

# STRATEGIC FRAMEWORK FOR THE ELIMINATION OF NEW HIV INFECTIONS AMONG CHILDREN IN AFRICA BY 2015



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# A GENERATION FREE OF HIV/AIDS



# Executive Summary

In 2009, an estimated 400 000 children were newly infected with HIV, with 90% of infections occurring in children in sub-Saharan Africa through mother-to-child transmission (MTCT). Without any intervention, the risk of MTCT ranges from 20% to 45%; without any treatment, half of the babies will die before their second birthday. About 42 000 to 60 000 of pregnant women die from HIV. In contrast, in high-income countries, the number of new infections among children as well as the number of maternal and child deaths due to HIV are virtually zero.

It is possible to stop new HIV infections among children and keep their mothers alive if pregnant women living with HIV and their children have timely access to quality life-saving antiretroviral drugs for their own health, as indicated, or as prophylaxis to stop HIV transmission during pregnancy, delivery and breastfeeding. When antiretroviral drugs are available as prophylaxis, mother-to-child transmission of HIV can be reduced to less than 5%. There is an urgent call for action by global and regional bodies as well as governments for the elimination of new HIV infections among children by 2015; this includes keeping mothers alive as well as sustaining children who are living with HIV.

With the vision of a generation alive and free of HIV and syphilis, the goal of this African regional framework is to eliminate new HIV infections among children by 2015 and keep their mothers alive. This framework outlines the aim, objectives, targets and priority actions for eliminating new HIV and syphilis infections in children in the African Region by 2015 and keeping their mothers alive. The framework is designed to provide countries in the Region with a systematic approach to the elimination of mother-to-child transmission of HIV (EMTCT) based on country typology (epidemiology and response) and improvement of maternal and child health and survival in the context of HIV/AIDS. The two targets to be achieved by 2015 are to reduce the number of new HIV infections among children by 90% from the 2009 baseline, and to reduce the number of AIDS-related maternal deaths by 50%.

The proposed priority actions for the EMTCT initiative are based on the following seven building blocks for accelerated actions: (i) ensure leadership and country ownership; (ii) improve coverage, access and utilization of services; (iii) strengthen quality of MNCH services to deliver effective PMTCT interventions; (iv) enhance provision of linked services; (v) strengthen human resource capacity, supply chain management and maintain information systems; (vi) improve measurement of performance and impact; and (vii) develop and engage community systems.

Monitoring and evaluation will be in line with the Global Monitoring and Evaluation Framework and Strategy for the Global Plan Towards the elimination of new HIV Infections by 2015. This Strategic Framework also relies on the global, regional and

country milestones of Countdown to Zero: Global Plan towards elimination of new HIV infections among children by 2015 and keeping their mothers alive, 2011–2015. Clear targets, indicators, milestones, roles and responsibilities have been defined with the priority being measurements of progress linked to maternal, newborn and child health.

There is global and regional consensus for elimination of new HIV infections in children and keeping mothers alive, as well as support for linking these efforts with those aimed at eliminating congenital syphilis, given the similar modes of infection transmission and prevention interventions. Countries will require support to implement effective interventions for elimination of MTCT of both HIV and syphilis to ensure universal coverage which is cost-effective and sustainable. It is also vital to have adequate resources, empowerment of communities, and empowerment of women living with HIV to access the HIV prevention, treatment and care that they need for themselves, their children and their families. It is critical to ensure partner involvement while observing and respecting the rights of women living with HIV.

National and global leaders must act in concert to support country-driven efforts, accept joint accountability for delivering results, and ensure integration with other key efforts to improve MNCH services. This framework is a road map for accelerated action to enable each country in this Region, regardless of context or circumstances, to take concrete steps towards eliminating new HIV and syphilis infections among children and keeping their mothers alive.

# Acknowledgements

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The following persons provided valuable contributions which influenced the development and finalization of the document:

## **AFRICAN UNION**

Dr Benjamin Djoudalbaye  
Dr Marie-Goretti Harakeye

## **CDC**

Dr Kassim Sidibe

## **EGPAF**

Mrs Mary Pat Kieffer

## **UNAIDS**

Dr Marie-Odile Emond  
Dr Sibongile Dlodlu

## **UNFPA**

Dr Yelibi Sibili  
Dr Margaret Anyetei

## **UNICEF**

Dr Andrew Agabu  
Dr Claudes Kamenga,

Dr Dorothy Mbori-Ngacha,  
Mrs Macoura Oulare,  
Dr Tesfaye Shiferaw,

## **WHO**

Dr Emil Asamoah-Odei  
Dr Ghislaine Conombo  
Dr Kim Eva Dickson  
Dr Tigest Ketsela  
Dr Frank John Lule  
Dr Khadidiatou Mbaye  
Dr Morkor Newman  
Dr Triphonie Nkurunziza  
Dr Innocent Bright Nuwagira  
Dr Paul Assimawe Pana  
Dr Charles Sagoe-Moses  
Dr Habib Somandje  
Dr Saliyou Sanni  
Dr Isseu Diop Touré

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# Abbreviations

3TC	Lamivudine
ABC	Abacavir
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
ARV	Antiretroviral
ART	Antiretroviral Therapy
AU	African Union
AZT	Zidovudine
CD4	Cluster of Differentiation 4
CTX	Cotrimoxazole
DBS	Dry Blood Spot
ECSA	East, Central and Southern Africa Economic Community
ECSA-HC	East, Central and Southern Africa Health Community
ECOWAS	Economic Community of West African States
ECS	Elimination of Congenital Syphilis
EFV	Efavirenz
ESTHER	The European ESTHER Alliance
EID	Early Infant Diagnosis
EMTCT	Elimination of Mother-to-Child Transmission
DPT	Diphtheria Pertussis Tetanus vaccine
FP	Family Planning
HIV	Human Immunodeficiency Virus
IMCI	Integrated Management of Childhood Illness
L+D	Labour and Delivery
LPVr	Lopinavir
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MNCH	Maternal, Newborn and Child Health
MTCT	Mother-to-Child Transmission of HIV
NVP	Niverapine
PCR	Polymerase Chain Reaction
PLWHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother-to-Child Transmission of HIV
PNC	Postnatal Care



SADC	Southern African Development Community
SRH	Sexual and Reproductive Health
SSA	Sub-Saharan Africa
STI	Sexually Transmitted Infection
TB	Tuberculosis
TWG	Technical Working Group
UA	Universal Access
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNGASS	United Nations General Assembly Special Session
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WAHO	West African Health Organisation
WHO	World Health Organization

# 1. Introduction

Globally, there are 15.7 million women living with HIV, out of which 12 million (60%) live in sub-Saharan Africa (1). About 91% of women with HIV globally live in 25 countries, 23 of which are in the WHO African Region. In these high-burden countries, the prevalence of HIV among pregnant women varies from 5% to 42%. According to the 2011 Universal Access Report, in 2010 an estimated 1 360 000 women living with HIV gave birth to an estimated 400 000 infants newly infected with HIV. Again, 91% of the cases occurred in sub-Saharan Africa through mother-to-child-transmission (MTCT). Without any interventions, the risk of MTCT ranges from 20% to 45% and in the absence of any treatment, about half of the HIV-infected children will die before their second birthday (2). HIV is now responsible for 7.5% of all under-5 mortality in countries in eastern and southern Africa. Eight countries reported over 10% of under-5 mortality due to HIV, with South Africa and Swaziland reporting over 40% (5). Also in 2009, globally, 42 000 to 60 000 pregnant women died from HIV, the majority occurring in the African Region (1). In contrast, the number of new HIV infections among children as well as the number of maternal and child deaths in high income countries was virtually zero.

Evidence has shown that it is possible to prevent new HIV infections among children and keep their mothers alive (3) if pregnant women living with HIV have timely access to quality life-saving antiretroviral drugs for their own health or as prophylaxis during pregnancy, delivery and breastfeeding. Preventing HIV infection among women at increased risk of HIV infection and meeting unmet family planning needs of women living with HIV can significantly contribute to reducing the incidence of paediatric HIV infections (4). Also, postnatal HIV transmission through breastfeeding can also be reduced from an estimated 22.3% at 24 months in the absence of ARVs to less than 5% with appropriate ARVs and infant feeding practices (5). Efforts to eliminate congenital syphilis can contribute to reducing HIV transmission and acquisition, and diagnosis and treatment of syphilis in pregnancy is a method of primary prevention of HIV and a cost-effective antenatal intervention (6).

The Inter-Agency Task Team agrees on a comprehensive approach to PMTCT of HIV. This approach is based on four prongs to be scaled up to reach the elimination goal (see Box 1).

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1. Angola, Botswana, Burkina Faso, Burundi, Cameroon, Chad, Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

### **BOX 1: THE COMPREHENSIVE APPROACH TO PMTCT CONSISTS OF FOUR PRONGS:**

- a) Primary prevention of HIV infection among women of reproductive age;
- b) Prevention of unintended pregnancy in HIV-positive women;
- c) Prevention of HIV transmission from women living with HIV to their infants;
- d) Providing appropriate treatment, care and support for women and children living with HIV and their families.
- e) Strengthen capacity of the Technical Working Group (TWG)<sup>6</sup> for improvement of MNCH and elimination of MTCT of HIV and syphilis.

Countries have made significant strides in preventing mother-to-child transmission of HIV. According to the UNAIDS 2010 Global Report (1), HIV infection among children born to mothers living with HIV dropped significantly from 500 000 in 2001 to 370 000 in 2009. Five countries reached over 80% coverage of ARV prophylaxis and treatment in pregnant women<sup>2</sup>

With these developments, there are global and regional commitments to elimination of new HIV infections in children by 2015 and keeping their mothers alive.

Commitments at global level:

1. Millennium Development Goals 4, 5 and 6 (agreed to by United Nations Member States in 2000) aim to reduce child mortality, improve maternal health and combat HIV/AIDS, malaria and other diseases.
2. June 2011, General Assembly Resolution 65/277 “Political Declaration on HIV/AIDS: Intensifying our efforts to eliminate HIV/AIDS” committed Member States to working towards the elimination of mother-to-child transmission of HIV by 2015 and substantially reducing AIDS-related maternal deaths.
3. June 2011, the Global Plan (7), Countdown to Zero: Global Plan towards elimination of new HIV infections among children by 2015 and keeping their mothers alive, 2011–2015, was developed and signed by governments of 25 countries.
4. Development of the 2010 WHO guidelines (4, 5): WHO guidelines were developed to provide international standards in support of the global scaling up of more effective interventions aimed at preventing MTCT in resource-limited settings.

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<sup>2</sup> Botswana, Lesotho, Namibia, South Africa, Swaziland.

5. Development of the document Preventing HIV and Unintended Pregnancies: Strategic Framework 2011-2015 in support of the Global Plan, Countdown to Zero. The framework offers guidance for preventing HIV infections and unintended pregnancies, which are both essential strategies for improving maternal and child health, and eliminating new paediatric infections.

Commitments at regional level:

1. African Union Commitment: At the Fifteenth Ordinary session of the Assembly of the Union on 27 July 2010 in Kampala Uganda, Member States committed to eradication of MTCT so that no child is born with HIV/AIDS.
2. The Southern African Development Community (SADC) in 2009 recommended the virtual elimination of mother-to-child transmission by 2015.

Commitments at country level:

1. At the High-level meeting in New York in June 2011, African countries signed the Commitment to eliminate new HIV infections in children by 2015 and keep their mothers alive.
2. In 2011, the East, Central and Southern Africa Health Community passed a resolution on achieving MDGs 4, 5, and 6 that urged Member States to develop integrated strategies to eliminate MTCT of HIV and implement the Global Plan, Countdown to Zero.
3. The HIV/AIDS Strategy for the African Region shares the vision of the Global Health Sector Strategy on HIV/AIDS (GHSS), 2011–2015, which is “Zero new HIV infections; zero AIDS-related deaths and zero discrimination in a world where people living with HIV are able to live long, healthy lives”.

The decision to develop this Strategic Framework for the African Region was made after consultation with the countries in the Region and in line with their commitment towards elimination of new HIV infections among children and keeping their mothers alive, the EMTCT Initiative. The Strategic Framework is designed to provide the African Region with a systematic approach to the elimination of MTCT. The target audience includes policy-makers, programme managers, implementers and other critical stakeholders such as networks of women living with HIV, civil society, private sector and professional organizations. The Framework will be shared with donors, implementing partners, programme managers, clinicians, and civil society groups to support the EMTCT Initiative.



## 2. Situation Analysis

Based on the UNAIDS/WHO estimates (1), as of December 2009, 22.5 million people were living with HIV in the African Region. This represents two thirds of the global number of 33.5 million, although only 10–12% of the world's population lives in the Region. Out of the 22 high-burden countries, 21<sup>3</sup> are in the African Region.

Though HIV prevalence still remains high in the Region, a declining trend has been observed. The prevalence among pregnant women attending antenatal clinics decreased from 9.5% in the year 2000 to 3.4% in 2008. In 2009, there were an estimated 1.8 million new infections in the Region which means a decrease of about 25% in new infections compared to data from the mid 1990s (1).

The contribution of HIV to maternal deaths was estimated at 9% in sub-Saharan Africa (SSA). Countries with the highest HIV prevalence experienced significant increases in maternal mortality rate (MMR) from 1990 to 2008; Botswana recorded an increase of 133%, Zimbabwe 102%, South Africa 80%, Swaziland 62%, and Lesotho 44% (8).

The 2010 World Health Statistics Report estimated that 4% of under-5 mortality in the African Region was HIV related. In countries like South Africa and Swaziland, HIV remained the most important cause of under-5 deaths, being 46% and 49%, respectively (9). Women living with HIV continue to have a high unmet need for family planning. Unintended pregnancy rate is as high as 20-40%, with a high unmet need for contraception of 20-35% (10). If this unmet need in HIV-positive pregnant women is not addressed, elimination of paediatric AIDS will not be possible.

Globally, it is estimated that there are 1.8 million pregnant women infected with syphilis, with rates over 5% in at least seven SSA countries.<sup>4</sup> Although considered an essential intervention for all pregnant women, reporting SSA countries indicated that only 59% were tested in 2010 (10).

In sub-Saharan Africa, the percentage of pregnant women who received an HIV test increased slightly. In 2010, 42% were tested for HIV as compared with 35% in 2009 and 29% in 2008. The HIV testing rate was higher in eastern and southern Africa, reaching 61% in 2010 against 25% in western and central Africa (10).

SSA achieved 60% maternal ARV coverage to prevent mother-to-child transmission in 2010. In eastern and southern Africa, coverage was 77%, while western and central Africa had a coverage rate of 21%. Countries have adapted national PMTCT guidelines in line

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<sup>11</sup> Angola, Botswana, Burundi, Cameroon, Chad, Cote d'Ivoire, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Nigeria, South Africa, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

<sup>12</sup> Central African Republic, Equatorial Guinea, Liberia, Madagascar, Mozambique, Swaziland and Zambia.

<sup>4</sup> Central African Republic, Equatorial Guinea, Liberia, Madagascar, Mozambique, Swaziland and Zambia.

with the 2010 WHO recommendations; 11 countries adopted Option A and the remaining countries adopted both Options A and B, Option B or a modification of Option B. The different options are described in Annex 2. The coverage of maternal ARV necessary to reach elimination of MTCT is 90% (11). The gap in ARV coverage is not evenly distributed and can be attributed to 14 countries which account for more than 80% of the global gap. Nigeria alone contributes 29% of the gap, while the Democratic Republic of Congo contributes 7% (10).

While there has been considerable progress in scaling up PMTCT programmes in SSA, key challenges remain. These challenges need to be addressed effectively if countries are to attain the goal of eliminating new HIV infections by 2015 and keeping mothers alive. Inadequate coordination and collaboration among programme components are major sources of concern, for example, incorporating HIV paediatric and maternal care into sexual and reproductive health (SRH) and maternal, newborn and child health (MNCH) services.

The low access and uptake of ANC services, late first visit bookings and a large proportion of women delivering at home make it very challenging for many pregnant women to access facility-based PMTCT services. In addition, the majority of women in ANC settings will test negative, but health promotion that includes HIV prevention is not often a priority. Opportunities for keeping these women HIV-negative are often missed, and seroconversion during pregnancy has been noted.

Weak and dysfunctional health systems result in bottlenecks including inadequate human resource capacity, with many countries facing critical shortages of skilled staff. Monitoring and evaluation systems are also weak, with inadequate data for a number of indicators such that reporting is often based on projections and estimations rather than on empirical, accurate and timely programme data.

As a result of a variety of operational constraints and system weaknesses, many mothers continue to receive single dose nevirapine rather than more effective antiretroviral (ARV) regimens for MTCT prevention and antiretroviral therapy (ART) for their own health when eligible. Postnatal transmission through breastfeeding also remains a significant concern and is often a result of confusing infant feeding messages, lack of support for exclusive breastfeeding and good infant nutrition as well as low postnatal ARV coverage for both mothers and infants.

Inadequate funding for programmes and low priority accorded to health in national economic and development policies are compounded by inefficient utilization of existing resources. External resources which are often unpredictable, unsustainable and not in harmony with country priorities also continue to be the mainstay of financing interventions, resulting in inconsistent implementation.

In most countries in the Region, there is poor community and male involvement (the global percentage for male involvement being 5%). There are also high levels of stigma and discrimination which compromise implementation of PMTCT interventions.

# 3. Justification

The Global Plan provides guidance to priority countries for achieving the elimination of new HIV infections among children and keeping their mothers alive. Almost all of the targeted countries (21 out of 22) are in the African Region.

This Framework provides the regional epidemiological and implementation perspective for the elimination initiative and guidance to all African countries. The HIV epidemics in the Region are recognized as being diverse. Countries show varied scenarios with HIV prevalence rate in pregnant women ranging from less than 5% to over 40%; ARV coverage ranging from less than 30% to over 80%; and low ANC utilization based on four ANC visits. The Framework addresses these diverse situations and the tailored responses needed in each situation to achieve elimination of new HIV infections among children and keeping mothers alive.

The Framework reinforces the Global Plan priority actions in focus countries. It is critical for buy-in, active support and accountability from stakeholder organizations and communities such as the African Union (AU), the Southern African Development Community (SADC), the East, Central and Southern Africa Health Community (ECSA-HC), the Economic Community of West African States (ECOWAS), and for leverage on other regional initiatives and synergies. The initiative for elimination of new HIV infections among children, keeping mothers alive and elimination of congenital syphilis also contributes directly towards achieving Millennium Development Goals (MDGs) 3, 4, 5 and 6.<sup>5</sup> With intensified support to countries to reach out to all women and children at risk of HIV and syphilis, and with global and regional consensus, it is possible for countries in the Region to achieve these goals.

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<sup>5</sup> MDG3: Promote gender equality and empower women; MDG4: Reduce child mortality; MDG5: Improve maternal health; MDG6: Combat HIV/AIDS, malaria and other diseases.



# 4. Guiding Principles

The planning and implementation of this regional framework for the elimination of new HIV and syphilis infections in children is informed by six guiding principles:

1. Country ownership, leadership and accountability in adaptation and implementation of the strategic elimination framework at country level.
2. Rights-based approach and gender sensitivity to ensure safeguarding of standard human rights including autonomy to make informed decisions in reproductive health and universal and equitable access to essential health services, especially for hard-to-reach and marginalized populations.
3. Family-centred approach and integration of PMTCT with services essential to achieve MTCT of HIV and syphilis elimination goals and improve maternal, newborn and child health.
4. Integration of PMTCT with existing reproductive health and MNCH services as the key for ensuring client-focused care that supports the mother-infant pair along the continuum of care and sustainability.
5. Community participation to ensure that key stakeholders, including civil societies and PLWHA, are empowered to play their roles in scaling up interventions at all levels, fostering utilization of services and sharing responsibility.
6. Cooperation and collaboration among partners to ensure efficiency in financial, technical and human resource allocation and utilization, and mutual accountability at global, regional and national levels to ensure achievement of agreed elimination goals.



# 5. The Strategic Framework

## AIM

The aim of the Strategic Framework is to eliminate new HIV infections among children by 2015 and keep their mothers alive.

## OBJECTIVES

The objectives of the Strategic Framework based on the 2009 baseline study are to:

1. Reduce the number of new HIV infections among children by 90% by 2015;
2. Half the number of AIDS-related maternal deaths by 2015.

TARGETS : the programatic targets for 2015 are	
<b>PRONG 1 TARGET</b>	<ul style="list-style-type: none"><li>• Reduce HIV incidence in women aged 15-49 years by 50%;</li><li>• Screen 90% of pregnant women for syphilis.</li></ul>
<b>PRONG 2 TARGET</b>	<ul style="list-style-type: none"><li>• Reduce unmet need for family planning to zero among all women (MDG3).</li></ul>
<b>PRONG 3 TARGET</b>	<ul style="list-style-type: none"><li>• Reduce mother-to-child transmission of HIV rate to 5%;</li><li>• Provide 90% of mothers with perinatal antiretroviral therapy or prophylaxis;</li><li>• Provide 90% of breastfeeding infant-mother pairs with antiretroviral therapy or prophylaxis;</li><li>• Treat 90% of syphilis-seropositive pregnant women appropriately.</li></ul>
<b>PRONG 4 TARGET</b>	<ul style="list-style-type: none"><li>• Provide 90% of pregnant women in need of antiretroviral therapy for their own health with life-long antiretroviral therapy;</li><li>• Provide antiretroviral therapy for all HIV-infected children;</li><li>• Reduce infant AIDS-related deaths by 50%.</li></ul>

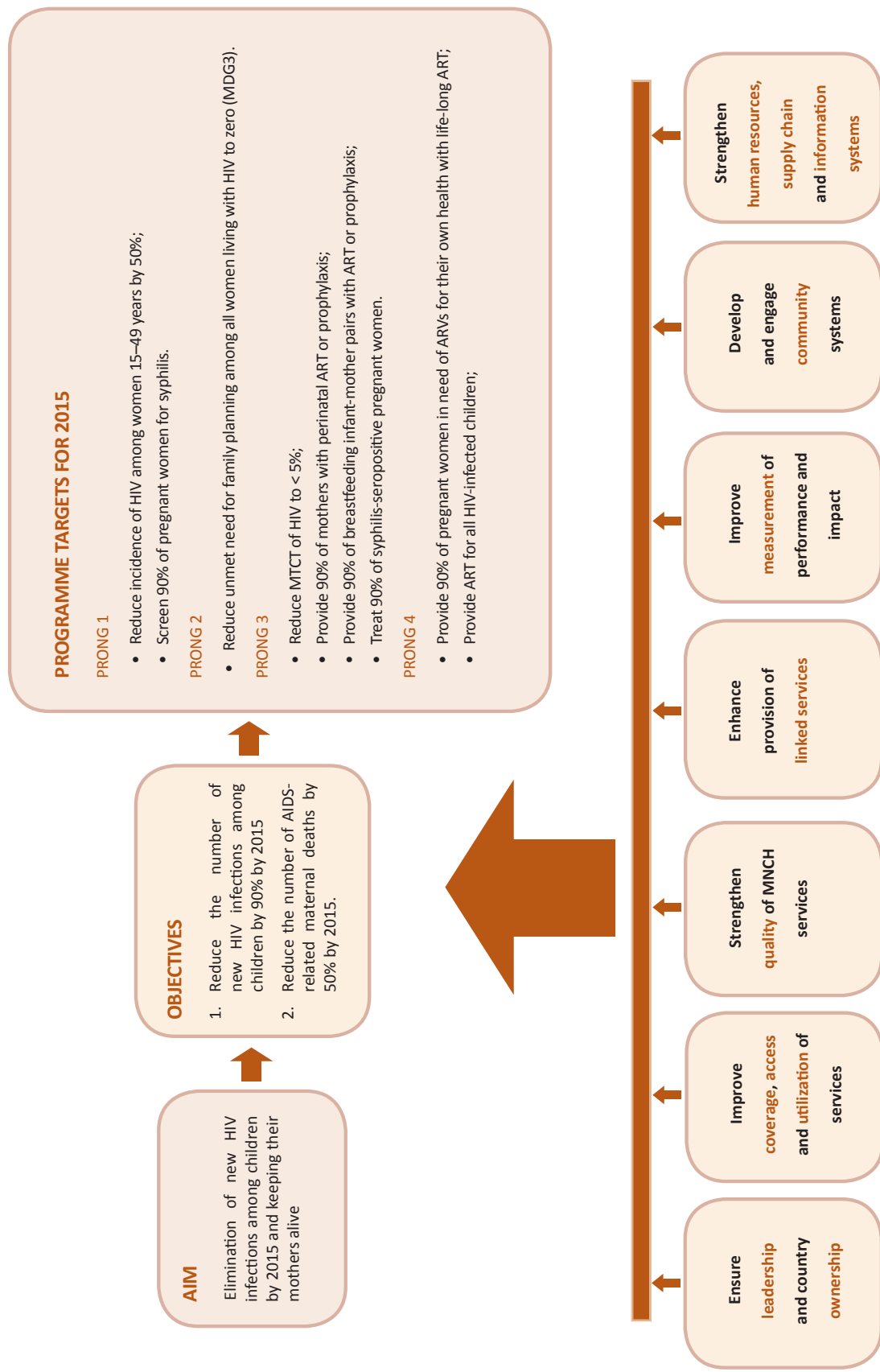
## 6. Priority Actions

The proposed priority actions of the Strategic Framework are based on seven priority areas referred to as “building blocks” (see Figure 1). These building blocks form the essential foundation for a cohesive and comprehensive response to the elimination of new HIV infections in children. The seven building blocks are: i) ensuring leadership and country ownership; ii) improving coverage, access and utilization of services; iii) strengthening quality of MNCH services to deliver effective PMTCT of HIV and syphilis interventions; iv) enhancing provision of linked services; v) strengthening human resource capacity, supply chain management and information systems; vi) improving measurement of performance and impact; and vi) developing and engaging community systems.

The key priority actions for each of the building blocks are discussed below.



Figure 1: Strategic Framework



## 6.1 Ensure leadership and country ownership

Strong political commitment for the elimination of new HIV and syphilis infections in children and keeping their mothers alive is the basis for the development of successful operational plans. It is critical that government leaders receive full endorsement from in-country partners and the private sector.

### KEY ACTIONS

- a) Ensure coordination and support from the highest level in government, including the Ministry of Health and other involved sectors;
- b) Strengthen capacity of the Technical Working Group (TWG)<sup>6</sup> for improvement of MNCH and elimination of MTCT of HIV and syphilis.

## 6.2 Improve coverage, access and utilization of services

Progress toward MTCT elimination goals in many countries is hampered by limited coverage, access and utilization of health services. Barriers include low coverage of PMTCT and maternity services, especially in rural and hard-to-reach areas, poor utilization of timely antenatal and skilled childbirth services, and ANC/L+D/PNC services without HIV and syphilis testing, intramuscular penicillin, and ARVs for women and their male partners.

## 6.3 Strengthen quality of MNCH services

### KEY ACTIONS

- a) Advocate for comprehensive PMTCT and MNCH services that are free of cost at the point of service delivery;
- b) Ensure that comprehensive PMTCT of HIV and syphilis services are available at every ANC, maternity and well-child clinic;
- c) Develop innovative methods to improve access and utilization of timely antenatal care and skilled childbirth services;
- d) Enhance client-centred approach to the delivery of integrated and efficient MNCH, STI, and HIV services where women and their male partners access care;
- e) Develop innovative methods to encourage community engagement and male partner involvement;
- f) Improve engagement with civil society groups to enhance utilization of services and reduce stigma and discrimination in the community.

In order to achieve elimination goals, it is essential to develop and provide an evidence-based, high-quality comprehensive package of MNCH services which routinely includes quality PMTCT of HIV and syphilis interventions. These should be implemented within the four prongs of PMTCT as described below and in every setting that women and their male partners access antenatal, family planning, STI, delivery, postnatal, or child health care services.

## KEY ACTIONS

### Prong 1: Primary prevention of HIV and syphilis among women of child-bearing age

- a) Integrate HIV and STI prevention for women of reproductive age, particularly sero-negative women, in any setting where women access reproductive health services;
- b) Integrate PMTCT messages into post-test counselling for men and women in any setting where HIV testing and counselling services are provided;
- c) Expand use of combination prevention interventions and link to PMTCT services;
- d) Expand prevention education efforts to include age-appropriate messages in schools, especially targeting young girls, and link with efforts to keep young girls in school.

### Prong 2: Prevention of unintended pregnancies among women living with HIV

- e) Standardize the delivery of routine family planning services for women receiving PMTCT and ARV/ART services, in MNCH, STI, and HIV care and treatment settings;
- f) Support and link with community-based family planning efforts that reach men and women in the community and workplace.

### Prong 3: Prevention of HIV transmission from a woman living with HIV to her infant

- g) Provision of highly efficacious combination ARV regimens for all pregnant women in line with most current WHO guidance;
- h) Provide intramuscular penicillin to syphilis seropositive pregnant women;
- i) Promote safe infant feeding practices, including ARV prophylaxis during breastfeeding.

#### Prong 4: Provision of appropriate treatment, care and support to mothers living with HIV and their children and families

- j) Strengthen the continuum of services between PMTCT interventions in the MNCH setting and life-long HIV care and treatment (in MNCH or specialized HIV centres) for mothers with HIV and their exposed children. Particular emphasis should be given to:
- Early CD4 assessment for treatment eligibility and prompt provision/linkage to ART for women who require it for their own health;
  - Early HIV diagnosis and provision of cotrimoxazole in exposed infants and provision/linkage to early ART for HIV-positive infants.

## 6.4 Enhance provision of linked services

As part of the development of a comprehensive, integrated and client-centred package of services, countries should prioritize the development of a formal bi-directional system of referral and linkages between MNCH and HIV programmes. This system of referrals and interlinked programme support is essential to ensure that pregnant women with HIV are rapidly linked with appropriate HIV treatment and care services and that they have appropriate referrals and access to continued HIV care postpartum.

### KEY ACTIONS

- a) Integrate HIV service provision into programmes that provide services for women and children (MNCH, SRH, FP, STI, TB, IMCI);<sup>7</sup>
- b) Prioritize development of a continuum of care between PMTCT and HIV care/treatment (ART) services with referral and follow-up mechanisms;
- c) Support coordination between MNCH and HIV programmes to enable more accurate forecasting, procurement and supply management of essential medicines and diagnostics.

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<sup>6</sup> The tasks of the TWG include formulating evidence-based national targets and timelines; developing a national advocacy plan with the involvement of civil society; ensuring that the elimination of MTCT of HIV and syphilis is prioritized within health sector planning processes; developing a timeline and national elimination costed plan for meeting country-level deliverables mandated by the Global Plan; developing a country-level monitoring and evaluation plan for monitoring progress, demonstrating impact, assuring accountability and outlining technical assistance needs; ensuring coordination and commitment of all key partner groups.

## 6.5 Strengthen human resources, supply chain and information systems

A successful campaign for the elimination of new HIV infections in children rests heavily on the capacity of existing basic health systems at the national and local levels to effectively deliver services. Weaknesses in human resource capacity, supply chain management and information systems all contribute to the slow scaling up of services and limited effectiveness of interventions.

### KEY ACTIONS

- a) Develop innovative approaches to task-shifting and task-sharing across the continuum of PMTCT services as solutions to human resource (HR) gaps;
- b) Prioritize capacity-building, with ongoing mentoring to effectively enable task-shifting and ensure staff retention, with particular emphasis on expanding provision of ART and intramuscular penicillin down to the lowest level of the health system;
- c) Actively promote the removal of legal barriers to successful task-shifting and build capacity to support effective supply planning, forecasting and operational follow-up;
- d) Promote coordinated quantification of needs across health sectors;
- e) Improve logistics management to reach community level and develop better integrated health information systems between MNCH and HIV for improved clinical management and programme evaluation.

## 6.6 Develop and engage community systems

The progress made thus far in the scaling up and expansion of HIV care and treatment in the Region would not have been possible without the contributions of community groups and workers. Similarly, community-based strategies have the potential to improve access and utilization of comprehensive MNCH services and result in significant reductions in maternal and infant deaths.

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<sup>7</sup> MNCH: maternal, newborn and child health; SRH: sexual and reproductive health; FP: family planning; STI: sexually transmitted infection; TB: tuberculosis; IMCI: Integrated Management of Childhood Illness.



## KEY ACTIONS

- a) With inputs from the community, establish clear guidelines for how and when community-based workers can most effectively enhance timely utilization of services and appropriate adherence to MNCH and PMTCT interventions;
- b) Develop standardized, integrated tools to enhance utilization of MNCH and PMTCT services that community-based workers may use;
- c) Involve community-based organizations in activities in demand creation, service delivery and patient follow-up at the community level.

## 6.7 Improve measurement of performance and impact

As countries develop national plans for the elimination of new HIV and syphilis infections in children and keeping their mothers alive, it is essential to develop accurate understanding of baseline programme performance and gaps. This will guide the order of implementing elimination efforts and timelines for meeting targets, goals and progress reports.

## KEY ACTIONS

- a) Define baseline programme needs and gaps for MNCH and PMTCT services;
- b) Establish national elimination targets for 2015 and interim annual targets;
- c) Agree upon standard indicators to monitor and evaluate programme performance and impact of PMTCT and MNCH services at national and sub-national levels;
- d) Build capacity for data management and analysis within the MNCH and HIV health programmes;
- e) Ensure that measurement of impact of PMTCT programme activities is included in programme evaluation plans at both national and sub-national levels.

Implementation of the recommended actions needs to take into consideration country specificity. Countries in the African Region have diverse epidemics, contexts and conditions and are at different stages in progress in implementation towards the Elimination (EMTCT) Initiative. In this sense, they have been identified as belonging to different typologies (Figure 2). This classification is based on coverage for ARVs during pregnancy. Four typologies have been identified. Countries in Typology A are those with ARV coverage during pregnancy that is more than 80%; Typology B countries are those with ARV coverage during pregnancy between 60% and 79%; Typology C countries are those with ARV

coverage during pregnancy between 30% and 59% and those in Typology D are countries with ARV coverage during pregnancy less than 30%. In addition, coverage for four visits of ANC is taken into consideration in classification and planning priority actions.

Given these typologies, it is critical that priority actions are tailored to specific country situations. Individual countries are encouraged to identify their typology as a basis for planning priority and focused actions to facilitate reaching the elimination targets.



TYPOLOGY A	TYPOLOGY B
<p>&gt; 80% ARV coverage  A+: 4 ANC visits &gt; 60%  A-: ANC visits &lt; 60%</p> <p>Priority action should be <b>improving equity</b> to reach the last 20% and <b>improving quality</b></p>	<p>60–79% ARV coverage  A+: 4 ANC visits &gt; 60%  A-: ANC visits &lt; 60%</p> <p>Priority action should be improving coverage of PMTCT services and <b>improving quality</b> (long-term follow-up of ARV regimens)</p>
<ul style="list-style-type: none"> <li>• Increase access to HIV prevention services and family planning;</li> <li>• Increase coverage of infant ARV prophylaxis;</li> <li>• Identify the unreached (hard to reach and marginalized) and address bottlenecks to access and utilization;</li> <li>• Improve access to more efficacious ARVs regimens for PMTCT;</li> <li>• Promote early booking/initiation of ANC;</li> <li>• Improve postnatal care;</li> <li>• Improve uptake and access to skilled birth attendance;</li> <li>• Promote appropriate infant feeding practices.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the unreached (hard-to-reach and marginalized) and address bottlenecks to access and utilization;</li> <li>• Improve access to more efficacious ARV regimens for PMTCT;</li> <li>• Reduce loss to follow-up;</li> <li>• Promote early booking/initiation of ANC;</li> <li>• Improve postnatal care;</li> <li>• Improve uptake and access to skilled birth attendance;</li> <li>• Promote appropriate infant feeding practices.</li> </ul>
<p>These are countries with maternal ARV coverage for PMTCT over 80%. If ANC coverage for 4 ANC visits is less than 60%, priority actions should include improvement of the quality of ANC services.</p>	<p>These are countries where maternal ARV coverage for PMTCT is 60–79%. If ANC coverage for 4 ANC visits is less than 60% (B-), priority actions should include improvement of the quality of ANC services.</p>

TYPOLOGY C	TYPOLOGY D
<p>60–79% ARV coverage  A+: 4 ANC visits &gt; 60%  A-: ANC visits &lt; 60%</p> <p>Priority action should be improving coverage and utilization</p>	<p>60–79% ARV coverage  A+: 4 ANC visits &gt; 60%  A-: ANC visits &lt; 60%</p> <p>Priority action should be improving coverage of PMTCT services and <b>improving quality</b> (long-term follow-up of ARV regimens)</p>
<ul style="list-style-type: none"> <li>• Increase availability of PMTCT services;</li> <li>• Focus on increasing utilization of ANC and PMTCT services;</li> <li>• Reduce loss to follow-up;</li> <li>• Promote early booking/initiation of ANC;</li> <li>• Improve post-natal care;</li> <li>• Improve uptake and access to skilled birth attendance;</li> </ul> <p>Promote appropriate infant feeding practices.</p>	<ul style="list-style-type: none"> <li>• Identify and address bottlenecks to access and utilization of ANC/MNCH and PMTCT services;</li> <li>• Identify and focus and providing PMTCT services in areas with the highest prevalence and number of women with unmet need for PMTCT intervention, increasing utilization of ANC and PMTCT services;</li> <li>• Improve uptake and access to skilled birth attendance;</li> <li>• Promote appropriate infant feeding practices.</li> </ul>
<p>These are countries where maternal ARV coverage for PMTCT is 30–59%.  If ANC coverage for 4 ANC visits is less than 60% (C-), priority actions should include improvement of the quality of ANC.</p>	<p>These are countries where maternal ARV coverage for PMTCT is less than 30%, with low to moderate ANC coverage. Priority actions should include improvement of the quality of ANC services.  Priority actions should be based on improving coverage and outreach or community-based approaches.</p>



# 7. Roles and Responsibilities

## COUNTRIES

National governments are urged to:

- a) Lead, coordinate and maximize strategic opportunities for collective action, and oversee core aspects of country efforts;
- b) Develop comprehensive and costed implementation plans including identifying and addressing policy, programme and management barriers to progress;
- c) Collect and analyse data, and provide regular reports on the elimination of new HIV and syphilis infections among children and their mothers;
- d) Increase both domestic and external investment for programmes based on robust gap analysis;
- e) Remove financial obstacles such as user fees that hinder women and families from seeking services for the elimination of new HIV and syphilis infections in children and keeping their parents alive;
- f) Address HIV, STI and gender-related stigma and discrimination and other related barriers to uptake of services and client retention;
- g) Ensure that all four prongs of prevention of mother-to-child transmission of HIV are implemented effectively;
- h) Ensure partnership with local and global institutions and individuals to mobilize resources for the implementation of plans towards the elimination of new paediatric HIV and syphilis infections and keeping their mothers alive;
- i) Involve communities, including civil society organizations, networks of mothers living with HIV, business communities, health care workers and their professional organizations, academic and research institutions.

## UN AGENCIES, AFRICAN UNION, GLOBAL AND REGIONAL PARTNERS

UN agencies, African Union (AU), and other partners will support countries by:

- a) Ensuring coherence of efforts, including technical, financial and material support in the goal towards the elimination of new HIV and syphilis infections in children and keeping their mothers alive;
- b) Carrying out advocacy among policy-makers, international partners and other key stakeholders for increased resources;
- c) Providing norms, standards and guidelines for HIV prevention and treatment for mothers and children, facilitating evidence through research and documentation of best practices;
- d) Developing strong accountability frameworks that can be adapted by countries in preparing their goals and targets;
- e) Providing technical and material support.

## 8. Resource Implications

UNAIDS estimates that the cost of interventions to eliminate new HIV infections among children and keep their mothers alive in 22 priority countries (all but one in the African Region) is approximately US\$ 1 billion per year between 2011 and 2015 (7). This includes costs for HIV testing and counselling, CD4 counts for pregnant women testing HIV positive, antiretroviral prophylaxis, ART and cotrimoxazole for eligible women and children, family planning for women living with HIV, counselling for infant feeding, and community mobilization.

A number of actions are needed for effective resource mobilization to support these priorities. These actions include: (i) costing EMTCT national plans; (ii) increasing domestic investments; (iii) increasing international investments; (iv) exploring innovative financing mechanisms; and (v) leveraging existing resources.

## 9. Monitoring and Evaluation

Monitoring and evaluation remain key components of the EMTCT Initiative; they are essential for tracking programme expansion and performance. Monitoring and evaluation will be in line with the Global Monitoring and Evaluation Framework and Strategy for the Global Plan Towards the elimination of new HIV Infections by 2015 (12). This Strategic Framework also relies on the global, regional and country milestones of Countdown to Zero: Global Plan towards elimination of new HIV infections among children by 2015 and keeping their mothers alive, 2011–2015. It presents a 10-point action plan with concrete steps for country-level implementation; this includes improving outcomes assessment, data quality and impact assessment. The Global Plan also recommends indicators for monitoring programmes and services for PMTCT of HIV and syphilis within maternal and child health services. Core national indicators are recommended to be monitored at least annually, although countries may choose to monitor them more frequently.

PMTCT interventions are provided across various service delivery points and across a time span of pre-pregnancy, pregnancy, delivery, postpartum and child follow-up after delivery. Therefore, since monitoring of progress will be based on MCH, FP, PMTCT (cascade of services), syphilis and HIV indicators, strengthening the routine MCH and broader health information systems will facilitate monitoring which is the key to a successful EMTCT Initiative.

Tracking progress towards EMTCT is a joint effort of national governments and international development partners (including the UN, NGOs and donors) at the country, regional and headquarters levels. Although data collected from PMTCT programmes are generally of acceptable quality to monitor trends, most health information systems in many countries in the Region remain weak. All countries and development partners need to work together to review targets, strengthen the quality of information management systems, conduct impact assessments and improve estimates to monitor the EMTCT Initiative targets.

The baseline value for the targets is the year 2009, and the target year is 2015, unless otherwise specified. The two overall targets of the EMTCT Initiative are: (i) reduce the number of new HIV infections in children by 90%, and (ii) reduce the number of AIDS-related maternal deaths by 50%. Progress towards both targets will be measured annually by estimating the number of new HIV infections in children due to MTCT as well as the MTCT rate using the Spectrum software (11) recommended by the UN for HIV estimates and projections. Several impact assessment methods have been demonstrated in some country settings such as nationally-representative immunization clinic survey testing of all infants; assessment of programmatic data where there is good follow-up of mother-infant pairs; household surveys; and interpretation of early infant diagnosis (EID) data where coverage is high.

In all countries, the EMTCT Initiative will report progress in key prong indicators along with targets. In countries with the highest numbers of HIV-positive pregnant women delivering, the EMTCT Initiative will report on the expanded set of indicators. Progress towards targets will be assessed every year for the top high-burden countries with the largest number of HIV-positive women delivering, and every other year for other countries, along with key indicators related to the four PMTCT prongs.

#### **Box 2: Reporting schedule**

- 2011: Report on EMTCT baseline and plan
- 2012: Report on indicators and progress made towards EMTCT targets
- 2013: Annual progress report; regional progress review meetings
- 2014: Mid-term review of EMTCT; global progress review meeting
- 2015: Annual progress report; regional progress review meetings

Target-setting, programme planning and data collection at local and sub-national levels contribute to national statistics, and the compilation of information on country efforts contribute, in turn, to regional and global monitoring. Thus, high-quality monitoring and evaluation and continued improvement and use of data at all levels are critical to the success of the EMTCT Initiative. Regional and global meetings will be held to review interim milestones with country governments and partners. Reporting accountability can be found in Annex 3.



Countries are expected to develop and implement national EMTCT monitoring and evaluation plans and frameworks. Annual costed national monitoring and evaluation workplans should be developed describing the priority activities; specifying responsibilities; detailing resource needs; identifying sources of funding; and presenting a clear timeline for delivery of outputs. This workplan will enable the Ministry of Health (national programme managers and M&E staff) to ensure that required financial and human resources are mobilized. The plan must be developed with input and consensus from all key stakeholders. The sub-national and facility levels may also develop M&E workplans to guide M&E implementation linked to the national M&E system. It has been recommended that 5–10% of the programme budget be allocated to M&E activities regardless of funding sources. It is advisable that the annual M&E work planning cycle be linked closely to the overall budgeting cycle to ensure that funding is secured.

## 10. Conclusion

Member States in the African Region together with the global community are committed to the elimination of new HIV infections in children and the improvement of the health and survival of HIV-infected mothers. EMTCT is feasible, even in the African Region which is characterized by high HIV burden, weak health systems and scarce resources.

The main requirements are universal coverage of effective interventions that are cost-effective and sustainable; adequate resources; empowerment of communities; empowerment of women living with HIV to access the HIV prevention, treatment and care that they need for themselves, their children and their families; partner involvement; and observance and respect for the rights of women living with HIV. It is critical that national and global leaders act in concert to support country-driven efforts and are held accountable for delivering results.

This Framework defines appropriate actions to enable each country in the African Region, regardless of circumstances, to take concrete steps towards eliminating new HIV infections among children and keeping their mothers alive.

Countries are urged to develop and update appropriate policies and strategic plans for implementing the proposed actions, monitor progress, and coordinate all partners. They also need to mobilize and allocate the necessary human, material and financial resources for successful implementation.

# References

1. UNAIDS. Report on the Global AIDS Epidemic, 2010. Geneva, UNAIDS, 2010.
2. Newell ML et al. Mortality of infected and uninfected infants born to HIV-infected mothers in Africa: a pooled analysis. *Lancet* 2004, 364:1236-43.
3. Mahy M et al. What will it take to achieve virtual elimination of mother-to-child transmission of HIV? An assessment of current progress and future needs. *Sexually Transmitted Infections* 2010, 86(Suppl. 2): ii48–55. Doi:10.1136/sti2010.045989.
4. WHO. Antiretroviral drugs for treating pregnant women and preventing HIV infection in infants: towards universal access. Recommendations for a public health approach. Geneva, World Health Organization, 2009.
5. WHO. Guidelines on HIV and infant feeding 2010. Geneva, World Health Organization, 2010.
6. Bhutta Z et al. Stillbirths: what difference can we make and at what cost? *Lancet* 2011, 377:1523–38.
7. UNAIDS. Countdown to Zero: Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive, 2011-2015. Geneva, UNAIDS, 2011.
8. WHO, UNICEF, UNFPA and World Bank. Trends in maternal mortality 1980 to 2008. Geneva, World Health Organization, 2010.
9. WHO, UNAIDS and UNICEF. Towards universal access: scaling up priority HIV/AIDS interventions in the health sector. Progress Report 2011. Geneva, UNAIDS, 2011.
10. WHO. World Health Statistic Report 2010. Geneva, World Health Organization, 2010.
11. Stover J et al. The Spectrum projection package: improvements in estimating incidence by age and sex, mother-to-child transmission, HIV progression in children and double orphans. *Sexually Transmitted Infections* 2010, 86 (Suppl. 2): ii16–21.
12. WHO and UNICEF. Global Monitoring and Evaluation Framework and Strategy for the Global Plan Towards the elimination of new HIV Infections by 2015. Geneva, World Health Organization, 2012 .

**Annex 1: WHO prophylaxis options: antiretroviral drugs for treating pregnant women and preventing HIV infection in infants (2010)**

<p><b>OPTION A: AZT MATERNAL AZT + INFANT ARV PROPHYLAXIS</b></p>	<p><b>OPTION B: TRIPLE ARV MATERNAL TRIPLE ARV PROPHYLAXIS</b></p>
<p style="text-align: center;"><b>MOTHER</b></p> <ul style="list-style-type: none"> <li>• Antepartum twice daily AZT starting from 14 weeks of gestation and continued during pregnancy</li> <li>• Sd-NVP at onset of labour*</li> <li>• AZT + 3TC during labour and delivery*</li> <li>• AZT + 3TC for 7 days postpartum*</li> </ul> <p>*If maternal AZT was provided for more than 4 weeks antenatally, omission of the sd-NVP and AZT + 3TC tail can be considered; in this case, continue maternal AZT during labour and stop at delivery</p>	<p style="text-align: center;"><b>MOTHER</b></p> <p>Triple ARV from 14 weeks of gestation and continued until delivery and when breastfeeding until one week after all exposure to breast milk has ended</p> <ul style="list-style-type: none"> <li>• AZT + 3TC + LPV-r</li> <li>• AZT + 3TC + ABC</li> <li>• AZT + 3TC + ABC</li> <li>• TDF + XTR + EFV</li> </ul>
<p style="text-align: center;"><b>INFANT</b></p> <p><b>Breastfeeding infants</b></p> <ul style="list-style-type: none"> <li>• Daily NVP (from birth until one week after all exposure to breast milk has ended)</li> </ul> <p><b>Non-breastfeeding infants (receiving replacement feeding only)</b></p> <ul style="list-style-type: none"> <li>• Twice daily AZT for 4 – 6 weeks</li> <li>• Daily NVP for 4 – 6 weeks</li> </ul>	<p style="text-align: center;"><b>INFANT</b></p> <p><b>For all exposed infants</b></p> <ul style="list-style-type: none"> <li>• Twice daily AZT for 4 – 6 weeks OR</li> <li>• Daily NVP for 4 – 6 weeks</li> </ul>

Modification of option B also known as B+. The mother takes option B above but does not stop after breastfeeding ends. She continues on triple ARV for life, regardless of her CD4 count.

## Annex 2: Reporting accountability

The United Nations (WHO, UNICEF, UNAIDS, UNFPA) and bilateral partners will support countries in their reporting requirements, contribute to building capacity for data collection and interpretation at the national and sub-national levels, and assist country programmes to effectively use data to strengthen PMTCT and MNCH services. UN agencies work together in producing and reporting on estimates related to HIV and maternal and child health. Primary roles are listed below for UN agencies that collaborate with national governments as well as other partners in relevant areas. WHO/UNICEF/UNAIDS will continue to jointly produce the annual progress reports.

TARGETS	RESPONSIBLE AGENCY	PRIMARY ROLES
OVERALL	UNAIDS/UNICEF/WHO	<ul style="list-style-type: none"> <li>UNAIDS: model targets annually</li> <li>WHO: support countries in collecting surveillance data</li> <li>WHO/UNICEF: support collection of better programme data</li> <li>WHO/UNICEF/UNAIDS: provide guidance on measuring PMTCT impact, and support modelling exercises</li> <li>WHO/UNICEF/UNAIDS: support review and validation of data from multiple sources</li> </ul>
PRONG 1 Targets and Indicators	UNAIDS/UNICEF/WHO	<ul style="list-style-type: none"> <li>UNAIDS: provide incidence data from models</li> <li>UNICEF/UNAIDS: collate data on condom use indicators</li> <li>WHO/UNAIDS/UNICEF: collect data on the other indicators through the UA reporting process</li> </ul>
PRONG 2 Targets and Indicators	UNFPA/UNAIDS/WHO	<ul style="list-style-type: none"> <li>UNFPA/WHO: provide data as part of MDG monitoring and support 25 countries to start collecting the key indicator for Prong 2 (unmet need for FP among women attending HIV facilities)</li> <li>UNAIDS: provide modelled estimate of number of HIV+ pregnant women</li> </ul>
PRONG 3 Targets and Indicators	WHO/UNICEF/UNAIDS	<ul style="list-style-type: none"> <li>WHO/UNAIDS/UNICEF: critically review transmission estimates and collect data on the other indicators through the UA reporting process</li> </ul>
PRONG 4 Targets and Indicators	WHO/UNICEF/UNFPA	<ul style="list-style-type: none"> <li>WHO/UNFPA: provide estimates of HIV-associated maternal deaths</li> <li>WHO: provide estimates of child deaths due to HIV</li> <li>UNICEF/WHO: provide data on infant and child mortality</li> <li>WHO/UNAIDS/UNICEF: collect data on the other indicators through the UA reporting process</li> </ul>

The joint workplan of the UN agencies and other development partners to support the monitoring of the EMTCT Initiative and improve health information systems and impact measurement in countries will support collaboration in monitoring and evaluation.

### Annex 3: Targets and indicators for the four prongs of PMTCT

OVERALL TARGETS			
1. REDUCE THE NUMBER OF NEW PAEDIATRIC HIV INFECTIONS BY 90%.			
2. REDUCE THE NUMBER OF AIDS-RELATED MATERNAL DEATHS BY 50%.			
Prong 1	Prong 2	Prong 3	Prong 4
<p><b>Target:</b></p> <p>1.1: Reduce HIV incidence in women 15-49 (and 15-24) by 50%</p> <p>1.2: 90% of pregnant women screened for syphilis</p>	<p><b>Target:</b></p> <p>Reduce unmet need for family planning to zero (regardless of HIV status)</p>	<p><b>Target:</b></p> <p>3.1: Reduce MTCT of HIV to &lt; 5% (&lt; 2% in non-breastfeeding settings or if assessed around 6 weeks although the final infection status must also be assessed after cessation of breastfeeding)</p> <p>3.2: 90% of mothers receive perinatal ART or prophylaxis</p> <p>3.3: 90% of breastfeeding infant-mother pairs receive ART or prophylaxis</p> <p>3.4: 90% of syphilis seropositive pregnant women treated adequately</p>	<p><b>Target:</b></p> <p>4.1: Provide 90% of pregnant women in need of ART for their own health with life-long ART</p> <p>4.2: Provide ART for all HIV-infected children</p> <p>4.3: Reduce infant AIDS-related deaths by 50%</p>
<p><b>Key Indicator:</b></p> <p>1.1: % of pregnant women who know their HIV status</p>	<p><b>Key Indicator:</b></p> <p>2.1: Unmet need for FP among all women of reproductive age (also MDG indicator 5.6)</p>	<p><b>Key Indicator:</b></p> <p>3.1: % of HIV-infected pregnant women who received efficacious ARV (prophylaxis or therapy) to reduce MTCT (disaggregated by regimen)</p>	<p><b>Key Indicator:</b></p> <p>4.1: % of infants born to HIV-infected women who received a virological test for HIV within 2 months of birth</p>

## OVERALL TARGETS

1. REDUCE THE NUMBER OF NEW PAEDIATRIC HIV INFECTIONS BY 90%.
2. REDUCE THE NUMBER OF AIDS-RELATED MATERNAL DEATHS BY 50%.

### Other indicators:

1.2: Number and % of pregnant women visiting ANC clinic at least once during pregnancy

1.3: Number and % of pregnant women visiting ANC clinic at least 4 visits

1.4: Number and % of pregnant women with early first ANC visit (1st or 2nd trimester)

1.5: % of pregnant women tested for syphilis at first antenatal visit

1.6: Estimated % of all pregnant women with syphilis tested by 24 weeks

1.7: % of pregnant women attending ANC clinic whose male partners were tested for HIV

1.8: % of males and females aged 15-49 yrs who had more than one sexual partner in the past 12 months reporting the use of a condom during last sexual intercourse

### Other indicators:

2.2: % of women of reproductive age attending HIV care and treatment services with unmet need for FP

### Other indicators:

3.2: % of HIV-infected pregnant women who were assessed for eligibility for ART (CD4 cell count or clinical staging)

3.3: % of infants born to HIV-infected women who are breastfeeding provided with ARV (either mother or infant) to reduce the risk of HIV transmission during the breastfeeding period

3.4: % of syphilis seropositive pregnant women who are adequately treated

3.5: % of infants born to syphilis seropositive women are treated appropriately

3.6: % of sexual partners of syphilis-seropositive pregnant women treated

3.7: Proportion of stillbirths attributable to maternal syphilis

3.8: Congenital syphilis cases /1000 live births

### Other indicators:

4.2: % of pregnant women in need of ART for their own health receiving life-long ART

4.3: % of infants born to HIV-infected women who are started on cotrimoxazole prophylaxis within 2 months of birth

4.4: % of HIV-exposed infants who are exclusively breastfeeding, replacement feeding or mixed feeding at DPT3

4.5: % of HIV-infected children aged 0–14 who are currently receiving ART

4.6: Number of new child HIV infections, and % reduction from 2009

## OVERALL TARGETS

1. REDUCE THE NUMBER OF NEW PAEDIATRIC HIV INFECTIONS BY 90%.
2. REDUCE THE NUMBER OF AIDS-RELATED MATERNAL DEATHS BY 50%.

### Additional relevant indicators:

- Existence of national policies and guidelines consistent with international standards for the prevention of MTCT of HIV
- Existence of national policies and guidelines consistent with international standards for the elimination of congenital syphilis
- Existence of an integrated elimination plan for HIV MTCT and congenital syphilis at country level
- % of health facilities that provide antenatal care services with HIV testing services, ARV for PMTCT, and syphilis screening (UA)
- % of deliveries attended by skilled birth attendants
- Number of facilities providing ANC services
- Number of facilities providing ANC services which also provide CD4 testing on site, or have a system for collecting and transporting blood samples for CD4 testing for pregnant women
- Number of facilities providing ANC services in addition to HIV testing and counselling for pregnant women
- % of health facilities providing ANC services that offer both HIV testing and ARVs for PMTCT on site
- % of health facilities that offer paediatric ART (i.e. prescribe and/or provide clinical follow-up)
- % of health facilities that provide virological testing services (e.g. PCR) for infant diagnosis on site or through dried blood spots (DBS)

## Annex 4: Standards of good practice in the data life cycle

Strengthening country M&E systems is a priority for the EMTCT Initiative. A strong M&E system should be built on standard best practices.

The data life cycle consists of four stages. Applying best practices can strengthen each stage. The four stages are:

1. Data collection
2. Data quality assurance and assessment
3. Analysis and use
4. Aggregation and reporting.

At each level of reporting—facility, sub-national, national and global—data go through some iteration of these four stages.

### Facility-level best practices

The facility level is the foundation on which all other stages of the data life cycle are built. The facility level must have the ability, tools and staffing to ensure that data collection is routine, that data quality is high, that aggregation is done appropriately, and that data analysis and use are ongoing.

*All national and global data are derived from the facility level. If data are flawed at the facility level, they will be flawed at the national and even the global level.*

*Ensure that staff members understand the importance of their work. Facility data have financial and global implications.*

#### 1. Data collection

- Use standardized tools to ensure data quality and accuracy.
- Train and support staff to collect required data.
- Fill out all forms clearly and review systematically as part of supervision.
- Make sure data are transposed accurately—for example, from a patient card to a register.
- Build in systematic review.
- Routinely seek input from data collection staff to improve tools and procedures.
- Follow a documented plan for data access, back-up and archiving that ensures data security, integrity and patient confidentiality.



## 2. Data quality assurance (with data validation)

- Develop and adhere to routine data quality assessment and assurance procedures.
- Review a sample of forms for accuracy and completeness.

## 3. Analysis and use

- Correct errors and retrain staff as needed.
- Create periodic (daily, weekly, monthly) indicator reports for review and reporting.
- Create graphs and charts of trends in key indicators.
- Review data periodically (weekly, monthly) with clinicians and programme managers to describe achievements, challenges, opportunities and agree on actions for improvement.

## 4. Aggregating and reporting

- Prepare reports for transmission to authorities and stakeholders.
- Validate reports for accuracy and completeness, and correct any errors.
- Transmit reports on a timely basis.
- Use feedback from the sub-national level to improve the programme.

### Sub-national-level best practices

The sub-national level plays an important role in the review and approval of data that comes from facilities. The sub-national level is also responsible for supportive supervision, dissemination and guidance to the facility level. Staff at the sub-national level need the resources to review and validate programme data, ensure data quality and use data to check programme performance.

#### 1. Data collection

At all levels

- Use standardized tools
- Ensure sufficient staff adequately trained for M&E
- Ensure that data are archived in a confidential, secure system with back-up.

#### *At all levels*

- *Use standardized tools*
- *Ensure sufficient staff adequately trained for M&E*
- *Ensure that data are archived in a confidential, secure system with back-up.*

- Ensure that definitions of variables are correct and consistent.
  - Provide supportive feedback on data quality to the facility level.
- 2. Data quality assurance and assessment (with validation)**
- Perform data quality assessment and assurance periodically.
  - De-duplicate data as indicated.
  - Validate data before reporting to the national level.
- 3. Analysis and use**
- Confirm use of standardized and appropriate analysis methods.
  - Use correct, standardized denominators.
  - Use data to describe programmatic trends and inform strategic planning.
- 4. Aggregating and reporting**
- Forward reports on time as prescribed by the national level.
  - Use information from the national level to improve the programme.

### **National-level best practices**

The national level has similar functions as the sub-national level but is responsible for ensuring timely receipt of data and that, pulled together, the data can tell a story of programme performance nationally. At this level data should inform strategic planning and decision-making. The staff at the national level are also responsible for providing supportive supervision and disseminating findings and guidance to the sub-national level.

### **Measuring overall EMTCT targets: proposal for countries**

- Collect, collate and compile accurate, quality, complete and timely programme data.
- Model every year with careful validation of input data.
- Use other methods to assess targets periodically in-country.