Review data collection tools to incorporate EMTCT of HIV and Syphilis indicators in the existing health sector M & E framework, including the HMIS.
- Conduct regular on-job training to improve quality of data collection, analysis and reporting and ensure completeness and proper archiving of individual records and registers.
- Strengthen EID monitoring system and track the transmission rate at all levels
- Ensure that all facilities stared analysis, interpretation, developing action based on the Mother and HEI cohort analysis finding using the integrated MNCH/PMTCT register as data source.
- Revise National indicators and targets that will be used for on-going performance tracking of the implementation of the strategic plan.

Strategy 8.2: Enhance capacity for use of data for quality improvement at all levels

Key Performance targets by the end of 2020:

- Data quality assessment conducted every quarter
- Monthly maternal and infant mortality review meeting conducted

Key interventions:

- Conduct data quality assessment during quarterly Integrated Supportive Supervision and mentoring sessions
- Identify, document and share innovations and best practices in the implementation of activities on EMTCT of HIV and Syphilis
- Conduct monthly maternal and infant mortality review meetings to identify causes and potential local strategies and actions to improve quality of care at health facilities with participation of Health Development Army Leaders, HEWs, and local relevant NGOs
- Introduce and expand national dashboards for improved EID data management.
- Introduce and use PMTCT cohort monitoring wall chart and reporting formats to improve retention and monitor PMTCT outcomes.

Strategy 8.3: Develop and implement operational research, surveillance, surveys and program data analysis to guide program evaluation

Key Performance targets by the end of 2020:

- Baseline survey conducted
- EMTCT of HIV and syphilis surveillance system established
- Mid-term and end-term evaluations of the strategy conducted

Key interventions:

- Conduct baseline survey to know the transmission rate of HIV and syphilis from mother to child.
- Conduct Operational Research in line with identified EMTCT of HIV priorities
- Establish EMTCT of HIV and syphilis surveillance system, including monitoring of adverse events related to the use of ART in pregnant women.
- Ensure the MTCT of HIV and syphilis data are captured in the routine surveillance system of public health emergency management unit (PHEM) of Ethiopian Public Health Research Institute (EPHI).
- Conduct mid-term and end-term evaluation of the implementation of the strategic plan for modifications of strategies; scale up of best practices and sharing lessons learnt.

5. Monitoring and Evaluation

5.1. The monitoring and evaluation framework

The M & E framework for this strategic plan will support the following five strategies to strengthen the health sector monitoring and evaluation framework.

- **Capacity building** of appropriate staff to ensure that they are sufficient and have the necessary skills and time to contribute to monitoring of the EMTCT of HIV AND SYPHILIS strategic plan
- **Standardized and integrated data collection and reporting** to avoid duplication of efforts and ensure the standardization of data collection tools across the country and data quality assurance.
- **Linkages and data flow between information sources at various levels of the health system (community-based, and public and private-sector facility-based)**
- **Efficient information use** for decision making at all levels, and
- **More systematic use of information and communication Technologies (ICT)** to support data collection, transmission, analysis, and presentation.

5.2. Data flow

Data are collected routinely by primary hospitals (PH), Health Centers (HC), Health Posts (HP) and at the community level, which submit quarterly service, disease and administrative reports to Woreda Health Offices (WorHOs); while RHBs receive quarterly reports from Woreda and Regional hospitals. The FMOH receives service, diseases and administrative reports from RHBs, from agencies, and federal hospitals. Routine data collection and aggregation processes at all levels of the health system produce summary statistics that can be used during performance monitoring meetings and planning.

The MOH has introduced a Community Health Information System (CHIS) to capture basic health and related information by Health Extension Workers (HEW) at household and individual levels. The CHIS collects data on basic demographic statistics, health service delivery and utilization based on the health extension package. This is done by using a family folder, which is a family-centered tool designed for HEW to manage and monitor her work in educating households and delivering an integrated package of promotive, preventive and basic curative health services.

The MOH will ensure that the EMTCT of HIV AND SYPHILIS indicators are included in the existing data collection tools from Health facilities and community level. These should be compiled at the Woreda and regional level and channeled up to the national level using the existing mechanism to monitor and evaluate national progress towards EMTCT & CS targets. At national level, the annual review meetings will be venues for reporting best lessons, challenges and strategize on corrective measures.

5.3. Periodicity of reports across the different levels

The schedule for routine HMIS reporting is organized as follows.

- Monthly reports from the peripheral level to WorHOs
- Monthly reports from WorHOs and Regional Hospital to RHB

- Monthly report from RHBs to the MOH
- Monthly report from RLs to EPHI

5.4. Key Indicators for performance assessment

Furthermore, the EMTCT of HIV AND SYPHILIS plan will be monitored and evaluated using the existing data collection and reporting system through harmonization and linkage within health sectors (private and public). Much effort will be made to ensure that indicators for EMTCT & CS are aligned and linked to the existing national M & E system (HMIS/and patient monitoring data and other sources).

5.5. Programme tools

The routine monitoring systems and tools to be used include the HMIS, LMIS, HSTP annual performance report, DHS and Spectrum modeling.

5.6. Researches and surveys

The success of implementation of this strategic document will also be assessed through operation researches, midterm and end-term reviews and surveys and performance monitoring dashboard by each respective managerial level

5.7. Monitoring modalities

Monitoring of activities will be carried out at all levels (national, regional, Woreda and health facilities) with clear definition of roles and responsibilities. The overall process will be anchored on the following activities:

- Weekly data and performance review
- Monthly cohort monitoring analysisand use of wall charts at the health facilities
- Monthly monitoring/review meetings at the health facilities
- Monthly review meetings at the Woreda level
- Quarterly review meetings bringing together all stakeholders in the region to review progress, identify challenges and solutions, share experience, and reward well performing health centers and Woredas
- Bi-annual review at the national level including annual review gathering all stakeholders at the national level, to review progress, identify challenges and solutions, share experience, and reward well performing regions and Woredas and facilities

5.8. Dissemination plan

Guidance and support will be provided at all level for more systematic compilation, analysis and use of programme data to assess performance and decision making. Overall dissemination of data will be carried out during MOH HSTP annual performance review conferences, other related workshops and meetings.

5.9. M & E framework and implementation Roadmap

5.9.1 M & E framework

Table 5. Monitoring and Evaluation Framework

S/N	Indicators	Baseline 2016	End of 2017	End of 2018	End of 2019	End-line 2020	Data source
1	**Impact Indicators**						
1.1	New rate of paediatric HIV infection due to MTCT (per 100,000 live births)	360	283	205	128	<50	DHS, HMIS. GAPR
1.2	National rate of MTCT of HIV (%)	18.1	14.8	11.6	8.3	<5	DHS, HMIS, GAPR
1.3	Reduce maternal death due to AIDS by (%)	N/A				50	DHS, CRVS, MDSR, GAPR
1.4	Rate of congenital syphilis (per 100,000 live births)	N/A				<50	Special survey, HMIS, DHS
2	**Outcome Indicators**						
2.1	ANC at least once (%)	98	98.5	99	99.5	100	HMIS
2.2	HIV test during pregnancy, L & D and PNC (%)	85	87.5	90	92.5	95	HMIS
2.3	Syphilis testing and treatment during pregnancy, L & D and PNC (%)	40.5	54.1	67.8	81.4	95	HMIS
2.4	ART (linked and Option B+) converge among HIV +Ve pregnant, L & D and lactating women (%)	57	66.5	76	85.5	95	HMIS
2.5	Coverage of treatment of syphilis sero-positive pregnant and lactating women (%)	N/A				95	HMIS, special survey
2.6	ARV Prophylaxis among HIV exposed infants (%)	41	54.5	68	81.5	95	HMIS, GAPR
2.7	Cotrimoxazole prophylaxix among HIV exposed Infants (%)	29	45.5	62	78.5	95	HMIS, GAPR
2.8	Early Infant Diagnosis (EID) virologic test (at 2 months)	25	42.5	60	77.5	95	HMIS, GAPR
2.9	HEI confirmatory test at 18 months (%)	30.5	46.6	62.8	78.9	95	HMIS, GAPR
2.9	ART coverage among HIV positive infants	41	54.5	68	81.5	95	HMIS, GAPR
2.10	Unmet need for modern contraceptives for women living with HIV	25	18.8	12.5	6.3	0	DHS, Special survey
3	**Health system indicators**						
3.1	# (%) of hospital and health centres providing PMTCT of HIV & S	247(100)	247(100)	247(100)	247(100)	247(100)	HMIS, Facility survey
3.2	% of hospital and health centres providing PMTCT of HIV & S 24/7	2621(74%)	3000(100%)	3531(100)	3531(100)	3531(100)	HMIS, Facility survey
3.3	% of facilities having the minimum required trained staff on PMTCT as per the staffing norms	N/A	90	95	100	100	HMIS, Facility survey
3.4	% of facilities with complete EMTCT data recording &timely reporting	N/A	90	95	100	100	HIMS report
4	**Equity indicators**						
4.1	Minimum ANC coverage for each region (at least once) (%)		95	95	95	95	HMIS
4.2	Minimum coverage of HIV and Syphilis test during pregnancy, L & D and PNC for each region (%)		95	95	95	95	HMIS
4.3	Minimum ART (linked & Option B+) coverage among HIV +ve pregnant women for each region (%)		95	95	95	95	HMIS

N/A: Data not available for 2016 baseline

5.9.2: Implementation Roadmap (National)

Table 6: Strategic Plan Implementation National Roadmap showing the amount of services to be delivered (2017-2020)

Target Groups	2017	2018	2019	2020	Total
Number of pregnant women receiving Basic ANC at least once	3,000,000	3,000,000	3,000,000	3,000,000	12,000,000
Number of women receiving Counselling and testing for HIV during pregnancy, L & D and Post natal	2,850,000	2,850,000	2,850,000	3,000,000	11,550,000
Number of women receiving VDRL/RPR test for syphilis during pregnancy, L & D and postnatal	2,850,000	2,850,000	2,850,000	3,000,000	11,550,000
Estimated number of syphilis sero-positive positive women needing treatment during pregnancy, L & D and Postnatal	40,000	45,000	50,000	60,000	195,000
Number of women needing ART for PMTCT (linked and new starters of Option B+) during pregnancy, L & D and postnatal	30,061	30,818	30,600	30,132	151,190
Number of women recieving ART for PMTCT (linked and new starters of Option B+) during pregnancy, L & D and postnatal	27,550	27,550	28,550	29,000	112,650
Number of HIV Exposed Infants (HEI) born to HIV positive mothers Receiving NVP Prophylaxis	20,300	23,200	26,100	29,000	98,600
Number of HEI needing **DBS** collection for DNA/PCR testing	17,400	20,300	23,200	28,000	88,900
Number of partners of pregnant mothers tested for HIV	1,500,000	2,000,000	2,850,000	3,000,000	9,350,000
Number of HEI receiving confirmatory Anti body HIV test at 18 months after totally stopping breast feeding	20,300	20,300	23,200	28,000	91,800
PMTCT/MNCH Sites with Cohort Monitoring and Analysis	500	1500	2500	2868	2868

Regional Roadmap

The region disaggregated roadmap for mothers needing PMTCT services is indicated below to set bench marks to be considered during the development of the regional cascade plan for EMTCT of HIV and syphilis.

Table 7: Regional road map as minimum benchmark for expected number of women needing PMTCT services, Ethiopia

S/N	Estimated PMTCT Needing mothers disaggregated by regions 2017-2020 (EPHI, Feb,2017)				
	Regions	**2017**	**2018**	**2019**	**2020**
1	Addis Abeba	1,466	1,479	1,490	1,490
2	Afar	506	541	529	504
3	Amhara	8,720	8,863	8,724	8,516
4	B. Gumuz	196	197	193	186
5	Dire Dawa	274	265	253	237
6	Gambela	511	589	619	635
7	Harar	202	201	201	201
8	Oromia	9,700	9,916	9,684	9,359
9	SNNP	3,753	3,970	3,994	3,956
10	Somali	1,902	1,996	2,199	2,426
11	Tigray	2832	2801	2715	2622
	Ethiopia	**30,061**	**30,818**	**30,600**	**30,132**

6. Institutional arrangement, coordination and Implementation

Appropriate institutional arrangement and coordination are indispensable for program implementation, performance monitoring and better outcome. This section gives a brief guidance on such issues.

6.1. Implementation at various levels

6.1.1. National level

At national level, the first year of implementation (2017) will focus on smooth transition from the EMTCT strategic plan 2013-2015 to the current one after taking stock of the implementation status at national, regional, Woreda and kebeles levels. By the end of 2017, the finding of the end term evaluation of EMTCT strategic plan 2013-2015 will be shared and key lessons that can contribute in shaping the current one will be drawn. The national Technical Working Group (TWG) will support the regional TWGs in adapting and implementing the regional EMTCT of HIV AND SYPHILIS plan through actively participating in the regional EMTCT & CS planning and regional review meetings. The Hot spots implementation initiative will be closely supported through supervision and close follow up.

The PMTCT case team will work harmoniously and proactively with other units in the MNCH directorate, its HIV counterpart in DPC directorate and FHAPCO. There will be strong and close collaboration with PFSA and EPHI in order to ensure smooth supply and commodity management. As usual, FMOH will continue the leadership in coordinating efforts of various health, nutrition and population donors and stakeholders and galvanize the national momentum. It remains watchful with respect to the global funding situation and tries to mobilize more funding as necessary. Its responsibility to capture new technical updates and exemplary experiences from elsewhere and adopt as necessary remains solid. It will continue conducting regular national performance reviews and giving timely directions to regions and other actors.

6.1.2. Implementation at Regional Levels

Regional steering committees will be strengthened and be responsible for the adaptation and implementation of the regional EMTCT of HIV AND SYPHILIS plan. High prevalence areas and hot spots will be identified and prioritized for technical and logistics support in the initial phase of the Plan. Quarterly review and joint supportive supervision will be organized by the TWG with all the stakeholders including private sectors and other sectoral bureaus.

6.1.3. Implementation at Zonal and Woreda level/ sub cities

The ZHDs and WorHOs/ sub cities will provide technical support for quality EMTCT services at the health facility level (hospital, health centers) including NGOs and private health facilities. Woredas will support facilities to ensure effective follow up and community linkage mechanisms are in place. Woredas will support and build the technical capacity of Health Development Armies in their engagement in community demand creation. Referral linkages between communities, health posts, health centers and

hospitals will also be strengthened. WorHOs will also plan and coordinate integrated supportive supervision and mentoring activities from hospitals to health Centers and health centers to health posts.

6.1.4. Implementation at community level

The exiting traditional and contemporary community platforms will be maximally used to mobilize the community and ensure community ownership and participation. The EMTCT of HIV AND SYPHILIS will be a standing agenda in community dialogues. Indigenous support structures will be established and strengthened to ensure women living with HIV with low financial status are not left behind. Retention in care and linkages to care will be part of the core concerns.

6.2. Strengthening the MNCH platform and the referral linkage

While implementation of the EMTCT of HIV AND SYPHILIS strategic plan will fit in to the overall health system, it particularly, looks for strengthening of the MNCH platform especially at facility level. This will ensure the provision of quality antenatal care, institutional deliveries and postnatal care. In the context of treatment optimization for pregnant women and their children through the scale up of option B+, the innovative programmatic approaches will be considered that ensures all pregnant women are offered HIV testing and counseling as well as syphilis testing and treatment.

The HP, HC and Woreda-level management of logistics and supplies, quantification and monitoring skills will be strengthened. Ensuring adequate and competent staffing will also be one of the focus areas. Through a functional linkage between the Health Post and the Health Centre, all pregnant women attending ANC at the Health Post will be referred to the catchment Health Centre for at least one visit for laboratory testing that includes HIV, RPR, Hgb and urinalysis and initiate treatment if found to be HIV and/or syphilis positive. Options like availing the dual HIV and syphilis testing kit through piloting at health post levels need to be considered. with functional referral linkage to the networked health center or primary health care unit(PHCU) for confirmatory retesting of HIV positives and immediate initiation of treatment for both HIV positive or those syphilis positive mothers.

6.3. Prioritization of “hot spots”

A phased approach will be used to meet the goals of the scale up plan within the available resources. The methodology for prioritizing the scale up approach is based on examining absolute unmet need as opposed to percent coverage. Unmet need is defined through using ARVs for PMTCT as a representative indicator. The program will then target areas where larger groups of women not yet accessing the services they require.

Regions, Zones, and Woredas with the highest unmet needs for PMTCT and pediatric HIV treatment and care, which were identified during the national level bottleneck analysis including Oromia (12,331; 34%), Amhara (8,536; 23%), SNNPR (5575; 15%), Somali (2910, 8%) and Tigray (2,322; 6%), will enable us to reach about 86% of the need. In each region, support will be provided to Regional Health Bureaus to give special emphasis to “hot spot” areas with the highest volumes of women and infants in need of

PMTCT services. For instance, Oromia has the highest number of women in need, but also very low prevalence, indicating that further targeting within the region needs to be done. In settings with low HIV prevalence, especially in rural area and where programme data have shown that very few pregnant women have been identified HIV-positive over a long period of time (6 months to 3 years), programme will focus on institutionalizing HIV-testing and counseling and STI screening as integral component of routine ANC at health centers and hospitals. In addition, for pastoral populations, consideration will be given to integrating HIV testing and counseling and PMTCT into mobile ANC clinics when available. While implementing the MTCT of HIV AND SYPHILIS elimination plan, priority interventions will be identified and implemented based on certain criteria indicators such as ANC coverage (as a representative indicator for the performance of the MNCH platform), the proportion of facilities offering PMTCT, HIV testing and counseling and STI screening and treatment coverage, and the absolute number of women in need of PMTCT services.

6.4. The roles and responsibilities of different stakeholders in the implementation of the EMTCT of HIV AND SYPHILIS strategic plan

6.4.1. Parliament and political leadership

- National leadership to position Ethiopia among countries with strong commitment to eliminating new HIV and Syphilis infections among children and keeping their mothers alive
- Provide action-oriented leadership to make the elimination of new HIV and Syphilis infections among children and keeping their mothers alive a high priority at national, regional, woreda and community levels and maximize strategic opportunities for collective action.
- Foster effective collaboration and synergy between the HIV and maternal, new-born and child health constituencies around the goals of eliminating new HIV and Syphilis infections among children by 2020 and keeping their mothers alive.
- Ensure actual implementation of the national plan and strategies, and prioritize populations with the highest unmet need.
- Increase domestic financial contributions and foster external investment for the elimination of new HIV infections and CS among children and keeping their mothers alive.
- Foster and support implementation of the "Three Ones" principles and establish efficient institutional and management systems at all levels building on existing structures and mechanisms
- Assess bottlenecks to effective operationalization of free MNCH/HIV policies and make policy decision to remove the barriers that hinder women and their families from seeking services.
- Ensure operationalization/implementation of national policies to reduce HIV- and gender-related stigma and discrimination and other related barriers to effective uptake of essential MNCH/HIV STI services

- Promote and strengthen strategic partnerships to improve sustainability of the national response to HIV and STI, including eliminating new HIV infections in children and keeping their mothers alive.

6.4.2. The Ministry of Health (MOH) with the HAPCO, PFSA, FMHACA and EPHI

- The Ministry of Health will lead the implementation of the EMTCT of HIV AND Syphilis Plan. It will provide overall technical leadership guidance, advice, resource allocation, monitoring and evaluation on the implementation of EMTCT and Pediatric HIV care and treatment,
- The MOH will ensure availability of essential drugs and supplies by facilitating efficient procurement and distribution to all levels of service delivery. In collaboration with PFSA, the MOH will facilitate forecasting and procurement of ARV, HIV test kits and other laboratory supplies and their distribution to all health facilities.
- Federal and regional HAPCOs will support multi-sectorial collaboration with other concerned line ministries such as education, water and communication. EPHI will support research, monitoring and evaluation, surveillance, laboratory functions (EID) and quality assurance, while FMHACA will lead the regulatory activities.

6.4.3. PMTCT Technical Working Group (TWG)

- *The PMTCT Technical Working Group (TWG) s*upports technically and MOH, lead, coordinate and oversee partner support at national level to plan for the elimination of new HIV infections and congenital syphilis among children and keeping their mothers alive.
- Work to ensure that national and sub national plans, policies, guidelines and protocols are endorsed and implemented by all stakeholders.
- Ensure that the "Three Ones" principles are applied in a manner that strengthens national ownership and efforts in tracking progress and programme performance.
- Based on the evolving global evidences, inform and support the MOH in adopting new and innovative practices and strategies for EMTCT of HIV and Syphilis.

6.4.4. Regional Health Bureaus (RHBs)

- RHBs will adopt the national EMTCT/CS plan and coordinate its translation into a context specific regional EMTCT plan
- RHBs to coordinate technical support to revision/update of and implementation of district micro plans in line with the national EMTCT/CS
- The Bureaus are responsible for planning, resource allocation, management, supervising and monitoring all EMTCT of HIV AND SYPHILIS activities and partners in the region.
- RHBs will coordinate and ensure quality training and mentoring of health care providers on EMTCT of HIV AND SYPHILIS at the district level and analyze, compile, disseminate and use reports and data on EMTCT of HIV AND SYPHILIS from the districts/councils and send to the

National Level.

- Working with implementing partners, RHBs will coordinate and conduct supportive supervision and clinical mentoring visits to hospitals and health centers.

6.4.5. Zonal and Woreda Health Offices

- Zonal and Woreda health offices will develop and implement a context specific district EMTCT/CS plan (including Monitoring/Supervision and Evaluation) through updating their existing plans. The Woreda based plans should include MNCH and EMTCT/CS targets and detailed scale up plans, as well as ensuring adequate allocation of human and financial resources.
- Zonal and Woreda health offices will provide technical support for quality EMTCT of HIV AND SYPHILIS services at the health facility level (hospital, health centers), including voluntary agencies and private health facilities. This includes setting up effective follow up mechanisms up to the community level for EMTCT of HIV AND SYPHILIS through involvement of HEW, HDA and associations of women living with HIV and Women coalition civic society organizations.

6.4.6. Health facilities (Hospitals and Health centers)

- As part of the district level planning process, health facilities will set clear targets for MNCH and EMTCT/CS for the catchment area population based on the PHCU principle including option B+ related targets.
- Identify ways to make the implementation of the national policy on free MNCH/HIV services effective through consultations with service providers, partners, civil society and communities, including HEWs, HDAs
- To ensure client satisfaction, retention, adherence and effective follow up, health facilities will need to provide quality services on HIV testing and counseling, information and counseling on preventing HIV transmission, Family planning, tracking mechanisms including reminder calls to women during pregnancy and postpartum period, antiretroviral drugs to prevent HIV transmission from mother to child, Infant feeding counseling, and HIV treatment and care for infected mothers, infants and other family members.
- Facility managers will ensure availability of supplies and motivated staff to provide preventive and curative STI including HIV services, provide adequate supervision and monitoring, as well as mechanisms to improve motivation to provide high quality services.
- When possible, facilities will also be engaged in conducting community-based interventions in close collaboration with HEWs and HDAs: HIV testing and counseling, including voluntary HIV counseling and testing, home-based testing and counseling for partners, and community mobilization
- Each facility should put in place active referral and tracking mechanisms to ensure that women receive all the necessary services when moving from one level of care to the next.

6.4.7. Health Extension Program (HEP)

- The HEWs will organize HDAs, women coalition, religious leaders and opinion leaders to promote MNCH services including HIV for demand creation and pregnant mother-partner pair involvement.
- Support defaulter tracing, referral, and adherence to treatment, with supervision and monitoring from the Health Centre staff and a strong referral mechanism for HIV-positive women in need of services.
- The HEWs will work to identify local barriers to access of services and address them through national/regional and/or locally adopted behavior change communication materials.
- HEWs will support optimal young infant feeding practices and referral of HIV testing of HIV exposed children.

6.4.8. Faith Based and Civil Society Organizations, including mothers living with HIV and NEP plus

- Through churches and mosques, community based organizations and groups, promote antenatal care, pre-marital HIV testing, family planning and birth spacing, HIV prevention and testing, skilled care at birth, postnatal follow ups, immunization, nutrition and prevention of harmful traditional practices.
- They will hold governments and other key stakeholders accountable through constructive advocacy, partnerships and consultations
- They will provide leadership in removing key bottlenecks to service delivery through innovative approaches such as task-shifting and task-sharing, the use of mobile phones, and social and psychological support to HIV+ women and their families.
- They will contribute to strengthen the engagement of women living with HIV, male partners, couples in HIV prevention in the context of treatment optimization through option B+, and treatment programmes for mothers and children
- They will actively participate in planning, implementing, including monitoring of programmes, and setting up accountability structures and mechanisms
- They will advocate and build constructive partnerships to ensure they are provided with necessary funding to support their contribution to the implementation of the plan
- In collaboration with the national programme and partners, they will establish community accountability structures for pro-active communication, feedback and problem-solving between HEWs, HDAs, women's groups, community-based and faith-based service providers, communities and HCWS.
- They coordinate and harmonize national, regional and Woreda level civil society, networks of PLWH and activist groups in their various activity and particularly their advocacy agenda to ensure effective response from national and local governments, donors, partners and other stakeholders

6.4.9. Development Partners, donors and implementing partners

- Overall, development and implementing partners and donors will support funding, coordination, and provide technical support for the implementation of the national and sub national EMTCT/CS plans.
- They will incorporate community and health systems strengthening, including human resources into donor support.
- They will provide technical and financial support to expansion of services at the regional and Woreda levels. Specially, they will provide technical and financial support to regions and Woredas to identify needs/gaps and translate the National eMTCT of HIV/CS plan into regional and Woreda specific, actionable /effective comprehensive plans. In this process, partners and donors will avoid parallel structures/mechanisms that could undermine national ownership and sustainability.
- Donors and partners will strongly position MTCT of HIV and Syphilis elimination as integral to their support to strengthening broader maternal, newborn and child health.
- Development and implementing partners will strengthen coordination among themselves at national, regional and Woreda level to optimize their investment, accelerate expansion, improve performance assessment, and facilitate experience sharing and documentation of best practices that can be shared with RHBs, partners and MOH to improve implementation, uptake and outcomes of services.
- Implementing partners will also support capacity building activities to enable RHBs and Woredas to effectively plan, manage, implement and monitor the programme.
- Working in collaboration with RHBs, partners will provide technical support, mentoring, training and supervision. Training will be both the standard packages and on-the-job Continuing Medical/Nursing Education.
- They will support Woreda and site level supply and logistics management to avoid stock out of essential commodities.
- They will provide funding through a variety of modalities, including direct budget or pooled support and through support to projects that focus on MNCH, EMTCT of HIV AND SYPHILIS and researches as part of comprehensive HIV and MNCH services.
- They will provide evidence-based guidance and guidelines to inform and adjust the national response on HIV prevention and treatment for mothers and children to ensure effectiveness and efficiency.
- They will develop rapid response mechanisms to respond timely to the country Technical advisory (TA) requests.

6.4.10. Universities and academic institutions

- Universities and other academic institutions will support pre-service and in-service training in MNCH, EMTCT/CS and inclusion of these subjects in the pre and in-service training curricula.
- They will ensure trainers have adequate knowledge and skills on MNCH, EMTCT/CS and able to conduct researches to inform programme design and implementation.
- Training institutions should include practicums that place students in health centers to learn and

to provide additional support to health workers.

- Universities and academic institutions will support operational/implementation research and innovations to accelerate scale up, identified bottlenecks and solution with special attention to demand side bottlenecks hampering delivery and uptake of new-born care, early infant diagnosis, and pediatric-related elements of HIV care and treatment and STI prevention and treatment. Overall the main purpose will be to better understand how to optimally deliver and maximize integrated delivery of PMTCT and pediatric HIV services across the MNCH platform.

6.4.11.Media and communication

- Media and communication structures will support the development and implementation of a communication strategy for social mobilization, demand creation, and stigma reduction.
- Standard messages and effective communication channels will be used for different audiences such as youths, women and men. Mobilizes champions to support the social mobilization and BCC activities.

6.4.12. Private Sector and the business community

- The private sectors maximize the potential of capturing clients for EMTCT of HIV AND SYPHILIS. Most private facilities are situated in areas where HIV prevalence is higher compared to rural setting. Currently some private sector clinics offer HIV services including HIV and/or syphilis for free, although they may charge a fee for other related costs. Some clients may desire to see private providers and have resources to pay for services.
- This Plan encourages Private facilities to make EMTCT of HIV AND SYPHILIS services available and to follow national guidelines.
- The private sector should have access to state of the art training and technical assistance to enable them to carry out quality services for clients. The PFSA will provide needed supplies and commodities to private facilities.
- Private facilities will be supported and encouraged to report their data through their districts like any other partners.
- They will advocate for the elimination of new HIV and syphilis infections among children and keeping their mothers alive within the business community.
- They will develop and implement a framework for concerted/harmonized support to simplification and innovation in service delivery including treatment optimization, EID and Point of Care (POC) diagnosis.

6.4.13. Ministry of Education

- Ministry of Education will promote HIV prevention, use of condoms, delaying age of marriage and sexual debut, fighting stigma and discrimination and HIV testing in primary and secondary schools and establish or strengthen ART centers for adolescents and youths needing the services including condom and FP services to avoid un intended pregnancy and other STIs

7. Transition, Sustainability and Validation

7.1. Transition and Sustainability

With the apparent maturity of the national HIV program, the change in global funding landscape and the subsequent shift in strategy of global support, the clinical response to HIV in Ethiopia is already in transition to the national health system. The process is guided by a National Framework for transitioning which was developed by The MOH together with the transitioning partner. Consequently, most of the regional health bureaus (except the developing regions) have been engaged in strengthening their capacity and have assumed full responsibility for smooth transition.

The supporting partners will continue working closely with the RHBs till complete transition is made. This EMTCT of HIV and S strategic plan and those to be developed at various levels are expected to take this issue in to consideration. Both the national and regional HIV leadership are therefore responsible to execute various tasks. The list of expected activities with respect to EMTCT comprises of but not limited to the following:

- Planning
- Resource mobilization and allocation
- Financial monitoring
- Training and mentoring of health workers
- Monitoring the implementation of Option B+
- Intensifying activities in hot spots and mega project areas
- Strengthening exposed infant care and diagnostic services
- Integration of RMNCH within PMTCT services including task sharing/shifting
- Develop and distribute job aids and IEC materials for patient education and improve treatment literacy by HIV positive women and families
- Monitor patient retention, and promote site level quality improvement activities
- Strengthen utilization of the integrated MNCH/PMTCT register and implement cohort monitoring tools such as wall chart at each facility level
- Assure CQI/A activities and collection of good quality data through the use of updated PMTCT monitoring tools
- Systematic collection and report of HMIS indicators
- Etc.

The Developing regions (regions needing special support) will continue to get the full package of support that includes the site level technical support from the transitioning organization for some time. However, as transitioning is inevitable, they are expected to make the necessary preparation to take over the responsibilities while benefiting the support in implementing this EMTCT strategic plan.

7.2. Validation of EMTCT of HIV and syphilis

The objective of the global and national initiatives for EMTCT of HIV and syphilis is to ensure that MTCT of HIV and/or syphilis is controlled as well as reduced to a very low level where they are no more public health problems. The same principle is used in elimination programmes for several other diseases, including leprosy, onchocerciasis, lymphatic filariasis, measles, and maternal and neonatal tetanus.

This 2017-2020 national strategic plan of Ethiopia seeks ongoing, routine, effective programme interventions and quality surveillance systems to monitor EMTCT of HIV and/or syphilis. Consistency in such engagements may build intent and interest for validation of elimination at a global level, which can be awarded as long as the country has successfully met the criteria of elimination at a specified point in time. Requirements of validation include meeting specific global targets based on selected indicators; passing through rigorous global processes that are executed by validation committees and secretariats at various levels.

Its recent momentum of programmatic implementation, the commitment at various level and the promising achievements documented so far even in the area of PMTCT may encourage Ethiopia to consider application for validation of EMTCT of HIV and/or syphilis in this strategic period. It will then be the task of MOH to consult global documents and prepare a validation procedure at some point within the same period.

8. EMTCT of HIV and syphilis Strategic plan resources requirement

8.1. Costing assumptions and methods

The costs that would be borne by the Ethiopian national HIV control program for the Elimination of Mother to Child Transmission of HIV and Syphilis were projected over a 4-year period from 2017 to 2020. The analysis estimated total costs by interventions (PMTCT and congenital syphilis detection and treatment among pregnant women), which considered logistics, drugs and other supplies needed. The program costs for the leadership and governance, health care providers training, communication, media and outreach, and monitoring and evaluation were separately determined and summed up with the intervention costs.

The interventions' cost estimations are done by using The WHO One Health Tool V.4.04 Beta 27, which is a system to create short and medium term for health services. Data and assumptions are taken from local sources and literature reviews, when possible, as indicated in table 3 under the M & E framework. The program costs were assumed based on previous experiences and current needs.

The estimated costs included are financial costs, not economic costs, and do not include opportunity costs. The costing also assumed that this strategic plan will be implemented within the existing facilities; hence, infrastructure costs are not included. The cost of health workers' salaries are excluded from this exercises, unless they are to be explicitly hired for the PMTCT activities (e.g., TOT salary costs, consultants, and new hires). This is because these costs are expected to already be accounted for in

other budgets. Moreover, the costs of contraceptive use among HIV positive pregnant women and other maternal health services (e.g skilled care at birth) are not included as it is already coasted within the main RH strategic plan to avoided duplications.

8.2. Results

Table 5: Summary of annual and total 4-year cost for Elimination of Mother to Child Transmission of HIV and Congenital syphilis (EMTCT-HIV AND SYPHILIS) – **ETB (2017-2020)**

Cost Categories	**2017 (ETB)**	**2018 (ETB)**	**2019 (ETB)**	**2020 (ETB)**	**Total (ETB)**
1. Intervention Costs					
1.1 PMTCT (Linked and Option B+)	20,730,890	26,928,886	32,186,044	41,408,444	121,254,264
1.2 Syphilis diagnosis and treatment	1.861,453	2,062,610	2,144,295	2,219,942	8,288,300
Total Intervention cost (ETB)	**22,592,343**	**28,991,496**	**34,330,339**	**43,628,386**	**129,542,564**
2. Program costs					
2.1. Leadership & Governance	27,440,000	27,440,000	27,440,000	27,440,000	109,760,000
2.2. Health Care Providers Training	226,870,000	241,815,000	180,075,000	145,475,000	794,235,000
2.3. Communication, Media and Outreach (HEW & WDAs support)	48,020,000	48,020,000	48,020,000	48,020,000	192,080,000
2.4. Monitoring and Evaluation	27,440,000	27,440,000	27,440,000	27,440,000	109,760,000
Total Program costs (ETB)	**329,770,000**	**344,715,000**	**282,975,000**	**248,375,000**	**1,205,835,000**
Grand Total (ETB)	**352,362,343**	**373,706,496**	**317,305,339**	**292,003,386**	**1,335,377,564**

The total cost for the EMTCT of HIV and syphilis over the four years (2017-2020) is estimated to be about 1.34 billion ETB (about 1.2 billion ETB (90%) for program costs and 0.22 billion ETB (10%) for intervention costs).

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