2022

Elimination of Mother to Child Transmission of HIV, Syphilis and Hepatitis B

Technical and Operational Guidelines

National HIV/AIDS Programme
Department of Communicable Diseases
Ministry of Health
Democratic Republic of Timor-Leste

Ministério da Saúde

World Health Organization
Timor-Leste

Elimination of Mother to Child Transmission of HIV, Syphilis and Hepatitis B

July 2022

National HIV/AIDS Programme
Department of Communicable Diseases
Ministry of Health
Democratic Republic of Timor-Leste

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Message from Hon'ble Minister of Health

dr. Odete Maria Freitas Belo, MPH
Minister of Health
Democratic Republic of Timor-Leste
Dili
July 2022

I am very pleased to note that National AIDS Programme has revised the national guidelines Elimination to Mother to Child Transmission (EMTCT) based on updated WHO recommendations.

This guideline is not intended to replace the existing MCH guidelines but should be referred as complementary to the existing MCH guidelines for ANC care, labour, postpartum care, and care of children less than 24 months. It focuses on the HIV-related aspects of the care provided to mother and child in addition to what is already mentioned in the MCH guidelines of Ministry of Health, Timor-Leste.

A comprehensive programme for the EMTCT of HIV is made up of four key strategies or prongs:

- Prong 1: Primary prevention of HIV infection to reduce HIV incidence and prevalence in women in reproductive age group
- Prong 2: Reduce unplanned or unintended pregnancies in HIV positive women
- Prong 3: Prevent HIV transmission from women to their infants by increasing ART coverage among HIV-infected pregnant, breastfeeding women and infants born to them
- Prong 4: Providing care, treatment and support for mothers with HIV and their children.

The updated guidelines on the components of EMTCT will assist the NAP in providing comprehensive support towards achieving the EMTCT in Timor-Leste.

I look forward to the successful implementation of and adherence to the revised EMTCT guidelines (2021 Edition) by all PLHIV care providers.

Dr. Odete Maria Freitas Belo, MPH
Minister of Health

Message from WHO Representative

Dr. Arvind Mathur
WHO Representative to Timor-Leste
World Health Organization
Dili
July 2022

I am proud to present the national technical and operational guidelines on Elimination of Mother to Child Transmission of HIV, Syphilis and Hepatitis B. The guideline development was completed by the Ministry of Health (MoH) with technical assistance from WHO. I congratulate and thank everyone who contributed to the guideline development.

Timor-Leste is committed to 'Triple Elimination' of MTCT of HIV/AIDS syphilis and hepatitis B by 2030. The External Mid-Term Review had noted that Timor-Leste has the potential to build on its strong primary health care (PHC) network to accelerate efforts towards EMTCT of HIV and syphilis.

The risk of mother-to-child transmission (MTCT) can be reduced to less than 5% by interventions that include ART or ARV prophylaxis given during pregnancy, delivery and breastfeeding period. With these interventions, new HIV infections in children are becoming increasingly rare in many parts of the world, particularly in high-income countries. Technically, elimination of mother-to-child transmission (EMTCT) of HIV is a distinct possibility By scaling up antenatal care (ANC) screening for HIV and by strengthening STI services, Timor-Leste can aim to achieve triple elimination of mother to child transmission – HIV, Hepatitis and STI in three to five years. This is also envisioned the integrated HIV, Hepatitis and STI Costed NSP 2022-26.

I am confident that the new EMTCT guidelines will assist PLHIV care providers in providing comprehensive support towards achieving the EMTCT in Timor-Leste WHO is committed to continue its support to the national program to End Inequities and End AIDS and to ensure that the country can meet the target of elimination of AIDS as a public health problem by 2030.

Dr. Arvind Mathur
WHO Representative

Acknowledgements

Timor-Leste brought out its first PMTCT Technical and Operational Guideline in 2014. The 2021 revision necessitated by the updates provided by WHO in the past two years.

The Ministry of Health, Democratic Republic of Timor-Leste gratefully acknowledges the contributions from the National AIDS Programme, WHO, The Global Fund, and National HIV, Hepatitis and STI Technical Advisory Group (TAG) for their valuable support and contributions in revising the national guidelines on EMTCT.

The final guidelines were reviewed by the TAG, WHO SEARO HIV Unit, WHO Country Office and NAP Team lead by Mr Bernardino da Cruz.

The Ministry of Health gratefully acknowledges the financial support provided from The Global Fund for TB, AIDS and Malaria (GFATM) and the continued technical support from the World Health Organization (WHO).

Acronyms and abbreviations

3TC	Lamivudine
ABC	Abacavir
AIDS	acquired immune deficiency syndrome
ANC	antenatal care
ART	antiretroviral therapy
ARV	antiretroviral drugs
ATV/r	atazanavir/low-dose ritonavir
AZT	zidovudine (originally known as azothymidine, also known as ZDV)
CDC	communicable disease control
CHC	community health centre
DTG	Dolutegravir
EFV	Efavirenz
EMTCT	elimination of mother-to-child transmission (of HIV)
FDC	fixed dose combination
FTC	Emtricitabine
HBV	hepatitis B virus
HCP	health care professional
HIV	human immunodeficiency virus
LPV/r	lopinavir/low-dose ritonavir
MCH	maternal and child health
MoH	Ministry of Health, Timor-Leste
MTCT	mother-to-child transmission
NNRTI	non-nucleoside reverse transcriptase inhibitor
NPO	national programme officer
NRTI	nucleoside reverse transcriptase inhibitor
NVP	Nevirapine
OIs	opportunistic infections
PCR	polymerase chain reaction
PI	protease inhibitor
PITC	provider-initiated testing and counselling
PLHIVs	people living with HIV
PMTCT	prevention of mother-to-child transmission (of HIV)
RAL	Raltegravir
RC	regional coordinator HIV/AIDS, STIs and hepatitis programme
SISCa	*Sistema Integradu Saude Communitaria* or integrated community health services
STIs	sexually transmitted infections
TB	Tuberculosis
TDF	tenofovir disoproxil fumarate
TLD	fixed dose combination of Tenofovir + Lamivudine + Dolutegravir
TLE	fixed dose combination of Tenofovir+ Lamivudine + Efavirenz
TWG	Technical working group
VCCTC	voluntary confidential counselling and testing centres
VCTC	voluntary counselling and testing centres
VL	viral load

Introduction

Background

The human immune deficiency virus (HIV) pandemic is one of the serious health crises the world faces today. The crisis has engulfed many continents and HIV infection continues to spread across the globe, including in many countries in the Asian region. In Timor-Leste, HIV infection is continuing albeit at a reduced pace.

The HIV sentinel surveillance (HSS) done in Timor-Leste during 2018–19 reveals that the prevalence of HIV among antenatal care(ANC) population is 0.3%(0.2–0.5%) for the country. The MoH/UNFPA also recently revised their projections for pregnant women in Timor-Leste.[1] The projections based on the current rates with lower and upper confidence bounds are given in Table 1.

Table 1. Population and pregnant women projections 2018–2025

	2018	2019	2020	2021	2022	2023	2024	2025
Total population	1 249 085	1 271 694	1 294 711	1318146	1342004	1366294	1391024	1416202
Est. pregnant women	39 346	40 058	40 783	41 522	42 273	43 038	43 817	44 610
Est. HIV+ PW (0.3% -median)	118	120	122	125	127	129	131	134
Est. HIV+ PW (0.2%- LB)	79	80	82	83	85	86	88	89
Est. HIV+ PW(0.5%- UB)	197	200	204	208	211	215	219	223

LB= Lower bound; PW=Pregnant women; UB=Upper bound

Thus, the estimated HIV positive pregnant women are likely to be between 83 and 223 over the next five years. Timor-Leste has embarked upon an ambitious programme to go in for a '*triple elimination*', i.e., elimination of mother-to-child transmission of HIV/AIDS, syphilis and hepatitis B by 2020.[2] However, this will be challenging if universal screening of all pregnant women is not done for these three diseases.

Timor-Leste is also undergoing an economic transition and has limited budget for its health activities. It is also expected that socio-demographic vulnerability fostering spread of HIV infection is likely to drive the epidemic to become generalized unless prevention strategies are implemented effectively.

Analysis of programmatic data suggests that among the screened pregnant women, the HIV positivity rates varied from 0.08% in 2016, 0.16% in 2017 to0.10% in 2018.[3]The rates have not been consistent, which could be due to the small number of HIV positives due to low HIV among ANC population.

[1]Data from MCH Division, MoH. Population growth rate is 1.18% (Census 2015).
[2] Timor-Leste's National Strategic Plan for HIV/AIDS and STIs, 2017–2021.
[3]Programme data, National HIV/AIDS Programme, MoH, Timor-Leste.

Most children living with HIV acquire the infection through mother-to-child transmission (vertical transmission). HIV can be transmitted from mother to child during pregnancy, delivery or breastfeeding. The maximal risk of HIV transmission is during delivery. WHO recommends breastfeeding as the preferred feeding option for HIV-exposed infants in developing countries.[4] This recommendation is based on studies in developing countries that indicate better HIV-free survival among infants born to HIV-infected mothers who breastfeed compared to those born to mothers who do not breastfeed.

The risk of mother-to-child transmission (MTCT)can be reduced to less than 5% by interventions that include ART or ARV prophylaxis given during pregnancy, delivery and breastfeeding period.[5] With these interventions, new HIV infections in children are becoming increasingly rare in many parts of the world, particularly in high-income countries. Technically, elimination of mother-to-child transmission (EMTCT) of HIV is a distinct possibility. A few countries have achieved this status starting with Cuba in 2015, Armenia, Belarus and Thailand in 2016, Caribbean islands in 2017, Malaysia in 2018 and Maldives in 2019. With less than 10–15 new detection of HIV positive pregnant mothers, this is a district possibility in Timor-Leste over the next four years.

This guideline is not intended to replace the existing MCH guidelines but should be referred as complementary to the existing MCH guidelines for ANC care, labour, postpartum care and care of children less than 24 months. It focuses on the HIV-related aspects of the care provided to mother and child in addition to what is already mentioned in the MCH guidelines of Ministry of Health, Timor-Leste.

Vision, goal and objectives of EMTCT in Timor-Leste

Vision: Every Infant born in Timor-Leste is free of HIV, congenital syphilis and hepatitis B

Goal: Achieve and sustain elimination of mother to child transmission of HIV, congenital syphilis and hepatitis B by 2030

In public health, elimination is generally defined as reduction to zero of the incidences of a disease or infection in a defined geographical area. However, because HIV, syphilis and hepatitis B remain public health issues and PMTCT measures are highly effective, but not 100%, currently it is not feasible in most settings to reduce MTCT of either infection to zero. Therefore, the goal for EMTCT initiatives is to reduce and ensure services to maintain MTCT of HIV, syphilis and hepatitis B at a very low level, such that it is no longer a public health problem.[6]

Objectives:

- At least 95% of woman presenting for antenatal care will be tested for HIV, syphilis and hepatitis B in pregnancy

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[4]Guideline: counselling of women to improve breastfeeding practices. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.

[5]https://www.who.int/hiv/topics/mtct/about/en/

[6]Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis, 2nd edition. Geneva: World Health Organization; 2017. p3. Licence: CC BY-NC-SA 3.0 IGO.

- 100% of pregnant woman found to be HIV, syphilis or hepatitis B positive will receive appropriate treatment
- 100% of babies born to HIV-exposed mothers will be provided with antiretroviral treatment in the first months of life.
- 100% of exposed infants will be tested for HIV at 6, 12 and 18 months (Early Infant Diagnosis)
- 100% of women and children living with HIV will be referred to lifelong treatment and care services.

Strategic framework for elimination of mother to child transmission of HIV/AIDS, syphilis and hepatitis B[7]

The EMTCT of HIV, syphilis and hepatitis B (Triple elimination) falls under the purview of MCH division of MoH under the reproductive, maternal, neonatal and child health (RMNCH) programme. The HIV programme supports the implementation through capacity-building, providing test kits and reagents and regular monitoring.
The Strategic Framework was developed by WHO, WPRO and SEARO in 2018. It lays emphasis on triple elimination by 2030 for all countries in Asia and Pacific.[8]The Regional Framework proposed an integrated approach towards triple elimination, emphasizes the principle of mother-newborn-and-child-centred care and a human rights-based approach for every child, mother, her partner and their families.

Timor-Leste is committed to 'Triple Elimination' of MTCT of HIV/AIDS, syphilis and hepatitis B by 2030. This is also envisioned the integrated HIV, Hepatitis and STI Costed NSP 2022–26. However, the programmes are at different levels and hepatitis is a relatively new programme and with limited resources. Timor-Leste adopted a similar vision and goal for Triple Elimination based on the Regional Framework, as detailed above.

Guiding principles:

1. Mother-newborn and child centric care: RMNCH services are provided with the family at the centre of care
2. Universal health coverage (UHC) for quality and equitable care: Three components of UHC, namely, EMTCT services are (1) Accessible; (2) Affordable and (3) Without any financial hardship
3. Sustainability: The Triple Elimination effort must be part of the health systems approach. A vertical programme would yield faster and quicker result, but is seldom sustainable
4. Promotion of human rights, gender equity and equality: The programme will ensure that the rights of the women, their partners and children will always be respected

[7]Adopted from WHO WPRO and SEARO declaration of Triple Elimination by 2030 and adopted by all Member States in the 68th RC meeting at Manila and New Delhi.
[8]Regional framework for the triple elimination of mother-to-child transmission of HIV, hepatitis B and syphilis in Asia and the Pacific, 2018–2030. Manila: World Health Organization Regional Office for the Western Pacific; 2018. Licence: CC BY-NC-SA 3.0 IGO.

5. Involve multiple stakeholders: Families are important stakeholder, and an inclusive approach will be adopted towards 'triple elimination'. Vulnerable and key population will be identified and involved.

To achieve this, a three-pillar priority approach is proposed, namely, (1) Coordinated policy and administrative action; (2) Integrated service delivery and (3) Intensive monitoring and evaluation activities for elimination. The various steps to be followed under each of the pillars proposed are discussed below.

Pillar 1: Coordinated policy and administrative action

Steps	Responsibility	Deliverables
• **High-level commitment for EMTCT of HIV/AIDS, syphilis and hepatitis with a realistic target based on Timor-Leste's health systems, available resources and predictive analysis**	Departments of MCH and Communicable Diseases Control	• Statements from MoH • Advocacy workshops • Allocation of funding for Triple Elimination
• **Integrate the coordinated triple elimination policies into costed action plans/workplans of MCH and HIV/AIDS, STIs and hepatitis units**	MCH and HIV/AIDS, sexually transmitted infections (STIs) and hepatitis units	• Strategy on Triple Elimination with costed action plan for period 2020–2025
• **Integrate the M&E indicators into DHIS-2 (TLHIS) for intensive monitoring of the service delivery and progress updates**	MCH, HIV/AIDS and HMISunits	• Three main indicators and their sub indicators are incorporated into regular reporting from service delivery units (CHCs) and municipalities
• Incorporate the interventions for triple elimination into primary healthcare and universal health coverage for a sustainable and decisive impact (funding, guidelines, etc.)	MCH, HIV/AIDS unit and '*Saudena Familia*'	• Triple elimination is part of the primary care interventions
• Formulate policies that address the barriers to service uptake for key and vulnerable population	HIV/AIDS unit, MCH and '*Saudena Familia*'	• Special interventions planned as part of associated programmes addressing the key and vulnerable population
• Incorporate human rights of all women, their partners, children and families; ensure protection of their privacy and	MoH and higher bodies	• Policy documents from MoH

confidentiality in all programmes; and address stigma and discrimination associated with implementation of interventions		

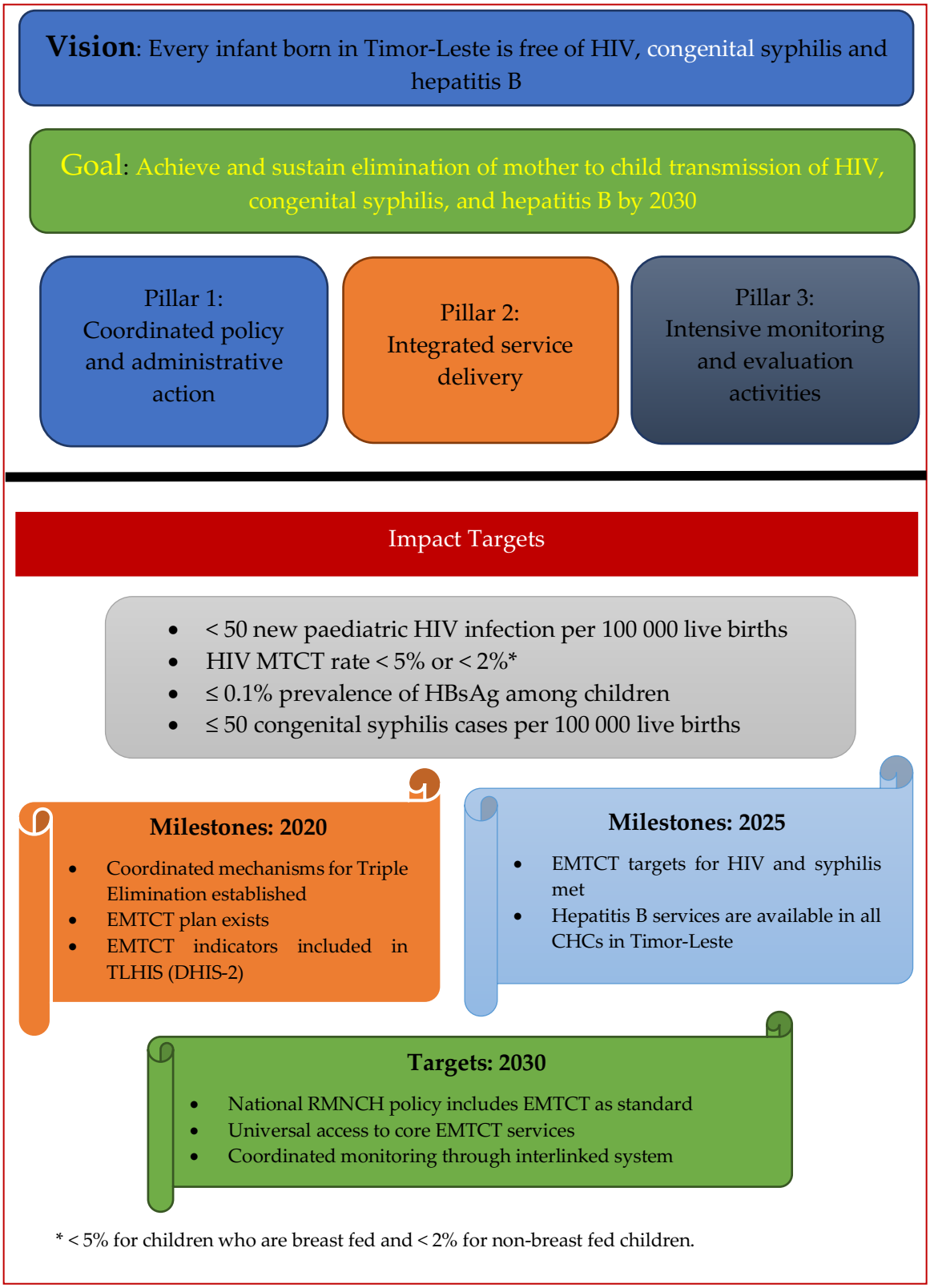
Pillar 2: Integrated service delivery - seamless quality care for women, newborns, children and their families

Steps	Responsibility	Deliverables
• **Conduct a situation analysis for mapping the current interventions for triple elimination being rolled out and identify the gaps and opportunities for coordinated implementation**	Departments of MCH and Communicable Diseases Control	• Gap report with proposed plan of action
• **Revise national policies, guidelines and training on reproductive, antenatal, childbirth, postnatal and childcare to provide the latest evidence-based quality of care for all pregnant women, newborns and children, including interventions for triple elimination**	HIV/AIDS unit and MCH	• Guidelines on Triple Elimination with intervention and workplan for 2020-21; 2021-22; 2022-23; 2023-24 and 2024-25
• **Develop a step-wise plan for strengthening or scaling up coordinated interventions for EMTCT, including universal screening for HIV, syphilis and, as appropriate, hepatitis B surface antigen (HBsAg) for women and their partners, linkages to appropriate care and treatment, timely hepatitis B birth dose and follow-up vaccination**	MCH, HIV/AIDS unit and '*Saudenafamilia*'	• Step-wise plan for expansion and consolidation of service delivery in municipalities with a micro-plan for expansion at each municipality
• Develop guidance and tools for health workers and those to be involved in service provision related to EMTCT within RMNCH care, through pre-service and on-the-job training	MCH, HIV/AIDS unit and '*Saudenafamilia*'. Also involve universities and institutions that impart education for doctors, nurses, midwives and public health professionals	• Tools and guidelines • Revised curriculum for healthcare professionals incorporating the triple elimination
• Engage stakeholders and communities to improve the utilization of service uptake for MCH service and thereby improving the uptake of Triple Elimination services	MCH, HIV/AIDS unit, UN agencies and civil society	• Documented stakeholders' meetings with progress report
• **Apply a step-wise approach to introduce additional interventions for EMTCT of hepatitis B including antenatal screening, the possible use of antiviral drugs and the**	MCH and HIV/AIDS unit	• Costed action plan for hepatitis

use of hepatitis B immunoglobulin (HBIG) among infants born to HBsAg-positive mothers based on evolving evidence and recommendations		
• **Quality assurance mechanism (Internal and external) for laboratory services**	HIV/AIDS unit, MCH and national labs	• Plans for external and internal quality assurance

Pillar 3: Intensive monitoring and evaluation activities for elimination

Steps	Responsibility	Deliverables
• **Monitor the key indicators for triple elimination based on the national- and municipal-level milestones**	HIV/AIDS unit and MCH	• M&E plan with detailed milestones
• **Review of key indicators for triple elimination and plan for data quality assurance**	HIV/AIDS unit, MCH and HMIS	• Indicators incorporated in the TLHIS (DHIS-2) • Data quality assurance (DQA) plan
• **Conduct research to inform and adjust policy and improve implementation of EMTCT interventions**	MCH, HIV/AIDS unit and '*Saudenafamilia*'	• Research plan • Implementation of research plan
• Experience sharing and review	MCH, HIV/AIDS unit, '*Saudenafamilia*' and other stakeholders	• Regular meetings' records • Experience sharing workshops



The impact targets will be monitored on a regular basis for assessing the progress to triple elimination. However, it is imperative that the process for triple elimination be monitored with diligence. Globally the programme targets are monitored as follows (all >95%):

- Antenatal care coverage ≥ 95%
- Births attended by skilled health personnel ≥ 95%
- Antenatal HIV, hepatitis B and syphilis screening ≥ 95%
- Treatment coverage (HIV and syphilis) ≥ 95%
- Hepatitis B vaccine birth-dose coverage ≥ 95%
- Hepatitis B vaccine third-dose coverage ≥ 95%.

Elimination of mother to child transmission of HIV/AIDS

A comprehensive programme for the EMTCT of HIV is made up of four key strategies or prongs:

- *Prong 1:* Primary prevention of HIV infection to reduce HIV incidence and prevalence in women in reproductive age group
- *Prong 2:* Reduce unplanned or unintended pregnancies in HIV positive women
- *Prong 3:* Prevent HIV transmission from women to their infants by increasing ART coverage among HIV-infected pregnant, breast-feeding women and infants born to them
- *Prong 4:* Providing care, treatment and support for mothers with HIV and their children.

The current HIV/RMNCH programme has had success in preventing HIV transmission from mother to their and to some extent providing care, treatment and support for mothers with HIV and their children. There are still significant challenges to be approached in reducing HIV transmission to women and preventing unwanted and unplanned pregnancy. However, still the aim is to reach zero new infections by 2021.

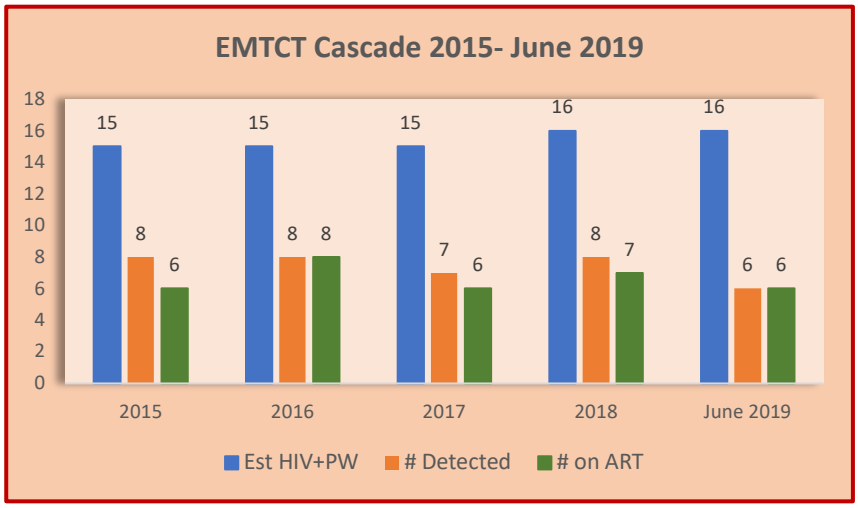


Fig.1. EMTCT Cascade 2015–June2019

The PMTCT programme has been in place since 2010. It was piloted in Dili and then expanded to five more districts (Baucau, Bobonaro, Covalima, Oecusse and Aileu). In 2016, the remaining districts (seven in number) also started screening pregnant women for HIV/AIDS. Shortage of fund was the primary reason for not been able to comprehensively expand to the remaining seven districts.

The plan is to scale up the EMTCT programme to remaining seven districts with a focussed approach. This will consist of:

- Expanding the EMTCT services to all CHCs where MCH programme is currently underway

- Cover any traditional or faith-based or private clinics that offer antenatal care or mother care services
- Provide focussed support to RMNCH programme to monitor the EMTCT programme through joint monitoring visits, etc.

The programme will focus on strengthening referral mechanisms for pregnant women who are reached through the interventions targeting the population at-risk and the pregnant partners of individuals reached through these interventions to have access to EMTCT services.

Prong 1: Primary prevention of HIV infection—Reduce HIV/ syphilis and hepatitis B incidence and prevalence in women in reproductive age group

The total fertility rates are high in Timor-Leste (5.7 in 2009–10, 5.2 in 2019).[9] Most of the pregnancies happen in adolescents and new mothers (15–24 years of age). There are an estimated 40 000 plus pregnancies per year. Out of which, almost 75% have had at least one ANC visit.[10] This is an opportunity for the HIV, STI and hepatitis programme to promote HIV/syphilis/hepatitis testing in healthcare settings. In 2018, eight HIV positive pregnancies were detected and seven have received ART for both mother and child (>85% coverage).

Sexually active adolescents are also involved in many transactional and casual sexual relationships. Teenage pregnancy within a relationship and otherwise is not infrequent. Studies have shown higher susceptibility of female genital tract to HIV and other STIs during pregnancy, which can lead to higher transmission rates.[11] Traditionally, the culture of sexual abstinence in late second and third trimester may lead to extramarital relationships among the male partners. Additionally, the new infection in pregnant women leads to higher MTCT rates (acute infection phase). Marriage is one of the risk factors identified in many counties for young females getting HIV/AIDS and STIs. Early age at marriage and early childbirth are some of the other risk factors. Access to family planning and youth-friendly sexual and reproductive health services are essential to address this issue. Added to this, services for orphan and vulnerable children for child protection, economic strengthening and social support are needed. Services are needed to keep the young women HIV negative, birth spacing, and linking any identified HIV positive young women to appropriate positive health initiatives, social support and economic strengthening initiatives.

However, the most decisive intervention to bring down the incidence of new infections in pregnant women is the comprehensive prevention programme among general population, especially among youth. This needs to be complemented by saturating the key population with HIV prevention interventions with comprehensive service package and covering every identified HIV positive with ART to reduce the HIV viral load (VL) in the population for 'secondary prevention'. Special programmes may be needed for youth with high-risk behaviour.

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[9]"State of World Population2019: Unfinished business: the pursuit of rights and choices for all." New York: United Nations Population Fund; 2019.

[10]Programme data, RMNCH programme, 2018, MoH, Timor-Leste.

[11]Mother to child transmission of HIV in Malawi. Ministry of Health, Malawi. Cited in National Strategic Plan 2015-2020. National AIDS Commission. 2015.

Prong 2: Reduce unplanned or unintended pregnancies in HIV positive women

Reproductive health rights for women is an important issue. The access to decision- making for a child or reproductive health rights is vital for overall well-being of women. This has obvious value for reducing HIV incidence. Access to youth-friendly reproductive health services and family planning will address this component of MTCT in a comprehensive way. This prong offers a risk reduction component for any sexually transmitted infection including HIV/AIDS.

For a PLHIV, reducing the number of pregnancies not only improves the general health of the woman, but also has an added public health benefit of transmission of HIV infection from mother to child. Overall, this also means lesser resources required to take care of HIV positive children in the long run.

Some of the well-known models of integration of provider-initiated family planning services could be adopted in Timor-Leste in close collaboration with MCH division in ART centres or identified MCH centres. This proposition needs to be carefully evaluated by the technical working group (TWG) of HIV and MCH programmes and adopted when the situation is appropriate and contextual. This should be under the overall support from MCH programme and would require technical support from agencies.

Prong 3: Prevent HIV transmission from women to their infants—Increase ART coverage among HIV-infected pregnant, breastfeeding women and infants born to them

This prong has been addressed well in Timor-Leste in the previous national strategic plan (NSP). With consistent coverage of ART (Option B+) among >90% of identified HIV positive pregnant women, the effect could be seen in the past four years with four out of 46 infants born to HIV positive mothers became positive. In 2016–18, there were no infants who became HIV positive. This is good, but the challenge lies in identifying all the HIV positive pregnancies as testing coverage is far from satisfactory.

Training component of EMTCT will be integrated with the regular training of midwives, nurses and doctors done by the MCH and HIV programmes.

The technical capacity of the country in the field of EMTCT was built slowly over the past three years. There is a training and mentoring system for midwives (referred as '*parteras*' in Timor-Leste). Some of the initial measures to achieve this are:

- Developing a TWG on EMTCT that is representative of the HIV unit, MCH, development partners, funding agencies, network of PLHIVs, technical resources from the hospitals, etc. The role of this resource group would be to guide the country on national policies, provide inputs for improving the programme, monitor the progress of implementation, etc.
- Identifying and building capacity of one national and many regional institutes that will function as technical resources for the country in the field of EMTCT for training, mentoring, monitoring and providing inputs for policy changes
- Developing a pool of master trainers and mentors
- Monitoring and evaluating the PMTCT services offered by the health centres periodically based on the defined minimum standards of EMTCT care.

Prong 4: Providing care, treatment and support for mothers with HIV and their children

This is part of revised ART guidelines for HIV in Timor-Leste (Please refer to Revised ART Guidelines, Timor-Leste, October 2019).
While EMTCT of HIV/AIDS, syphilis and hepatitis B is a distinct possibility, proportionate efforts are needed to upgrade the testing uptake and corresponding treatment coverage for mother and child as appropriate.

Adoption of EMTCT indicators as routine use

WHO specifies several criteria for the roadmap to EMTCT of HIV and congenital syphilis. While there are several impact/outcome and coverage indicators that is documented, the following minimum targets **need to be met** before elimination could be considered:

Impact targets and indicators

HIV:

1. ≤ 50 new paediatric infections per 100 000 live births and
2. HIV transmission rate < 5% breastfeeding populations, or
3. < 2% in non-breastfeeding populations.

Syphilis:

1. ≤ 50 cases of congenital syphilis per 100 000 live births.

Besides these impact-level indicators, a set of four coverage or service-level indicators are also to be met for at least two years:

(1) Antenatal care coverage (at least one visit) of ≥ 95%
(2) Coverage of HIV and/or syphilis testing of pregnant women of ≥ 95%
(3) ART coverage of HIV positive pregnant women of ≥ 90%
(4) Treatment of syphilis—sero-positive pregnant women of ≥ 95%.

Hepatitis B:

1. 90% reduction in new chronic infections, equivalent to 0.1% prevalence of hepatitis B surface antigen (HBsAg) among children.

Besides the indicator of ANC coverage, which is routinely collected by MCH department for reproductive maternal neonatal child and adolescent health (RMNCAH) programme, NAP routinely reports on the other indicators.

Components of EMTCT and technical recommendations for Timor-Leste

HIV/AIDS

Prevention of new infection among couples of childbearing ages

Primary prevention of MTCT of HIV, syphilis and hepatitis B is achieved by preventing new HIV infection among couples of childbearing age group. It should be ensured that couples of childbearing ages have access to information and means of preventing themselves from HIV, STIs or hepatitis B/C infection. This can be done by providing:

- Information on safer sex practices and risk reduction strategies as part of interventions focused on prevention of HIV, syphilis and hepatitis B infection among key and vulnerable populations
- Information on safer sex practices to youth as part of life skill education and other interventions on family planning and maternal and child health
- Information on HIV, STIs and hep B/C prevention, which should be part of family planning and reproductive health counselling and services offered to couples of childbearing age group.

Prevention of unintended pregnancies among HIV-infected women

Another important component of preventing MTCT of HIV is by preventing unintended pregnancies among HIV-infected women. This can be achieved by ensuring the following:

- All HIV-infected women have access to family planning services either offered as part of HIV care or linked with family planning services
- Strengthening HIV testing facilities and policies to identify a greater number of HIV-infected adults during their early stages of HIV infection
- Testing partners and spouses of all HIV-infected adults and linking them to care and treatment services (including family planning services).

Pre-test information/counselling: (Provider-initiated testing and counselling)

The initial step of a PMTCT/EMTCT service is to provide information on HIV to all pregnant women accessing antenatal care for the first time. It should be provided in the first antenatal visit, but for any reason if that is missed, needs to be done in the next visit and then tested.

Note: Provider-initiated testing and counselling does not mean that the testing does not require any counselling. It means that once the client is made aware of the issues related to HIV/AIDS, s/he may actively 'opt out' of HIV testing. However, if the person does not actively 'opt out', s/he would be offered the HIV/AIDS testing.

All women coming for delivery and immediately after delivery, without a prior HIV test report, should also undergo a pre-test and recommended a HIV test. Pre-test should be done based on the mental status of the woman, especially while in delivery. If the woman is not in a situation to receive a pre-test the close relative should be informed, and test recommended.

Pre-test information can be provided as one-on-one individual basis or as small groups of 2–10 members. The purpose of the pre-test counselling is to provide adequate information for all pregnant women so they can take an informed decision to opt out of HIV testing. It is unethical to perform a test for HIV without providing proper information to the pregnant woman.

The minimum components that should be discussed as part of pre-test information/counselling for pregnant women are:

- Modes of transmission of HIV
- How to prevent HIV transmission?
- Importance of testing during pregnancy
- ART and its impact on reducing transmission of HIV from mother to child
- Consequences of a negative test and window period
- Consequences of a positive test
- Verbal informed consent with the option of opting out from HIV test. The pregnant woman has the right to deny testing
- Information on infant feeding, institutional delivery and other MCH-related services.

Additional information on pre-test counselling as well as confidentiality are available in "Guidelines for HIV Testing Services in Timor-Leste."

Pre-test information/counselling should be ideally provided by the person offering antenatal care for all pregnant women (midwife). Occasionally the person providing antenatal care is not able to provide this information to the pregnant woman because of lack of time. In such situations pregnant woman need to be guided to the counsellor of HTS who can provide this information.

Testing

Two definitive strategies are used for HIV testing namely, (1) Provider-initiated testing and counselling (PITC) or 'opt out'; (2) Voluntary counselling and testing (VCT) or 'opt in'. HIV PITC is offered to pregnant women, key population, TB, STI and chronic patients etc., while VCT is offered to general population. The rationale behind this is, higher risk population should and must be tested, while the low-risk population must be assessed for risk behaviour.
The policy for testing pregnant women in Timor-Leste is provider initiated opt-out. It means that the testing is initiated by the provider (the healthcare worker who is providing antenatal care – midwife/counsellor) and not by the pregnant women herself. Testing should not be recommended without pre-test information/counselling.

The pregnant woman has the right to refuse a test being done. If the pregnant woman does not refuse a test it is implied that she has provided her consent and HIV test is done.
The testing guidelines for Timor-Leste suggests the use of the following three tests (Fig.2).

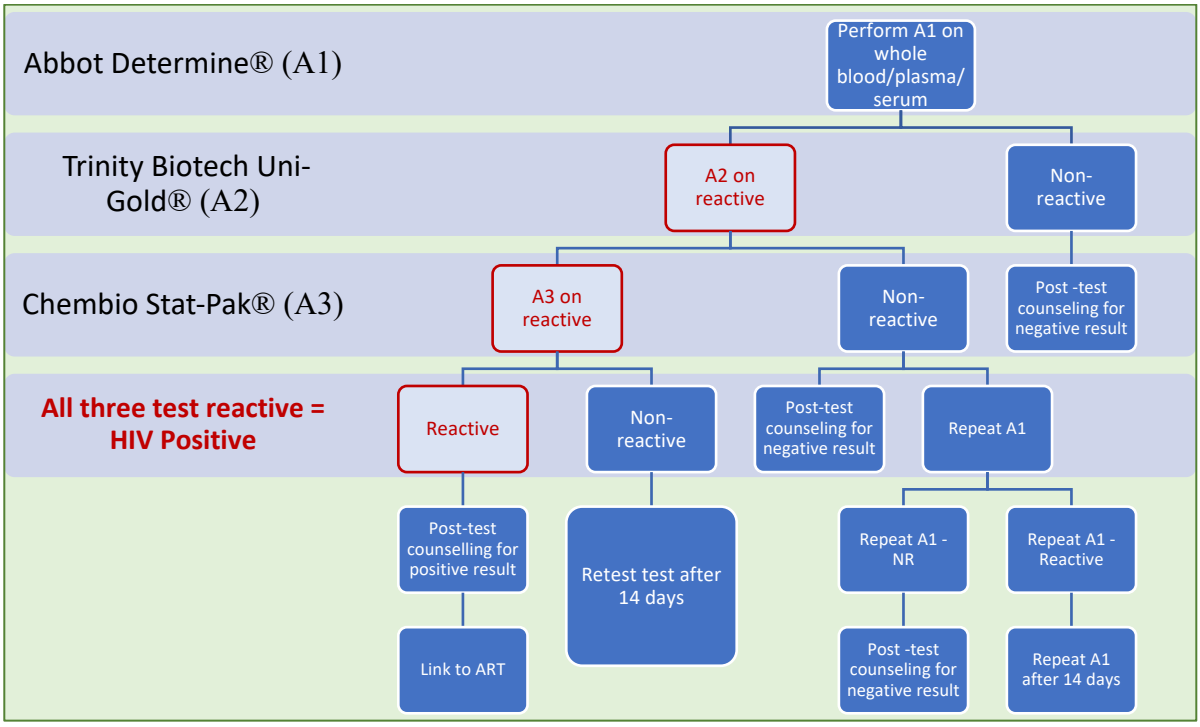

Fig. 2. Current pathway of HIV testing services (HTS) in Timor-Leste

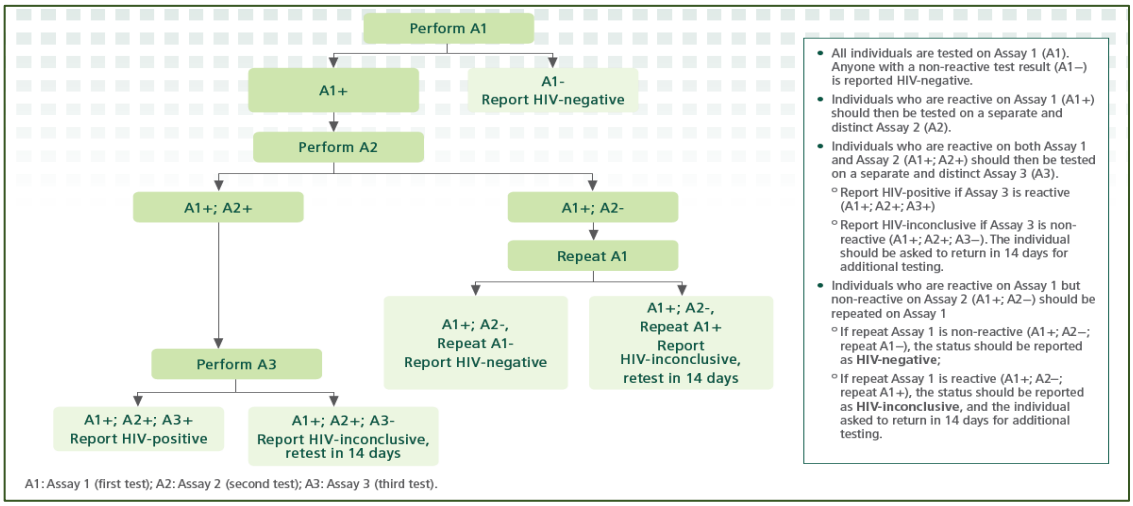

Fig.3. WHO HIV testing algorithms for low HIV prevalence countries

Source: https://www.who.int/publications/i/item/978-92-4-155058-1

WHO's new guidelines recommend re-testing of pregnant women late in pregnancy and postpartum period.
Table 2 provides the summary of retesting of pregnant women at definite time frames.

Table 2. WHO recommended timepoints for HIV re-testing among pregnant and postpartum women in low HIV burden setting

Setting	Early in pregnancy (first antenatal care visit)	Late in pregnancy (third antenatal care visit)	1additional postpartum re-test (14 weeks, 6months or 9months postpartum)
Low HIV burden	All pregnant women as part of EMTCT, otherwise focused on those at high ongoing risk	Can be considered for those at high ongoing risk	Can be considered for those at high ongoing risk

The results are provided same day in community health centres (CHCs) and if test results are positive, persons are linked to ART for a lifelong ART (please see section on ART).

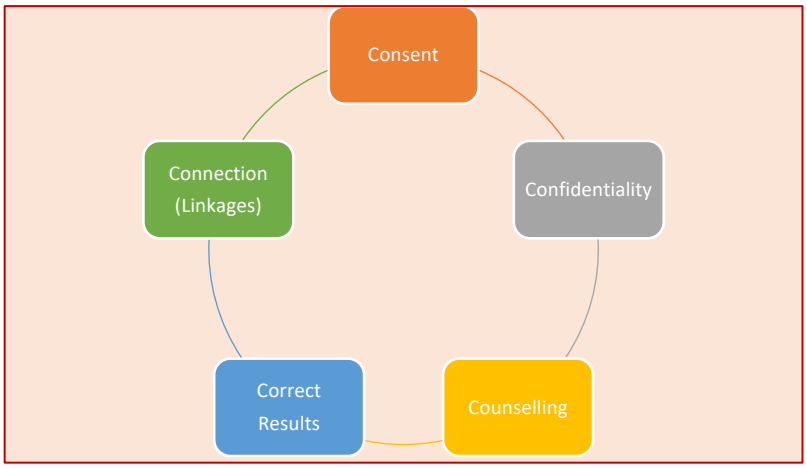

Fig.4. 5Cs of HIV testing services

However, it must be noted that approximately 60–85% of the estimated pregnancies are being registered in the CHCs. With many initiatives such as '*ligainan*', '*saudenafamilia*', etc. the outreach of the RMNCH programme has improved. It may be noted that the current practice is to offer the HIV, syphilis and hepatitis B tests as a part of ANC package along with Hb, blood grouping and malaria (only if indicated for fever cases).

HIV testing services in Timor-Leste has been decentralized to all CHCs and above HIV tests must be done following the 5C principles, i.e., (1) Consent; (2) Confidentiality; (3) Counselling; (4) Correct results; and (5) Connection.

Who is responsible?

The lab technician at CHCs is responsible for the test. The midwife/nurse/counsellor is responsible to ensure that either the blood sample or the pregnant women herself reaches the lab. Confidentiality of the test reports should be maintained by all staff involved in the test. It is a shared confidentiality, meaning the result can be shared only with healthcare professionals who are directly involved in the care of the person (like midwife, counsellor, doctor and nurse). It should not be shared with health care workers who are not directly involved in the care of the person or any non-health care workers.

Post-test counselling

Post-test counselling is provided after the availability of test results. All pregnant women who underwent HIV test should be provided post-test counselling. The post-test counselling on an

average could take 15–20 minutes for a woman with negative test result and 20–30 minutes for a woman with positive test result. However, this time duration is likely to vary depending on the knowledge and understanding of both the client and the health care provider.

The purpose of post-test counselling is to ensure that all HIV negative pregnant women remain **negative** in future and all positive pregnant women avail complete package of EMTCT services and give birth to HIV-uninfected children.

Post-test counselling for both negative and positive pregnant women should be on a one-on-one individual basis with proper audio-visual privacy. The minimum components of post-test counselling are as follows:

HIV negative pregnant women

- Explanation of test result including window period and re-testing as appropriate
- Remaining negative through safer sexual practices and risk reduction
- Testing sexual partners who are at-risk for HIV infection (like having multiple sex partners, unprotected sex with a non-regular partner, injecting drug use, men having sex with men (MSM), etc.)
- Family planning and provision of condoms
- Infant feeding
- Institutional delivery and other MCH-related counselling.

HIV positive pregnant women

- Explanation of test result and ensure the client understands it
- Prevention of transmission of HIV to others and provision of condoms
- Testing sexual partners and children
- Screening for the need of ART for their own heath
- Role of ART on prevention of MTCT
- Importance of adherence to drugs
- Infant feeding and care of exposed child
- Family planning and provision of condoms
- Institutional delivery and other MCH-related counselling.

Who is responsible?

Counselling preferably should be by the health care worker providing antenatal care. Alternatively, it can be provided by the counsellor of the HTS centres (CHCs/RH/ National Hospital and private clinics). Confidentiality on the HIV status of the women should be maintained by all staff involved in the test. It is a shared confidentiality, meaning the result can be shared only with health care professionals who are directly involved in the care of the person (like midwife, counsellor, doctor and nurse). It should not be shared with health care workers who are not directly involved in the care of the person or any non-health care workers.

Additional information on post-test counselling as well as confidentiality is available in “HIV Testing Services in Timor-Leste, 2016 – Operational Guidelines for HIV Testing and Linkage to Care, Support and Treatment”.

Once the pregnant woman is diagnosed HIV infected, the midwife should enter details of pregnancy in the separate ANC cohort register for HIV-infected pregnant women and fill the ANC card for HIV-infected women.

Testing of partners and children of HIV-infected pregnant women and mothers

All sexual partners and children of HIV-infected pregnant women and mothers should be recommended for testing. Counselling on the same should be a component of post-test counselling.

Partners of negative pregnant women who have risk factors for HIV (like having multiple sex partners, unprotected sex with a non-regular partner, injecting drug use, MSM, etc.) should also be recommended HIV test as part of post-test counselling.

Testing of partners should be with a proper pre-test information/counselling (as mentioned above) and the person has the right to deny a test (opt out). Testing of children should be done after pre-test information/counselling of the parent or guardian. The test result should be shared through a post-test counselling as mentioned in "HIV Testing Services in Timor-Leste, 2016 – Operational Guidelines for HIV Testing and Linkage to Care, Support and Treatment".

The HIV testing services can be improved many folds by initiating assisted partner notification services (aPNS). It involves tracing and offering HIV testing to partners of HIV-positive individuals. It is a part of WHO's self-testing and notification services. It is currently being offered through ANC services and HTS that are attached with ART centres.

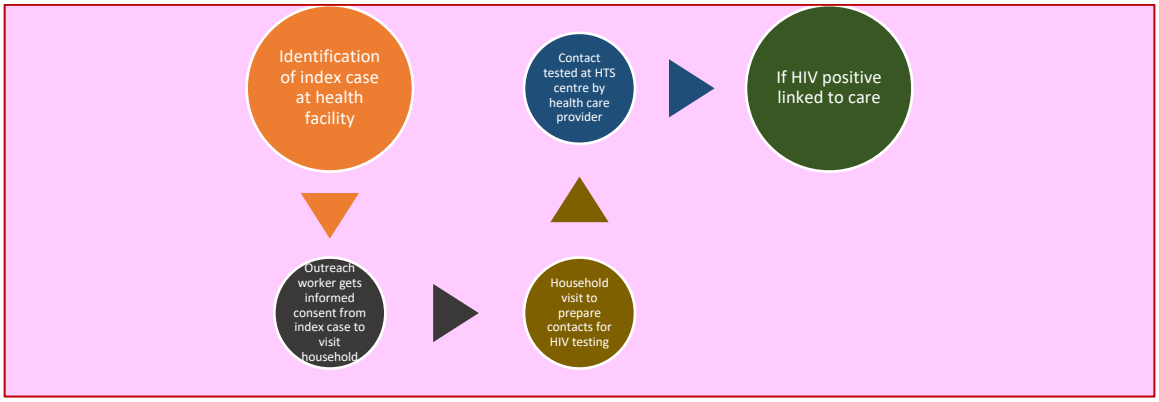

Fig.5. Process flowchart for assisted partner notification

Who is responsible?

The responsibility for testing partners and children of pregnant women lies with the healthcare team who provides ANC services (doctor, nurse and midwife) and the counsellor of HTS centres. aPNS is also being provided through this team.

Linkage to ART – "Test and Treat"

Every HIV positive pregnant woman will be referred to the ART centre and provided ART free of cost for a lifetime. Timor-Leste has a low HIV prevalence, and hence the estimated number of HIV positive pregnant mothers is also low. With the "test and treat'/ 'treat all' strategy adopted since 2017, all diagnosed HIV positives are linked to ART and provided free ART for a lifetime.

Note: In Timor-Leste, every diagnosed HIV positive is eligible for free ART irrespective of their CD4, Viral Load and WHO staging criteria.

The algorithm for HIV, syphilis and hepatitis B is provided in *Annex 1.Algorithm for EMTCT regimen*

When to start ART in pregnancy?

ART should be initiated as early as feasible, irrespective of gestational age, for all pregnant women and mothers who require ART for their own health. All pregnant women irrespective of CD4 cell count, HIV V L and WHO clinical stage require ART. However, ART should be initiated only if underlying opportunistic infections (OIs) are either ruled out or the person is stabilized after initiating management for OIs.

What ART to start?

The recommended first-line ART regimens for eligible HIV-infected pregnant women and mothers are the same as for non-pregnant HIV-infected women. The preferred first-line ART regimen is:(1) Tenofovir (TDF) 300 mg plus Lamivudine (3TC) 300 mg plus Dolutegravir 50 mg as fixed dose combination (FDC) daily;(2) Tenofovir (TDF)300 mg plus Lamivudine (3TC) 300 mg plus Efavirenz (EFV) 400 mg as FDC daily; (3) Alternative recommended regimens are: Zidovudine (AZT) 300 mg plus Lamivudine 150 mg (Twice a day) plus Efavirenz 400 mg once a day or Tenofovir 300 mg plus Lamivudine 300 mg plus Nevirapine (NVP) 200 mg for 14 days, and then 200 mg twice a day to continue.

Details regarding consideration for the choice of first-line ART for HIV-infected pregnant women and their dosing are given in *Annex 2. Considerations for the choice of first-line ART for HIV-infected pregnant women.*

Close clinical monitoring (and laboratory monitoring, if feasible) during the first 12 weeks of therapy is recommended in*Annex 3. Protocol of laboratory monitoring for pregnant women receiving ART or ARV* prophylaxis.

Prior exposure to non-nucleoside reverse transcriptase inhibitors (NNRTIs) as part of PMTCT during a previous pregnancy could result in NNRTI resistant strains of virus and can influence the efficacy of ART. The choice of ART would depend on the previous exposure to ARV, time of stopping and administration of nucleoside reverse transcriptase inhibitors (NRTI) tail during discontinuation. NRTI tail (Using AZT + 3TC) for a period of 7 days after discontinuing NNRTI has shown to reduce the development of resistance and is recommended in ART guidelines. Recommended ART regimen for HIV-infected pregnant women who require treatment and have

prior exposure to ARVs for PMTCT are given in *Annex 4.Recommended ART regimen for HIV-infected pregnant women who require treatment and have prior exposure to ARV for MTCT.*

Women presenting very late in pregnancy who are not able to initiate ART before delivery should receive ART whenever they present to health system.

Women receiving ART who become pregnant require counselling on:

- Possible risk of infant HIV infection (very small but there is a possibility)
- Potential drug toxicity for mother and infant
- Safer sexual practices
- General health messages
- Offer possibility of joining groups for PLHIVs (PLHIV groups in Timor-Leste such as Estrela Plus and Esperança).

Note: ART should be continued without interruption for women who become pregnant while on ART.

Clinical and laboratory monitoring of pregnant women and mothers receiving ART for their own health should be done as is recommended for non-pregnant HIV-infected adult and HIV-uninfected pregnant women.

Table 3. Summary of ART initiation in pregnant women based on time of diagnosis

Scenario	What to do?	Remarks/Comments
1. HIV positive pregnant woman becoming pregnant **1) Already on ART (TDF+3TC+EFV)** **2) Already on ART (AZT+3TC+EFV)** **3) Already on ART (TDF+3TC+NVP)** **4) Already on ART (AZT+3TC+NVP)** **5) Already on ART (TDF+3TC+DTG)**	• Revise the ART regimen, i.e., replace EFV with DTG(TDF+3TC+DTG) • If Hb ≤ 7 g/dL, replace AZT with TDF (TDF+3TC+DTG) • Change for 3 & 4 with TDF+3TC+DTG • For 5: Continue the same. This is the preferred regimen	Please note that EFV is to be avoided during the first trimester. Known to cause foetal distress and/or abortions
2. Pregnant woman detected with HIV infection in First Trimester (≤ 14 weeks)	• Follow ART initiation protocol • Start TDF+3TC+NVP for the patient or alternate first line if contraindicated for TDF use AZT if Hb ≥ 7 g/dL • May change to TDF+3TC+EFV after first trimester	Known contraindications for tenofovir are: • Chronic kidney diseases with creatinine clearance < 50mg/mL • Coadministration with didanosine (DDI) or abacavir (ABC)

	depending on discretion of ART physician	
3. Pregnant woman detected HIV positive after first trimester (pregnancy ≥ 14 weeks)	Follow ART initiation protocol. Preferred: TDF+3TC+DTG, in case of any specific contraindications or issues, may use alternate first line	
4. Pregnant woman detected as HIV positive in labour	Follow ART initiation protocol. Start the patient on TDF+3TC+DTG. Use AZT if any contraindication for TDF	Newborn child will be required to be give ARV prophylaxis with enhanced postnatal prophylaxis (ePNP) protocol, i.e., AZT+NVP for 6 weeks and then use NVP alone for 6 weeks(See Table 4for more details)

Note: WHO now recommends first-line TDF+3TC+DTG for all adults and adolescents, including pregnant women.

Monitoring of HIV positive pregnant women on ART

Clinical, immunological and virological monitoring is being done for all HIV-infected individuals. With the introduction of HIV VL monitoring, it has become possible to diagnose virological failure at an early stage and appropriate second-line regimens could be offered to these individuals.

Clinical monitoring of HIV patients is routinely done every month at the ART centres and pregnant women are also be monitored in the same way. WHO staging is an additional tool to monitor the stage of HIV infection and also the progress on ART.
The monitoring of immunological status through measurement of the CD4 cell count can be used to confirm clinical treatment failure.

Note: The absolute CD4 cell count decreases during pregnancy because of pregnancy-related haemodilution; after delivery, body-fluid changes normalize to the non-pregnant state, and CD4 levels may rise by 50–100 cells/mm^3. A decrease in the absolute CD4 count of a pregnant woman from her CD4 values before pregnancy should therefore be interpreted with caution.

For pregnant women who have haemoglobin of ≤7g/dL, AZT-based regimen should not be offered. They need to persist with tenofovir-based regimens.

HIV-infected pregnant women who are coinfected with TB and receiving rifampicin-based regimen should be started with EFV and not NVP after the woman is stabilized on anti-TB treatment. However, during the first trimester of pregnancy, EFV-based regimen should not be provided as there is evidence of teratogenicity and foetal distress. For more information, please refer to management of HIV-TB coinfection guidelines.

Pregnant women coinfected with HIV and HBV should receive a regimen that has at least two drugs that are effective against HBV. The recommended regimen is TDF + 3TC (or FTC) along with EFV.

When to stop?

ART should be continued during pregnancy, delivery, breastfeeding (if breastfeeding) and throughout life. Under exceptional circumstances, ART may have to be modified for a pregnant woman due to life-threatening side-effects or associated diseases such as chronic kidney diseases, multisystem organ failure or hepatic failure.

Any such decision will be taken by a medical board comprising specialist physicians who are part of TWG for HIV, STIs and hepatitis.

Who is responsible for providing ART to pregnant women?

The primary responsibility of providing ART to pregnant women and mothers lies with the health care team (doctor, nurse, midwife, counsellor and outreach worker) that provides antenatal, delivery and postnatal care for all pregnant women. However, this team in collaboration with the team that provides ART (doctor, nurse and counsellor) should ensure that all pregnant women who require ART for their own health receive ART appropriately and that the services are available throughout the life of the woman.

The laboratory monitoring required for those on ARV prophylaxis is given in *Annex 3. Protocol of laboratory monitoring for pregnant women receiving ART or ARV* prophylaxis.

Follow up of HIV-infected pregnant women and mothers on ART to ensure adherence

All pregnant women and mothers on ART should be followed up monthly. Monthly visits should be planned before the drugs run out of stock – for example, when the pregnant woman has at least 4–7 days of drug stock with her. The following should be ensured during monthly visits:

- Adherence to drugs needs to be verified by asking history of missing drugs during the previous month (more specifically in the previous week) and by counting pills that are left over
- Clinical evaluation for HIV illness and side-effect of drugs
- Reinforce importance of institutional delivery and infant feeding
- Offer possibility of joining groups for PLHIVs.

If the pregnant woman did not come for a visit or is not able to come to the centre, it is the joint responsibility of the health care team (doctor/nurse/midwife) of the ANC and the health care team (doctor/nurse/counsellor) of ART centre to ensure that she receives the drugs uninterrupted. This can be done either visiting the pregnant woman at her residence by the counsellor/midwife or through the outreach component of the MCH department (SISCa)/outreach component of network of PLHIVs.

Follow-up and adherence to drugs can also be increased through support group meetings for HIV-infected pregnant women. These meetings can be organized by network of PLHIVs and supported by midwife and counsellor. HIV-infected pregnant women willing to be part of support groups should be linked to these groups. The support groups can also address other psychosocial, community and family related issues.
National HIV/AIDS Programme has developed a protocol for intensive monitoring of patients on ART. PLHIV groups Estrela Plus and Esperança are supporting the national programme to retrieve the missed and loss to follow-up cases.

ARV prophylaxis for HIV-exposed infants(ePNP)

The 2016 ART guidance from WHO suggests the use of 12 weeks of ARV prophylaxis instead of 6 weeks with at least two ARV drugs, AZT+NVP for 6 weeks and then both or only NVP for another 6 weeks. The 2018 guidance from WHO reaffirms the need for enhanced prophylaxis for high-risk infants. In Timor-Leste, programmatic data suggest that there may be adherence issues with PLHIVs on ART as well as the average CD4 count during diagnosis was < 100/mL. This would correspond to high HIV VL in the initial period and slow decline of HIV VL due to multiplicity of factors. In short, the HIV- exposed infant is at high risk for transmission. This would justify the rationale of ePNP for 12 weeks and would give a higher benefit compared to the emergence of side-effects due to longer period of exposure to HIV ART drugs.

When to start?

ARV prophylaxis for exposed infants should be started as early as possible after birth, but preferably within the first 6 hours.

What to start?

The TWG on HIV/AIDS considered the evidence placed before them to address the issue of ePNP in Timor-Leste. Based on available data and evidence from Swaziland, Kenya, Tanzania, South Africa and WHO's own database, the recommendations available are given in Table 4.

Table 4. Dosing and formulation options for infant prophylaxis

Dosage forms	Dose 0–6 weeks AZT+NVP	Dose 6–12 weeks AZT+NVP	Dose 6–12 weeks NVP only	Comments/Remarks
Syrup AZT 10 mg/mL NVP 10 mg/mL	AZT dose 1.5 mL (15 mg) twice daily	AZT dose 6 mL (60 mg) twice daily	NVP dose 2mL (20mg) once daily	• Accurate dosing for all drugs (included for low birthweight newborns) and one type of formulation for the whole 12-week period • Costly to procure and transport syrups • Supplier availability may be limited • Might be acceptable where most women of childbearing age are well-controlled on ART and
	NVP dose 1.5 mL	NVP dose 2 mL		

	(15 mg) once daily	(20 mg) once daily		number of high-risk infants is low, but would not be the best option for a programme that chooses to treat all infants as high risk
Syrups and single drug tablets AZT 60mg NVP 50mg	AZT dose 1.5 mL (15 mg) twice daily NVP dose 1.5 mL (15 mg) once daily	AZT dose 1 tab (60mg) twice daily NVP dose ½ tab (25 mg) once daily	NVP dose ½ tab (25mg) once daily	• Combines accuracy of syrup dosing in the first 6 weeks and the ease of tablets from 6 to 12 weeks • Challenges of syrups as before½ a tab of NVP represents a slight overdose of NVP(25mg vs 20mg)
FDC	¼ tab (15 mg AZT, 7.5 mg 3TC, 12.5 mg NVP) twice daily	Unsuitable	Not applicable	• Difficult to quarter a FDC accurately: caregivers should use the first quarter in the morning and the second quarter in the evening in order to keep daily dose accurate • 3TC not part of the recommended prophylaxis regimen • Cannot use FDC during weeks 6 to 12 without giving 5times more than the recommended daily NVP dose
FDCs and single drug tablets	¼ tab (15 mg AZT, 7.5 mg 3TC, 12.5 mg NVP) twice daily	AZT dose 1 tab (60 mg) twice daily NVP dose ½ tab (25 mg) once daily	NVP: ½ a 50mg tablet once daily	• Combines ease of FDC with single drug tablet for thesecond6 weeks • Challenges of FDC as above

Source: Adapted from HIV diagnosis and ARV use in HIV-exposed infants: a programmatic update, July 2018. WHO Geneva.

Remarks:

- It should be noted that unlike for NVP, there is no specific prophylaxis dose for AZT. The recommended dose is the same as that used for treatment—15 mg twice daily for term infants in the first 6 weeks of life, increasing to 60mg twice daily from week 6 to week 12.
- When presumptive treatment is administered, age-appropriate regimens and dosing should be used as illustrated in current WHO treatment guidelines.
- FDC containing AZT+3TC+NVP for infants is not available in Timor-Leste.

It is recommended to start AZT+NVP for 6 weeks and then use NVP alone for 6 more weeks in any HIV-exposed infant irrespective of the risk status.

When to stop?

The preferred regime for ePNP in Timor-Leste is AZT+NVP for 6 weeks followed by NVP alone for 6 more weeks. No other medications are required after 12 weeks unless the infant is confirmed HIV positive.

Who is responsible for ARV prophylaxis to the exposed infant?

The medical officer of the health facility who provides care for all newborn is responsible for ARV prophylaxis. The responsibility also lies with the health care team that provides antenatal care and delivery to ensure that the exposed infant receives ARV prophylaxis appropriately.

Infant feeding for HIV-exposed children

The recommended infant feeding options for HIV-exposed children are as follows:

- Initiate breastfeeding as soon as possible after birth
- Exclusively breastfeed for the first 6 months
- Continue breastfeeding for at least 12 months, and may continue up to 24 months or more
- Introduce appropriate complementary food thereafter (weaning), and continue breastfeeding for 12 months or more
- Breastfeeding should then only stop once a nutritionally adequate and safe diet without breast milk can be provided
- Wean gradually within 1 month
- ePNP should be given to all HIV-exposed infants for a duration of 12 weeks
- Mothers who are on ART should continue it lifelong, including the breastfeeding period.

When mothers known to be HIV-infected decide to stop breastfeeding at any time, infants should be provided with safe and adequate replacement feeds to enable normal growth and development. If in any case the breast milk from mother is not available or mother on anti-cancer drugs, etc., replacement feeding should be initiated as follows:

For infants less than 6 months of age:

Commercial infant formula milk if home conditions outlined below are fulfilled:

- Safe water and sanitation are assured at the household level and in the community
- The mother, or other caregiver can reliably provide enough infant formula milk to support normal growth and development of the infant
- The mother or caregiver can prepare it cleanly and frequently enough so that it is safe and carries a low risk of diarrhoea and malnutrition
- The mother or caregiver can, in the first 6months, exclusively give infant formula milk
- The family is supportive of this practice
- The mother or caregiver can access health care that offers comprehensive child health services.

These criteria were referred by the acronym ‘AFASS’ or ‘Acceptable, Feasible, Affordable, Sustainable and Safe’.

Expressed, heat-treated breast milk can be an interim feeding strategy in the following circumstances:

- When the infant is born with low birth weight or is otherwise ill in the neonatal period and unable to breastfeed; **or**
- When the mother is unwell and temporarily unable to breastfeed or has a temporary breast health problem such as mastitis; **or**

- To assist mothers to stop breastfeeding; **or**
- If ARV drugs are temporarily not available.

Home-modified animal milk is not recommended as a replacement food in the first 6months of life.

For children over 6months of age:

- Commercial infant formula milk if home conditions outlined in the previous section are fulfilled
- Animal milk (boiled for infants under 12 months), as part of a diet providing adequate micronutrient intake
- Meals, including milk-only feeds, other foods and combination of milk feeds and other foods, should be provided four or five times per day. All children need complementary foods from 6months of age.

If infants and young children are known to be HIV-infected, mothers are strongly encouraged to exclusively breastfeed for the first 6months of life and continue breastfeeding as per the recommendations for the general population, that is, up to 2 years or beyond.

Care of HIV-exposed infants

All infants born to HIV-infected mothers (exposed infants) should receive the following minimum package of services:

- ARV prophylaxis postdelivery within 6 hours of birth (as part of EMTCT prophylactic regimen)
- Cotrimoxazole prophylaxis for all HIV-exposed infants and children born to HIV positive mothers from 6 weeks of age (coinciding with the first immunization visit) until their HIV status is confirmed negative
- HIV testing to determine HIV status of the infant/child: HIV DNA PCR or antibody test depending on age of the infant/child (early infant diagnosis)
- Regular follow-up for clinical, development and growth monitoring
- Immunizations as per the national schedule
- Nutrition counselling for parents/caregiver to ensure appropriate infant feeding practices including weaning and complementary feeding
- ART and other treatment when indicated.

As detailed in the previous section ePNP should be provided for all infants born to HIV-infected pregnant women.

Cotrimoxazole prophylaxis should be initiated at 6 weeks for all exposed children and continued until HIV diagnosis is confirmed negative. The recommended dose of cotrimoxazole (5mg/kg of Trimethoprim per day) is given once daily, either in syrup or paediatric dispersible tablet formulations. Adult cotrimoxazole tablets should not be split into quarters and used for infants/children. The dosage based on weight and when to stop are given in the Revised ART Guidelines of Timor-Leste.

Immunization, growth and nutrition evaluation of all exposed infants should be done as per national protocol for all children.

Infant feeding practices should follow that of national recommendations. It is important that the mother receives ART throughout the period of breastfeeding. ART for mothers who need for their own health should be continued lifelong.

Follow-up visits will correspond with the national immunization schedule, with additional visits at 6, 12 and 24 months, if required. The activities related to care of exposed children based on follow-up visits are detailed in Revised ART Guidelines of Timor-Leste.

Who is responsible for care of exposed children?

The medical officer of the health facility, who provides care for children, has the primary responsibility for care of exposed children.

If any HIV-exposed infant or child develops clinical signs and symptoms suggestive of HIV infection, the medical officer at health care facility should start immediate treatment for the acute illness, stabilize and in consultation with the medical officer of ART centre should evaluate the child for initiating ART. HIV testing according to the national testing algorithm for infants.

Follow-up of HIV infected infants and children started on ART will be done by the medical officer (paediatrician) at health facility in collaboration with the medical officer at ART centre.

Diagnosis of HIV in HIV-exposed infants and children less than 2 years

Diagnosis of HIV status in infants/children is very important in order to plan their care, support and treatment. To establish if the infant or child less than 18 months of age has acquired HIV infection, the DNA of the virus has to be detected in the infant's blood through the '*Polymerase Chain Reaction*' (PCR).

Serology for HIV antibodies, which is used for diagnosis in adults, cannot be used for children below 18 months because of false positive results due to presence of cross reacting maternal HIV antibodies in the infant's blood.

HIV test should be done for any child with a history suggestive of exposure to HIV infection. The exposure can be during antenatal, delivery or breastfeeding period. Exposure to HIV can occasionally be due to transfusion of unscreened blood or sexual abuse.

In addition, HIV test should be done for any child showing two or more of the following clinical signs and symptoms:

- Oral thrush
- Pneumonia

- Persistent diarrhoea
- Enlarged lymph nodes
- Ear infections
- Parotid gland enlargement
- Malnutrition.

The protocol for HIV diagnosis among HIV-exposed children <24 months is detailed in *Annex 5. HIV infant diagnostic algorithm*

ART for HIV-infected children less than 2 years

ART should be initiated immediately for all infants and children less than 24 months if:

- HIV DNA PCR is positive or Gene Xpert™ HIV QUAL is positive
- Antibody tests are positive, and the child is between 18 months and 24 months of age
- The child is less than 18 months and DNA PCR is not available, but has a positive HIV antibody test result and is symptomatic with two or more of the following:
    - oral thrush
    - severe pneumonia
    - severe sepsisor
    - diagnosis of any AIDS-indicator condition.

ART should be continued lifelong.

Note: Under 'Treat All' every child with confirmed infection will be initiated on ART.

Hepatitis B

The prevalence of hepatitis B among pregnant women has not been estimated. The blood bank data suggest that the prevalence of HBsAg positivity among blood donors could be as high as 6–7%.[12]However, this is unlikely the case with hepatitis C. In the past, the hepatitis B prevalence has been high in selected population. As this guideline is being developed, a Hepatitis Sentinel Surveillance (HSS) is underway among key population and uniformed personnel. The data from this survey would prove to be invaluable in our settings.
Current data on hepatitis B positivity is given in Table 5.

Table 5. Current data on hepatitis

Group	Hepatitis B(in %)	Hepatitis C(in %)
ANC**	NA	NA
FSW*	8.3	NA
MSM*	10.2	NA
CSWs (Clients)*	14.4	NA
Uniformed personnel (UP)*	14.8	NA
Blood bank***	6–7	3–5

Source: *IBBS, 2011, **HSS – 2013 and ***Data from Blood Bank 2015.

[12]Programme data from Blood Bank, 2015.

The diagnosis and treatment of hepatitis B in a mother are done as per the algorithm given in Fig. 6.

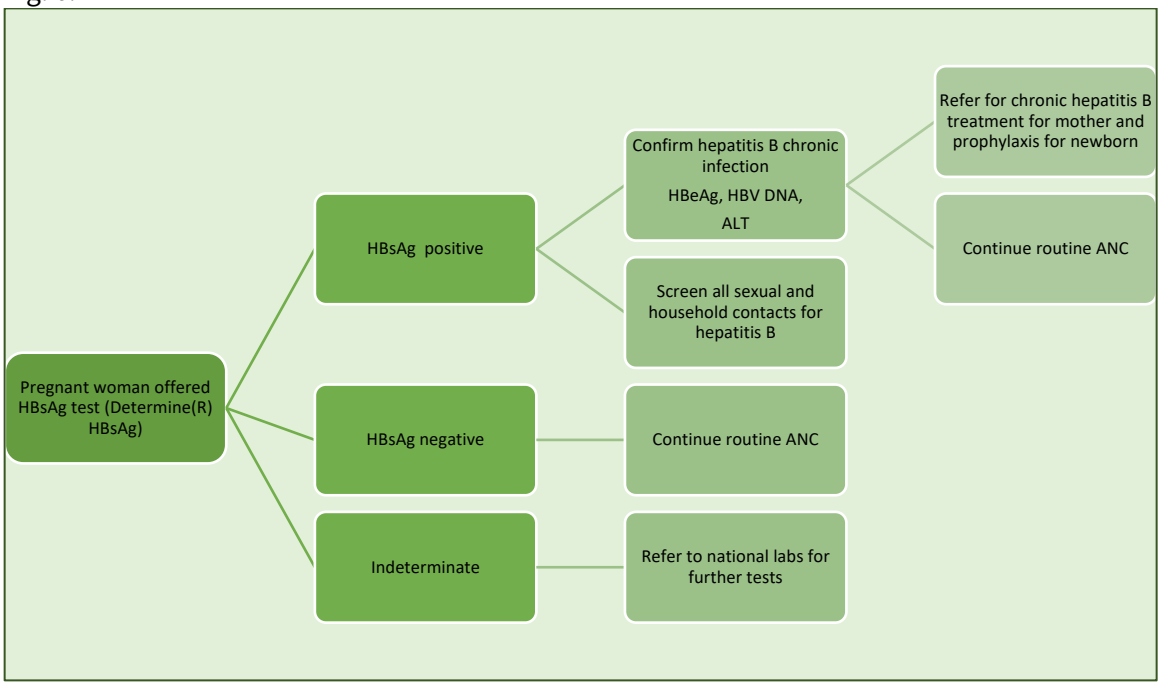

Fig. 6. Diagnosis and management for hepatitisB in pregnant woman

Rapid tests that detect HBsAg is recommended for use at the peripheral centres and if detected to be hepatitis B positive should be referred to ART centre for further management.
The treatment protocol is presented in Fig. 7.

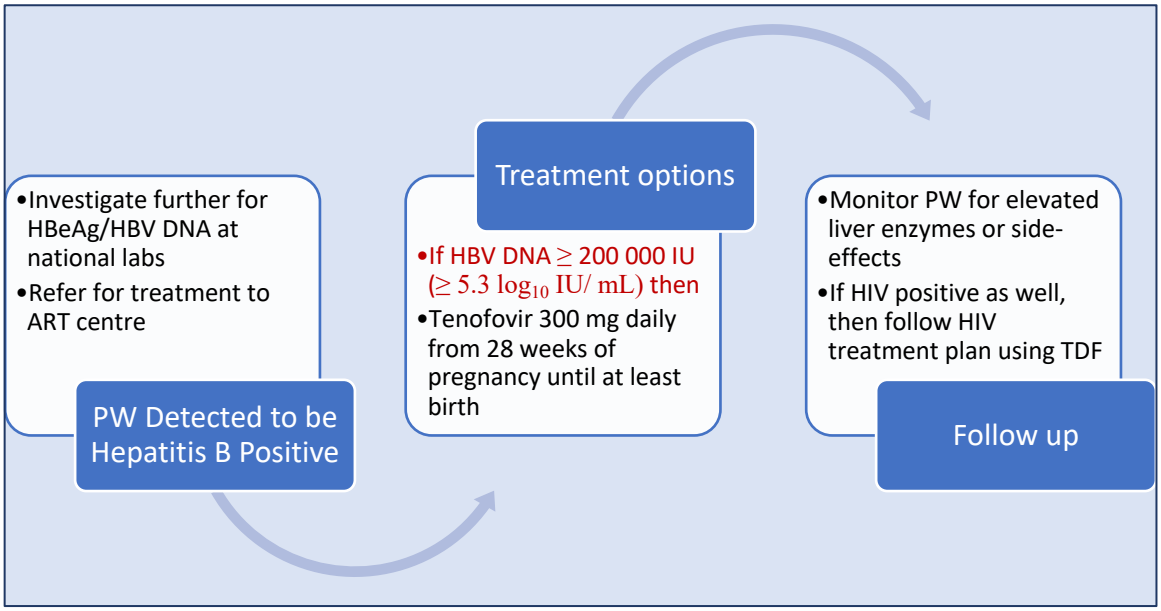

Fig.7.Treatment algorithm for hepatitis B positive pregnant woman

Note: If pregnant woman is also HIV positive then should be initiated on TDF+3TC+DTG. This will be also address hepatitis B.

Prophylaxis in a hepatitis B-exposed infant

Hepatitis B is a very strong virus. It is a higher chance than HIV of perinatal transmission compared to HIV. The rates vary across the globe and ranges from 10to 85% in different settings depending upon the prevalence of HBsAg, ethnicity, vaccination coverage of hepatitis B and healthcare delivery system. It is also dependent upon the mother's hepatitis B e antigen (HBeAg) status. If the mother is positive for both hepatitisB surface antigen (HBsAg) and HBeAg the risk of perinatal transmission is 70–90%. If the mother is HBsAg-positive, but HBeAg-negative, the risk of perinatal transmission is <10%.[13]
The exposed infant needs to be provided a dual cover with:

- Hepatitis B vaccination as birth dose and follow-up vaccination with 2nd and 3rd dose ≥ 4 weeks apart
- Hepatitis B immunoglobulin at birth – dose 0.5 mL of HBIG® in the antero lateral thigh as soon as possible, but preferably within 12 hours after birth.

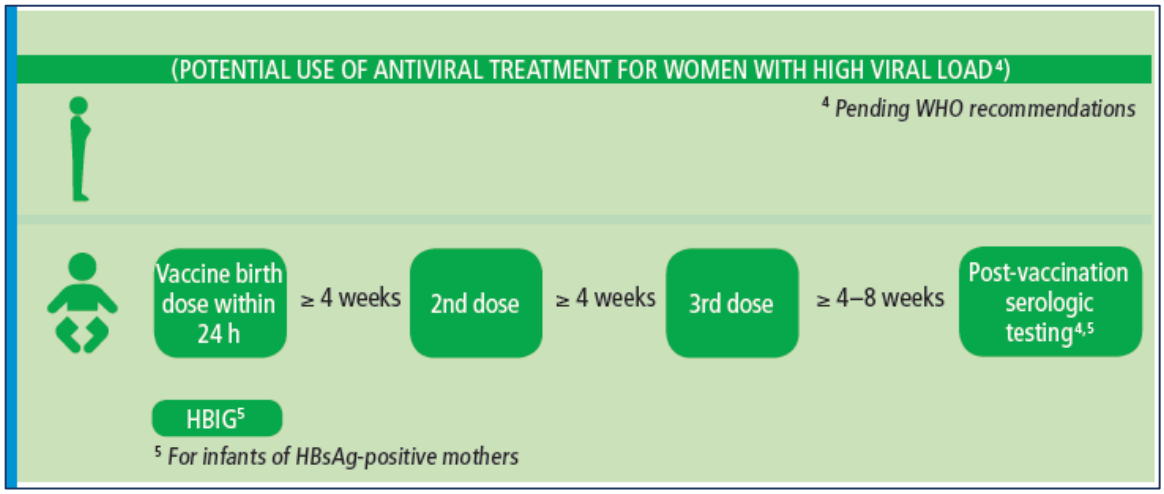

Fig.8. Baby vaccination and HBIG schedule in hepatitis B exposed infant

Reproduced from WHO guidelines on hepatitis B and C testing (2017), Hepatitis B vaccines: WHO position paper (2017).

Syphilis

MTCT of syphilis continues to be a challenge across the globe. In Timor-Leste the perinatal transmission rates are not available. However, the prevalence of syphilis in pregnant women is 1.7% [95% CI:1.3–2.1%] as noted in HSS of 2018.
Programme on elimination of congenital syphilis is already underway in Timor-Leste since 2015.

Diagnosis of primary syphilis in pregnant women

The diagnostic algorithm is presented in Fig. 9.

[13]Perinatal hepatitis B prevention program manual. New York State Department of Health; 2011. (https://www.health.ny.gov/diseases/communicable/hepatitis/hepatitis_b/perinatal/docs/program_manual.pdf, accessed on 24 September 2019).

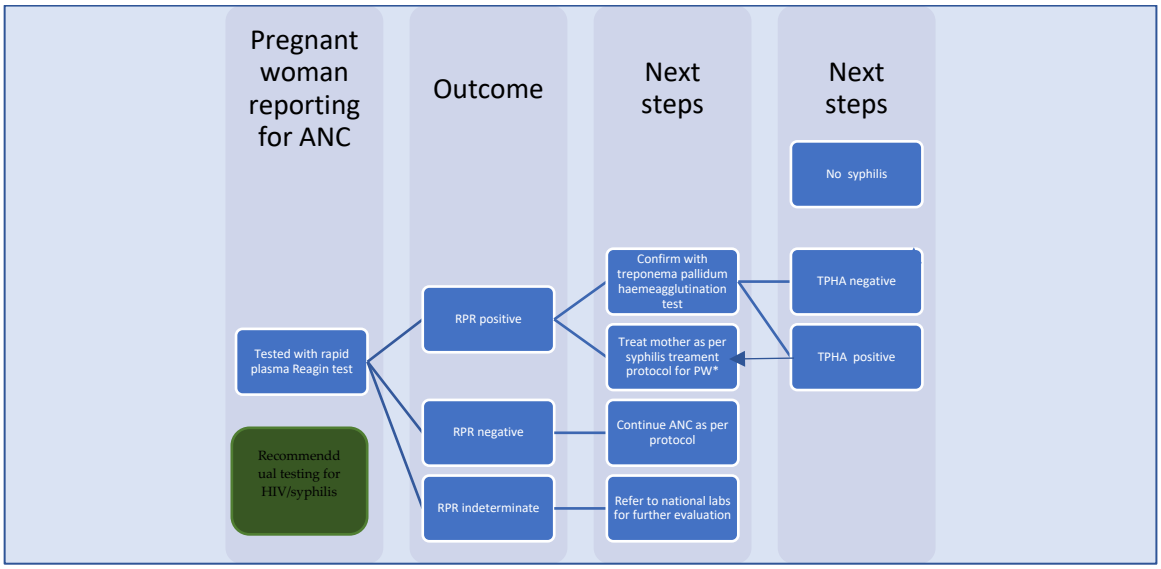

Fig.9. Diagnostic algorithm for syphilis in pregnant women

** Treat the mother if not possible to get a confirmation test with TPHA or TPPA.*

WHO recommends use of dual testing for HIV/syphilis for pregnant women. Evidence suggests this has multiple benefits: (1) bridge gap between HIV and syphilis testing in pregnant women; (2) cost effective compared to using separate tests; and (3) improved outcomes for elimination of HIV and congenital syphilis.

Treatment of primary syphilis in pregnant women and newborn

Treatment of primary syphilis is with:

- Injection Benzathine Penicillin G 2.4 million units as a single dose to mother as soon as detected
- If mother is inadequately treated or no credible history of treatment is available during antenatal period, the newborn must be treated with a single intramuscular (IM) dose of benzathine penicillin G (50 000 U/kg; not to exceed 2.4 million units).

Operational aspects of EMTCT and roles of personnel

Client flow

The client flow for pregnant women is shown in Fig. 10.

Fig. 10. Client flow for pregnant women

Community mobilization and behaviour change communication

The programme should focus on strategies to mobilize community for increasing access to EMTCT like:

- Outreach activities through community workers
- Behaviour change communication (BCC) to increase health-seeking behaviour
- Community based intervention that have shown to improve coverage for ANC in Timor-Leste
- Communication materials like leaflets and mass media communication to increase awareness among the community on availability and significance of availing EMTCT services.

Roles and responsibilities of health care workers

Roles and responsibilities of personnel involved in different components of EMTCT are given in Table 6.

Table 6. Roles and responsibilities of health care workers

Components of PMTCT	Primary responsibility	Others responsible	Roles of personnel
Pre-test counselling	Midwife in ANC; nurse/ midwife in labour ward and postnatal care	Counsellor; doctor in labour ward and postnatal care	• Provide pre-test information/counselling to all pregnant women coming for the first ANC visit or in follow-up visits if this information was not provided earlier or during delivery and postpartum if HIV test was not done earlier in pregnancy • Maintain the ANC register and fill ANC card • Guide the pregnant woman to testing. In places where lab is far away, collect blood samples and transport the same to the lab
Testing	Lab technician	Counsellor	• Collect blood sample. Process the blood sample • Fill the report and deliver it to midwife/counsellor. Maintain register for stock of kits, test results and external quality assurance system
Post-test counselling	Midwife in ANC; nurse/midwife in labour ward and postnatal care	Counsellor; doctor in labour ward and postnatal care	• Provide post-test counselling as per protocol • Maintain ANC register, and fill ANC card as appropriate. For those with a positive test result maintain exclusive cards and registers as indicated • Work in collaboration with the doctor/nurse of ANC unit and doctor/counsellor of ART unit to provide care for HIV-infected pregnant women
Support group meetings for HIV-infected pregnant women	Network of PLHIVs	Midwife; counsellor	• Network of PLHIVs should organize support group meetings for HIV-infected pregnant women • Midwife and counsellor should facilitate the process and also link HIV-infected pregnant women willing to be part of support groups to the network
Testing of partners and children of HIV-infected pregnant	Midwife	Counsellor; Lab technician	• Counselling HIV-infected pregnant women and mothers for testing partners and children • Pre-test counselling for partners and children • Processing test and issuing report (lab technician)

women and mothers			• Post-test counselling and referral for ART
CD4 testing and clinical assessment for need of ART	Doctor providing care during ANC, delivery and postnatal period	Doctor of ART centre; lab technician of the clinic	• The lab technician will collect the sample for CD4 testing and send it as per the guidelines for transport of samples to the national hospital. Perform other investigations as recommended by the doctor • The doctor of the ANC clinic with technical inputs from the doctor of the ART centre would do a clinical evaluation of all HIV-infected pregnant women and recommend any investigations needed to ascertain clinical state of HIV illness
Follow-up of HIV-infected pregnant women and mothers on ART	Midwife providing antenatal care; nurse/midwife providing postnatal care	Doctor providing ANC and postnatal care; ART doctor; counsellor of ART centre; SISCa; pharmacist	• The team should ensure that the pregnant woman mother come to the clinic for follow-up every month. If the HIV-infected pregnant women or mother does not come for follow-up, the counsellor or SISCa should trace the woman and, if needed, a home visit should be made • Review adherence to drugs and improve it if found to be low • Doctor should evaluate clinically and observe for side-effects to drugs • Provide counselling on adherence, PMTCT, family planning, infant feeding and other relevant aspects • Maintain case records and registers for all HIV-infected pregnant women • Pharmacist will be responsible for ensuring adherence by reinforcing messages and wherever possible through a pill count
Labour	Doctor; midwife and nurse of labour room	Counsellor	• Deliver all HIV-infected pregnant women along with HIV-uninfected pregnant women adhering to universal precautions as recommended for all deliveries by the health care team involved in delivery • Counsel and test all women coming in for delivery without a prior HIV test • Ensure that all HIV-infected pregnant women who are on ART or ARV prophylaxis continue without interruption during labour and postpartum • Ensure that all pregnant women diagnosed as HIV-infected during labour or postpartum period receive ARV prophylaxis and undergo evaluation for need of ART after stabilization of labour
ARV prophylaxis for HIV-exposed infants; care of HIV-exposed infants and	Doctor providing care for infants and children	Doctor providing ART; doctor and nurse of labour	• Initiate ARV prophylaxis for all exposed children as early as possible (preferably within 6 hours) • Provide co-trimoxazole prophylaxis for all exposed infants from the age of 6 weeks onwards until diagnosed HIV-uninfected

children; HIV test for HIV-exposed infants and children; ART for HIV-infected infants and children < 2 years		ward; counsellor; midwife; lab technician; pharmacist	• Dried blood spot sample collected and sent to national laboratory for all HIV-exposed infants and children aged 6 weeks and above • Recommend antibody tests for HIV-exposed infants and children as per protocol • Initiate ART for all HIV-infected infants and children less than 2 years • Monitor the clinical progress of all HIV-exposed infants and children • Maintain case records and registers for all HIV-exposed infants and children • Pharmacist will be responsible for dispensing the drugs
Reporting	Midwife	Counsellor; doctor; pharmacist; lab technician	• Midwife with help from the counsellor (if available), pharmacist and lab technician should compile the data on a monthly basis in the reporting form and send it to the national programme officers for HIV and MCH, and regional coordinator • The doctor in-charge of maternity should verify the accuracy of the reports before sending
Monitoring	Doctor; regional coordinator national programme officer EMTCT	Director Clinical of the hospital MCH unit of MoH	• The doctor is responsible for the daily monitoring of PMTCT services • The regional coordinator should monitor the progress through monthly review of reports and by visiting the centres at least once in 3 months • The national programme officer for HIV should monitor the progress of the centres by review of data on a monthly basis, conducting review meetings once in 3 months and by visiting at least once in a year • The Director Clinical of the hospital should review on a monthly basis. MCH unit is responsible for integrating PMTCT monitoring along with that of MCH
Training	National programme officers for HIV and MCH	Training institute and master trainers	The national programme officers for HIV and MCH should ensure that: • All new staff (midwife; nurse and doctor providing antenatal, natal and postnatal care; doctor providing paediatric care; doctor providing ART; counsellor; lab technician) should be trained using the induction training manual for PMTCT • All staff should receive refresher training at least once in a year • Master trainers receive updates on recent technical and programmatic developments • Training curriculum and guidelines are revised periodically to suit the needs of the programme preferably based on a training need assessment (TNA)

Mentoring	Master trainers	National programme officer for HIV	• The master trainers should provide onsite mentoring for each centre at least once in 6 months to start with and once in a year after the performance of the centre has improved • National programme officers for HIV and MCH should facilitate mentoring
Supply of kits and drugs	National programme officer for HIV and MCH	Pharmacist; lab technician	The forecast of kits and drugs should be provided by the midwife/counsellor for individual clinics with support from pharmacist and lab technician The national programme officers for HIV and MCH should: • Prepare national forecast based on forecast from centres • Procure kits and drugs • Supply them to the centres

For roles and responsibilities of individual staff, refer *Annex 6. Roles and responsibilities of health care workers involved in EMTCT.*

Supply of test kits, drugs and consumables

Test kits: test kits will be supplied by SAMES through the established supply system. The lab technician should maintain the stock register of test kits on a daily basis and track the expiry of kits.

Kits that are expiring in next 3months should be informed to the programme. The national programme will take the appropriate steps to redistribute the kits. Expired kits should be destroyed as per national policies or sent to national lab for further disposal.

An adequate supply of test kits for HIV, syphilis and hepatitis B should be maintained to support the EMTCT activities.

Forecasting should be done by the centre annually based on the number of pre-test counselling, the expected increase in client load for that year (target) and a buffer stock for 3–6 months.

Drugs for ART:ART is provided through eight approved ART centres. The ART inventory is maintained by the ART centre.

Drugs that are expiring in 3 months should be informed to NAP. The programme will take necessary steps for redistributing the drugs for use at other centres. Expired drugs should be destroyed as per national policies or sent to regional hospital for destroying.

Consumables and other drugs: The consumables and drugs other than those required for ART and ARV prophylaxis will be supplied by the hospital.

Records and registers

HIV test report should be entered in the regular ANC cohort register used for all pregnant women.

Data of HIV-infected pregnant women should be entered in the exclusive cohort register for pregnant women.

ANC card with details specific to HIV should be initiated for all HIV-infected pregnant women as soon as a diagnosis of HIV infection is made. If they already have a regular ANC card, it should be replaced with HIV-specific ANC card at the earliest.

The different records and registers to be used for PMTCT are in *Annex 7. Registers and cards for EMTCT.*

Current reporting is done through a paper-based system and hard copies of the reports are sent to municipal public health directorate and then transmitted to National Programme. Efforts are on to use computerised formats for capture and transmission of data.

Monitoring and evaluation

Reporting

All the centres should report on a monthly basis in the reporting format enclosed in *Annex 8. Revised reporting format for EMTCT (HIV/AIDS).*

The report should be filled in the specified format by the midwife counsellor. After being verified by the medical officer, it must be signed by the Director Clinical of the hospital. The Director Clinical should verify the accuracy of the report before signing it. The signed report should be posted to national programme officer (NPO) and a copy of the same to regional coordinator (RC) before the 5th of every month. One copy should be retained at the centre. The midwife/counsellor, medical officer and Director Clinical of the hospital are jointly responsible for the accuracy of the report.

The report of mentoring and monitoring visits as well as the training reports should be sent in the specified tool to NPO and a copy to RC within 15 days of completion of travel or training.

Monitoring framework and minimum standards of care for PMTCT

The overall monitoring framework is given in Table 7.

Table 7. Monitoring framework

Outcome	Output	Initiatives
All HIV-infected pregnant women and mothers have access to all the components of EMTCT services	• All pregnant women tested for HIV • All HIV-infected pregnant women and mothers receive HIV VL/CD4 testing and clinical assessment every month • All HIV-infected pregnant women and mothers in need of ART for their own health receive complete ART • All HIV-infected pregnant women and mothers not in need of ART for their own health receive complete ARV prophylaxis • All HIV-exposed infants receive complete ARV prophylaxis (ePNP) • All HIV-exposed infants receive a complete course of co-trimoxazole prophylaxis from 6 weeks onwards • All HIV-exposed infants and children have access to HIV testing • All HIV-infected infants and children < 2 years receive ART	• Integrate PMTCT with MCH services • Establish PMTCT services in centres were antenatal, perinatal and postnatal services are available • Train staff on PMTCT • Provide drugs, test kits and consumables • Mentoring of staff on an ongoing basis • Monitoring the progress of implementation • Supply of registers and reporting formats
	Build the capacity of the country in the field of EMTCT	• Train a pool of master trainers • Train a pool of mentors • Provide support for training institute to build their capacity in the field of PMTCT • Integrate PMTCTC with the training curriculum of MCH staff • Train all staff involved with PMTCT services
	All centres that offer PMTCT meet the minimum standards	• Periodic evaluation of quality of PMTCT services in all the centres • Job aids and interventions to improve the quality of care in the centres based on findings of the evaluation

The indictors for monitoring the EMTCT programme and the minimum standards of care are given in *Annex 9. Indicators for monitoring EMTCT programme and minimum standards of care (HIV/AIDS)*.

The personnel responsible and periodicity for monitoring the programme are given in Table 8.

Table 8. Personnel responsible and periodicity for programme monitoring

Personnel responsible	What to monitor?	How often to monitor?
National programme officer	Performance of the centres based on monthly reports	Every month
	Performance of centres based on monitoring visits	Once in 2 years or shorter based on need
	Performance of the supply of drugs and kits	Once in 6 months
	Performance of the mentoring system	Once in 3 months
	Performance of regional coordinator	Once in 3 months
	Overall performance of the programme in the country	Once in 6 months
Regional coordinator	Performance of centres based on monthly reports	Every month
	Performance of centres based on monitoring visits	Once in 3 months
	Supply of drugs and kits	Once in 3 months
Director Clinical of the hospital	Performance of centres based on monthly report	Every month
	Performance of centre based on monitoring visits	Every month
	Supply of drugs and kits	Every month
Doctor	Performance of centre based on monthly report	Monthly
	Performance of centre based on day-to-day activities	Once in a week
	Supply of drugs and kits	Once in a month

Tools for evaluation

The tools for evaluation of the programme are in *Annex 10.Tools for evaluation of EMTCT programme.*

Capacity-building

Capacity-building involves training and mentoring. Training refers to classroom or field visits as part of a training package. Mentoring refers to on-job capacity-building provided by a mentor.

Training:

Training should be done using training curriculum (induction and refresher training curriculum) that are reviewed and updated (based on policy changes, technical advances and needs

assessment of staff involved in the programme) at least once in 2 years or earlier if there is a need.

The training manuals for doctors, nurses and midwifes should be incorporated with the existing training manuals on MCH.

All existing staff should undergo induction training in the beginning of the programme. All new staff getting involved in EMTCT services, in the future, should be trained using the induction module. The various staffs involved in the EMTCT programme and require training are as follows:

- Master trainers
- Doctor providing antenatal, perinatal and postnatal care
- Nurse providing antenatal, perinatal and postnatal care
- Midwifes providing antenatal, perinatal and postnatal care
- Counsellors
- Doctor providing care for infants and children
- Doctor providing ART
- Nurse providing ART care
- Lab technician
- Pharmacist.

All staff should be trained at least once a year using the refresher training curriculum.

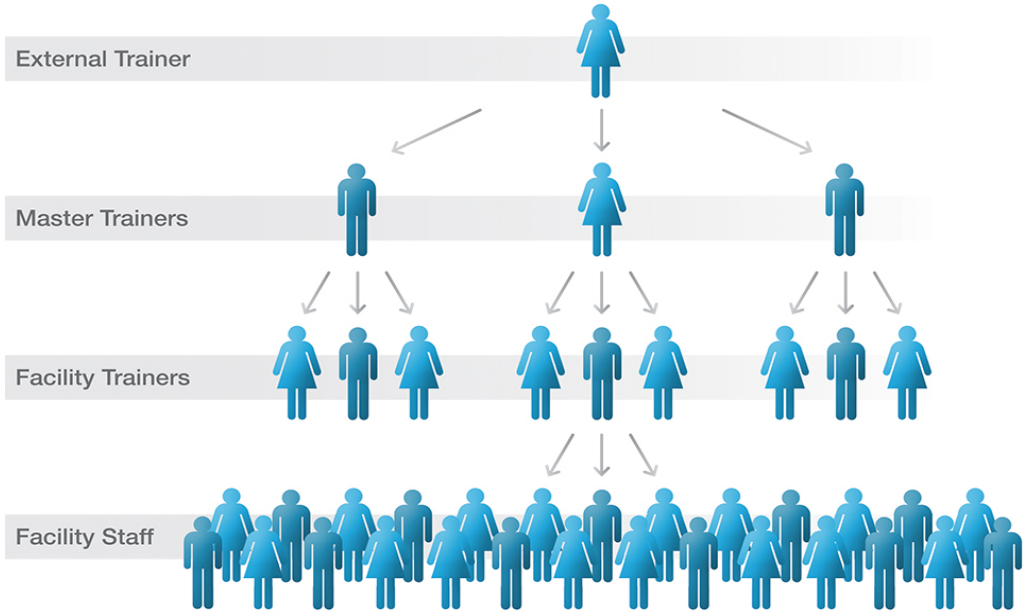

Fig.10.Cascade model of training

The cascade capacity-building model will be used to percolate the training to the last level of healthcare workers (Fig. 10).
A group of master trainers from every category of healthcare worker would be identified and trained. The master trainers will in turn train the participants through a series of training preferably at the regional level.

All training should have a pre- and post-training evaluation. However, as noted in many training sessions, the scores are always higher in post-test transfer of immediate knowledge is a relatively simple concept. The endeavour is to try and transfer the skills required for the job. A performance evaluation is required in assessing the cascade model of instructional design. The scores of the evaluation will be enclosed in the training report. Participants scoring <70% in post-training evaluation would be retrained in the next training or alternatively should be provided on-job mentoring until their post-training/mentoring evaluation score is >70%. The training report should be jointly prepared by the master trainers (one person can coordinate) and sent to the national programme officer and regional coordinator.

Mentoring:

Mentoring will involve a process where the mentors will visit to the centres where EMTCT services are provided. The mentors observe EMTCT services using the pre-designed evaluation tools and mentor the staff in the clinic based on the needs. Every centre should be mentored at least once in a year. The centres with a poor performance should be mentored once in 6 months until performance is satisfactory.

The remuneration for master trainers and mentors for training and mentoring visits will be revised periodically and finalized by the HIV unit in collaboration with the MCH unit.

Evaluation of master trainers and mentors:

The master trainers will be evaluated by the participant feedback form as well as by an independent observer. Mentors will also be evaluated by an observer. The observer of the training/mentoring visit will provide feedback on the skills of the trainer/mentor. The observer could be another master trainer/mentor or preferably a person from the national programme and having skills to mentor a master trainer/mentor. The observer should send the report to the national programme officer and regional coordinator who will in turn compile the rating of all master trainers/mentors.

In the initial 6 months master trainers and mentors would be observed during all training and mentoring visits by an observer. Overall performance of a master trainer in a classroom training or mentoring will be finally assessed after 6months as *Performing to Standard* if s/he performs all critical tasks satisfactorily (Excellent, above average or average). Once the performance is satisfactory, the trainer will be observed once a year.

The key topics and the frequency of training for various staff involved in EMTCT are given in Table 9.

Table 9. Topics and the frequency of training

Topic	1*	2	3	4	5	6	7	8	9	10
Facilitation skills	I/R									
Mentoring skills	I/R									
Basics of HIV		I	I	I	I	I	I	I	I	I
Natural course of HIV infection		I	I	I	I	I	I	I	I	I
Basics of EMTCT		I/R	I/R	I/R	I/R	I/R	I/R	I/R	I	I

HIV VL, CD4 cell count and clinical staging of HIV		I/R	I/R	I/R	I/R		I/R	I/R		
ART		I/R					I/R			
Follow up and adherence		I/R	I/R	I/R	I/R		I/R	I/R		I/R
Counselling		I/R	I/R	I/R	I/R		I/R	I/R		
Testing									I/R	
Testing of partners and children		I/R	I/R	I/R	I/R		I/R	I/R		
Care of exposed child including testing			I/R	I/R	I/R	I/R	I/R	I/R		
ART for HIV-infected child						I/R	I/R			
Monitoring and reporting	I/R	I/R	I/R	I/R	I/R	I/R	I/R	I/R	I/R	I/R
Roles and responsibilities	I/R	I/R	I/R	I/R	I/R	I/R	I/R	I/R	I/R	I/R

1 - Master trainers; 2 - Doctor providing antenatal, perinatal and postnatal care; 3 - Nurse providing antenatal, perinatal and postnatal care; 4 - Midwife providing antenatal, perinatal, and postnatal care; 5 – Counsellors; 6 - Doctor providing care for infants and children; 7 - Doctor providing ART; 8 - Nurse providing ART care; 9 - Lab technician; 10 – Pharmacist;
I – Induction; R – refresher.
*Master trainers, in addition to what is listed in the table, would receive the training related to the category of staff they represent (for example, a midwife master trainer will receive training on all the components for midwife).

The different reporting formats used to evaluate the training and mentoring are enclosed in the *Annex 11. Reporting formats to be used for training and* mentoring.

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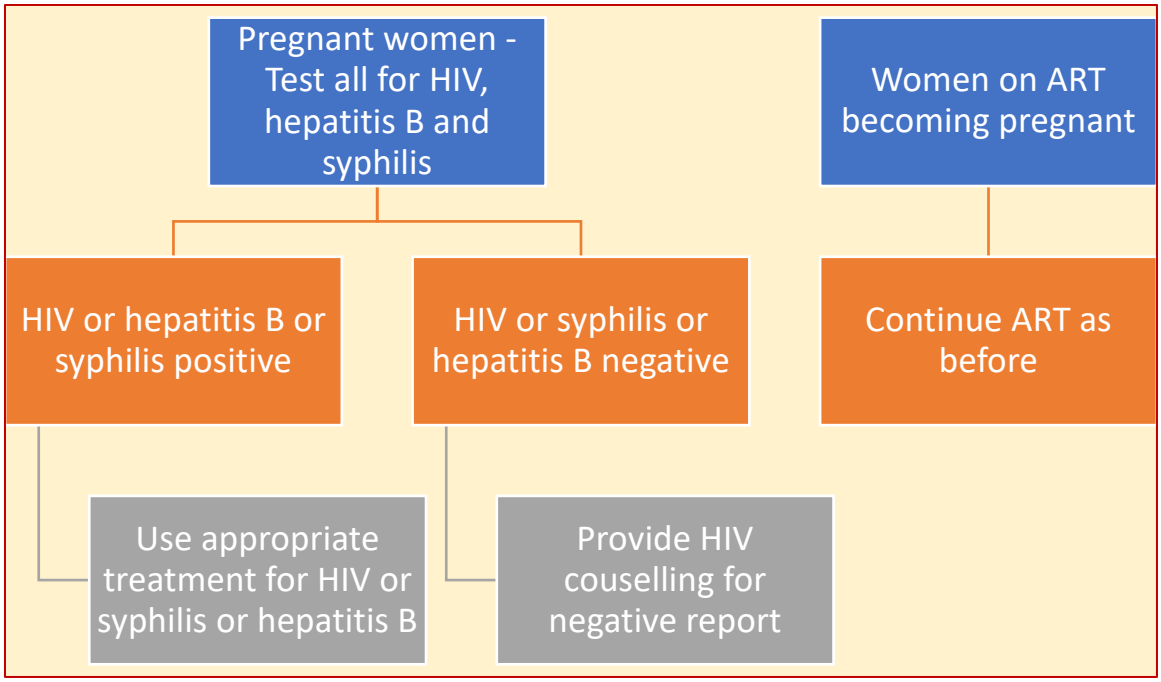
Annexures

Annex 1.Algorithm for EMTCT regimen



Annex 2. Considerations for the choice of first-line ART for HIV-infected pregnant women (2019 update)

Regimens	Dosing	Feasibility considerations	Safety considerations
TDF + 3TC + DTG (FDC)	Morning: 1 FDC of TDF 300 mg + 3TC 300 mg + DTG 50 mg daily	• Given as once-daily regimen in a FDC • Effective contraception after delivery is required to prevent (subsequent) pregnancy with use of DTG • In case of pregnant woman also has TB, may consider increasing the dose of DTG to 50 mg twice a day (second trimester onwards)	▪ Risk of nephrotoxicity with use of TDF ▪ Limited data available on potential maternal and infant bone toxicity with use of TDF ▪ Potential risk (current data suggest the risk to be around 0.19%) for neural tube defects with use of DTG in the first month of pregnancy. The risk is minimal while benefits of DTG are immense, so women should be counselled and given an informed choice.
TDF + 3T C + EFV (FDC)	Evening: 1 tablet of TDF 300 mg + 3TC 300 mg + EFV 400 mg daily (New recommendations)	• Given as once-daily regimen in a FDC • Effective contraception after delivery is required to prevent (subsequent) pregnancy with use of EFV • EFV use is recommended for women presenting with TB • TDF + 3TC (or FTC) use is recommended for women with HBV infection requiring HBV treatment	▪ Risk of nephrotoxicity with use of TDF ▪ Limited data available on potential maternal and infant bone toxicity with use of TDF ▪ Potential risk (probably <1%) of neural tube defect with use of EFV in first month of pregnancy (before 6 weeks gestation)
TDF + 3TC + NVP (alternate)	Evening: 1 tablet of TDF + 3TC (300 + 300 mg) and NVP 200 mg in the morning once a day for 14 days (lead in dose); then increase to twice a day NVP 200 mg	• FDC available for TDF + 3TC and is once a day dose • NVP is used as lead in dose of 200 mg once a day for 14 days, and if no adverse effect occurs the dose to be increased to 200 mg twice a day	▪ Adverse effect with TDF is as above ▪ NVP is perhaps the safest drug in pregnancy without any significant effect on fetus, however, serious rashes and hepatotoxicity is noted in pregnancy
AZT + 3TC + EFV or NVP (alternate)	AZT 150 mg + 3TC 150 mg twice a day and EFV 400 mg once a day or NVP 200 mg in the morning once a day for 14 days (lead in dose); then increase to twice a day NVP 200 mg	• 2 pills to be taken. Only used when TDF is contraindicated • NVP is used as lead in dose of 200 mg once a day for 14 days, and if no adverse effect occurs the dose to be increased to 200 mg twice a day	▪ In cases where, TDF is contraindicated due to renal

Annex 3. Protocol of laboratory monitoring for pregnant women receiving ART or ARV prophylaxis

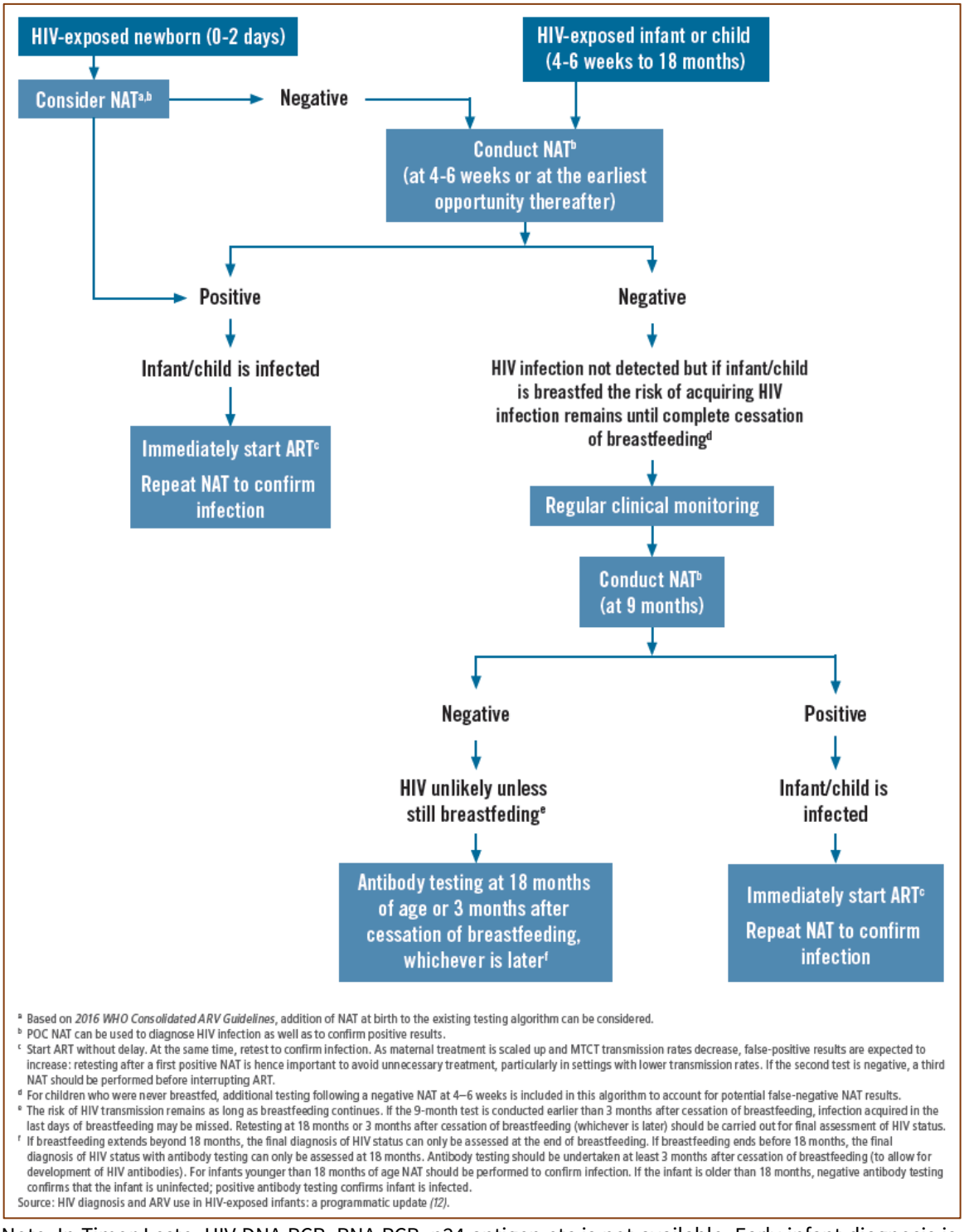
Sl. No.	Drug/situation	Lab tests	Periodicity	Remarks
1	For all PLHIVs on ART	CD4	Baseline and every 6 months	Absolute CD4 cell count decreases during pregnancy because of pregnancy-related haemodilution; after delivery, body-fluid changes normalize to the non-pregnant state, and CD4 levels may rise by 50–100 cells/mm^3. A decrease in the absolute CD4 count of a pregnant woman from her CD4 values before pregnancy should therefore be interpreted with caution
2	For all PLHIVs on ART	HIV VL	Baseline and every 6 months	No effect of pregnancy
3	AZT	Hb	Baseline. Symptom-directed	Patients with low body weight and/or low CD4 cell counts are at greater risk of anaemia. These patients should have routine Hb monitoring 1 month after initiating AZT and then at least every 3 months. AZT should not be given if Hb is <7 g/dL
4	TDF	Creatinine clearance	If feasible, before initiation and every 6 months	The inability to perform creatinine clearance is not a barrier to TDF use. Creatinine clearance monitoring is recommended in those with underlying renal disease, of older age groups, and with low body weight or other renal risk factors such as diabetes or hypertension. Creatinine clearance should be monitored more closely when TDF is used with a PI/r. Wherever not feasible, it should be symptom directed
5	NVP/EFV	Hepatic enzymes	Symptom-directed	Symptom-directed monitoring means ordering tests only when the care provider recognizes signs and symptoms of potential ART-related toxicity
6	DTG	Hepatic enzymes	Weeks 2, 4 and 12 after initiation, if feasible	Symptoms directed monitoring
7	HIV/HBV or HIV/HCV coinfection	Hepatic enzymes	Weeks 4 and 12 following ART initiation, if feasible	Wherever not feasible, it should be symptom directed

Annex 4.Recommended ART regimen for HIV-infected pregnant women who require treatment and have prior exposure to ARV for MTCT

Previous ARV exposure	ART regimen recommended
Single dose NVP or NVP in combination with other drugs without an NRTI tail during discontinuation within 12 months of starting treatment	Non-NNRTI-based ART regimen (e.g., a LPV/r-based regimen or DTG-based regimen*)
Single dose NVP alone or in combination with other drugs, but with an NRTI tail within 12 months of starting treatment	Standard NNRTI-based regimen or DTG-based regimen**
Single dose NVP alone or in combination with other drugs more than 12 months of starting treatment	Standard NNRTI-based regimen or DTG-based regimen**
All triple ARV regimen irrespective of duration of exposure and time since exposure	Initiate NNRTI-based regimen or DTG-based regimen***

* If a non-NNRTI-based regimen is not available, an NNRTI-based regimen may be started, but it is recommended that VL testing (if available) be performed after 6 months of ART and, if the VL is greater than 1000 copies/mLa switch to a boosted PI regimen (e.g., LPV/r) is recommended.
** VL testing is recommended after 6 months of ART and, if the VL is greater than 1000 copies/mLa switch to a boosted PI regimen (e.g., LPV/r) is recommended.
*** If earlier triple ARV regimen was NNRTI-based and was stopped without administration of an NRTI tail, check VL at 6 months, if available, and if >1000 copies/mL, switch to second-line ART with PI.

Annex 5. HIV infant diagnostic algorithm



[a] Based on *2016 WHO Consolidated ARV Guidelines*, addition of NAT at birth to the existing testing algorithm can be considered.
[b] POC NAT can be used to diagnose HIV infection as well as to confirm positive results.
[c] Start ART without delay. At the same time, retest to confirm infection. As maternal treatment is scaled up and MTCT transmission rates decrease, false-positive results are expected to increase: retesting after a first positive NAT is hence important to avoid unnecessary treatment, particularly in settings with lower transmission rates. If the second test is negative, a third NAT should be performed before interrupting ART.
[d] For children who were never breastfed, additional testing following a negative NAT at 4–6 weeks is included in this algorithm to account for potential false-negative NAT results.
[e] The risk of HIV transmission remains as long as breastfeeding continues. If the 9-month test is conducted earlier than 3 months after cessation of breastfeeding, infection acquired in the last days of breastfeeding may be missed. Retesting at 18 months or 3 months after cessation of breastfeeding (whichever is later) should be carried out for final assessment of HIV status.
[f] If breastfeeding extends beyond 18 months, the final diagnosis of HIV status can only be assessed at the end of breastfeeding. If breastfeeding ends before 18 months, the final diagnosis of HIV status with antibody testing can only be assessed at 18 months. Antibody testing should be undertaken at least 3 months after cessation of breastfeeding (to allow for development of HIV antibodies). For infants younger than 18 months of age NAT should be performed to confirm infection. If the infant is older than 18 months, negative antibody testing confirms that the infant is uninfected; positive antibody testing confirms infant is infected.
Source: HIV diagnosis and ARV use in HIV-exposed infants: a programmatic update *(12)*.

Note: In Timor-Leste, HIV DNA PCR, RNA PCR, p24 antigen etc is not available. Early infant diagnosis is based on GeneXpert® HIV QUAL positivity.

Annex 6. Roles and responsibilities of health care workers involved in EMTCT

Midwife:

- Provide pre-test information/counselling to all pregnant women coming for the first ANC visit or in follow-up visits if this information was not provided earlier
- Maintain the ANC register and fill ANC card
- Guide the pregnant woman to testing. In places where lab is far away, collect blood samples and transport the same to the lab
- Provide post-test counselling as per protocol
- For those with a positive test result, maintain exclusive cards and registers as indicated
- Counselling HIV-infected pregnant women and mothers for testing partners and children
- Pre- and post-test counselling for partners and children and refer those infected with HIV for ART
- Work in collaboration with the doctor/nurse of ANC unit and doctor/counsellor of ART unit to provide care for HIV-infected pregnant women
- Ensure that all HIV-infected pregnant women have received their CD4 count and clinical assessment for ART, and if not follow-up the same with the doctor
- Follow-up with doctor and ensure that all HIV-infected pregnant women who need ART for their own health receive it and those who do not need ART for their own health receive ARV prophylaxis
- Along with doctor and counsellor ensure that the HIV-infected pregnant women/mother on ART come to the clinic for follow-up every month. If the HIV-infected pregnant women or mother does not come for follow-up coordinate with the counsellor or SISCa to trace them
- Review adherence to drugs and improve it if found to be low during monthly visits
- Ensure that the HIV-infected pregnant woman is evaluated clinically and observed for side- effects to drugs by the doctor during every follow-up visit
- Provide counselling on adherence, EMTCT, family planning, infant feeding and other relevant aspects
- Maintain case records and registers for all HIV-infected pregnant women
- Ensure that all HIV-exposed infants and children receive the following care from the doctor providing care for infants and children:
    - are initiated ARV prophylaxis (ePNP) as early as possible (preferably within 6 hours)
    - are given co-trimoxazole prophylaxis from the age of 6 weeks onwards until diagnosed HIV-uninfected
    - are tested at 6 weeks or sooner afterwards by collecting dried blood spot sample and sent to national laboratory
    - are tested using antibody tests as per protocol
    - are monitored clinically for signs and symptoms suggestive of HIV infection
- Ensure that all HIV-infected infants and children less than 2 years receive ART
- Maintain case records and registers for all HIV-exposed infants and children
- With help from the counsellor (if available) should compile the data on a monthly basis in the reporting form and send it to the national programme officers for HIV and MCH, and regional coordinator after being verified by the doctor of maternity unit
- Maintain the stock of kits, drugs and consumables and ensure the availability of the same in ANC OPD and labour ward
- Provide the forecast of kits, drugs and consumables.

Counsellor:

In places where midwife is not able to provide PMTCT services, the counsellor would perform the components listed under the roles of midwife.

Doctor of maternity unit:

- Monitor and guide the midwife and counsellor to provide pre- and post-test counselling as per the guidelines
- With technical inputs from the doctor of the ART centre:
  - do clinical evaluation of all HIV-infected pregnant women
  - recommend CD4 for all and any other investigations as needed to ascertain clinical state of HIV illness
  - initiate ART for those pregnant women who need it for their own health
- Review adherence to drugs and improve if is found to be poor
- Evaluate clinically during monthly visit and observe for side-effects to drugs
- Ensure that lost to follow-up are traced by midwife and counsellor
- Supervise the roles of midwife, nurse and counsellor and ensure that their duties as listed are performed
- Monitor the implementation and quality of EMTCT services provided in the hospital on a daily basis
- Guide the midwife/counsellor for providing the forecast of drugs, kits and consumables
- Review and verify the accuracy of monthly reports compiled by the midwife/counsellor.

Doctor of labour ward and postnatal care:

- Verify the records of all women coming to deliver and look for previous HIV test. If not done, ensure that test is done immediately by the nurse or the midwife with pre- and post-test as may be appropriate based on the condition of the pregnant woman
- If already diagnosed and on ART, ensure that the woman continues the same without interruption
- If the HIV-infected mother is diagnosed of having HIV during the time of delivery or immediately after delivery, the doctor with technical inputs from ART medical officer should initiate ARV prophylaxis immediately and evaluate for the need of ART
- Ensure that case records and registers for all HIV-infected pregnant women are maintained
- Deliver all HIV-infected pregnant women along with HIV-uninfected pregnant women adhering to universal precautions as recommended for all deliveries
- Ensure that ARV prophylaxis for all exposed infants is initiated within 6 hours of delivery
- Oversee the maintenance of the stock of drugs, kits and consumables in the labour ward.

Nurse/midwife in labour ward:

- Provide pre-test information/counselling to all pregnant women coming for delivery and postpartum if HIV test was not done earlier in pregnancy
- Maintain register and fill appropriately in ANC card
- Collect blood samples and transport the same to the lab
- Provide post-test counselling as per protocol
- Ensure that all HIV-infected women receive ART or ARV prophylaxis without interruption during delivery
- Ensure that ARV prophylaxis is initiated by doctor for all HIV-infected pregnant women who are previously not on ART or ARV prophylaxis
- Ensure that delivery is conducted as for HIV non-infected women with universal precautions and all exposed children receive ARV prophylaxis within 6 hours of birth and continued till 6 weeks
- Maintain stock of drugs, kits and consumables in the labour ward.

Lab technician:

- Collect blood sample for HIV test. Process the blood sample.
- Fill the report and deliver it to midwife/counsellor. Maintain register for stock of kits, test results and external quality assurance system

- Collect the sample for HIV VL/CD4 testing and send it as per the guidelines for transport of samples to the national hospital. Perform other investigations as recommended by the doctor.

Pharmacist:

- Dispense drugs
- Ensure adherence by reinforcing messages and wherever possible through a pill count
- Support midwife in reporting on drug stock
- Maintain supply and support in forecast for drugs required in the centre.

Doctor providing care for infants and children:

- Initiate ARV prophylaxis for all HIV-exposed children as early as possible (preferably within 6 hours)
- Provide co-trimoxazole prophylaxis for all exposed infants from the age of 6 weeks onwards until diagnosed HIV-uninfected
- Dried blood spot sample collected and sent to national laboratory for all HIV-exposed infants and children aged 6 weeks and above
- Recommend antibody tests for HIV-exposed infants and children as per protocol
- Initiate ART for all HIV-infected infants and children less than 2 years
- Monitor the clinical progress of all HIV-exposed infants and children
- Maintain case records and registers for all HIV-exposed infants and children.

Director – Clinical services of the hospital:

- Review the performance of PMTCT services of the hospital on a monthly basis
- Provide support to the programme (infrastructural, administrative and technical).

Regional coordinator:

- Monitor the progress through monthly review of reports and by visiting the centres at least once in 3 months.

Master trainers:

- Train all staff involved in EMTCT programme as and when required by the programme
- Provide onsite mentoring for each centre at least once in 6 months to start with and once in a year after the performance of the centre has improved.

National programme officer for EMTCT:

- Monitor the progress of the centres by review of data on a monthly basis, conducting review meetings once in 3 months and by visiting each centre at least once in a year (or once in 2 years)
- Ensure that:
    - All new staff (midwife; nurse and doctor providing antenatal, natal and postnatal care; doctor providing paediatric care; doctor providing ART; counsellor; lab technician) should be trained using the induction training manual for PMTCT
    - All staff should receive refresher training at least once in a year
    - Master trainers receive updates on recent technical and programmatic developments
- Training curriculum, policy and guidelines are revised periodically to suit the needs of the programme preferably based on a needs assessment
- Prepare national forecast based on forecast from centres
- Procure kits and drugs and supply them to the centres.

Annex 7. Registers and cards for EMTCT

- Register for all pregnant women coming for ANC care. The existing ANC register should be used with the following modification:
    - In the existing ANC register the column no. 12 needs to be split into two. The upper half will be for Hb and the lower half for Albumin urine. The column 13 should be divided into two and the upper half for HIV report and the lower half for post-test counselling. As per policy on performing routine tests for syphilis, HBV and malaria for all pregnant women, the results related to these tests are recorded in register
      If the pregnant women are found to be HIV-infected, their details should be transferred from the ANC register for all pregnant women to the register for HIV-infected pregnant women; if found positive for syphilis should be reported in the STI register and if positive for Hepatitis B should be reported in Hepatitis B register.

- Register for all HIV-infected pregnant women: The details of HIV-infected pregnant women should be entered in this register.

Cohort data on maternal health and delivery for HIV-infected women

Tinan: Munisipiu: Subdistrito: Suco: Aldeia: Fasilidade Saude:

No Regitstu	Naran	Hela Fatin	Tinan	GPA	Data Fase Ikus	Visita Ante Natal																															
						Visita Priemiru (V1 = K1)											14-week visit		16-week visit	20 weeks visit	Visita Segundu (V2 = K2): 24 weeks					28-week visit	Visita terceiru (V3 = K3): 32 weeks					Visita Quartu (V4 = K4): 36 weeks					
					Kalkulasaun Partus	Data	Todan Hira	LILA <23.5 cm	Hb <11 gr%	HIV report	HIV VL/CD4 count	Lab	Altura Fundu Uteru	TT#	Identifika Fator Risku Seluk	Seluk (including OI)	Data	HIV status of partner	Data	Data	Data	Todan Hira	Altura FunduUteru	Fe 30 tab	Seluk/TT#/details of stopping or changing ART/ARV regimen	Data	Data	Todan Hira	Altura FunduUteru	Fe 30 tab	Seluk/TT#/details of stopping or changing ART regimen	Data	Todan Hira	Hb <11 g%	Altura FunduUteru	Fe 30 tab	Seluk/TT#/details of stopping or changing ART regimen
						Isin Rua<2 th	Altura <145 cm	Tensi	Fe 30 tab	Post-test counseling given (Date)	WHO stage (Presiza)	Albumin urine	Semana	Muskiteru			ART started: 1.ART registration no.; 2. ART	HIV status of children	ART/ARV drugs: 1.Continued; 2.Stopped; 3.Started; 4.Changed	ART/ARV drugs: 1.Continued; 2.Stopped; 3.Started; 4.Changed	ART/ARV drugs: 1.Continued; 2.Stopped; 3.Started; 4.Changed	Tensi	Semana	Albendazole 400 mg		ART/ARV drugs: 1.Continued; 2.Stopped; 3.Started; 4.Changed	ART/ARV drugs: 1.Continued; 2.Stopped; 3.Started; 4.Changed	Tensi	Semana			ART/ARV drugs: 1.Continued; 2.Stopped; 3.Started; 4.Changed	Tensi	Albumin Urine	Semana		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38

Depois de partu and Child care up to 18 months	Visita Segundu	Breastfeeding: 1.yes, 2.stopped<6 weeks ago	ART/ARV for mother: 1.Continued; 2.Stopped; 3.Started; 4.Changed (mention reason for	70					
		Fo konselhu ba PF depois de partu	Bebe nia todan	69					
		Fokonselhosusubenesklusivu	Counseling on cotrimoxazole prophylaxis & HIV testing at 6 weeks	68					
		Vit A bainan	Fe 90	67					
		Lochia la normal	Altura Fundu Uteru	66					
		Data	Tensi inan	65					
	Especial ba imunization	Data OPV zero durante semana rua depois moris	Data fo BCG depois mois	64					
	Visita Primeiru	Seluk (Moras / Sinal perigu / refere		63					
		Te la normal	Clinical signs & symptoms of HIV in child - Yes / No (Specify WHO stage)	62					
		NVP prophylaxis continued for child - Yes / No (Specify reason for stopping)	ART/ARV for mother: 1.Continued; 2.Stopped; 3.Started; 4.Changed (mention reason for change / stopping)	61					
		Fokonselhosusubenesklusivu	Counseling on cotrimoxazole prophylaxis & HIV testing at 6 weeks	60					
		Bebeniatodan	Fosusubeninanniance duhosusesu	59					
		Vit A bainan	Fe 90	58					
		Altura FunduUteru	Hemorajia / lochia la normal	57					
		Data	Tensiinan	56					
Partus	Kondisaun bebe iha	Refere		55					
		Seluk/sinalperigu		54					
		Salpmatan	Vit K1	53					
		AZT+NVP prophylaxis initiated	AZT+NVP initiated after birth? Time?	52					
				51					
	Kondisaun bebe nian	Fosusubeninanniansed uhosucesu		50					
		Sekau	Bebeniantodan						
		Mate ihakabunlaran	Morismaihafoinmata	49					
		Aspexia		48					
	Ema nebe ajuda partu	Hosp Refera (data, horas, etc)		47					
		Naran parteira		46					
	Kondisaun	Data horas Inan mate ho kausa		45					
		ART/ARV drugs: 1.Continued; 2.Stopped; 3.Started; 4.Changed (mention reason for change /topping)		44					
		Komplikasaun E-eklansia, H-hemorajia, P-prolongadu, etc	M-manual / digital placenta	43					
		Posisaun bebe	Kaduak	42					
			Normal / Kldung	41					
	Fatin, loron, horas partu	Fatin Partu (Uma/FS)	Data/horas partu	40					
Visita Seluk (data, Moras, etc)				39					

Depois de partu and Childcare up to 18 months	Visit at 18 months	Others (ART for child, etc)		97
		Breastfeeding: 1.yes, 2.stopped<6 weks ago, 3.stopped >6 wks ago	ART/ARV for mother: 1.Continued; 2.Stopped; 3.Changed (mention reason for change / stopping)	96
		Cotrimoxzole prophylaxis continued - Yes / No	Clinical signs & symptoms of HIV infection - Yes / No (Specify WHO stage)	95
		Data	HIV antibody test result	94
	Visit at 10 months if DNA PCR done at 9 months, if not visit at 12 months	Breastfeeding: 1.yes, 2.stopped<6 weks ago, 3.stopped >6 wks ago	ART/ARV for mother: 1.Continued; 2.Stopped; 3.Changed (mention reason for	93
		Cotrimoxzole prophylaxis continued - Yes / No (Specify reason to stop)	Clinical signs & symptoms of HIV infection - Yes / No (Specify WHO stage)	92
		Data	DNA PCR test report	91
	Visit at 9 months	Others (ART for child, etc)		90
		Breastfeeding: 1.yes, 2.stopped<6 weks ago, 3.stopped >6 wks ago	ART/ARV for mother: 1.Continued; 2.Stopped; 3.Changed (mention reason for	89
		HIV antibody test result	HIV test for DNA PCR sample sent - Yes / No	88
		Cotrimoxzole prophylaxis continued - Yes / No (Specify reason to stop)	Clinical signs & symptoms of HIV infection - Yes / No (Specify WHO stage)	87
		Data	Immunization at 9 months	86
	Visit at 14 weeks	If DNA PCR not done previously mention if sample sent now	Others (ART for child)	85
		Breastfeeding: 1.yes, 2.stopped<6 weks ago, 3.stopped >6 wks ago	ART/ARV for mother: 1.Continued; 2.Stopped; 3.Started; 4.Changed (mention reason for change / stopping)	84
		Cotrimoxzole prophylaxis continued - Yes / No (Specify reason to stop)	Clinical signs & symptoms of HIV infection - Yes / No (Specify WHO stage)	83
		Data	Immunization at 14 weeks	82
	Visit at 10 Weeks	ART initiated for child - Yes / No with ART registration no.	DNA PCR test result (If not done previously mention if sample sent now)	81
		Breastfeeding: 1.yes, 2.stopped<6 weks ago, 3.stopped >6 wks ago	ART/ARV for mother: 1.Continued; 2.Stopped; 3.Started; 4.Changed (mention	80
		Cotrimoxzole prophylaxis continued - Yes / No (Specify reason to stop)	Clinical signs & symptoms of HIV infection - Yes / No (Specify WHO stage)	79
		Data	Immunization at 10 weeks	78
	Visita Terseiru (PN3/KN3 loron: 6 weeks after delivery)	Seluk (Moras/Sinal perigu/refere, etc	NVP prophylaxis stopped for child	77
		Breastfeeding: 1.yes, 2.stopped<6 weks ago, 3.stopped >6 wks ago	ART/ARV for mother: 1.Continued; 2.Stopped; 3.Started; 4.Changed (mention reason for change / stopping)	76
		DNA PCR sample collected	CTZ prophylaxis initiated	75
		Pre-test counselling for DNA PCR test	Clinical signs & symptoms of HIV infection - Yes / No (Specify WHO stage)	74
		Konselho susu ben esklusivu	Conselho ba PF depois de partu	73
		Data	Immunization at 6 weeks	72
			NVP prophylaxis continued for child - Yes / No (Specify reason for stopping)	71

ANC card: The following changes need to be made to the ANC card to facilitate implementation of PMTCT services

For all pregnant women: In the existing card the following HIV information is recorded		
Page	**Location in page**	**Content to add**
3	Above Abortu	History of HIV infection/syphilis/ hepatitis B in self or partner
4	Below Sinalanemis	HIV/syphilis/hepatitis B test result
21	Add either one of the information in the pictorial messages	Test for HIV, syphilis and hepatitis B to have a healthy baby
		Knowing your HIV/syphilis/ hepatitis B status is important for preventing these infections in the newborn as well as for your health. Healthy Mother and Healthy Child
If a PW is tested positive, change her ANC card to the one that is specific for HIV-infected pregnant women –the following modifications are available.		
Page	**Location in page**	**Content to add/change**
3	Above Abortu	History of HIV infection in spouse and children
		History of opportunistic infections or other signs and symptoms of HIV
		History of ART or ARV prophylaxis during previous pregnancies
4	Below Sinalanemia	HIV test result
		HIV VL and CD4 cell count
		Liver function tests
		Renal function tests
		WHO staging
5 & 6	Within the bracket in column 3	Opportunistic infections
	In column 4	(Counselling on adherence, Infant feeding, regular follow-up, institutional delivery, etc.)
	In column 5	(ART/Cotrimoxazole prophylaxis)
	In column 1	(Mention date of next visit)
7	Above DadusKuidadus….	ART given to mother
		AZT+ NVP prophylaxis provided (Time after birth)
	In the table under DadusKuidadus…	AZT+ NVP Prophylaxis continued for 6 weeks and then NVP for another 6 weeks

8	In the table under DadusKuidadus…	ART continued for mother
	In between pages 8 and 9	An additional page to accommodate the following table

Care for HIV-exposed child from 6 weeks to 18 months

	6 weeks	10 weeks	14 weeks	9 months	10 months	18 months	Other visits (week/month)		
Date									
DNA PCR sample collection for child									
DNA PCR result for child									
CTZ prophylaxis for child									
Breastfeeding status (Continued; stopped <6 weeks ago; stopped >6 weeks ago)									
ART(continued/ stopped/ changed)									
HIV antibody test for child									
WHO stage									
Initiation of ART for HIV-infected infants and children									

	On the back side of the page with the table above add the table below:

Minimum components of care for HIV-exposed infants and children aged 6 weeks to 18 months

	6 weeks	10 weeks	14 weeks	9 months	10 months	18 months

	DNA PCR sample collection for child	X			X - if HIV antibody test is positive		
	DNA PCR result for child		X			X - if DNA PCR done at 9 months	
	CTZ prophylaxis for child	Initiated	Continued until confirmed negative and breastfeeding had stopped > 6 weeks prior to the test				
	Breastfeeding status (Continued; stopped <6 weeks ago; stopped >6 weeks ago)	X	X	X	X	X	X
	ART(continued/ stopped/changed)	ART must be continued for lifelong. The reason for stopping or changing should be noted in the column for treatment under Lamentasaun					
	HIV antibody test for child				X		X
	WHO stage	X	X	X	X	X	X
	Initiation of ART for HIV-infected infants and children	ART should be initiated for all HIV-infected infants and children below the age of 2 years as soon as diagnosed					

9	Within the bracket in column 3	Opportunistic infections
	In column 4	(Counselling on adherence, infant feeding, regular follow up, institutional delivery, etc.)
	In column 5	(ART/ARV prophylaxis/Cotrimoxazole prophylaxis: - initiated, continued, stopped, changed)
	In column 1	(Mention date of next visit)
22 & 23	In between pages 22 and23	Add: pictorial communication messages on EMTCT on one side and information on the other side. The contents of the messages are as follows:
	Knowing your HIV/syphilis/ hepatitis B status is important for preventing these infections in the newborn as well as for your health. Healthy mother and healthy child	
	You can know if you are infected with HIV, syphilis and hepatitis B through simple blood tests that are available in CHCs and Hospitals	

	If you are HIV-infected and pregnant it is possible that the child can become HIV-infected
	It is possible to prevent transmission of HIV from pregnant mother to child. This can be done by taking medicines during pregnancy, delivery and breastfeeding. The medicines should be taken without skipping even one dose
	These medicines are available in CHCs and hospitals
	If HIV-infected, it is important to get yourself checked for the need of treatment for HIV (ART). This will not only prevent the transmission of HIV to your child but will also help you lead a healthy life. These drugs have shown to reduce mortality during pregnancy
	If you are HIV-infected get your sex partner and children tested for HIV. Knowing their status is important for their health and survival
	If you are HIV-infected use condoms every time you have sex. This will prevent you from getting STI, other strains of HIV as well as transmitting to others
	The best food for the infant during the first 6 months of life is breastmilk even if you are HIV-infected. Taking medicines to prevent transmission of HIV during breastfeeding period will prevent transmission of HIV to the child
	Breast milk can be continued from 6 to 12 months along with local supplementary food
	If the child is HIV-infected, breastmilk can be continued till 2 years
	All HIV-exposed children should be tested for HIV at 6 weeks, 9 months and 18 months after birth
	Bring the child for regular check as advised by the health care provider. This will help in early diagnosis of HIV and early treatment. Diagnosing HIV before 2 years of age and treating immediately can save your child's life

Annex 8. Revised reporting format for EMTCT (HIV/AIDS)

Name of the centre: **District:**

Name of the medical officer in-charge: **Month of reporting:**

Date of report submission: **Year:**

Sl. No.	Programme data reporting:	PW coming for ANC visit	Women coming in directly for labour or immediately after delivery without a prior HIV test
1	Total no. of women attending the services		
2	No. of women tested for HIV		
3	No. tested positive for HIV		
4	No. of HIV negative women receiving post-test counselling		
5	No. of HIV-infected women receiving post-test counselling		
6	No. of HIV-infected women with CD4 < 350		
7	No. of HIV-infected PW with CD4 > 350 and		
8	No. of HIV-infected pregnant women started on ART		
9	No. of HIV-infected PW started on ARV prophylaxis		
10	No. of HIV-infected PW expected to deliver this month		
11	No. of HIV-infected PW delivered		
12	No. of HIV-exposed children born		
13	No. of HIV-exposed children given ARV prophylaxis		
14	No. of HIV-exposed infants started CTZ at 6 weeks		
15	No. of samples from HIV-exposed infants sent for DNA PCR		
16	No. of DNA PCR positive reports		
17	No. of HIV-exposed infants and children without a DNA PCR, but with clinical signs and symptoms of HIV		
18	No. of HIV-infected children started ART		
19	No. of HIV-exposed infants tested at 9 months using antibody tests		
20	No. of positive reports of testing at 9 months		
21	No. of DNA PCR samples sent at 9 months		

22	No. of DNA PCR positive samples at 9 months	
23	No. of HIV-exposed children tested at 18 months	
24	No. of positive reports for testing at 18 months	
25	No. of HIV-infected pregnant women who are on ART	

Sl. No.	Drug/test kit stock reporting: name of drug/test kit	No. of tablets / syrups/ test kit in the beginning of the month	No. of tablets /syrups/test kit in the end of the month	No. of tablets /syrups/test kit with expiry date ≤ 3 months	No. of tablets/ syrups/ test kit that have expired	No. of tablets/ syrups/ test kit received	Excess no. of tablets/ syrups/ test kit needed for next 3months
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Sl. No.	Reporting on staff status:	Categories (Doctor, midwife, nurse, counsellor, others)	Category wise no.
1	New staff joined the programme		

2	Staff who have not received EMTCT training in the past		
3	Old staff left the programme		
4	Vacancies as of end of the month		
5	Participated in training		

Sl. No.	**Visits:**	Yes/ No	Date:	Name of the person
1	Mentoring visits			
2	Monitoring visit by RC			
3	Monitoring visit by national programme officer			

Sl. No.	**Miscellaneous:**	Availability	Additional required for the next 3 months
1	Registers for HIV-infected PW		
2	Stock register		
3	ANC card for HIV-infected PW		
4	Communication materials		
5	Others:		

Cohort of expected deliveries (ED) (Filled in March, June, September and December reports only; Q 1 represents the quarter following the reporting month; enter the months of the quarter and the year below the quarters)

	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
Months:										
Year:										
ED:									.	

Annex 9. Indicators for monitoring EMTCT programme and minimum standards of care (HIV/AIDS)

Indicators	Means of verification	Remarks	Minimum standards
Outcome			
Proportion of HIV-infected pregnant women who receive complete course of ART	Numerator: No. of HIV-infected pregnant women who received complete course of ART or ARV prophylaxis until one week after complete cessation of breastfeeding (reports) Denominator: number of estimated HIV-infected mothers stopping breastfeeding (estimate)	Periodicity: once in a year Follow up: by regional coordinator and national programme officer for each district	Based on the targets for the year. *80%*, *85%, 90%, 95% and 100%* of estimated pregnant women from year 1 to 5 receive a complete course of ART
Output			
Proportion of pregnant women in the community who are tested for HIV	Numerator: No. of pregnant women tested for HIV (ANC register and monthly report) Denominator: estimated no. of pregnant women (estimate)	Periodicity: once in a year Follow up: by RC and NPO (district wise)	Based on the targets for the year. *80%*, *85%, 90%, 95% and 100%*of estimated pregnant women from year 1 to 5 are tested for HIV
Proportion of total pregnant women attending the clinic tested for HIV	Numerator: No. of pregnant women tested for HIV (ANC register, ANC card, monthly report) Denominator: No. of pregnant women attending ANC services in the hospital (report)	Periodicity: once in a month Follow up: by health facility, RC and NPO	*90%* of pregnant women attending the centre tested for HIV
Proportion of pregnant women receiving complete pre-test information	Numerator: No. of pregnant women receiving complete pre-test information (Client exit interview, mystery client) Denominator: No. of pregnant women attending the clinic (report)	Periodicity: once in one or 2 years Follow up: NPO and RC	All pregnant women who are tested for HIV receive complete pre-test information
Proportion of HIV-negative pregnant women receiving complete post-test counselling	Numerator: No. of HIV-negative pregnant women receiving complete post-test counselling (client exit interview, mystery client) Denominator: No. of HIV-negative pregnant women (report)	Periodicity: once in one or 2 years Follow up: NPO and RC	80% of HIV-negative pregnant women receive complete post-test counselling
Proportion of HIV-infected pregnant women receiving	Numerator: No. of HIV-infected pregnant women receiving complete post-test counselling (client exit interview)	Periodicity: once in 1or 2 years Follow up: NPO and RC	All HIV-infected pregnant women receive complete post-test counselling

complete post-test counselling	Denominator: No. of HIV-infected pregnant women		
Proportion of pregnant women receiving HIV-test on the same day	Numerator: No. of pregnant women receiving HIV test result on the same day (observation of client flow, client exit interview) Denominator: Total no. of pregnant women tested	Periodicity: once a month using data from ANC register (follow up: by MO, Director Clinical, RC and NPO); once in 1or 2 years using client exit interview and observation (follow up: NPO and RC)	80% of HIV test results are offered on the same day
Proportion of centres testing HIV through a single window system for HIV and other ANC-related blood tests	Numerator: No. of centres offering HIV test through a single window system for HIV and other ANC-related blood testes (observation of client flow, client exit interviews, mystery client) Denominator: No. of centres offering PMTCT services	Periodicity: once in 1or 2 years Follow up: NPO and RC	90%of centres offer single window system for testing HIV and other ANC-related blood tests
Proportion of HIV-infected pregnant women and mothers who receive CD4 and clinical assessment for the need of ART	Numerator: No. of HIV-infected pregnant women and mothers receiving HIV VL and CD4 and clinical assessment (monthly report, ANC card, ANC register) Denominator: Estimated no. of HIV-infected pregnant women (estimate)	Periodicity: once in a month Follow up: by health facility, RC and NPO (district-wise)	CD4 cell count and clinical assessment done for all HIV-infected pregnant women and mothers
Proportion of HIV-infected pregnant women and mothers in need of ART for their own health who receive ART	Numerator: No. of pregnant women receiving ART (monthly report, ANC card, ANC register) Denominator: No. of pregnant women with either CD4 count ≤ 350 or WHO clinical stage 3 and4 disease (monthly report, ANC card, ANC register)	Periodicity: monthly Follow up: centre, RC and NPO (centre-wise)	ART initiated for all HIV-infected pregnant women and mothers who are in need of ART
Proportion of HIV-infected pregnant women and mothers not in need of ART for their own health who receive ARV prophylaxis	Numerator: No. of HIV-infected pregnant women and mothers receiving ARV prophylaxis (monthly report, ANC card, ANC register) Denominator: No. of HIV-infected pregnant women and mothers not in need of ART for their own health (monthly report, ANC card, ANC register)	Periodicity: monthly Follow up: centre, RC, NPO (centre-wise)	All HIV-infected pregnant women and mothers not in need of ART for their own health receive ARV prophylaxis
Proportion of HIV-exposed infants who receive ARV prophylaxis	Numerator: No. of HIV-exposed infants receiving ARV prophylaxis (monthly report, ANC card, ANC register)	Periodicity: monthly based on monthly report; once in 1or 2	All HIV-exposed infants should receive ARV prophylaxis

	Denominator: No. of HIV-exposed infants born (report, ANC card, ANC register)	years based on card review and register verification Follow up: centre, RC, NPO (centre-wise)	
Proportion of HIV-exposed infants and children who receive cotrimoxazole prophylaxis	Numerator: No. of HIV-exposed children receiving cotrimoxazole prophylaxis (monthly report, ANC card) Denominator: No. of HIV-exposed children (monthly report, ANC card)	Periodicity: monthly; once in 1or 2 years based on card review and register verification Follow up: centre, RC, NPO (centre-wise)	80% of HIV-exposed infants and children should receive cotrimoxazole prophylaxis from 6 weeks onwards
Proportion of HIV-exposed infants and children who are tested for HIV	Numerator: No. of HIV-exposed infants or children tested either by DNA PCR or by antibody test (monthly report, ANC card) Denominator: No. of HIV-exposed infants or children (monthly report)	Periodicity: monthly; once in one or 2 years based on card review and register verification Follow up: centre, RC, NPO (centre wise)	80% of HIV-exposed infants and children are tested using DNA PCR at 6 weeks
Proportion of HIV-infected infants and children (either diagnosed by DNA PCR or clinically) less than 2 years who receive ART	Numerator: No. of HIV-infected infants and children receiving ART (monthly report, ANC card) Denominator: No. of HIV-exposed infants and children either HIV-positive or have clinical signs and symptoms suggestive of HIV infection (monthly report, ANC card)	Periodicity: monthly; once in 1or 2 years based on card review and register verification Follow up: centre, RC, NPO (centre-wise)	All HIV-infected infants and children (either diagnosed by DNA PCR or clinically) less than 2 years receive ART
Proportion of centres that meet the minimum standards of PMTCT services	Numerator: no. of centres that meet minimum standards of PMTCT services (evaluation) Denominator: total no. of PMTCT centres available (can be done on a representative sample for the country)	Periodicity: yearly or once in 2 years Follow up: NPO	80% of centres meet the at least 80% of the minimum standards of care for PMTCT

Process/input indicators	**Means of verification**	**Remarks**
Proportion of mentors/master trainers who are mentoring/training as per the national protocol	Numerator: No. of mentors/master trainers mentoring/training as per the national protocol (assessment) Denominator: Total no. of mentors/trainers available (programme data)	Periodicity: once in a year Follow up: by NPO (RC to be involved after scale up)

Proportion of existing training institutes that train on EMTCT	Numerator: No. of training institutes that train in PMTCT Denominator: No. training institutes in the country	Periodicity: once in a year Follow up: NPO
Proportion of MCH services with antenatal or perinatal or postnatal care also offering EMTCT services	Numerator: No. of centres with PMTCT services (programme data) Denominator: No. of centres in the country (or region) offering antenatal or perinatal or postnatal care (MCH data)	Periodicity: once in a year Follow up: by RC and NPO
Proportion of staff involved in EMTCT who are trained	Numerator: No. of staff trained in PMTCT services (programme data) Denominator: No. of staff involved in PMTCT services (programme data)	Periodicity: 6 monthly Follow up: RC and NPO
Proportion of centres receiving mentoring visits	Numerator: No. of centres receiving mentoring visits as per national protocol (programme data) Denominator: No. of PMTCT centres in the country (programme data)	Periodicity: once in a year Follow up: RC and NPO
Proportion of centres receiving monitoring visits	Numerator: No. of centres receiving monitoring visits as per national protocol (programme data) Denominator: No. of PMTCT centres in the country (programme data)	Periodicity: once in a year Follow up: RC and NPO
Proportion of centres that report on a monthly basis	Numerator: No. of centres reporting on a monthly basis (monthly report) Denominator: No. of centres in the country (programme data)	Periodicity: monthly Follow up: RC and NPO
Proportion of centres having supplies of drugs, kits and consumables	Numerator: No. of centres having supplies of drugs, kits and consumables (monthly report) Denominator: Total no. of centres (programme data)	Periodicity: monthly Follow up: RC and NPO
No. of master trainers available in the country	Total No. of master trainers available in the country (training report)	Periodicity: once in a year Follow up: RC and NPO
No. of mentors providing	Total No. of mentors available in the country	Periodicity: once in a year Follow up: RC and NPO
Proportion of EMTCT centres having the required job aids	Numerator: No. of centres having job aids (evaluation) Denominator: Total no. of centres providing PMTCT services (programme data)	Periodicity: once in a year Follow up: RC and NPO

Annex 10.Tools for evaluation of EMTCT programme

Tool to assess human resources for EMTCT services

Staff availability	Specifications	Mode of verification	Availability	Training received	Knowledge	Remarks
Pre-test information/counselling	MW or nurse or doctor or counsellor available for pre-test counselling	Interviewing staff of hospital and verifying staff registers				
Testing	Lab technician available to do tests for HIV, CD4, haemoglobin, complete blood count, liver function test, etc					
Post-test counselling	MW/nurse/doctor/counsellor available for post-test counselling					
Evaluating client for ART (Follow ART protocol)	Medical officer (MO) to evaluate for ART available in the hospital					
Provision of ART	MO to provide ART					
Provision of ARV prophylaxis for those who do not need ART	MO to provide ARV for those who do not require ART					
Delivery	Doctors, nurses and midwives available for conducting delivery					
Care of exposed children	Doctor or nurse available for care of exposed child					

Tool to assess EMTCT services:

Component	Specifications	Mode of verification	Functioning	Remarks

Pre-test information	The following information is shared with the pregnant woman: Modes of transmission of HIV; How to prevent HIV; Importance of knowing HIV during pregnancy and PMTCT; Consequences of negative test result and positive test result	Observation of sessions, client exit interviews and mystery client assessments		
Testing	Testing is done as per the national protocol	Observation of testing procedures, registers and cross verification with counselling registers and patient records		
Post-test counselling	The following information are shared: For HIV negative PW - remaining negative during pregnancy and prevention messages, family planning options, risk assessment and testing of partner if needed, infant feeding; For HIV positive PW - prevention messages during pregnancy, need for ART and ARV prophylaxis, efficacy of ART and ARV prophylaxis in reducing transmission of HIV to child, adherence to drugs, infant feeding options, care of exposed child	Observation of sessions, client exit interviews and mystery client assessments		
Testing of partners and children	All partners and children of HIV positive PW are encouraged for testing and partners of HIV negative PW, but having risk factors for HIV are encouraged for testing			
CD4 testing and screening for eligibility of ART	All HIV-infected pregnant women identified should be screened for requirement of ART for their own health by CD4 and clinical assessment	Observation of registers and patient records, mystery client		
ART for those who require	All HIV-infected pregnant women with a CD4 cell count of <350 cells/mm^3 (irrespective of clinical stage) or WHO stages 3 and4 (irrespective of CD4 cell count) should be initiated ART for their own health. ART should be initiated as early as possible in pregnancy, preferably by 14 weeks	Observation of registers and patient records		
ARV for those who do not require ART	All pregnant women who do not require ART for their own health should receive triple drug ARV prophylaxis preferably from 14 weeks of pregnancy or else anytime immediately after the diagnosis is made	Observation of registers and patient records		

Delivery	Delivery will follow the standard protocol for normal delivery	Observation of delivery protocols and interviews with health care workers		
ARV prophylaxis for infants	All infants born to HIV-infected pregnant women should receive NVP once daily dose for 6 weeks	Observation of registers and patient records		
Infant feeding	All HIV-infected pregnant women should be encouraged to breastfeed as per the national infant feeding policy, provided they receive ARV prophylaxis	Interviews with health care workers, client exit interviews and patient records		
Cotrimoxazole prophylaxis	All HIV-exposed children should receive daily cotrimoxazole from 6 weeks onwards until proved HIV-uninfected	Observation of registers, patient records and client exit interview		
HIV diagnosis of exposed child at 6 weeks	All HIV-exposed children should be tested for HIV virology at 6 weeks	Observation of registers and patient records		
Diagnosis of exposed child at 18 months	All HIV-exposed children should be tested at 18 months to confirm the status of HIV infection using antibody detection tests			
Initiation of ART for HIV-infected children <2 years	ART should be started for all HIV-infected children less than 2 years immediately after HIV diagnosis is established			
Mentoring visits	The centre has received at least one mentoring visit once in every 3–6 months in the previous year	Interviews with health care workers, mentors, and observation of mentoring reports		
Monitoring visits	The centre has received at least one mentoring visit once in every 3–6 months in the previous year	Interviews with health care workers, supervisor, and observation of monitoring visit reports		
Record maintenance	All the registers are maintained in the centre up to the date of visit	Review of registers and reports		

Client flow	Registration - midwife (some instances the patient may be referred to the counsellor for a pre-test counselling) - lab for testing (in some instances the sample may be sent by the midwife or counsellor) - counsellor (in some places the midwife can do the post-test - ANC medical officer + ART medical officer (if identified HIV-infected) - delivery - paediatrician + ART medical officer (for care of exposed baby)	Observation of client flow, interviews with health care providers and client exit interview		
Others and future support				

Tool to assess infrastructure availability for EMTCT:

Parameter	**Specifications**	**Mode of verification**	**Availability**	**Remarks**
Place for group counselling	Space available for counselling a group of 10 individuals. In places where counselling is done on individual basis the specifications for post-test counselling needs to be followed	Observation during site visit		
Place with privacy for post-test counselling	A minimum of 8 × 8 feet completely covered from all sides including the roof, with a door that can be closed			
Testing facility	Space for laboratory to store kits, collect samples and perform the following tests: HIV, Anaemia, blood count, liver function (CD4 in the national lab)			
Drug storing facility	Exclusive storage space available for PMTCT drugs. A minimum of 2 cubic feet			
Facility for deliveries	Labour ward with facility for conducting deliveries			
Follow-up and postnatal care	OP room for postnatal care			
Care of exposed child	OP room for paediatric care			

Annex 11. Reporting formats to be used for training and mentoring

Formats for reporting on training (to be filled by the lead master trainer after completion of the training and sent to RC and NPO):

Format 1 for reporting on training				
Name of training:			Place of training:	
No. of participants:			Dates of training:	
Name of lead master trainer:				
Sl. No.	**Name of the participant**	**Pre-training score**	**Post-training score**	**Comments**
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Format 2 for reporting on training			
Sl. No.	**Name of master trainer**	**Topics delivered**	**Comments**
1			
2			
3			
4			

5			

Format for evaluation of trainers by participants (to be used by the participants to evaluate the trainers)

Format for evaluating training of master trainers: to be administered in the last day of the training.

Participant Feedback Form – Training of Master trainers

Rating (1-5)*: **1 = Poor, 2 = Less than satisfactory, 3 = Satisfactory, 4 = More than satisfactory, 5 = Excellent**

Venue: **Date:**

Sl. No.	***Statements***	***Rating (1–5)****	***Specific feedback*** *(Both positive and areas for improvements)*
	A. Overall training		
1	Training objectives were clear to me		
2	Training objectives were achieved		
3	Training was participatory		
4	Training time was adequate covering essential content		
5	Training facilities and arrangements were satisfactory		
6	Training addressed my needs of training and support of health care professionals (HCPs)		
	B. Training contents/topics		
7	Contents covered in the training were adequate in achieving the training objectives		
8	Topics of the training followed a logical sequence		
9	Overall, the topics covered during the training were useful for my training and support of HCPs		
	C. Trainers/facilitators		
10	Trainers could adequately explain the topics covered		
11	Trainers provided answers to my questions which are relevant for the topic		
12	Trainers could hold the attention of all participants		
	D. Training materials and methodologies		
13	Overall, the training materials used during the training were useful for my learning the training topics		
14	Overall, the training methodologies used during the training were useful for my learning the training topics		
	E. Application of learning to future work		

Sl. No.	***Statements***	***Rating (1–5)****	***Specific feedback*** *(Both positive and areas for improvements)*
15	I am confident that I shall be able to conduct "class room training" for HCPs		
16	I am confident that I shall be able to conduct "theme meetings" for HCPs		

17. What did you feel was the most useful part of this training and why?

18. What could have been done differently in this training that would better enable you to train/work with HCPs in the future?

Format for evaluating HCP trainings done by trainers: to be administered in the last day of the training**(Training observer/master trainers to send this form along with Training Report to National Programme Officer and Regional Coordinator)**

Rating (1-5)*: **1 = Poor, 2 = Less than satisfactory, 3 = Satisfactory, 4 = More than satisfactory, 5 = Excellent**

For training observer/master trainer to fill:
Name of training_____ Observer/Master trainer's name_____ Training location:_____Date of training_____

For office use at Dili:
Date received for data entry_____ Date entered_____

Sl. No.	**Statements**	**Rating (1–5)**	***Specific feedback*** (Both positive and areas for improvements)
	A. Overall training		
1	Training addressed the issues I wanted to know about		
2	Topics of the training followed a logical sequence		
3	Training was participatory		
4	Training time was adequate covering essential content		
5	Training facilities and arrangements were satisfactory		
6	I will recommend this training to my doctor friends/colleagues		
	B. Trainers/facilitators		
7	Trainers could adequately explain the topics covered		
8	Trainers introduced the checklists properly		
9	Trainers explained the flowcharts properly		
10	Slides were easily read and understood		
11	Trainers provided answers to my questions which are relevant for the topic		

12	Trainers could hold the attention of all participants		
	C. Training aids		
13	The training aids like models and other tools helped in better understanding of the topic		
	D. Training methodology		
14	Overall, the methodology used was effective in understanding the topic		
	E. Application of learning to future work		
15	I am confident that I shall be able to deliver PMTCT services		

16. What did you feel was the most useful part of this training and why?

17. What could have been done differently that would better enable you to effectively implement EMTCT services in the future?

Format to evaluate trainers: to be used by observers. The completed form should be sent to RC and NPO within 15 days of training.

Name of the observer:	Place of training:	Date of training:			
Name of the training:	Actual duration of training:				
	Name of the trainers				
*Arranges logistics and physical facilities to encourage participation					
*Arranges training schedule to assure it adheres to the selected training option (team assessment)					
Presents learning objectives from manual for each session					
*Provides accurate and complete information as given in the manual					
*Uses different aids (as mentioned in the facilitators manual - checklists, slides, flipcharts, handouts, flowcharts, provider manual, cards for games, etc.) correctly and as required					
✓Performs a demonstration properly in the correct sequence covering all the steps					
✓Manages role-play					
*Maintains clear, simple and audible verbal communication					
*Guides discussion by asking questions, paraphrasing, summarizing and encouraging, elicits HCPs' experiences/views and involves all participants					
*Summarizes key points at the end of each session					
As non-lead facilitator, supports lead facilitator to assure active learning among providers					
Number of critical tasks (*) performed satisfactorily					
Other comments (also use this space to specify if the trainer was not able to deliver a particular topic, etc)					
Summary of the participant feedback. Mention the sessions that were not satisfactory					

Instructions for use of the format

1. The rating scale has the following categories:
   Excellent; Above average; Average; Below average; Poor or not done
   Besides the categories mentioned, a separate column for comments is provided
2. This instrument has a total of 12 tasks of which tasks marked with * are critical (7 tasks). The observer should pay particular attention to whether these critical tasks are performed satisfactorily (excellent/above average/average) and provide feedback accordingly
3. The tasks (2 tasks for classroom training) marked with ✓ are to be assessed using the checklists attached for that individual activity
4. In order to assess the performance of a master trainer, it is essential that the observer attend a full session or day
5. Recording of observations must be completed on the spot when the master trainer is being observed
6. The observer should not interfere/intervene in the process being observed unless very sure that an incorrect message is being delivered to the trainees. At that point or at a convenient moment, a non-insulting interruption could be entertained. The observer could pull the master trainer aside and ask him/her to correct the misinformation
7. If any of the listed tasks (e.g., manages role-play, in class room training) are not part of the sessions (as per the manual) taken by a particular master trainer, mention NA (Not Applicable) in the assessment column of such tasks for that master trainer. However, if any master trainer does not do the tasks which are part of his/her sessions (as per the manual), assess as poor for that task
8. Observers using this tool should provide supportive feedback to the master trainers based on the findings recorded in the tool.

Scoring guide for using format to evaluate trainers

Task	How to score?
*Arranges logistics and physical facilities to encourage participation	**Excellent (4):** 1. Enough space for participants and activities, room comfortable, well-ventilated and well-lit in a quiet area 2. Chairs and tables well-arranged so that all participants can see and hear 3. Toilet facilities, drinking water, refreshments available 4. Training manuals, flowcharts, checklists, handouts pre- and post-test forms, participant reaction forms, banner, etc. available 5. LCD projector, laptop, flipcharts, flipchart stand, markers, scotch tape available 6. Cards for card games, torso and penis models, condoms, disposable gloves available in adequate numbers 7. Prepares agenda in advance and makes available to all participants. All the above logistics for learning approaches (role-plays, case studies, situation slips, exercises, etc.) as mentioned in the concerned sessions in the Facilitators' Manual are adequately available in the classroom training. **Above average (3):** Logistics listed in 2, 4, 5, 6 for learning approaches (role-plays, case studies, situation slips, exercises, etc.) as mentioned in the concerned sessions in the Facilitators' Manual adequately available in the classroom training **Average (2):** Logistics listed in 4, 5, 6 for learning approaches (role-plays, case studies, situation slips, exercises, etc.) as mentioned in the concerned sessions in the Facilitators' Manual adequately available in the classroom training **Below average (1):** Logistics listed in only 2 of 4, 5, 6 for learning approaches (role-plays, case studies, situation slips, exercises, etc.) as mentioned in the concerned sessions in the Facilitators' Manual adequately available in the classroom training

	Poor (0): Logistics for learning approaches (role-plays, case studies, situation slips, exercises, etc.) as mentioned in the concerned sessions in the Facilitators' Manual are not available in the classroom training
*Arranges training schedule to assure it adheres to the selected training option (team assessment)	**Excellent (4):** Training schedule contains all the sessions with same sequence and time allocated as mentioned in the concerned option of HCP training **Above average (3):** Training schedule contains 80–90% of sessions with time allocated as mentioned in the concerned option of HCP training **Average (2):** Training schedule contains at least 70–60% of sessions with time allocated as mentioned in the concerned option of HCP training **Below average (1):** Training schedule contains at least 50–40% of sessions with time allocated as mentioned in the concerned option of HCP training **Poor (0):** Training schedule does not include all sessions or does not allocate time for each session as mentioned in the concerned option for HCP training
Presents learning objectives from the manual for each session	**Excellent (4):** At start of each session presents and clarifies the learning objective from manual for session **Above average (3):** Presents learning objectives from the manual, but does not clarify them **Average (2):** Presents learning objectives well into the session and does not clarify them **Below average (1):** Presents learning objective, which does not match with the manual **Poor (0):** Does not present or clarify the learning objectives
*Provides accurate and complete information as given in the manual	**Excellent (4):** Provides accurate and complete information per the facilitators' manual for the concerned option throughout the discussion **Above average (3):** Provides accurate and complete information in most instances and in others could have improved **Average (2):** Provides accurate information in all areas but does not complete/substantiate it with supporting information **Below average (1):** Provides accurate information according to the manual in certain instances only **Poor (0):** Information provided is incomplete and inaccurate in most parts of the discussion
*Uses different aids (as mentioned in the facilitators' manual - checklists, slides, flipcharts, handouts, flowcharts, provider manual, cards for games, etc.) correctly and as required	**Excellent (4):** Paraphrases slides instead of reading projected text/Good flipchart management (writes clearly, captures points well on flipchart, refers back to chart)/refers to checklists as per guidance/guides learners to appropriate section in Provider's Manual to familiarize them with it/has enough cards for participants **Above average (3):** Reads text from the slides, captures points on flipcharts, reads out the checklists and appropriate sections of providers manual, has enough cards for participants **Average (2):** Reads slide text/flipchart management needs improvement (Observer to specify how)/ does not guide learners to checklist or Provider's manual/ mismatches cards, does not have enough at hand, misses important cards **Below average (1):** Does not use effectively the aids mentioned in the facilitators' manual. **Poor (0):** Does not use the aids mentioned in the facilitators' manual
✓Performs a demonstration properly in the	**Excellent (4):** Performs all the steps and scores 80% and above in the demonstration checklist

correct sequence covering all the steps	**Above average (3):**Performs demonstration and scores 60–79% in the demonstration checklist **Average (2):** Performs demonstration and scores 50–59% in the demonstration checklist **Below average (1):** Performs demonstration and scores below 50% in the demonstration checklist **Poor (0): Al**though required in the session, does not perform demonstration
✓Manages role-play	**Excellent (4):** Performs all the steps and scores 80% and above in the role-play checklist **Above average (3):** Manages role-play and scores 60–79% in the role-play checklist **Average (2):** Manages role-play and scores 50–59% in the role-play checklist **Below average (1):** Manages role-play and scores below 50% in the role-play checklist **Poor (0):**Although required in the session, does not conduct role-play
*Maintains clear, simple and audible verbal communication	**Excellent (4):** Uses understandable language in English/local dialect with good voice modulation, articulates clear messages **Above average (3):**Uses understandable language in English/local dialect with voice modulation, but can improve on articulation of messages **Average (2):** Voice modulation and language acceptable, but not impressive; explanation correct, but not well articulated **Below average (1):** Voice too loud/soft, articulation hard to follow for learners; explanation not clear **Poor (0):** Voice inaudible; articulation hard to follow for learners; explanations not given
*Guides discussion by asking questions, paraphrasing, summarizing and encouraging, elicits HCPs' experiences/views and involves all participants	**Excellent (4):** Asks questions, paraphrases and encourages participants appropriately, elicits HCPs' experiences/views, involves all participants, elicits summary from participants **Above average (3):** Quality of questions needs to improve (observer to give specific feedback – e.g., more closed than open questions), elicits HCPs' experiences/views, involves all participants but performs only 2 of remaining 3 facilitation skills – paraphrasing, summarizing and encouraging. Summarizes rather than getting participants to summarize **Average (2):** Elicits HCPs' experiences/views, but could have been improved, involves most participants but not all, performs only 1 of remaining 3 facilitation skills – paraphrasing, summarizing and encouraging **Below average (1):** Does not ask questions to elicits HCPs' experiences/views, let's some participants dominate session, does not actively involve all participants, performs only 1 of remaining 3 facilitation skills – paraphrasing, summarizing and encouraging **Poor (0):** Facilitation skills were not used. Session presented, but no learning facilitated
*Summarizes key points at the end of each session	**Excellent (4):** Key points of the session are highlighted at the end with clear important messages, elicits participants comprehension of take-home messages **Above average (3):** Key points of the session are highlighted at the end with clear important messages eliciting participants' comprehension of take-home messages can be improved **Average (2):** Key points were highlighted, but not all without eliciting participants' comprehension

	Below average (1): Summarization was done but need improvement/no clear messages highlighted/some important messages missed (observer to specify which) **Poor (0):** Summarization was not done
As non-lead facilitator, supports lead facilitator to assure active learning among providers	**Excellent (4):** Co-facilitator was ready with preparation beforehand and helps the lead facilitator in noting down participants' views on flipcharts or facilitating small group work/role-play or distributes materials and helps participants to refer to the correct document. **Above average (3):**Co-facilitator prepares himself at the prompted instance and does his/her role. **Average (2):** Co-facilitator does his/her role, but needs improved coordination between him/her and lead facilitator **Below average (1):** Co-facilitator does not play his/her role properly **Poor (0): Al**though required, co-facilitator does not play any role in the session

Checklist to assess performing a demonstration during classroom training

Name of master trainer being assessed: _____

Assess each action as done very well/satisfactorily; an attempt was made but much improvement needed; not done

Sl. No.	**Action**	**Assessment**	**Comments**
1	Sets up the necessary equipment		
2	Arranges the equipment so that everybody could observe clearly		
3	Organizes participants using the relevant skill checklist/hand-out when observing the demonstration		
4	Arranges demonstration in small groups so all could see		
5	Performs the skill in the correct sequence covering all the steps		
6	Demonstrates slowly, simultaneously explaining all steps		
7	Clarifies steps where mistakes are most likely		
8	After the demonstration, asks the participants verbally repeat the steps in order		
9	Invites questions, gave clear answers, and re-demonstrated if needed		
10	Provides appropriate and supportive feedback		

Checklist to assess management of a role-play during classroom training

Name of master trainer being assessed: _____

Assess each action as done very well/satisfactorily; an attempt was made but much improvement needed; or not done

Sl. No.	Action	Assessment	Comments
1	Explains the situation to be role-played to the players and observers and explains learning objective clearly		
2	Guides observers to refer to checklist		
3	Organizes to ensure that the role-play is seen and heard by everyone		
4	During the role-play takes notes/gives specific (not general feedback), observes learners and role-play		
5	At the end of the role-play, leads a discussion in the group, to elicit the main points learned in the role-play (with a view to achieving the learning objectives)		
6	Provides, or facilitates others to provide supportive feedback		
7	Manages the players and audience during the role-play if they were diverting from the issue		
8	Elicits from the participants a summary of the key points arising from the role-play and discussion		

Format to evaluate mentors: to be used by observers. The completed form should be sent to RC and NPO within 15 days of mentoring visit.

Name of the observer: Place of training: Name of the training: Actual duration of training: Date of training:		
Task	**Assessment**	**Comments**
***** Assesses if the HCP follows EMTCT guidelines, identifies the steps not followed by the and identifies barriers, if any		
* Reviews the monthly reports, registers and records and identifies gaps		
* Assesses if infrastructure is available for EMTCT services meet EMTCT guidelines and identifies barriers		
***** Discusses and suggests options to address the barriers in following EMTCT protocols		
Identifies specific needs of HCPs for future support		
***** Identifies further topics that need to be addressed in refresher training		
***** Provides accurate and complete information as per facilitator's manual and guidelines		
Encourages provider to refer to appropriate section of provider manual and guidelines		
*****Encourages experiential learning (elicits HCPs' experiences and views, and build discussion)		
*Performs a demonstration properly in the correct sequence covering all the steps		

Respects mentee's views and listens actively		
Uses understandable language and promotes interaction		
*Guide discussions by asking questions, paraphrasing, summarizing and encouraging		
* Summarizes key points at the end of session		
*Asks provider if the information shared in this session has been useful and if so how does he perceive applying it		

Instructions for use of the tool

1. The rating scale has the following categories:
   Excellent; Above average; Average; Below average; Poor or not done
   Besides the categories mentioned, a separate column for comments is provided
2. This instrument has a total of 16 tasks of which tasks marked with * are critical (11 tasks). The observer should pay particular attention to whether these critical tasks are performed satisfactorily (excellent/above average/average) and provide feedback accordingly
3. In order to assess the performance of a master trainer, it is essential that the observer attend a full mentoring session
4. Recording of observations must be completed on the spot when the mentor is being observed
5. The observer should not interfere/intervene in the process being observed unless very sure that an incorrect message is being delivered to the mentee. At that point or at a convenient moment, a non-insulting interruption could be entertained. The observer could pull the mentor aside and ask the person to correct the misinformation
6. If the mentor does not do the tasks which are part of mentoring, assess as poor for that task
7. Observers using this tool should provide supportive feedback to the mentor based on the findings recorded in the tool.

Scoring guide for using format to evaluate mentors

Task	How to score?
* Assesses if the HCP follows PMTCT guidelines, identifies the steps not followed by the HCP and identifies barriers, if any	**Excellent (4):**Reviews the services using evaluation tools, identifies the specific areas not followed, and identifies barriers/specific reasons on the part of HCP for following the step/s **Above average (3):** Reviews using evaluation tools and identifies specific areas **Average (2):** Reviews using evaluation tools but does not focus on specific areas, takes a general review **Below average (1):** Just reviews using evaluation tools, no probing **Poor (0):** Does not review using tools or incomplete review
* Reviews the monthly reports, registers and records and identifies gaps	**Excellent (4):** Reviews the reports, registers and records, identifies the specific gaps, and identifies barriers/specific reasons on the part of HCP for improving the gaps **Above average (3):** Reviews reports, registers and records and identifies specific areas

	Average (2): Reviews reports, registers and records but does not focus on specific areas, takes a general review **Below average (1):** Just reviews reports, registers and records, no probing **Poor (0):** Does not review reports, registers and records or incomplete review
* Assesses if infrastructure is available for PMTCT services meet PMTCT guidelines and identifies barriers	**Excellent (4):** Reviews infrastructure using evaluation tools, identifies the specific areas not followed, and identifies barriers/specific reasons on the part of HCP for following the step/s **Above average (3):** Reviews using evaluation tools and identifies specific areas **Average (2):** Reviews using evaluation tools but does not focus on specific areas, takes a general review **Below average (1):** Just reviews using evaluation tools, no probing **Poor (0):** Does not review using tools or incomplete review
***** Discusses and suggests options to address the barriers in following PMTCT protocols	**Excellent (4):** For the identified barrier, gives the rationale for following that step, discusses specific solutions to address the barriers, and encourages to implement solutions **Above average (3):** For the identified barrier, gives the rationale for following that step and discusses general solutions **Average (2):** For the identified barrier, gives the rationale for following that step **Below average (1):** Just discusses barriers with no attempt to work towards solution **Poor (0):** No discussion on barriers
Identifies specific needs of HCPs for future support	**Excellent (4):** Identifies specific needs on the areas discussed, records, prepares plan for next visit **Above average (3):** Identifies specific needs, records **Average (2):** Identifies general needs and records (not specific) **Below average (1):** Identifies general needs **Poor (0):** No need identification
***** Identifies further topics that need to be addressed in refresher training	**Excellent (4):** Identifies specific information needs of HCPs, notes and sends information to supervisor **Above average (3):** Identifies specific information needs of HCPs, notes in the form **Average (2):** Identifies specific information needs of HCP (not general) **Below average (1):** Identifies general information needs (not specific) **Poor (0):** No attempt to discuss specific information needs of HCPs
***** Provides accurate and complete information as per facilitators' manual and guidelines	**Excellent (4):** Provides accurate and complete information as per facilitator's manual and guidelines throughout the discussion **Above average (3):** Provides accurate and complete information in some instances and in others could have improved **Average (2):** Provides accurate information in all areas but does not complete/substantiate it with supporting information **Below average (1):** Provides accurate information according to the manual and guideline in certain instances only **Poor (0):** Information provided is incomplete and inaccurate in most parts of the discussion
Encourages provider to refer to appropriate section of	**Excellent (4):** Provider feels encouraged to refer to the appropriate section in the manual and guideline and understands the relevant take home message from that section

provider manual and guidelines	**Above average (3):** Refers to the manual and guideline, reinforces the relevant section and the HCP is encouraged to read through the relevant section **Average (2):** Refers to the manual and reinforces the relevant section in the manual and the HCP makes an effort to locate the manual and guideline **Below average (1):** Refers to the manual and guideline but the HCP is not inclined or encouraged to locate the manual and guideline **Poor (0):** Does not refer to the manual and guideline
*****Encourages experiential learning (elicits HCPs' experiences and views, and build discussion)	**Excellent (4):** Elicits HCPs' experiences and views, and build discussion **Above average (3):** Elicits HCPs' experiences and views, but does not relate it to the theme for discussion **Average (2):** Elicits HCP's experience, but is not able to facilitate the discussion **Below average (1):** Recounts his/her own experience only related to the theme for discussion **Poor (0):** No discussion about past experiences
*Performs a demonstration properly in the correct sequence covering all the steps	**Excellent (4):** The HCP performs the demonstration/return demonstration from the HCP with clarification on all important steps **Above average (3):** Performs the demonstration completing all the steps and clarifying where mistakes are made **Average (2):** Performs the demonstration covering all the steps hastily **Below average (1):** Performs the demonstration, but misses some steps **Poor (0):** Demonstration was needed, but was not done
Respects mentee's views and listens actively	**Excellent (4):** Respects providers' views, listens actively, encourages the HCP on positive deviations and builds discussion forward **Above average (3):** Facilitates the participation from HCP and listens actively to the providers' views **Average (2):** Has a discussion with the HCP, but contradicts/overrides the HCPs' opinion **Below average (1):** Encourages HCPs' views on discussion points/theme, but HCP is reluctant **Poor (0):** Talks more than the HCP in the discussion – a didactic method of delivering learning
Uses understandable language and promotes interaction	**Excellent (4):** Uses understandable language (in English or local dialect) interspersed with clear messages for the HCP to follow **Above average (3):** Uses local and English dialect to facilitate discussion with clear practical guidance for the HCPs **Average (2):** Technical jargon is frequently used with little practical/realistic messages for the HCP **Below average (1):** Communication is not clear and creates threatening environment to the HCP **Poor (0):** The mentor will need more practice to carry on the discussion in the identified theme
*Guide discussions by asking questions, paraphrasing, summarizing and encouraging	**Excellent (4):** Uses all the facilitation skills to create an informal non-threatening environment for transfer of learning **Above average (3):** Uses some of the facilitation skills effectively for guiding the discussion **Average (2):** Uses all the facilitation skills, but not related to the flow of the discussion

	Below average (1): Uses some of the facilitation skills in between conversations **Poor (0):** Will need a lot of practice in using facilitation skills
* Summarizes key points at the end of session	**Excellent (4):** Elicits HCP's comprehension on the key points for implementation from the discussion with the mentor **Above average (3):** Key take home messages of the discussion are highlighted at the end **Average (2):** Summarization was done, but with some important messages **Below average (1):** Summarization was done, but no clear messages **Poor (0):** Not done
*Asks provider if the information shared in this session has been useful and if so how does he/she perceives applying it	**Excellent (4):** Asks HCP if the information shared in this session has been useful and if so how does he/she perceives applying it **Above average (3):** Asked HCP's opinion on the usefulness of the session, but did not effectively plan for how will the HCP apply **Average (2):** Emphasized the important points on his/her own and not elicited HCP's comprehension **Below average (1):** Cursorily asked on the usefulness of the session **Poor (0):** Not able to do so

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