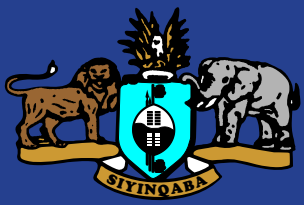

Ministry of Health

ELIMINATION OF NEW HIV INFECTIONS AMONG CHILDREN BY 2015 AND KEEPING THEIR MOTHERS ALIVE

National Strategic Framework for Accelerated Action

2011 / 2015

Kingdom of Swaziland

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FOREWORD

The Government of Swaziland has supported an aggressive national response that is focused on prevention and promotion of behaviour change, as outlined in the current National Health Sector Plan and National Multi-Sectoral Strategic Framework on HIV and AIDS.

This strategic framework for the **Elimination of new HIV infections among children by 2015 and keeping their mothers alive** (Elimination framework) reflects the national priorities for a comprehensive response to the epidemic, and provides a unified platform upon which to strengthen and accelerate efforts to prevent HIV infection among infants and children, and to keep their mothers alive. While prevention of mother-to-child transmission (PMTCT) interventions have been implemented since 2002, and the programme has achieved significant accomplishments, this Elimination framework prioritizes strategic and programmatic interventions that must be scaled up to achieve Elimination targets of reducing mother-to-child transmission of HIV (MTCT) to less than 2 per cent by 2015. Its successful implementation calls for involvement and collaboration among government, health providers, development partners, civil society and communities.

Priority strategies for the 2011–2015 Elimination framework period are aligned to the four-pronged approach defined by WHO and include: (i) keeping HIV-negative women from acquiring HIV infection in the first place; (ii) integrating family planning into antiretroviral therapy (ART) and labour and delivery sites to reduce the unmet need among HIV-positive women; (iii) improving the quality of care especially during labour and delivery; and, (iv) standardizing comprehensive care for HIV-positive mothers and their HIV-exposed infants.

PMTCT should be addressed within the socio-cultural and economic context that creates and perpetuates vulnerability while undermining uptake by women. In view of this the Elimination framework proposes interventions that promote male involvement and encourage both partners to take responsibility for HIV prevention; integration of relevant services (such as testing, efficacious ARV provision, and family planning) to increase access and early uptake; improving the quality of services provided to HIV-infected women and their exposed infants; and social and behaviour change communication (SBCC) to create a supportive community environment for PMTCT.

The Government of Swaziland remains committed to the fight against HIV, and to supporting the implementation of this Elimination framework and partnering with other stakeholders in a collective response that is critical to the achievement of Elimination objectives.

Hon. Benedict Xaba
Minister of Health

ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral Drug
ASRH	Adolescent Sexual and Reproductive Health
AZT	Zidovudine
CBO	Community-Base Organization
CTX	Co-trimoxazole
DHS	Demographic and Health Survey
EGPAF	Elizabeth Glaser Paediatric AIDS Foundation
EID	Early Infant Diagnosis of HIV
eMTCT	Elimination of Mother-to-Child Transmission
FBO	Faith-based Organization
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HTC	HIV Testing and Counselling
IEC	Information, Education and Communication
INH	Isoniazid
IPT	Isoniazid Preventive Therapy
IYCF	Infant and Young Child Feeding
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MNCH	Maternal, Newborn and Child Health
MOH	Ministry of Health
MTCT	Mother-to-Child Transmission of HIV
NERCHA	National Emergency Response Council on HIV and AIDS
NGO	Non-governmental Organization
NSF	National Multi-Sectoral Strategic Framework on HIV and AIDS
NSP	National Strategic Plan on HIV and AIDS
NVP	Nevirapine
PCR	Polymerase Chain Reaction
PEPFAR	President's Emergency Plan for AIDS Relief
PITC	Provider Initiated Testing and Counselling
PMTCT	Prevention of Mother-to-Child Transmission of HIV
RHMT	Regional Health Management Team
SBCC	Social and Behaviour Change Communication
SNAP	Swaziland National AIDS Programme
SOP	Standard Operating Procedure
SRH	Sexual and Reproductive Health
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis
TWG	Technical Working Group
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

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The Swaziland Ministry of Health wishes to acknowledge the numerous institutions and individuals whose technical support, hard work and endless efforts led to the development of this national strategic framework for the **Elimination of new HIV infections among children by 2015 and keeping their mothers alive.** The development of the national strategic framework was spearheaded by the National Steering Committee, under the leadership of the Honourable Minister for Health, as listed below:

Champion:
Minister of Health - Hon. Mr. Benedict Xaba

National Steering Committee:
Chairperson: Deputy Director of Health services (Public Health) - Ms. Rejoice Nkambule
Alternate Chairperson: NERCHA Coordinator (Programmes) - Ms. Faith Dlamini

Members:

1. WHO MCH Focal Person - Ms. Dudu Dlamini
2. UNICEF HIV and AIDS Specialist - Dr. Fabian Mwanyumba
3. EGPAF Country Director - Dr. Mohammed A. Mahdi
4. Baylor Clinical Director - Dr. Nida Hailu
5. ART Coordinator - Dr. Velephi Okello
6. PMTCT Coordinator (Secretariat) – Ms. Bonisile Nhlabatsi
7. UNAIDS Programme Officer - Ms. Thembisile Dlamini
8. UNFPA Programme Specialist SRH - Ms. Margaret Thwala-Tembe
9. NURSING Dept. DCNO - Ms. Mavis Nxumalo
10. PEPFAR Prevention Advisor - Mr. Munamato Mirira
11. MOH Monitoring and Evaluation Coordinator - Ms. Sibongile Mndzebele

The Ministry of Health would like to extend special gratitude to UNICEF for its financial support of this effort, to EGPAF for hosting the working sessions for the development of the framework, and to the PMTCT Technical Working Group for their valuable contributions and feedback into the preceding versions of this framework. In addition, the Ministry of Health would like to acknowledge the support of Grace Mercy Osewe, the project consultant who coordinated all the inputs and developed the strategic framework.

1. INTRODUCTION

The national strategic framework for the **Elimination of new HIV infections among children by 2015 and keeping their mothers alive**[1] eMTCT as developed to strengthen and accelerate the effort to eliminate HIV transmission to children and improve the survival of mothers over the next four years. The country has made significant achievements in reaching pregnant women with antenatal care services and is well positioned to leverage this antenatal care coverage to eliminate HIV transmission to infants and children.

The Government of the Kingdom of Swaziland remains committed to the elimination of new HIV infections among children, in fulfilment of His Majesty The King's continuous call to stepping up efforts in HIV prevention. In his State Address at the official opening of the third session of the 9th Parliament in February 2011, he reiterated the need to strengthen HIV prevention efforts:

"Whilst we are making gains in the fight against malaria and other areas, there still remains a challenge in the fight against TB and HIV. We should encourage everyone to present themselves to the health facilities to receive the required attention and to ensure they take the full course of their treatment. I would like to remind the nation that HIV still remains ***indzabayetfusonkhe (collective responsibility)****. In this regard, efforts to strengthen our national impact mitigation strategies must be accelerated. We are encouraged by the improved public response to the awareness programmes on HIV and AIDS. This shows that the nation is now taking this issue seriously.* ***Our motto as a nation should be Prevention! Prevention! And Prevention!*** *All it takes is a change of behaviour from all of us."*

It is in line with this commitment that the country established its national goal of reducing new HIV infections among children to 5 per cent by 2014[2] , two years ahead of the Global Plan towards the Elimination of New HIV Infections among Children. This eMTCT framework therefore reflects a consolidation of on-going national efforts, as articulated in the current National Strategic Framework (NSF) on HIV and AIDS 2009–2014 and is in alignment with existing plans and related national strategies. It sets out the framework for a response that is anchored on a strengthened maternal, newborn and child health (MNCH) platform and addresses specific challenges that currently undermine the PMTCT effort.

[1] Referred to as the 'Elimination framework' throughout this document.
[2] National Strategic Framework on HIV and AIDS 2009–2014

2. DEVELOPMENT OF THE eMTCT FRAMEWORK

The eMTCT framework was developed through consultations with key stakeholders in a process that was led by the National Steering Committee, under the stewardship of the Minister of Health, Honourable Benedict Xaba. It is designed to strengthen and focus the work that is currently underway towards elimination of MTCT. Box 1 outlines the key steps in the development of the framework.

The eMTCT framework is aligned to the following national plans:

- Global and Regional Consensus documents on Virtual Elimination of Mother-to-Child HIV Transmission
- National Multi-Sectoral Strategic Framework for HIV and AIDS 2009–2014
- National Health Sector Strategic Plan 2008–2013
- Monitoring and Evaluation Framework 2008–2013.
- Integrated Sexual Reproductive Health Strategic Plan 2008–2015

Box 1: Key steps in the development of the Elimination framework:

1. Review of the PMTCT response (2010).
2. Desk review of existing PMTCT plans.
3. Desk review of relevant national strategy documents.
4. Gap analysis to inform areas of intervention focus.
5. Workshop with National Steering Committee to set impact and outcome targets.
6. Review with National PMTCT Technical Working Group.

3. BACKGROUND AND CONTEXT

3.1 Country profile

The Kingdom of Swaziland is landlocked with a surface area of 17,364 square kilometres, and is bordered by the Republic of South Africa and Mozambique. According to the 2007 Population Census, the population of Swaziland is estimated at 1,018,449 people with 481,428 males (47 per cent), and 537,021 females. Fifty-two per cent of the population is under the age of 20 years and 79 per cent of the people live in rural areas. The literacy rate among women of reproductive age is 91 per cent, with 59 per cent having a secondary education or higher.

Swaziland is divided into four administrative regions namely, Hhohho, Lubombo, Manzini and Shiselweni. Each region is further divided into 55 constituencies known as tinkhundla and 360 chiefdoms and towns. Manzini is the most populated region with 31 per cent of the total population, followed by Hhohho (28 per cent), Shiselweni (20 per cent), and Lubombo (20 per cent).

Swaziland is classified as a lower middle income country[3] with a per capital income of US$2,580 (2007), and an economy that is largely agriculture driven. South Africa accounts for 80 per cent of its imports and 60 per cent of its exports. Economic growth has slowed down in the last 20 years from a gross domestic product growth rate averaging 8.4 per cent during 1981–1990 to 2.6 per cent during 2001–2008[4]. The economic slowdown has been driven by fluctuations in the performance of the agricultural sector due to climatic conditions and global fluctuations in the price of agriculture products.

Swaziland has been heavily impacted by the HIV epidemic and has the highest HIV prevalence in the world with 26 per cent of the population aged 15–49 living with HIV[5]. Due to HIV and AIDS, life expectancy at birth declined from a high of 60 years in 1997 to 46 years in 2009[6].

3.2 HIV and AIDS in Swaziland

Sentinel surveillance data show that prevalence among women attending antenatal clinics increased from 3.9 per cent in 1992 to 41.1 per cent in 2010. There is evidence of prevalence stabilizing; it shifted from 42.6 per cent in 2004 to 39.2 per cent in 2006[7], 42 per cent in 2008 and to 41.1 per cent in 2010. HIV prevalence is evenly distributed across the country. Disaggregation of the Demographic and Health Survey (DHS) 2007 data by age and gender shows that women aged 15–49 are more likely to be HIV positive than men (31 per cent and 20 per cent respectively). Prevalence also peaks earlier among women (25–29 years) than among men (35–39 years).

Despite the high infection rate, only 16 per cent of the population knows its HIV status (22 per cent of women and 9 per cent of men). HIV prevalence is higher among urban

[3] World Bank, World Development Indicators, 2008
[4] ADB (ESTA) database, 2006
[5] CSO and Macro International Inc. 2008
[6] World Bank, World Development Indicators 2009
[7] Sentinel surveillance reports (various) – Ministry of Health and Social Welfare, Swaziland

than rural populations, and rural residents are more likely to be tested than their urban counterparts. Analysis from the 2009 Modes of Transmission Report suggests that over 90 per cent of new infections occur through heterosexual contact and about 68 per cent of all new HIV infections in adults occur in persons above 25 years, the majority of whom are married or cohabiting with a steady partner.

3.3 Health service delivery system

Swaziland has a total of 223 health facilities organized within a five-tier healthcare system:

I. Community clinics
II. Health centres
III. Sub-regional hospitals
IV. Regional hospitals
V. National referral hospital

Box 2: Fast facts

Five per cent of total deliveries occur before arrival at a health facility. Out of a total of 23,962 deliveries, 88 per cent occurred in hospitals, 9 per cent in health centres, and 3 per cent in clinics. This shows that nine out of 10 pregnant women deliver at the hospitals, bypassing health centres and clinics.

Most deliveries occur in hospitals (Box 2).

The health service delivery system consists of both formal and informal sectors. In the formal sector the government owns 44.8 per cent of health facilities, while 22.4 per cent are privately owned by doctors or nurses, 14.8 per cent by faith-based institutions, 12.6 per cent by industrial facilities and 5.4 per cent by NGOs. The informal sector consists mainly of traditional and alternative healthcare providers (SAM 2010).

The public health system is decentralized from the central ministry to the four regional health offices:

- The central level performs executive and administrative functions and provides strategic guidance on delivery of the essential healthcare package at all service delivery levels.
- Each regional office is headed by a Regional Health Administrator and supported by the Regional Health Management Team (RHMT) whose mandate is to provide technical leadership in executing Ministry of Health policies.
- At community level, there is a network of community health workers, including rural health motivators, to promote community participation in health activities. There are also community health committees assisting in the general management of health facilities.

The health sector faces a severe human resource shortage across all cadres, at all levels of the health system. Over 50 per cent of the existing workforce is deployed in hospitals located in the urban areas, serving about 20 per cent of the population. The rural areas, which have 80 per cent of the population, are served by only 50 per cent of the workforce.

Box 3: Key milestones in the PMTCT programme

- ✓ 2002: PMTCT Guidelines 1st Edition
- ✓ 2002: PMTCT programme piloted in three facilities
- ✓ 2003: PMTCT Strategic Plan 2003–2005
- ✓ 2006: PMTCT Guidelines 2nd Edition
- ✓ 2007: PMTCT Operational Plan 2007–2011
- ✓ 2009: Early Infant diagnosis of HIV using DNA PCR fully established in the country
- ✓ 2010: PMTCT Guidelines 3rd Edition
- ✓ 2011: Elimination framework and Operational Plan 2011–2015

3.4 The PMTCT programme in Swaziland

The PMTCT programme was officially launched in 2003 at three pilot sites, with primary support from UNICEF. The lessons from these pilots formed the basis for the national expansion from three sites in 2003 to an impressive 150 in 2010. The key programme milestones are highlighted in Box 3.

3.4.1 Programme achievements

In Swaziland, 33,000 infants are delivered annually, an estimated 13,563 (41 per cent) of whom are born to HIV-infected mothers[8]. Without PMTCT intervention approximately 5,425 (40 per cent[9]) of these infants would be infected. In 2009 an estimated 2,300 infants became infected during pregnancy, delivery and breastfeeding, indicating that PMTCT interventions prevented 59 per cent of HIV infections in infants born to HIV-infected mothers. Antenatal coverage is almost universal, with 97 per cent of pregnant women attending antenatal care services at least once. Attendance by skilled personnel is also significant with 80 per cent of women delivering at health facilities.

Table 4: Health facility coverage of PMTCT

Region	Number of facilities offering antenatal care services	# of facilities offering PMTCT service, 2008	# of facilities offering PMTCT service, 2010
Hhohho	47	39 (83%)	42 (89%)
Manzini	57	43 (75%)	44 (77%)
Lubombo	37	31 (84%)	36 (97%)
Shiselweni	30	24 (80%)	28 (93%)
Total	**171**	**137 (80%)**	**150 (88%)**

Source: SAM 2010

[8] PMTCT guidelines 2010

[9] Kevin deCock et al, JAMA, 2000, 283: 1175-1182

Swaziland has made great progress in implementing PMTCT, from three facilities in 2003 to 150 facilities by 2010 (see Table 4 above). PMTCT services were provided within MNCH services. HIV testing became integrated as part of antenatal care services and single dose Nevirapine (sd-NVP) was the initial regimen provided to HIV-infected pregnant women and exposed infants to reduce MTCT. In 2007, the country introduced use of a more efficacious ARV regimen of AZT from 28 weeks of pregnancy, NVP+plus 3TC+AZT during labour and delivery with the 'tail' (3TC+AZT) for one week. Infants received NVP plus one week of AZT.

By the end of 2010, Swaziland had made commendable progress in expanding PMTCT services and in delivering ARVs to HIV-infected pregnant women. As shown in Table 5 below, 76 per cent[10] of all HIV-infected pregnant women received a full course of PMTCT prophylaxis in 2010 while 73 per cent of pregnant women were assessed for ART eligibility and 44 per cent of those eligible were initiated.

Table 5[11]: Uptake of PMTCT among women accessing PMTCT services in 2011

Indicator	Value
Pregnant women accessing HIV testing and counselling	**81%**
Proportion of infected pregnant women receiving ARV prophylaxis or ART	**76%**
Proportion of HIV-exposed infants receiving ARV prophylaxis	**87%**
Proportion of HIV-infected pregnant women assessed for ART eligibility (CD4<350)	**73%**
Proportion of HIV-exposed infants accessing co-trimoxazole prophylaxis	**78%**
Early infant diagnosis for HIV-exposed infants within 6–8 weeks	**47%**
Proportion of HIV-infected children on ART	**59%**
Proportion of HIV-infected infants on ART	**28%**

The revised national PMTCT guidelines were developed in 2010. For the first time, ARV prophylaxis could be given to make breastfeeding safer for HIV-infected women. The new guidelines improve the quality of care for both mother and child and include provision of more efficacious ARV regimens to HIV-infected women from as early as 14 weeks gestation, and to exposed infants during breastfeeding. Early infant diagnosis using Polymerase Chain Reaction (PCR) testing is also recommended for all exposed infants at six weeks. It is these new guidelines that have provided regimens with very high efficacy to reduce MTCT below 5 per cent.

[10] MOH routine PMTCT data, 2011; EID data, 2010; routine ART data and spectrum 2010 projections, Bottleneck Assessment for MTCT Virtual Elimination Strategy
[11] Ibid.

3.4.2 Programme opportunities

The PMTCT programme is well positioned to intensify and scale up the current response to achieve eMTCT targets. Among the opportunities to capitalize on are:

- Strong national commitment for PMTCT from the highest levels of government, development partners and civil society.
- Financial and technical resources are available to support current elimination efforts.
- The revised guidelines have been developed and are available for nationwide dissemination to improve the scope of services and standardize the quality of care offered to pregnant women and breastfeeding to prevent MTCT.
- The high antenatal care attendance rate (97 per cent) and facility-based deliveries (80 per cent[12]) can be leveraged to expand access to pregnant women to receive HIV testing and other PMTCT interventions to reduce the risks of MTCT during pregnancy, intra-partum and immediate post-partum.
- Immunization coverage for DPT is over 80 per cent for DPT 1, which provides another opportunity to provide mother-infant pairs with PMTCT services in the post-partum period.
- Location of PMTCT within the MNCH platform provides an entry point for the provision of integrated sexual reproductive health (SRH) and HIV services.
- Strong repeated post-test counselling for HIV-negative pregnant women to support them to remain HIV negative, including support for condom use.

3.5 Gaps and challenges

The country has a high prevalence of HIV among pregnant women of 41.1 per cent[13], which translates into an estimated 13,536 pregnancies or HIV-exposed infants a year. Within this context, HIV-related illnesses have become the leading cause of death for mothers and children, accounting for an estimated 46 per cent of maternal deaths and 47 per cent of under-five deaths. Complications related to poor management of bleeding during pregnancy and after delivery are the most frequent obstetric complications and a major cause of maternal mortality.[14]

Table 6 on the next page shows the PMTCT cascade with missed opportunities, with red representing the women and infants who received or who did not receive the respective service. The gaps are due to a number of programmatic and systemic challenges[15], which are described in the following section.

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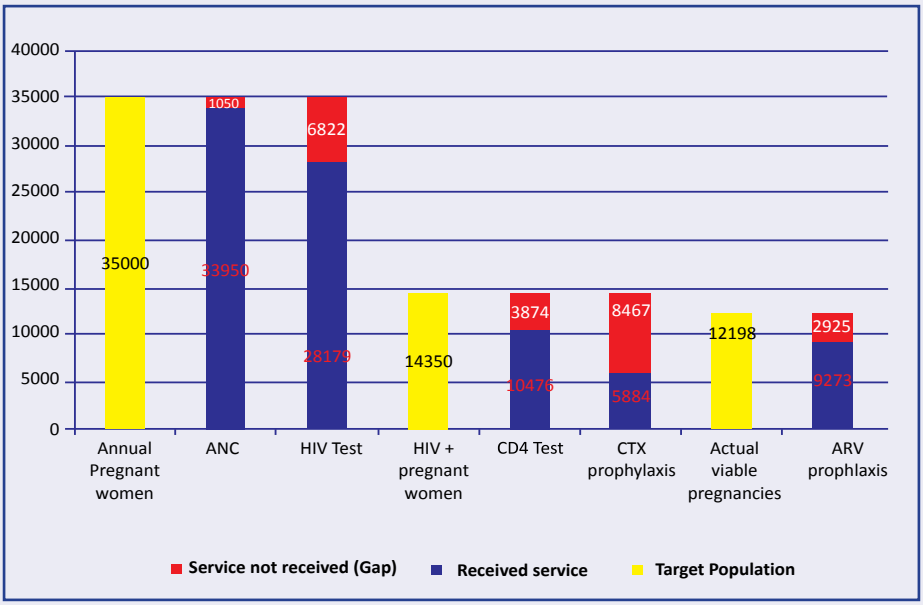
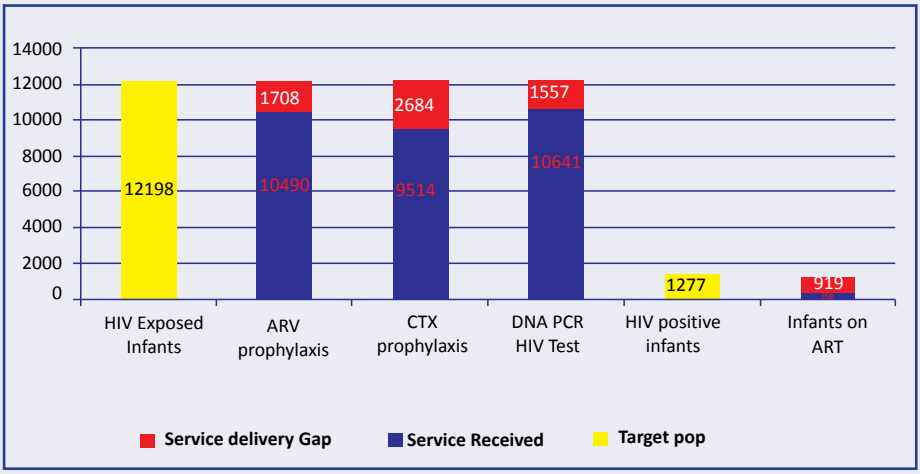
[12] MICS 2011, Preliminary results
[13] MICS 2011, Preliminary results
[14] MOH HIV sero-surveillance among pregnant women, 2010
[15] Improving the Quality of Maternal and Neonatal Health Services in Swaziland: A Situation Analysis, May 2011, Ministry of Health
The statistics in the section are drawn from the reprogramming of PMTCT funding Global Fund Round 7 Phase 2 work plan (2010).

Figure 1: The PMTCT cascade with missed opportunities (gap analysis – women)



Source: PMTCT data, 2011

Figure 2: The PMTCT cascade with missed opportunities (gap analysis – exposed infants)



3.5.1 Program related challenges

- **Timeliness and frequency of antenatal care uptake**
  Timing of antenatal care visits determines how early efficacious ARV regimens are initiated, and subsequent effectiveness of the PMTCT intervention. According to the PMTCT guidelines, the ARV regimen should be initiated as early as possible after 14 weeks, which is only possible if the pregnant woman visits antenatal care within the first trimester. Despite the high antenatal care attendance of 97 per cent, only 28 per cent of pregnant women attended antenatal care services during the first trimester (2010). When women attend antenatal care earlier, they can be diagnosed, assessed for treatment eligibility and initiate prophylaxis or treatment earlier.

- In terms of frequency, a minimum of four antenatal care visits is recommended and approximately 77 per cent of pregnant women made at least four antenatal care visits in 2009[16]. The MNCH programme has poor capability for tracking clients and ensuring that all services are received and women adhere to their drug regimens throughout their pregnancy. A total of 20 per cent of pregnant women did not access health facilities for delivery, contributing to high maternal and infant mortality, and leaving a large number of women without access to essential PMTCT services.

- **Limited coverage of HIV counselling and testing**
  HIV testing is the entry point to prevention, treatment and care services. While there is low uptake of HIV testing among the general population, which is attributable to both stigma and availability of services, 80 per cent of pregnant women are tested for HIV at antenatal care. This leaves 20 per cent who were excluded from subsequently related prevention and PMTCT services.

- **Uptake of efficacious ARV regimen for pregnant women and exposed infants**
  A significant number (24 per cent) of HIV-positive pregnant women are not accessing ARV prophylaxis or treatment. Fifty per cent of eligible HIV-infected pregnant women do not receive ART for their own health. Lack of timely access to CD4 assessment, lack of doctors or specialized nurses to initiate ART, and limited scale-up of ART services nationwide are some of the factors contributing to this gap.

- **Poor post-natal attendance**
  Only 22 per cent of women come for a post-natal check-up at six weeks. Thirty-seven per cent of HIV-positive women indicate that their family planning needs are unmet (DHS, 2007). While 80 per cent bring their infants for immunization at

[16] MICS 2010

six weeks, in 2010 only 47 per cent of HIV-exposed infants received an HIV test at six to eight weeks of age; 78 per cent of exposed infants received co-trimoxazole; only 28 per cent of HIV-infected infants received ART; and exclusive breastfeeding rates are at 44 per cent (MICS, 2010) for infants less than six months old.

3.5.2 System-related challenges

- **Health systems**
  - **System-wide shortages of trained health personnel** especially in rural areas. Doctors, midwives and nurses are all in high demand. Other supporting cadres such as counsellors and community health workers are also needed. A task sharing/shifting policy is needed in the short to medium term to align human resource demands to the existing resource base.
  - **Weak linkages and systems for cross-referral** to other treatment and care programmes such as ART, tuberculosis (TB), sexually transmitted infections (STIs), family planning, and psychosocial support.
  - **Inadequate infrastructure and equipment** in various MNCH facilities, especially in labour and delivery, and emergency/ambulatory services for maternity referrals. Other gaps relate to the limited capacity for early infant diagnosis and access to laboratory services for CD4 assessment to facilitate initiation of ARV regimens in timely manner.
  - **Weak logistics management information system** that needs to be strengthened and centralized for effective management of the multiple drugs and commodities for testing and treatment, and family planning (i.e. HIV, TB, STIs, ART, opportunistic infections) required in an integrated setting.

- **Community systems**
  - **High stigma and discrimination** driven by community norms, myths and misconceptions that do not support HIV prevention efforts, including uptake of practices such as HIV testing and counselling, male involvement or treatment adherence. It also affects health worker attitudes towards HIV-positive mothers, especially at labour and delivery.
  - **Weak linkages and referral mechanisms between community and facility-based services** to create demand, promote uptake and facilitate follow-up of HIV-positive mothers and exposed children.
  - **Lack of accurate knowledge and information on HIV protective behaviours** such as safe sex practices for primary prevention of new infections among HIV-negative women and family planning for prevention of unwanted pregnancies among HIV-positive women.

4. ELIMINATION OF MTCT PLAN

4.1 Policy context

The eMTCT framework is aligned to the following commitments, policies and standards among others:

International and regional Level

- Attainment of Millennium Development Goals (MDGs) 4 (reduce child mortality), 5 (improve maternal health) and 6 (combat HIV and AIDS, malaria and other diseases) by 2015.
- The Prevention of Mother-to-Child Transmission High Level Global Partners Forum held in December 2005 in Abuja, Nigeria, and the call to action by governments to work towards the achievement of an HIV and AIDS-free generation by 2015.
- June 2006 commitment by UN Member States to work towards universal access to comprehensive prevention programmes, treatment, care and support by 2010.
- Global Plan towards the Elimination of new HIV Infections among children by 2015 and keeping their mothers alive.
- Framework for the Elimination of New Paediatric Infections in Eastern and Southern Africa 2011–2015.

National level

- National Health Sector Strategic Plan 2008–2013
- Health Sector Monitoring and Evaluation Framework 2008–2013
- Integrated Sexual Reproductive Health Strategic Plan 2008–2015
- National Multi-Sectoral Strategic Framework for HIV and AIDS 2009–2014
- National Guidelines for Prevention of Mother to Child Transmission of HIV (2010)
- Guidelines for Antiretroviral Therapy for Adults
- Guidelines for Antiretroviral Therapy for Children
- National Guidelines for the HIV Testing and Counselling
- National Guidelines for HIV/TB management

4.2 Guiding principles

The eMTCT framework is consistent with the broader national HIV and AIDS response[17] and is based on the following principles:

i. **Result-based management:** Planning, implementation and monitoring of PMTCT interventions at all levels with a focus on achieving stated measurable results or change.

ii. **Family-centred approach:** Provision of a basic package of MNCH services to the pregnant and breastfeeding woman, her partner and children directly and through efficient referral services in collaboration with partner agencies and the community.

[17] This section draws on the Guiding Principles for the National Strategic Framework 2009–14.

iii. **Gender equality and equity:** Meeting eMTCT targets will not be possible without the participation of men and women, with both taking responsibility to reduce the spread of HIV. Stakeholders will address gender inequalities that contribute towards fuelling the HIV epidemic. This will be done by incorporating gender dimensions in all aspects of HIV programming to promote the active engagement and participation of both women and their partners. It will help to reduce gender vulnerability and risks of HIV transmission, while at the same time improving equal access to HIV prevention, treatment and care services, especially to the most vulnerable.

iv. **Systems approach and integration:** The eMTCT framework will integrate and link HIV prevention, care and treatment services within MNCH and reproductive health programmes through a health systems approach, including community systems.

v. **Promote greater involvement and empowerment of people living with HIV and AIDS (GIEPA):** Stakeholders will embrace and operationalize the principle of meaningful involvement and participation of people living with HIV (PLHIV) in the national HIV response at all levels. In particular, mentor mothers (mothers living with HIV who are trained and employed as part of a medical team to support, educate and empower pregnant women and new mothers about health and their babies' health) working at both the facility and community level embody this principle.

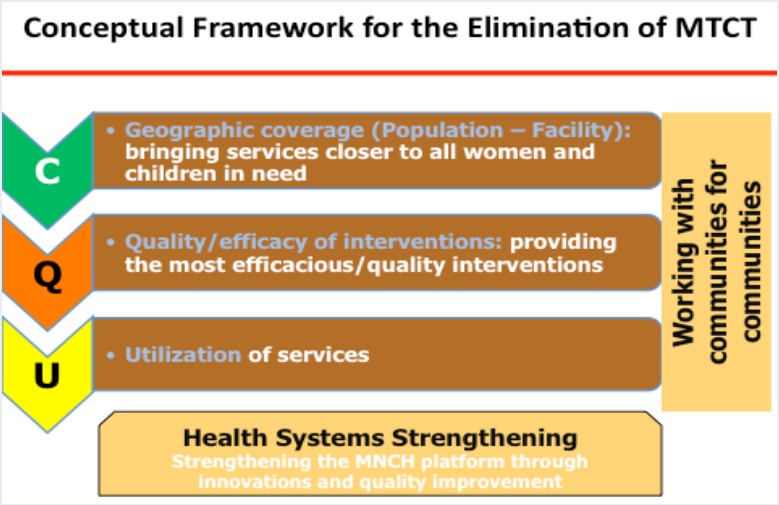
vi. **'Three Ones' principle:** Stakeholders will harmonize their operations with the Three Ones principles i.e. having one national (a) coordination authority, (b) strategic framework, and (c) monitoring and evaluation framework.

vii. **Community engagement and participation in, and ownership of HIV and AIDS interventions.** Communities will be supported, empowered and their systems strengthened to ensure that interventions at community level are owned and driven by the communities themselves. Stakeholders will ensure adequate support and strengthening of community solutions, the use of existing infrastructure, equity and sustainability of interventions.

viii. **Knowledge management:** Stakeholders will make efforts to share and learn from each other based on their 'hands-on' experiences and existing and emerging best practices on HIV and AIDS.

ix. **Commitment to address regional and international HIV and AIDS obligations and adherence to international HIV-related protocols:** Stakeholders will take due cognisance, will adapt and customize regional and international protocols to ensure compliance and contribute to meeting Swaziland's regional and international commitments on HIV and AIDS.

4.3 Conceptual framework[18] for the Elimination of new HIV infections among children by 2015 and keeping their mothers alive



Based on the gap analysis of the PMTCT programme, a number of priority actions are needed to address the current gaps and bottlenecks in service delivery in order to scale up PMTCT to the level required to meet Elimination targets. These actions are aligned to the **Conceptual framework** above and include the following:

4.3.1 Coverage, quality and access

- Expanding access to quality comprehensive PMTCT care at all antenatal care facilities.
- Integrating PMTCT interventions into the MNCH platform at each entry point (antenatal care, family planning, labour and delivery, post-natal, including services targeting adolescents and teenage mothers), and strengthening linkages to TB, ART and other relevant services.
- Enhancing capacity of MNCH for the early detection, care and treatment of HIV in pregnant and breastfeeding women, their partners and infants.
- Incorporating quality peer support services provided by mentor mothers to increase knowledge, reduce stigma, and limit barriers to demand.

4.3.2 Health systems strengthening

- Supporting translation of revised PMTCT guidelines (2010) into practice at regional and facility level through dissemination to, and training of, service providers at all levels.

[18] Adapted from a presentation made by R. Ehounou-Ekpini of UNICEF at the Regional Consultation on the Elimination of MTCT and Synergies for Improved Maternal and Newborn Health in Eastern and Southern African Region, 2011.

- Developing packages of integrated services that respond to the specific context (community) and needs of sub-groups (i.e. HIV-negative women, care for HIV-exposed infants including infant feeding, and family planning at treatment centres).
- Disseminating guidelines and standard operating procedures (SOP) to guide and support integrated care (HCT, PMTCT, family planning, ART, TB) to women, children and their families.
- Capacity building and training of service providers to promote standardized services.
- Addressing stigma and discrimination by health workers.
- Encouraging male participation within the MNCH platform by changing health worker attitudes and providing appropriate, male-friendly services.
- Integrating supply chain management to minimize stock-outs of all diagnostics, drugs and other essential commodities required in an integrated setting, rather than using vertical/silo-type mechanisms.
- Reviewing roles and responsibilities of the current workforce to address issues of workload and inform formalization of task shifting/sharing, including identification of tasks to be shifted to midwives, nurses and the various cadres of community health workers (such as mentor mothers), accreditation of training and remuneration.
- Addressing issues with the human resource system to assure adequate staffing levels, timely placement of personnel and improved remuneration to encourage retention.

4.3.3 Working with communities for communities

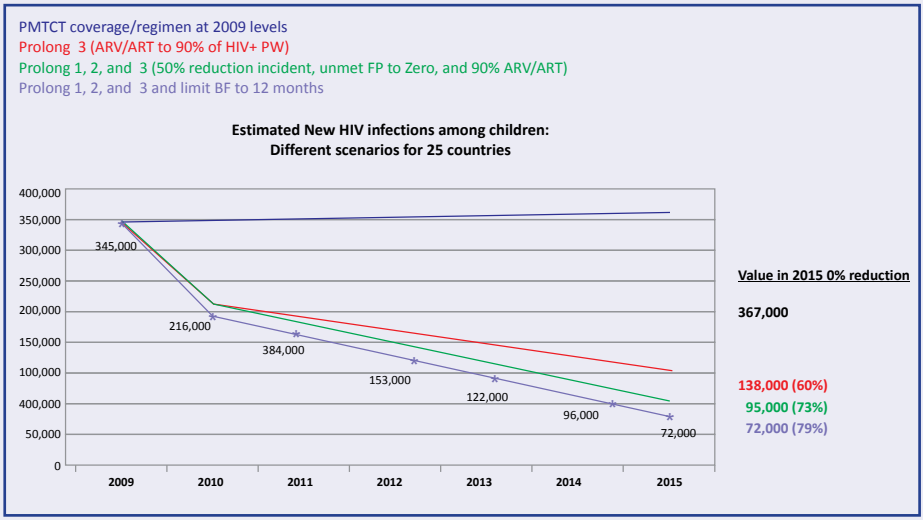
- Increasing community support, participation and mobilization for uptake of PMTCT, and strengthening of community-based referral and support networks.
- Capacity building of civil society organizations and existing structures to deliver a continuum of prevention, treatment, care and support services at community level.
- Behaviour change communication interventions to promote involvement of male partners, significant family members and communities to create a supportive environment for PMTCT.

4.4 Strategic Approach

The national eMTCT Framework applies the 4 prolong strategic. The strategic approach based on multiple prongs has been shown to have the greatest impact on PMTCT, as opposed to implementing an individual prong as shown in **Making the Case for a Multi-Prong Approach** insert below. Only 60 per cent reduction was achieved with Prong 3, versus 79 per cent reduction with Prongs 1, 2, and 3 coupled with breastfeeding limited to 12 months. A four-prong approach is ideal because health, nutrition and psychosocial support promoted by Prong 4 should be an essential part

of any programme that aims to reduce HIV transmission and improve survival rates for HIV-infected mothers.

Figure 3: Making the case for a Multi-Prong Approach



4.5 National eMTCT goal and targets

4.5.1 Impact Level

Goal: Reducing new HIV infections among children to <5% by 2015 and improving survival of their mothers.

Target: Reduced new HIV infections in infants from 12% in 2010 to <5% by 2015

4.5.2 Programmatic targets

This section outlines, outputs contributing to the achievement of the impact for the Elimination Framework, based on the Four-Prongs.

Programmatic targets (outcomes and outputs)

PRONG	OUTCOME INDICATOR	BASE LINE	SOURCE AND YEAR	TARGETS		OUTPUT INDICATOR	BASE LINE	SOURCE AND YEAR	TARGETS	
				2013	2015				2013	2015
1	% of HIV negative pregnant women who test HIV positive during pregnancy and breastfeeding	10%	Program Survey 2010	7.5%	5%	1.1 % of women attending MNCH who tested for HIV and know their HIV status	81%	HMIS 2010	90%	100%
						1.2 % of HIV negative women attending ANC whose male partner is tested for HIV	3%	TBG	25%	50%
						1.3 % of HIV negative women whose eligible male partner is on ART	N/A	TBG	25%	50%
2	% of HIV positive women attending HIV care and treatment services with unmet need for family planning	37%	2011 program data	20%	5%	2.1 % of HIV positive women (15 -49) using modern family planning methods by six weeks post-partum		Routine HMIS, PNC register	25%	50%
						2.2 % of HIV positive women (15 -49) on ART, who do not want children, using modern family planning methods		ART and family planning register	50%	95%
						2.3 % of HIV positive women (15 -49) newly enrolled in pre-ART, who do not want children using modern family planning methods		Pre – ART and Family planning register	50%	90%

PRONG	OUTCOME INDICATOR	BASE LINE	SOURCE AND YEAR	TARGETS		OUTPUT INDICATOR	BASE LINE	SOURCE AND YEAR	TARGETS	
				2013	2015				2013	2015
3	% of infants who are HIV infected	12%	Spectrum 2010		<5%	3.1 % of HIV positive women who receive efficacious ARVs	31%	HMIS 2010	90%	97%
						3.2 % of women delivered at the health facilities by a skilled birth attendant	80%	HMIS 2010	90%	97%
						3.3 % of HIV positive women delivered whose partogram was accurately completed	N/A	HMIS	75%	99%
						3.4 % of exposed infants initiated on extended NVP prophylaxis	N/A	HMIS	85%	95%
4	4.1 % of maternal death due to HIV	46%	Maternal Audit	30%	10%	4.1.1 % of eligible HIV positive pregnant or breastfeeding women initiated on ART	76%	HMIS 2010	85%	95%
						4.1.2 % of eligible HIV positive women initiated on cotrimoxazole prophylaxis	40%	HMIS 2011	85%	100%
						4.1.3 % of HIV and TB co-infected pregnant or breastfeeding mothers i nitiated on TB treatment	TBD		TBD	TBD
						4.1.4 % of HIV positive pregnant or breastfeeding mothers without active TB initiated on INH prophylaxis		HMIS	TBD	TBD

PRONG	OUTCOME INDICATOR	BASE LINE	SOURCE AND YEAR	TARGETS		OUTPUT INDICATOR	BASE LINE	SOURCE AND YEAR	TARGETS	
				2013	2015				2013	2015
	4.2 % of children of HIV positive mothers who are alive beyond 5 years of age	TBD	Survey		TBD	4. 2.1 % of children initiated on CTX prophylaxis up to six weeks of birth	78%%	HMIS 2010	85%	95%
						4.2.2 % of children exclusively breastfed up to six months of age	44%	MICS 2010	55%	65%
						4.2.3 % of HIV and TB co-exposed children on INH prophylaxis	TBD			100%
Cross Cutting HSS 5.	5.1 % of Health facilities providing comprehensive package of PMTCT services to pregnant an d breastfeeding mothers, infants and children	88%	SAM 2010	90%	95%	5.1.1#RHMTs coordinating PMTCT implementation using integrated plans	N/A	N/A	4	4
						5.1.2 # of MNCH entry points using required protocols for PMTCT service delivery		SAM		100%
						5.1.3 # of facilities in regions to provide additional information to “fast track” integration of PMTCT into MNCH at multiple levels			4	4
						5.1.4 # of health care workers trained in PMTCT protocols		SAM	TBD	TBD

PRONG	OUTCOME INDICATOR	BASE LINE	SOURCE AND YEAR	TARGETS		OUTPUT INDICATOR	BASE LINE	SOURCE AND YEAR	TARGETS	
				2013	2015				2013	2015
	5.2 % of facilities with functional community referral, outreach and support programs for pregnant and breastfeeding mothers, children and partners	3.5%	SAM 2010	25%	50%	5.2.1 # of facilities with functional referral and outreach	6	SAM	33	59
						5.2.2 % of men and women of reproductive age group reached through mass media		KAP Survey	90%	95%
						5.2.3 % of men and women of reproductive age group reached through interpersonal communication	N/A	Program Data	90%	95%

4.5.3 Programmatic outcome and strategies

OUTCOME	STRATEGIES
1. Reduce new HIV infections among women attending MNCH by 50% by 2015	1.1 Strengthen capacity to provide comprehensive HIV prevention interventions (Box 4) for HIV negative pregnant women and their partners
2. Reduce unmet need for Family Planning among women living with HIV from 37% to 5% in 2015	2.1 Expand access to modern family planning methods by HIV positive women • Promotion of a standardized routine FP package for all labor and delivery facilities as well as ART treatment and Care centers • Strengthen linkages between health facilities and communities for referral and outreach services including the use of retired midwives • Initiate community based distribution of FP commodities through support groups of PLWH/A
3. Reduce mother to child transmission of HIV during pregnancy, childbirth and breast-feeding	3.1 Strengthen capacity to provide efficacious ARV regimens for PMTCT according to national guidelines • Scale up implementation of the national guidelines to all facilities. • Build capacity of health care workers to initiate and manage clients on ARV prophylaxis and treatment • Scaling up access to timely CD4 assessment, EID and related supplies 3.2 Improve the quality of care provided during labour and delivery and immediate post partum • Strengthen the infrastructure and equipment in facilities conducting deliveries • Strengthen the capacity and skills of health care workers in delivery of safe motherhood interventions. (special focus on monitoring of labour using partogram, active management of the third stage labour, and early post partum care of mother and newborn) 3.3 Strengthen the capacity to provide comprehensive counseling and services for infant and young child feeding

OUTCOME	STRATEGIES
4. Reduce HIV related deaths among mothers and children under five by 50% by 2015	4.1 Improve the quality of care and support provided to HIV positive mothers and HIV exposed infants • Increase access to ART by all eligible pregnant women • Strengthen provision of comprehensive care (Box 5) for HIV exposed infants • Strengthen the provision of health, nutrition and psychosocial support and counseling for HIV positive mothers and children • Increase access to the essential TB care package for HIV positive pregnant or breastfeeding mothers. • Strengthen linkages between health facilities and community support systems such as PLHA support groups, social workers and community health workers.
5. Improved health and community systems capacity to deliver quality prevention, care and treatment services across MNCH platform by 2015	5.1 Develop systems to support horizontal integration of PMTCT services • Strengthen capacity of human resources for health • Strengthen community structures to improve the delivery of basic PMTCT prevention and care services • Develop social and behaviour change communication (SBCC) interventions to create a supportive environment and increase uptake of PMTCT

Box 4: Comprehensive Prevention

The HIV Prevention package for the HIV negative women consists of:

1. Retesting (at 8 weeks after initial testing, 32 weeks, 6 weeks and 12 months after delivery, and 6 weeks after cessation of breastfeeding).
2. Preventive counseling
3. Partner testing/counseling
4. Screening and treatment of STIs
5. Identification of sero-discordance and referral to treatment
6. Condom demonstration and distribution

Box 5: Comprehensive Care

Ten Key Elements of an Exposed Infant Visit:

1. Document PMTCT regimen received by the mother and the infant.
2. Test for HIV or give results, when indicated.
3. Assess growth and development.
4. Give immunizations.
5. Provide prophylaxis (CTX, IPT).
6. Treat infections early.
7. Ask about household TB contacts.
8. Counsel on infant feeding and nutrition.
9. Ensure that the family is receiving HIV care, FP, social support.
10. Maintain suspicion for HIV infection

4.5 4 Summary of Interventions by Prong

Prong 1: Primary prevention of HIV	*Prong 2: Prevention of unwanted pregnancies among women*
• Health information and education • HIV testing and counseling • STI screening and management • Couple testing • Positive partner identification and enrollment in treatment • Safer sex practices, including dual protection (condom promotion • Counselling on HIV prevention for HIV negative pregnant mothers	• FP counselling and services to help women make informed decisions about reproductive health • HIV testing and counselling in RH/FP services • STI screening and management • FP services integrated and offered at ART sites • FP integrated Labour and delivery services • Safer sex practices, including dual protection (condom use) • Community based FP services through support groups of PLH/A
Prong 3: Prevention of HIV transmission from HIV-infected women to their infants	*Prong 4: Appropriate treatment, care and support to HIV-infected mothers and exposed infants*
• Offer micronutrient supplements or complementary foods • CD4 assessment of HIV positive pregnant women • ART for pregnant women (according to national guidelines) • ARV prophylaxis for prevention of MTCT • Safer obstetric practices (monitoring labor and delivery using partogram) • Nutritional assessments	• ART for women eligible for treatment • Prophylaxis for mothers and infants • Infant feeding counselling and support • Early Diagnosis of HIV infection in infants • Immunization and growth monitoring • Psychosocial support • CTX prophylaxis for exposed children
Cross-Cutting: Strengthening health and community systems to deliver quality integrated-services • Planning, management and coordination capacity at national, regional, community and facility • Capacity for integration of PMTCT into MNCH platform-Guidelines, HMIS, Infrastructure, Supply Chain Management, M&E, QA and documentation of best practise • Increasing human resource capacity at facility and community level • Supporting civil society and community based groups to generate demand and promote uptake of PMTCT services • Multi-component, multi-media social behaviour change communication campaign	

5. WAY FORWARD: COORDINATION AND IMPLEMENTATION

5.1 Coordination arrangements

The National Emergency Response Council on HIV and AIDS (NERCHA) was established in 2003 to coordinate the overall national multi-sectoral response. Development partners, including UN agencies, support the planning, development and implementation of the national response, and provide financial and technical support. The Ministry of Health, through the Swaziland National AIDS Programme (SNAP) is responsible for coordinating the health sector-based response that includes government institutions, the private sector, traditional health practitioners and selected civil society organizations.

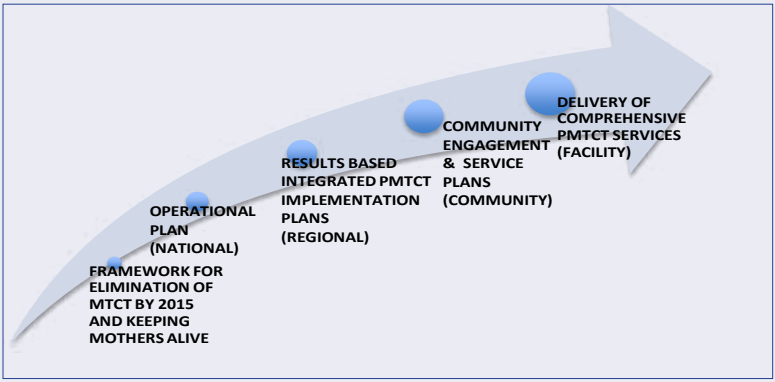
At regional level, NERCHA works through regional coordinating mechanisms that include the Regional Multi-Sectoral HIV and AIDS Coordinating Committee (REMSHACC), Tinkhundla Multi-sectoral HIV and AIDS Coordinating Committee (TMSHACC), and Chiefdom Multi-sectoral HIV and AIDS Coordinating Committee (CHIMSHACC). Other coordinating structures include RHMT under the Ministry of Health, and the Municipality HIV and AIDS Teams that coordinate the urban response. The regional coordination structures are in line with the National Decentralisation Policy of 2005.

5.2 Implementation of PMTCT

Integrated PMTCT service provision involves multiple systems of care and requires effective coordination of government programmes with jurisdiction over children (i.e. SRH, Expanded Programme for Immunization, Integrated Management of Childhood Illness, Nutrition Council etc.), development partners and civil society organizations working at national, regional and community level. The SRH programme supported by the Directorate will coordinate the implementation of the eMTCT plan at national level. The national level will ensure strategic leadership, national commitment and allocation of the required financial, technical and human resources. The National PMTCT Steering Committee has representation from NERCHA, the MNCH platform, implementing partners and development partners, and is well positioned to provide on-going strategic direction, technical guidance and support to the national elimination effort.

The starting point for the Elimination agenda is the development of a strategic framework to guide the response and an operational plan to implement the strategic response (see Figure 9).

Figure 9: Implementation arrangements for PMTCT



The following national-level actions are also necessary:

- Harmonization of HIV and AIDS, STI, MNCH, Adolescent and SRH policies and initiatives to facilitate integration.
- Definition of organizational strategies, prioritization of interventions, and roles and responsibilities of key stakeholders.
- Formulation of programmatic and service delivery targets, and the needed human and financial resources.
- Measures for monitoring and evaluation and reporting mechanisms.

The regional level is critical for leveraging resources to support horizontal integration across different partners, agencies and programmes to make integration and comprehensive PMTCT service provision a reality. RHMT serves as the regional coordinating structure responsible for joint planning and monitoring of the Elimination framework at implementation level (i.e. regional and community level). Regional integrated operational plans can be developed under the auspices of RHMT to support decentralized implementation of the Elimination framework. Regional Technical Working Groups that mirror the composition at national level can provide on-going technical guidance and support supervision. A regional PMTCT coordinator has been recruited for each region.

At the community level, community-based coordination committees also exist and work in a multi-sectoral environment. Several government and non-government community structures have been established to provide care and support to vulnerable groups. NGOs, CBOs and institutions such as the KaGogo Centres and Neighbourhood Care Points are able to provide services directly to women, their partners and children. KaGogo Centres also play an important role in coordinating community services. The Lutsango Lwaka Ngwane (women's 'regiments' and community volunteers) also provide care and support to orphans and vulnerable children and can serve as a community resource for integrated PMTCT services.

Annex 1. National eMTCT plan Narrative

1.1 Goal and Impact Target

Goal: Reducing new HIV infections among children to <5% by 2015 and improving survival of their mothers.

Impact: Reduced new HIV infections in infants from 12% in 2010 to <5% by 2015. This reflects the impact of preventing transmission of HIV during pregnancy, childbirth and breastfeeding, which is the primary mode of transmission to children under the age of five.

1.2 Programmatic Targets

This section outlines the outcomes, outputs and strategies contributing to the achievement of the impact for the eMTCT Framework, based on the 4-prong strategic approach.

Outcomes:

1. Reduced new HIV infections among women attending MNCH by 50% by 2015.
2. Reduced unmet need for family planning among HIV positive women from 37% to 5% by 2015.
3. Reduced mother to child transmission of HIV during pregnancy, childbirth and breastfeeding from 12% to <5% by 2015.
4. Reduced HIV related deaths among mothers and children under five by 75% by 2015.
5. Improved health and community systems capacity to deliver quality prevention, care and treatment services across MNCH platform by 2013.

Outcome 1: Reduced new HIV infections among women attending MNCH by 50% by 2015.

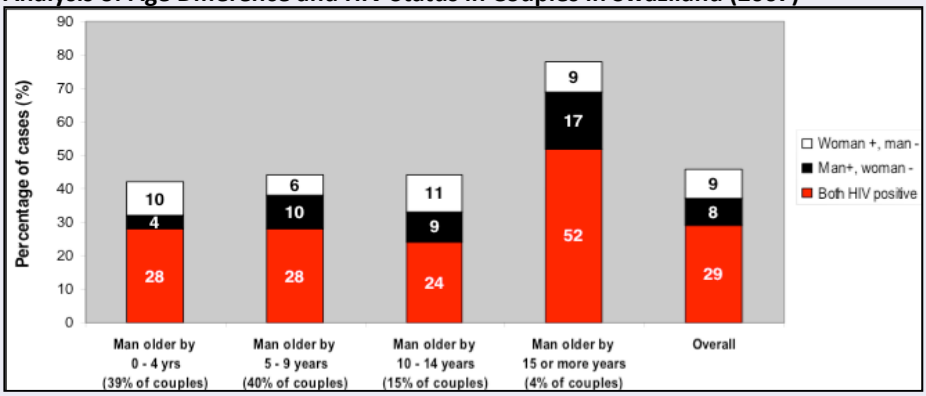
Primary prevention in the general population of women of reproductive age is a critical component of preventing eventual transmission of HIV to infants. A key thrust under this prong is to support HIV negative women to remain negative.

[1] "MNCH" refers to the platform where Antenatal Care, Family Planning, Labour and Delivery, Child Welfare Clinic and Postnatal services are offered.

[2] "MNCH" refers to the platform where Antenatal Care, Family Planning, Labour and Delivery, Child Welfare Clinic and Postnatal services are offered.

According to the Swaziland Modes of Transmission Study (2009), HIV-discordant and concordant positive couples are a critical target for prevention, given the epidemiological evidence which indicates that in 45% of couples, at least one of the two partners is HIV positive. In addition, sero-discordance also differs by the age difference between couples, as highlighted in the chart below which shows that the discordant rate is higher on average where men are 5 or more years older than their female partners.

Analysis of Age Difference and HIV Status in Couples in Swaziland (2007)



Source: SDHS. 2006/2007

Reaching **HIV negative women** attending MNCH services with a comprehensive prevention package (See Box 4.5) can provide them and their partners with the tools they need to stay negative. The high rate of MNCH attendance by women, estimated at 97% (2006-07 DHS), provides an opportunity for scaling up primary prevention services. The prevention package is designed to piggy-back on the visits by mothers to the MNCH (postpartum care,immunization services or infants (DPT) and follow-up HIV test) for infants and children.The increase in number of HIV negative women 15-49 attending MNCH services who are still negative six weeks after stopping to breastfeed will be used as a proxy to assess adherence to the prevention programme.

Output 1.2.1: Increased HIV testing among women attending MNCH services to 95% by 2015

HIV testing is an entry point for access to both prevention and care services, and an important component of the PMTCT package. To reach Elimination targets it is necessary to expand provider initiated HIV counselling and testingto all women who seek services within the MNCH platform.

Output 1.2.2: Increased treatment of HIV positive male partners by 50% by 2015

In addition to the fact that a significant proportion of couples are sero-discordant and up to 10% of women contract HIV during pregnancy or breastfeeding, increased

identification and treatment of HIV positive male partners, coupled with prevention counselling would reduce the risk of MTCT by minimizing the chance of transmitting HIV infection to the mother.

Strategies

1.1: Strengthen capacity to provide HIV prevention interventions for HIV negative women and their partners

This strategy is designed to promote early testing and identify HIV negative women before they get pregnant, and if already pregnant (i.e. at ANC), ensure that they get the support they need to stay negative. This will require expanding access to provider initiated testing and counselling (PITC) services through integration at each entry point into the MNCH platform and reaching women of reproductive age with HIV testing outside the MNCH platform through outreach and mobile testing facilities.

Box 4: Comprehensive Prevention

The HIV Prevention package for the HIV negative women consists of:

8. Retesting (at 8 weeks after initial testing, 32 weeks, 6 weeks and 12 months after delivery, and 6 weeks after cessation of breastfeeding).
9. Preventive counseling
10. Partner testing/counseling
11. Screening and treatment of STIs
12. Identification of sero-discordance and referral to treatment
13. Condom demonstration and distribution

The priority under this strategy is to provide comprehensive prevention as outlined in Box 7, which includes testing of clients at specific points, identification of HIV positive partners and subsequent provision of treatment according to national guidelines. Supportive interventions will include promoting male involvement to generate demand, and strengthening capacity of health care workers to provide HIV prevention counselling to HIV negative pregnant women and mothers, and their partners. Lay counsellors and mentor mothers can also provide peer education and psychosocial support.

Outcome 2: Reduced unmet need for family planning among women living with HIV from 37% to 5% in 2015

The objective under this prong is to increase the number of HIV positive women on family planning in order to avoid unwanted pregnancies. 37% of HIV infected women report an unmet need for family planning. In addition, the most frequent obstetric complications are related to poor management of bleeding during pregnancy and after delivery and are a major cause of maternal mortality[3] .

[3] Improving the Quality of Maternal and Neonatal Health Services in Swaziland: A Situational Analysis, MOH 2011

This, coupled with the high HIV prevalence in Swaziland makes expanding family planning for HIV infected women a prudent, cost-effective strategy for PMTCT.

Output 2.1: Increased proportion of HIV positive women using modern FP methods by six weeks postpartum by 50% by 2015

The postpartum period currently represents a missed opportunity to provide HIV positive women with long-term modern methods (i.e. implants and intrauterine devices) immediately after delivery, thereby reducing the chances of an unplanned pregnancy.

Output 2.1.2: Increased proportion of HIV positive women (15-49) attending ART clinics who are using modern FP methods to 95% by 2015

Integrating family planning services into ART clinics expands access by a key target group for PMTCT intervention, making it easier for them to avoid unwanted pregnancies. This includes both Pre-ART and ART clients.

Strategies

2.1: Expand access to modern family planning methods by HIV positive women

This strategy reduces the number of unwanted pregnancies by expanding access to modern family planning methods at entry points where HIV positive women already receive care, focusing on labour and delivery facilities, and ART treatment and care centres. Key priorities include promotion of a standardized, routine family planning package for all labour and delivery, and HIV care and treatment settings, coupled with strengthening of linkages between health facilities and communities for referral and outreach services by trained health care workers such as practising and retired midwives who can counsel women and provide/distribute modern family planning commodities, lay counsellors and mentor mothers. The NSF MTR of 2010 also pointed to the need to scale up community based distribution of FP commodities as one of the measurers to reduce the unmet need for FP for women living with HIV.

Outcome 3: Reduced mother to child transmission of HIV during pregnancy, childbirth and breastfeeding from 12% in 2010 to <5% in 2015

Delivering on this outcome will require expanding access to minimum package of PMTCT services (ANC, PITC, ARV/ART) to all sites, and improving the quality of services from ANC to labour and delivery and post partum to reduce the risk of transmission. In 2010, PMTCT services were available at 88% of ANC facilities, and 76% and 73% of HIV infected women receive ARV prophylaxis and ART respectively.

Output 3.1.1: Increased proportion of known HIV positive pregnant women who receive efficacious ARVs from 76% in 2010 to 95% by 2015

To achieve the target of 95% of HIV positive pregnant women receiving efficacious ARVs, the number of women counselled and tested for HIV and receiving ARVs needs to increase significantly.

Output 3.1.2: Increased proportion of institutional deliveries monitored by a skilled birth attendant from 74% to 95% by 2015

Most labour and delivery facilities do not have the basic equipment for emergency obstetric and newborncare. In a recent study[4] , only 11 of 428 staff (doctors, midwives and nurses) working in 59 health facilities had received any in-service training in emergency obstetrics care. Within this context, midwives and nurses consider monitoring of labour using, and accurately completing, the partogram as additional work. Strengthening the infrastructure and equipment, and the capacity for monitoring of labour using a partogramis needed, as well as improving skills of health workers in delivery of safe motherhood interventions, active management of 3rdstage oflabour, and early postpartum care of mother and newborn. In addition, labour and delivery is the last opportunity to provide PMTCT interventions before the delivery of the child, which represents the time period for the highest risk of HIV transmission. It also ensures that the infant will be initiated on NVP right from birth.

Output 3.1.3: Increased proportion of HIV exposed infants initiated on NVP prophylaxis to 95% by 2015

NVP prophylaxis is the new standard of care for all exposed infants in Swaziland from birth to 6-8 weeks of age. However, 78% of exposed infants were given NVP at birth in 2009. Timeliness of initiation and access to NVP are both important in ensuring its effectiveness in reducing MTCT during this critical six week period.

Output 3.1.4: Increased proportion of HIV exposed infants who are exclusively breastfed at 6 months to 65% by 2015

Exclusive breastfeeding is considered a safe infant feeding practice that can reduce MTCT. National guidelines for PMTCT recommend exclusive breastfeeding for 6 months, coupled with an appropriate prophylaxis regimen for mother and infant.

Strategies:

3.1: Strengthen capacity to provide efficacious ARV regimens for PMTCT according to national guidelines

The 2010 PMTCT guidelines stipulate a more efficacious ARV regimen for HIV-infected women and their exposed infants. The priority is to scale up implementation of these guidelines to ensure that all PMTCT sites provide this new standard of care; that PMTCT is expanded to all sites offering ANC; and that health care workers have the necessary skills and resources to refer/initiate clients for ARV prophylaxis and treatment.

[4] Improving the Quality of Maternal and Neonatal Health Services in Swaziland: A Situation Analysis, May 2011, Ministry of Health

Scaling up access to timely CD4 assessment, early infant diagnosis and related supplies are critical to ensuring timely access to the most efficacious ARV regimens. It is also necessary to engage civil society groups to generate demand and promote timely access and utilization of the PMTCT services by women and male partners. Civil society groups can provide behavioural and psychosocial support and education to overcome the stigma, denial and misinformation that negatively influences demand for PMTCT services.

3.2: Improve the quality of care provided during labour and delivery, and immediate postpartum

In the absence of effective PMTCT interventions to minimize risk factors for transmission during labour, delivery and immediate postpartum, seventy percent of all the possible MTCT transmission of HIV occurs during this period. The challenges around labour and delivery are attributable to the inadequate health facility infrastructure, lack of obstetric care equipment and supplies, and shortages in skilled human resources available to provide quality services to women in labour.

Box 5: Comprehensive Care

Ten Key Elements of an Exposed Infant Visit:

12. Document PMTCT regimen received by the mother and the infant.
13. Test for HIV or give results, when indicated.
14. Assess growth and development.
15. Give immunizations.
16. Provide prophylaxis (CTX, IPT).
17. Treat infections early.
18. Ask about household TB contacts.
19. Counsel on infant feeding and nutrition.
20. Ensure that the family is receiving HIV care, FP, social support.
21. Maintain suspicion for HIV infection

Outcome 4: Reduced HIV related deaths among mothers and children* under five by 50% by 2015

The health and stage of HIV disease of the mother is highly correlated to the risk of MTCT and survival of the exposed infant. With this in mind, the emphasis of this outcome is on assuring the needed linkages to on-going care and treatment for HIV-infected pregnant/postpartum women and their HIV-exposed children. The major focus is on improving survival of the mother through increasing access to ART by all eligible, improvements in obstetric services, prevention of transmission to the HIV-exposed infants and prolonging the life of those infected through delivery of care and treatment services.

Additional elements include timely HIV testing of infants/children, and linkages to treatment, nutritional and psychosocial support and counselling for the HIV positive mothers and children. A protocol for comprehensive care of exposed infants is shown in Box 8, which incorporates key components of care such as access to PMTCT services;

completion of PMTCT regimen, including NVP prophylaxis during breastfeeding when the mother is not on ART; support of infant feeding methods to reduce postnatal transmission; access to co-trimoxazole prophylaxis for infants; monitoring for early childhood development of infants; and completion of infant immunization regimens.

Output 4.1.1: Increased proportion of HIV positive women and exposed infants retained in care and treatment for 12 months to 95% by 2015

Effective care of an exposed infant requires a comprehensive approach that ideally starts during pregnancy. Upon their delivery, exclusive breastfeeding with prophylaxis is initiated. Early infant diagnosis (EID) is also important in ensuring early initiation of ART to HIV positive infants and continuous prevention intervention to keep the HIV negative infants negative throughout the breastfeeding period. For monitoring purposes, data collection points in the comprehensive package are timed to coincide with scheduled MNCH visits at 6 weeks, 3 months and 12-18 months. Retention of eligible pregnant women on ART for 12 months is used as proxy for increased survival. The monitoring of mother baby pairs is in alignment with scheduled MCH visits for the infants. Components of care include ART, CTX prophylaxis, referral/treatment for TB and nutritional assessments with food by prescription for the clinically malnourished.

Strategies:

4.1: Improve the quality of care and support provided to HIV positive mothers and HIV exposed infants

Health, nutrition and psychosocial support are all essential components of programmes that aim to reduce HIV transmission and improve survival rates of PLHIV on treatment and care. Safe feeding practices are important to prevent MTCT, while adequate nutrition is also necessary for most drugs to work optimally. Psychological support is necessary to promote adherence and mental health of infected persons. Due to the high HIV/TB co-morbidity, it is necessary to increase the number of HIV infected pregnant or breastfeeding women accessing the minimum standard of care for TB so as to improve their survival and quality of life. However, since TB screening is still not routinely offered to HIV positive persons, and vice versa, this requires the establishment of functional linkages with the TB programme.Strengthening linkages between health facilities and community support systems such as PLHIV, social workers and support groups are also important to facilitate the implementation of the continuum of care from facility to community.

Outcome 5: Improved health and community systems[5] capacity to deliver quality prevention, care and treatment services across MNCH platform by 2013

There are several cross cutting interventions that are required to address strengthening of health and community systems that impact on the performance of the entire service delivery system. These consist of improvements in the quality of clinical services at facility level and social/community mobilization to increase demand for, and uptake of, PMTCT and related services. Also included is behaviour change communication targeting knowledge, attitudes and practices related to HIV in general, and PMTCT in particular- that influence service utilization.

Standardised national monitoring tools have been developed for routine monitoring of PMTCTimplementation at the MNCH platform. Whereas indicators from routine data will be tracked continuously for quality improvement measures, there will be a need for strategic data/special surveys to complement routine data. Since it is not possible to collect strategic data or conduct special survey in all the facilities, each region will be asked to select facilities at each level of services delivery: Hospital, health centre/ Public health unit and clinic to provide additional information for continuous tracking of key indicators for quality improvement of service delivery at all levels. Challenges and lessons learnt will be used to improve on strategies towards achievement of the elimination targets, especially during the mid-term review of the framework.

Output 5.1.1: Improved structure for planning, management and coordination of PMTCT at regional level by December 2015

A functional planning and coordination structure for PMTCT already exists at national level through the Technical Working Groups. A coordinating structure is needed at regional level to strengthen programme planning, management and coordination. The RHMT is best placed to fulfil this role and provide support supervision for PMTCT/ SRH integration.

Output 5.1.2: Improved horizontal implementation of integrated PMTCT at all levels by December 2013

All facilities in each Region will deliver the national package of services critical for virtual elimination. Each region will collect strategic data/conduct special surveys within the continuum of care at Hospital, health centre/Public health unit and clinic to provide additional information to track implementation of key interventions for virtual elimination.

[5] Community Systems refer to community health workers, faith based institutions, community based organizations, traditional structures, women's organizations, associations of PLHIV, support groups, and public or private sector organizations that work in partnerships to support community based health service delivery.

Output 5.1.3: Increased human resource capacity to deliver continuum of PMTCT services from facility to community level by December 2013

There is an on-going, national shortage of health personnel, especially in rural areas where the majority of the population reside. It is important to develop strategies to address this shortage in the short and long term to ensure some level of sustainability of services within the context of HIV.

Strategies:

5.1: Develop guidelines, tools and standard operating procedures to guide and support integration

Priority actions for the elimination agenda include keeping HIV negative women from acquiring HIV infection, integrating FP into ART and labour and delivery sites, improving the quality of care especially during Labour and Delivery, and standardizing comprehensive care for HIV positive mothers and their HIV exposed infants. To support this process, appropriate planning and operational tools (i.e. HMIS, supply chain management for critical drugs, supplies and commodities) to capture relevant service related information and to guide implementation, monitoring and reporting will be revised/developed and implemented nationally. Strategic data/special surveys to complement routine data will be collected in select facilities at each level of services delivery: Hospital, health centre/Public health unit and clinic to provide additional information for continuous tracking of key indicators for quality improvement of service delivery at all levels.

5.2: Strengthen capacity of human resources for health

This requires a two-pronged approach that optimizes utilization of existing cadres of staff on the one hand and targets pre-service training of nurses and midwives on the other. It is critical to develop a nationalhuman resources for health management plan that includes task shifting/sharing, training and accreditation of different cadres of facility and community based health workers to deliver the services required, taking cognizance of the fact that the limited staff have to be shared across programmes.The staff would then be supported to provide the integrated package of PMTCT services according to the national guidelines, through training, provision of standard operating procedures including visual job aids and support supervision.A comprehensive PMTCT curriculum can be integrated into pre-service training of nurses and midwives to build their capacity in PMTCT as part of the HIV curriculum.

Output 5.2.1: Expand the provision of MNCH related services at community level by December 2013

Community based structures can be leveraged to provide services to pregnant, breastfeeding women and their families, in collaboration with health care facilities. This includes peer-to-peer psychosocial support to HIV positive pregnant and lactating mothers. Since each community is different, it is prudent to engage communities

by building on what already exists to provide services that are sustainable and appropriate. Bottom-up programming that begins by addressing the various priorities and resource constraints in eachcommunityis most appropriate in developing such service models.

Output 5.2.2: Increase availability of evidence informed social behaviour change communication reaching at least 90% of women of reproductive age and their partners by 2015

Targeted behaviour change communication interventions can lead to desirable changes in knowledge, attitudes and practices among the target population, and to adoption of norms that support uptake of PMTCT and other HIV prevention measures.

Strategies:

5.2.1: Strengthen community structures to improve thedelivery of basic PMTCT prevention and care services

Community based networks and organizations complement the health system and are well placed to identify and support families in need through distribution of medicines and food, psychosocial support, home-based family centered care, contact tracing/ follow-up and adherence support.Improving the capacity of community structures (such as CHIMSHACC, KaGogo Centres and Neighbourhood Care Points) would enable them to play a more pro-active and effective role in coordination and facilitation of community level identification, planning and delivery of the integrated MNCH response. Strengthening the skills and competencies of community-based service providers and in particular caregivers, both formal and informal (i.e. CBOs, FBOs, home based care workers, mentor mothers and support groups of people living with HIV) can help to generate demand through outreach and support uptake through both direct and referral services.

5.2.2: Develop social and behaviour change communication (SBCC) interventions to create a supportive environment and increase uptake of PMTCT

Communities (faith-based, family, peers, mothers living with HIV and other social networks) have an essential role to play in advocacy for HIV prevention and care, increasing community literacy on testing, diagnosis and adherence, and creating norms in support of HIV safe attitudes and practices. In the case of PMTCT, this would involve working with civil society and community based groups to target the community with multi-channel, multi-media SBCC interventions to address cultural norms, myths and misperceptions that limit uptake of HTC and PMTCT, to increase male involvement and to promote early ANC, family planning, early diagnosis and infant feeding within the context of HIV.

6. ANNEX II– RESULTS FRAMEWORK

Strategic framework for the Elimination of new HIV infections among children and keeping their mothers alive: 2011–2015

	Result	Indicator	Baseline			Targets				
			Value	Source	Year	2011	2012	2013	2014	2015
	Impact									
1	Reduced new HIV infections among children from 12% to <5% by 2015	% of children who are HIV infected at 18 months	12%	PMTCT impact evaluation	2010					<5%
	Outcome									
	Reduced new HIV infections among women attending MNCH[23] services from 10% to 5% by 2015	% of HIV-negative pregnant women who test HIV positive during pregnancy and breastfeeding	10%	Routine HMIS				7.5%		5%
	Outputs									
1.1	Increased HIV testing among women attending MNCH services from 81% to 100% by 2015	% of pregnant women attending MNCH who were tested for HIV and know their results	80%	Routine HMIS	2010			90%		100%
1.2	Increased identification and treatment of HIV-positive male partners by 50% by 2015	% of HIV-negative women attending MNCH whose male partner is tested	TBD	Routine HMIS/surveys	2010			25%		95%
		% of HIV-negative women attending MNCH whose male partner is on ART	TBD	Routine HMIS/surveys	2010			25%		50%
	Outcome									
2	Reduced unmet need for family planning among HIV-positive women from 37% to 5% by 2015	% of HIV-infected women attending HIV care and treatment services with unmet need for family planning	64%	MICS	2010			20%		5%

	Result	Indicator	Baseline			Targets				
	Outputs		**Value**	**Source**	**Year**	**2011**	**2012**	**2013**	**2014**	**2015**
2.1	Increased percentage of HIV-positive women using modern family planning services at six weeks post-partum to 50% by 2015	% of HIV-positive women (15–49) using modern family planning methods by six weeks post-partum	TBD	Programme data	2011			25%		50%
2.2	Increased proportion of HIV-positive women (15–49) attending ART clinics, who do not want children, using modern family planning services to 95% by 2015	% of HIV-positive women (15–49) on ART using modern family planning methods % of HIV-positive women (15–49) newly enrolled in pre-ART using modern family planning methods	TBD TBD	ART and family planning registers ART and family planning registers				50% 50%		95% 95%
	Outcome									
3	Reduced mother to child transmission of HIV during pregnancy, childbirth and breastfeeding from 12% to <5% by 2015	% of infants who are newly HIV infected	12%	Spectrum	2010			10%		<5%
	Outputs									
3.1	Increased proportion of HIV-positive pregnant women who receive efficacious ARVs from 76% to 95% by 2015	% of HIV-positive mothers who receive efficacious ARVs	76%	Routine HMIS data	2010			90%		95%
3.2	Increased proportion of institutional deliveries monitored by a skilled birth attendant from 80% to 95% by 2015	% of women delivered at the health facilities by a skilled birth attendant % of HIV-infected women delivered whose partogram is accurately completed	80% N/A	DHS SAM	HMIS 2010 HMIS 2010			90% 85%		95% 100%
3.3	Increased proportion of HIV-exposed infants initiated on NVP prophylaxis to 95% by 2015	% of HIV-exposed infants initiated on extended NVP prophylaxis		Routine HMIS	2010			85%		95%

	Result	Indicator	Baseline			Targets				
	Outcome		**Value**	**Source**	**Year**	**2011**	**2012**	**2013**	**2014**	**2015**
4	Reduced HIV-related deaths among mothers and children under five by 50 % by 2015	% of HIV-positive mothers who die during pregnancy or within six weeks after delivery	46%	Cohort study	2010			TBD		10%
		% of children of HIV-positive mothers who are alive beyond five years of age		Survey				TBD		TBD
	Outputs									
4.1	Increased proportion of HIV-positive women and exposed infants retained in care and treatment for 12 months to 95% by 2015	% of eligible HIV-positive pregnant or breastfeeding women initiated ART	76%	Routine HMIS	2010			85%		95%
		% of eligible HIV-positive pregnant or breastfeeding women receiving CTX prophylaxis	40	Routine HMIS	2011			95%		100%
		% of HIV and TB co-infected HIV-positive pregnant or breastfeeding women initiated on TB treatment	TBD	TB programme data				85%		100%
		% of HIV-positive pregnant or breastfeeding women without active TB receiving INH prophylaxis	TBD	TB programme data				85%		95%
		% of positive pregnant or breastfeeding women receiving nutritional food supplements	TBD	Routine HMIS	2010			TBD		TBD
		% of exposed infants who are exclusively breastfeeding at (six months of age).	44%	MICS	2010			55%		65%
		% children initiated on CTX prophylaxis within six weeks of birth	78%	Routine HMIS	2011			90%		95%
		% of HIV and TB co-exposed children initiated on INH prophylaxis	TBD	Routine HMIS	2011			TBD		TBD

	Result	Indicator	Baseline			Targets				
			Value	Source	Year	2011	2012	2013	2014	2015
	Outcome									
5	Improved health and community systems capacity to deliver quality prevention, care and treatment services across the MNCH platform by 2013	% of health facilities providing comprehensive integrated[24] package of PMTCT services to pregnant and breastfeeding women, infants and children	88%	SAM	2010			90%		95%
		% of health facilities with functional community referral, outreach and support programmes for pregnant and breastfeeding women, children and partners	3.5%	SAM	2010			25%		50%
	Output									
5.1a	Improved capacity for planning, management and coordination of PMTCT at regional level by December 2013	# of RHMT coordinating PMTCT implementation using an integrated (MNCH/SRH) action plan	TBD	Rapid assessment	2011		4			
5.1b	Improved systems to support horizontal integration of PMTCT into the MNCH platform at facility level by December 2013	# of MNCH entry points (antenatal care, labour and delivery, post-natal) using required protocols for PMTCT service delivery onsite or referral	TBD	SAM SAM	2011			100%		
5.1c	Increased human resource capacity to provide continuum of PMTCT services from facility to community level by December 2013	# of health workers trained in PMTCT protocols who are providing services at each health facility (regional and community level)	TBD	Rapid assessment	2011			50%		

[24] This refers to HIV testing, family planning, efficacious ARV, NVP prophylaxis, CTX prophylaxis, screening and treatment for TB, opportunistic infections and STIs.

	Result	Indicator	Baseline			Targets				
			Value	Source	Year	2011	2012	2013	2014	2015
5.2a	Improved delivery of basic PMTCT and care services at community level by December 2013	# (by type) of health facilities with a functional referral and outreach service plan for pregnant and breast-feeding women and their families	6	SAM	2011		10 [25]	33		
5.2b	Increased availability of evidence-informed SBCC reaching at least 90% of women of reproductive age and their partners by 2015	% of women of reproductive age and their partners reached through mass media	TBD	KAP surveys SAM	2012			90%		
	Increased human resource capacity to provide continuum of PMTCT services from facility to community level by December 2013	# of women of reproductive age and their partners reached through interpersonal communication)	TBD	Programme data	2012			50%		

[25] These are the 10 facilities that had the most deliveries (97% of national total) in 2010.

Elimination of new HIV infections among children by 2015 and keeping their mothers alive