STRATEGIC FRAMEWORK FOR THE EXPANSION
OF
THE PREVENTION OF MOTHER TO CHILD
TRANSMISSION OF HIV/AIDS SERVICES IN
ZAMBIA

October 2003
Version one
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# Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>ANC</td>
<td>Antenatal Care</td>
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<tr>
<td>ARV</td>
<td>Anti Retro Viral Drugs</td>
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<tr>
<td>AZT</td>
<td>Zidovudine</td>
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<tr>
<td>EPI</td>
<td>Expanded Programme on Immunization</td>
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<tr>
<td>HIV</td>
<td>Human Immuno-deficiency VIRUS</td>
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<tr>
<td>IGAs</td>
<td>Income Generating Activities</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, Education and Communication</td>
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<tr>
<td>INH</td>
<td>Isoniazid</td>
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<tr>
<td>3TC</td>
<td>Lamivudine</td>
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<tr>
<td>MIP</td>
<td>Malaria in Pregnancy</td>
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<tr>
<td>MIS</td>
<td>Management Information System</td>
</tr>
<tr>
<td>MNTE</td>
<td>Maternal and Neonatal Tetanus Elimination</td>
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## MTCT

### Mother to Child Transmission of HIV

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>NGO</td>
<td>Non Governmental Organisation</td>
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<tr>
<td>NVP</td>
<td>Nevirapine</td>
</tr>
<tr>
<td>OIs</td>
<td>Opportunistic Infections</td>
</tr>
<tr>
<td>PCP</td>
<td>Pneumocystis Carinii Pneumonia</td>
</tr>
<tr>
<td>OPVo</td>
<td>Polio Vaccine within 14 days of birth</td>
</tr>
<tr>
<td>PCR</td>
<td>Polymerase Chain Reaction</td>
</tr>
<tr>
<td>PLWHAs</td>
<td>People Living with HIV/AIDS</td>
</tr>
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## PMTCT

### Prevention of Mother to Child Transmission of HIV

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>STD</td>
<td>Sexually Transmitted Diseases</td>
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<tr>
<td>STI</td>
<td>Sexually Transmitted Infections</td>
</tr>
<tr>
<td>UNGASS</td>
<td>United Nations General Assembly Special Session on HIV/AIDS</td>
</tr>
<tr>
<td>VCT</td>
<td>Voluntary Counselling and Testing</td>
</tr>
<tr>
<td>ZDHS</td>
<td>Zambia Demographic and Health Survey</td>
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</table>
1. INTRODUCTION AND PROGRAM RATIONALE

Mother to Child Transmission (MTCT) is by far the largest source of HIV infection in children below the age of 15 years. According to UNAIDS estimates, over 90 percent of children born to HIV-positive mothers acquire the virus before, during birth or through breastfeeding.

Zambia is amongst the countries hardest hit by HIV/AIDS epidemic in Africa. The 2000-2001 Zambian Demographic and Health Survey (ZDHS) estimated the national HIV prevalence rate at 16 percent, the prevalence being lower in rural areas (11%) than in urban areas (25%). Although declining HIV trends have been observed in young people since 1998, HIV/AIDS in Zambia is still a major threat to the lives of women in the reproductive age group and their children.

HIV Prevalence Rates in Sentinel Antenatal Clinics
15-44 Age Group, 2002
(Source: 2001/2 Sentinel Surveillance of HIV and Syphilis Trends in Zambia)

Data from the 2001/2 National HIV Sentinel Surveillance system show that HIV prevalence among pregnant women range from 6.7% in Isoka to 31.8% in Mongu.
With no interventions to curb transmission to children, studies suggest that the risk of transmission from an HIV infected mother to her child in Zambia is around 40 percent.1,2. There were 560,000 babies born in Zambia in the year 2000 and given the 19 percent HIV prevalence in the Sentinel sites, approximately 40,000 will acquire HIV infection. This translates into about 100 new HIV infections in babies per day. Within the 40 percent overall transmission rate without intervention, five to 10 percent will be as a result of transmission through pregnancy, 10 to 20 percent during labour and 5 to 10 percent through breastfeeding.3. Already in Zambia, HIV/AIDS is reversing all child survival gains as evidenced by the projected increased child mortality (Figure 1).

The implementation of Prevention of Mother to Child Transmission (PMTCT) of HIV programmes has yielded positive results in developed countries such as Thailand, a middle-income country, where the MTCT rates have been reduced to less than 2 percent and 10 percent respectively. If the Zambian programme is to have significant impact on childhood HIV infection and the increasing mortality trends, PMTCT services need to be scaled - up to all Maternal Child Health (MCH) services in the country. Scaling up includes the four key strategies: prevention of primary infection, prevention of pregnancy in HIV infected women, prevention of mother to child transmission using ARVs and care and support of infected families.

At health facility level strategies include improving antenatal and postnatal utilization to 90 percent, acceptance of VCT to 70 percent, and acceptance and adherence of ARV therapy by HIV positive women to 75 percent,4 and ensuring clean and safe deliveries in the health facility and the home. The pilot program in Zambia demonstrated that the integration of PMTCT interventions within MCH services is feasible in Zambia, although intervention uptake requires improvement.

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2. PILOT PMTCT PROGRAMME IMPLEMENTATION IN ZAMBIA

In an effort to reduce the incidence of new childhood HIV infections in Zambia, the Ministry of Health (MOH) with support from the UN (through UNICEF) launched the PMTCT Pilot Programme in 1999 to assess the feasibility of integrating PMTCT interventions in MCH services. Three districts in three provinces were selected, Lusaka, Mbala and Monze in order to have a better understanding of the implementation challenges in an urban compared to a rural setting and between different health delivery systems. By October 2000, the pilot programme was fully operational in six pilot sites: University Teaching Hospital (UTH) and Chipata Clinic in Lusaka; Monze Mission Hospital and Keemba Rural Health Centre in Monze, Southern Province; Mbala General Hospital and Tulemane Health Centre in Mbala, Northern Province.

As of October 2003, there are 74 PMTCT sites in the country located in 9 districts in 6 provinces in Zambia out of a total of 1,284. There are 23 PMTCT sites in Lusaka, managed by Lusaka District Health Management Team (LDHMT), and in partnership from the Elizabeth Glaser Paediatric AIDS Foundation (EGPAF) Call to Action Programme. The USAID funded LINKAGES (AED) Project is supporting services at 27 health centres. Two Konkola Copper Mines health centers in Chililabombwe and Chingola, have also integrated PMTCT services. Central Board of Health began the national expansion process of PMTCT services to all provinces in December 2002. By December 2003 72 trainers will have been trained (8 per province) to roll out the cascade training of the districts and nationwide expansion of PMTCT services.
2. LESSONS LEARNED FROM PILOT PROGRAM AND RECOMMENDATIONS FOR SCALING UP

In May 2002, UNICEF Headquarters commissioned the USAID funded HORIZONS project to conduct a rapid evaluation of the six initial UN supported pilot sites. Key lessons learned critical to the scale-up process were as follows:

A Integration of PMTCT into MCH services
PMTCT services were integrated within Maternal and Child Health (MCH) Services at facility level. Since a high proportion of pregnant women (96%) in Zambia access antenatal services, these services provide a window of opportunity for delivery of PMTCT services. However, a 53 percent of women do not deliver in health facilities and this reality has been taken into account in this framework and National PMTCT protocol.

B Human Resources
The evaluation suggested that most PMTCT providers were happy with the Government’s decision to implement the PMTCT program. Many of the providers felt the PMTCT program was useful to communities and societies as a whole. Some of the positive outcomes included improvement in delivery of health services and overall care of women identified as HIV positive as the programme brought in the much-needed supplies. Staff welcomed the additional income provided through allowances for extra duty. These factors were significant enhancers of staff morale and performance and should be taken into consideration during the expansion phase.

Quality counseling and testing of clients takes time and yet MCH services do not have adequate numbers of trained health professionals. The few that are available are already overburdened and working under very difficult situations, often without job aids. Staff do not always observe universal precautions for their own protection and access to post-exposure HIV prophylaxis. As a recommendation Provincial Health Directorates and DHMTS should analyse their staff requirements and where possible fill existing gaps. Other experiences should also be taken into account e.g. the use of non-professional trained lay counselors and off-duty and retired nurses. Other considerations should include strengthening adherence to universal precautions and provision of post-exposure prophylaxis for all health care providers.

C Training
Training is the cornerstone to quality service provision and should be an ongoing process. Training materials have been developed, but despite training a critical number of providers per facility, the pilot programme experienced a high turnover of trained staff. To ensure sustenance of trained personnel during the expansion phase in-service training at district and provincial level is recommended. A provincial and district level pool of PMTCT facilitators / trainers should therefore be trained. In areas where staffing levels are limited, training should be modified to include on-site teaching and learning including peer-to-peer training. However, for the training to remain sustainable, pre-service training should be introduced in both nursing schools and the medical school.

D Infant and Young Child Feeding Counselling and Support
Initially providers at the pilot sites demonstrated a bias towards infant formula as the infant feeding method for HIV positive women. In addition, the provision of infant formula by the PMTCT programme was highly valued by communities. However, the safety of use of infant formula in the pilot communities is unknown. As part of planning for replication and
scale-up, it was recommended that safety data should be collected and combined with the
information provided by providers and the community about the role of formula in
preventing MTCT. Although some data is expected from a longitudinal cohort study of
women utilizing PMTCT services at Chipata clinic and from the exclusive breastfeeding
study at Matero and Kanyama clinics in Lusaka, similar data should be collected from
some of the rural sites in Monze and Mbala to guide the policy and protocols development
regarding infant and young child feeding, counseling and support.

E Partner Involvement
Antenatal clinics were not found to be male friendly and men were not provided with
adequate PMTCT information. It was recommended that during expansion provincial and
district health management teams should develop innovative ways for providing
information directly to men, possibly outside of the antenatal clinic.
Examples of these approaches include:
- Targeting male community leaders with PMTCT education and information
- Offering community education on PMTCT in locales where men congregate
  such as bars, football fields, taxi stands
- Creating discussion/support groups for men. Provision of community based
couple counseling through trained community counselors

F Peer counselling
HIV positive women were seen as potential assets to the programme. If supported, the
women and their families were more open and could also help in reducing the high levels
of stigma. The community and providers strongly recommended that HIV positive women
who went through the PMTCT programme be mobilized as peer counsellors to provide
information and support to women currently in the PMTCT program.

G Supply is a good model
The PMTCT pilot supply system established by the pilot programme was found to have no
major stock-outs. While most medical and drug supplies have been procured by UNICEF,
the PMTCT drug distribution system utilizes the already existing government infrastructure,
the Medical Stores, to store and deliver supplies and the existing district and site level
mechanisms for stocking clinics.
HIV test kits have been procured and distributed through the National VCT Program
without any major obstacles. VCT role out will need to take into account services will need
accommodate new PMTCT sites.

H Missed Opportunities: Linkages with other programs
Although the evaluation clearly demonstrated progress in integration of PMTCT into MCH
services, linkages with other programs such as: the safe motherhood, family planning
adolescent reproductive health, EPI and IMCI programs were not clearly defined. For
example, at the pilot PMTCT sites women were provided with information about family
planning methods, dual risk of unwanted pregnancy and HIV infection were not discussed
with HIV negative women and HIV testing is not part of routine family planning services. In
addition, some community members felt that with PMTCT program in place, HIV positive
women/couples no longer needed to use family planning. These results suggest that there
is urgent need to update the guidelines and training (or offer refresher training) for family
planning provision in the context of HIV.
Considering that the majority of women are not tested before they deliver and the fact that administration of nevirapine during delivery and the immediate postnatal period, ensuring rapid testing with same day results both when a woman presents in labour and after delivery will be an important addition to the programme.

5 HIVNET 012
6 Taha taha et al. Postpartum administration of nevirapine and AZT and mother to child transmission of HIV. Presented at the XIV International AIDS Conference, Barcelona, 7th – 12th July 2002
1. **Goals:**

The overall goals of the program are three-fold and consist of the following:

1) To contribute to the improvement in child survival and development through reduction of HIV related infant and childhood morbidity and mortality.

2) To contribute to the decrease in maternal mortality through the strengthening of antenatal, delivery and postpartum care services.

3) To contribute to the improvement of the length and quality of life of HIV positive women and their families through the provision of care and support services.

2. **Objectives:**

In line with the United Nations General Assembly Special Sessions on HIV/AIDS (UNGASS) goal to reduce the rate of mother to child transmission of HIV by 20 percent; from the current estimated 40 percent to 32 percent by the end of 2005. This objective will be achieved through the following operational objectives are to be achieved by the end of 2005:

a) To expand PMTCT/Safe Motherhood and the prevention of HIV infection in Reproductive Health services to all MCH facilities (public and private) in 72 districts by the end of 2005.

b) In all sites offering PMTCT facilities:
   - To provide VCT to at least 70% of all first ANC visiting women.
   - To ensure that pregnant women tested HIV positive receive a short course of ARV (AZT or nevirapine).
   - To increase the level of exclusive breast-feeding up to 6 months of age to 70 percent.

c) To expand community care and support activities in all districts (Neighbourhood Health Committees to establish at least one peer-support group)

d) To establish referral linkages and dialogue with the VCT, malaria, STI, TB, EPI, Family Planning, home based care and IMCI programness.

3. **Expected program outcomes**

(a) Strengthening of primary prevention of HIV/AIDS and other STIs among women of childbearing age and their partners

(b) Increased Zambian families’ access to quality PMTCT and RH services

(c) Increased access to care and support services for HIV/AIDS infected women and their families

(d) Decreased maternal, infant and under-five morbidity and mortality through improved antenatal care, delivery and postpartum services;

(e) Increased health workers capacity in HIV/AIDS prevention and care

(f) Increased community capacity to manage HIV/AIDS issues particularly PMTCT
4. Strategies

The globally agreed upon 4 pronged approach (primary prevention, prevention of unintended pregnancy, PMTCT and care and support) to provision of services. The strategic elements for each prong are outlined in table 1. The elements under prong 1, 2, 3 activities are already in place in Zambia but cross linkages HIV/PMTCT activities and vice versa will have to be established.

**Table 1 The four-prongs**

<table>
<thead>
<tr>
<th>PREVENTION OF HIV IN WOMEN (PRONG 1)</th>
<th>PREVENTION OF UNINTENDED PREGNANCY (PRONG 2)</th>
<th>PREVENTION OF MTCT (PRONG 3)</th>
<th>CARE AND SUPPORT (PRONG 4)</th>
</tr>
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<tbody>
<tr>
<td>• Enhancing community engagement and mobilisation, including male involvement</td>
<td>• Provision of VCT in ANC and family planning units</td>
<td>• Strengthening of MCH services including, malaria prevention (IPT and ITNs), and strategies to reach those missed in ANC and safe delivery practices</td>
<td>• Screening and treatment of opportunistic infections among mothers and their families</td>
</tr>
<tr>
<td>• Integrating VCT information in Adolescent Friendly health Services</td>
<td>• Provision of family planning information and services to women and their partners in the context of HIV</td>
<td>• Integration of routine counseling and testing (100% counseling with opt out model) in MCH services</td>
<td>• Post-partum maternal TB prophylaxis</td>
</tr>
<tr>
<td>• Screening and treatment of STIs</td>
<td>• Promoting condom use</td>
<td>• Provision of ARVs for PMTCT</td>
<td>• PCP co-trimoxazole prophylaxis in children from 6 weeks</td>
</tr>
<tr>
<td>• Promoting condom use</td>
<td>• Providing preventive counseling for HIV negative women and their partners</td>
<td>• Ensuring safe delivery practices including provision and correct use of safe delivery kits</td>
<td>• Establishment of referral linkages for palliative care and support for symptomatic mothers and their families</td>
</tr>
<tr>
<td>• Providing preventive counseling for HIV negative women and their partners</td>
<td>• Encouraging disclosure of HIV status amongst couples</td>
<td>• Counseling for optimal and safe infant feeding options as well as maternal nutrition</td>
<td>• Provision of nutrition, ongoing counseling and psychosocial support for both the mothers and their families</td>
</tr>
<tr>
<td>• Encouraging disclosure of HIV status amongst couples</td>
<td>• Promoting traditional practices that reduce the transmission of HIV/AIDS</td>
<td>• Condom use</td>
<td>• Supporting the creation of peer-support groups for infected mothers and their families</td>
</tr>
<tr>
<td>• Promoting traditional practices that reduce the transmission of HIV/AIDS</td>
<td>• Empowering women and girls</td>
<td>• Male involvement and community counseling</td>
<td>• Development of linkages with IMCI, home based care and orphan programs</td>
</tr>
<tr>
<td>• Empowering women and girls</td>
<td></td>
<td></td>
<td>• Empowering women and girls</td>
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**Prong 1: Primary prevention**

Given the high HIV prevalence in Zambia, negative women are still at risk of acquiring HIV before or during pregnancy and during breastfeeding. A woman with new HIV infection runs a much higher risk of transmission. As a long-term strategy, primary prevention activities through a number of interventions will be encouraged;

a) Promotion of VCT and knowledge of status, especially among adolescents
b) Promotion of counseling of women and their partners
c) Encouraging destigmatization of HIV/AIDS to support those who are HIV positive
d) Increasing community dialogue on the importance of knowing one’s status

7 Opt-out model: The opt-out model is a model where all antenatal care attendees receive counselling for HIV testing but where the counselled pregnant woman has the option to refuse the HIV testing.
e) Provision of condoms to young people and women identified as HIV negative
f) Screening and treatment of sexually transmitted diseases
g) Integration of VCT in Adolescent Friendly Health Services will be strengthened.

**Prong 2: Prevention of unintended pregnancies:**
Adolescents, women and men attending family planning will be counselled and tested for HIV for to make an informed choice about which family planning method to use and the effect of HIV status on subsequent pregnancies.

**Prong 3: Prevention of mother to child transmission of HIV**
The scaling-up process will be phased and will adopt the following elements:

a) Ensuring that all women are offered counseling and testing as part of the routine service in antenatal, delivery and immediate postnatal period. Following counseling, the woman will have the right to refuse testing.
b) Building capacity of nurses, midwives and medical doctors through pre- and in-service training on Integrated PMTCT Minimum package of care (IPMP) for mother and babies;
c) Strengthening maternal and child care services through the provision of back-up supplies for the prevention and treatment of anaemia as well as malaria and maternal tuberculosis prophylaxis, and treatment and institutional capacity building;
d) Providing ARVs to reduce MTCT. The program will provide nevirapine free of charge and when available or the woman can afford, zidovudine will be considered if the woman chooses (refer to National PMTCT protocol);
e) Promotion of condom use during pregnancy and lactation by all women
f) Providing counseling and support on optimum infant and young child feeding practices. Exclusive breastfeeding will be promoted and supported and where feasible, affordable, acceptable, sustainable and safe, the woman will be encouraged to use replacement feeding;
g) Developing community capacity to address HIV/AIDS/PMTCT, safe motherhood, community counseling and formation of community support groups.
h) Developing a system for program supervision as well as monitoring and evaluation.

**Prong 4: Care and Support**
In order to improve the well being of mothers and their children, referral linkages will have to be developed by DHMTs with other programs such as IMCI, tuberculosis, malaria, ARV and home-based care, including higher levels of care and community support groups.

**Stages in the PMTCT scale up process: Strategies and actions**
To ensure sufficient coverage as well as intensification of interventions, scaling up will have to go beyond increased geographical coverage, to include functional and organizational dimensions. Functional scaling up implies an increase in both the number and type of activities to be performed. For example in addition to the core activities of counseling, testing and provision of ARVs, district will integrate activities for primary prevention of HIV infection and develop linkages to care and support services. A scaling up of organizational strengths will include a critical analysis of provincial, district and community capacities, designing of district programs based on the analysis, development of local and international partnerships to support district expansion, integration and linkages with other programs, capacity development and co-ordination. A more explicit political component will ensure increased intensity and sustainability. Communities will require strengthening interaction between health systems and community groups at all levels (refer to communication strategy).

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8 The Integrated PMTCT Minimum Package of Care includes the following components, PMTCT, PMTCT Plus, and the Making Pregnancy Safe Initiative.
In the **first year** of implementation the provinces will provide preventive ARV therapy to **20 percent** of the target number of HIV infected women in the province, increasing to **50 percent** in the **second year** and **70 percent** in the **third year**.

**Stage 1: Strategies for preparing and laying the foundation for scale up:**

**a) Advocacy and resource mobilization**

Although Government has secured some resources for scaling up PMTCT through the World Bank and the Global Fund and there is now a number of partners in-country supporting expansion, resource mobilization efforts will continue.

**b) Policy Development**

Both a PMTCT and an infant and young child feeding policy will be developed to guide programming. In addition, as part of an accelerated action to promote optimal infant feeding practices, enforcement of the code of marketing for breast milk substitutes will also be expedited and monitors trained.

**c) Co-ordination**

Scaling up of PMTCT requires a systematic planning approach to meeting training needs, developing national standards, developing management protocols and establishing a monitoring system. The CBOH PMTCT Implementation Team will hold monthly meetings while sub-committees will be established to handle specific program areas such as VCT, Drug supplies, infant feeding and communication.

**d) Capacity development**

The expansion of services will require 4 types of in-service training as follows:

- A **one-day orientation** for doctors, programme managers and other health workers not directly involved in the provision of services but who need to be equipped with the basics regarding the integrated PMTCT programme.

- An **eleven-day training on Integrated PMTCT Minimum Package of Care** for front-line workers including nurses, midwives, and medical doctors. The topics will cover mother and child care (including refresher sessions on Malaria in Pregnancy (MIP), Maternal and Neonatal Tetanus Elimination (MNTE)), counseling and testing, mother and child nutrition, monitoring and evaluation and community network. Trainers will have an extra one-week for facilitation skills.

- An **nine-day Breastfeeding and HIV and Infant feeding counseling course** for front line workers

- **Laboratory training** for HIV rapid testing, serology for syphilis and hepatitis for midwives and nurses and for laboratory technicians

In order to create systems for delivering PMTCT services to significantly more women, training of personnel in PMTCT will be critical. Training activities will include:

- National training of trainers for 20 health workers (at least 2 from each province) from each provincial capital (Output: 108 health workers trained in IPMP), to include nurses/midwives tutors as well as doctors
- With the 20 trained trainers, training of trainers in each province including 3-day sensitization workshops for managers.
- Training of health workers and other care providers in the districts
• Inclusion the PMTCT program into standard pre-service training curricula.

The PMTCT Working Group has already developed a training curriculum and other supportive materials. To ensure quality of PMTCT services and adequate program uptake, the program target will be to train at least 70 percent of nurses and midwives working in maternal child services for efficient delivery of services. The duration of PMTCT counselor training will be 11 weeks or modified to on site training using experienced counselors (Call to Action model). Trainers will receive extra one-week facilitation training. To meet the training demand, 9 provincial counselor-training workshops (20 participants per training) will be conducted, drawing participants from within the province and surrounding districts. These trainers will be charged with the responsibility of district training. To sustain the levels of trained personnel, the PMTCT curriculum will be integrated in the training curricula of midwives and doctors.

The nurses and midwives will also be trained in rapid HIV testing by the National VCT Program. To enhance promotion of optimal infant and young child feeding, practices, PMTCT providers will be trained using existing materials adapted from the UNICEF/WHO guidelines/UNAIDS. PMTCT technical update sessions will be held biannually with support from the PMTCT Working Group.

e) Calculating demand for the different intervention

For planning purposes and realistic estimation of supply needs, the initial projections will be based on HIV prevalence and intervention uptake data obtained from the pilot sites, averaging to 40% counselling uptake, 65% testing uptake, 25% HIV prevalence among pregnant women and 100% nevirapine uptake in those identified as positive). Monitoring and evaluation, however, will need to be rigorous at provincial and district level to guide site-specific future estimates.

Table 2: Women benefiting from the program

<table>
<thead>
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<tr>
<td>First ANC attendants</td>
<td>30,593</td>
<td>10,668</td>
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<tr>
<td>Pre-test counselled Tested</td>
<td>6,742 (22.1)</td>
<td>8,400 (79)</td>
</tr>
<tr>
<td>HIV infected (target estimate from site prevalence data)</td>
<td>4,339 (14.2)</td>
<td>7,860 (73.7)</td>
</tr>
<tr>
<td>HIV infected mothers who have delivered Received ARVs</td>
<td>7,556 (24.7)</td>
<td>2,346 (22)</td>
</tr>
<tr>
<td></td>
<td>522</td>
<td>555</td>
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<td></td>
<td>768 (10.2)</td>
<td>547 (23.3)</td>
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Source: PMTCT progress report, September 2002
c) Site selection and preparedness

By the end of 2003, all provinces will have at least initiated PMTCT activities Provincial and district hospitals will be selected as initial implementation sites to serve as referral and support units when the program is rolled out to health centres. Once PMTCT services are offered at Provincial and district capital hospitals, provinces will ensure that the selection criteria for rolling-out to other facilities include:

a) High HIV/AIDS prevalence areas  
b) Presence of on-going and well-established VCT activities in the district  
c) Commitment from the DHMT

The following factors will be considered in defining site preparedness:

- 70 percent health providers in maternal child services trained in PMTCT  
- Allocation of space for counselling  
- Logistics in place for rapid testing  
- Logistics in place for management of PMTCT supplies  
- Logistics in place for supervision, monitoring and evaluation  
- Technical working group appointed at district level (integrated in existing RH group)  
- Site focal point and responsibility of staff at all levels defined  
- Patient management flow established  
- Community and engagement mobilisation activities in place (refer to Communication for PMTCT Community Capacity Development)
Stage 2: Strategies and actions during program implementation

a) Integration of PMTCT activities in all district plans to include:

- Accelerated training of program providers in health facilities and communities
- Strengthening of health service delivery to include activities to ensure availability of drugs including drugs for ANC services, STI management and ARVs for PMTCT.
- Continue to improve system for the integration of supplies management, HIV testing and program management (definition of clear roles and responsibilities) co-ordination, supervision and monitoring and evaluation using existing infrastructure
- Revitalize and scale up the Baby Friendly Hospital Initiative and mobilize and engage community support groups and lay counselors
- As much as possible, create a cadre of counsellors at health facility level

b) Documenting progress and taking action to solve problems:

District teams will take necessary action to ensure that:

- The district maintains and keeps an inventory of trained PMTCT trainers and health workers.
- PMTCT program focal points conduct supervisory visits and visits are documented
- Community representation on teams or links between community members and health system is established.
- Provincial directorates host intra and inter-district meetings

c) Program Monitoring and Evaluation

In order to monitor progress made towards achieving UNGASS goals and to contribute to global reporting, the following indicators will be collected by each province and district and reported to national level.

<table>
<thead>
<tr>
<th>Core Indicator 1:</th>
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<tbody>
<tr>
<td><strong>PMTCT trainers trained and available in the province and institutions assisting in PMTCT training, and number of health care workers trained or retrained</strong></td>
</tr>
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</table>

**Definition:**

1. The percentage of training institutions that have training on the prevention of HIV in women and children incorporated into their curriculum.
2. Number of training courses held in the last 1 month per province
3. The number of trainers trained in the last 1 month per province and district
4. The percentage of providers (defined by job description) newly trained or retrained in the last 1 month

<table>
<thead>
<tr>
<th>Core Indicator 2:</th>
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</thead>
<tbody>
<tr>
<td><strong>PMTCT service points.</strong></td>
</tr>
</tbody>
</table>

**Definition:**

The percentage of all possible public and private venues providing the minimum package of services to prevent HIV infection in women and infants in the past 3 months per province and district. This will require all provinces and districts to map out all facilities providing MCH services.
Core Indicator 3: Testing and counseling cascade

**Definition:** This indicator is made up of a series of indicators measuring:
   a) Number of first antenatal attendants
   b) Number of deliveries
   c) Number women/partners accepted testing for HIV
   d) Number HIV women /partners positive
   e) Number women/couples post test counseled
   f) Number received HIV results

Core Indicator 4: ARV prophylaxis

**Definition:** In the last month, number of HIV positive women receiving ARV to reduce MTCT. In the initial phases of expansion uptake of nevirapine or AZT will be reported.

Core Indicator 5: Exclusive breastfeeding

**Definition:**
   a) Number of women opting to exclusively breast feed
   b) Number of women opting to give replacement feeds

Core Indicator 6: (Impact indicator):

**Definition:** Number of HIV positive infants born to women who received ARV prophylaxis.

Monitoring indicators developed by the PMTCT Working Group will be updated and integrated in existing registers and reporting forms. Other indicators for monitoring to be collected using existing systems according to the four prongs PMTCT include:

<table>
<thead>
<tr>
<th>No</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Prong Indicators</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>HIV prevalence among ANC attendees</td>
</tr>
<tr>
<td>2</td>
<td>Condom use and condom availability</td>
</tr>
<tr>
<td>3</td>
<td>Median age at onset of sexual activities</td>
</tr>
<tr>
<td>4</td>
<td>Prevalence of STIs and percentage of treatment</td>
</tr>
<tr>
<td><strong>Second Prong Indicators</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Access to family planning methods</td>
</tr>
</tbody>
</table>
### Use of family planning method

**DHS**

<table>
<thead>
<tr>
<th>Third Prong Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Proportion of women attending ANC at least four times (1 in 1st trimester, 1 in 2nd trimester and 2 in 3rd trimester)</td>
</tr>
<tr>
<td>2. Proportion of pregnant women who receive malaria prophylactics during at least one ANC visit.</td>
</tr>
<tr>
<td>3. Proportion of pregnant women who received TT2+ doses.</td>
</tr>
<tr>
<td>4. Proportion of delivery attended by skilled health worker</td>
</tr>
<tr>
<td>5. Proportion of delivery using safe delivery kits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Prong Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Proportion of women who have received family planning counselling including prevention of HIV transmission and condom use by six weeks postnatal period.</td>
</tr>
<tr>
<td>2. Proportion of HIV positive mothers referred for follow up support services by type of service.</td>
</tr>
<tr>
<td>3. Proportion of mothers and partners screened for TB</td>
</tr>
<tr>
<td>4. Proportion of HIV positive mothers given INH preventive therapy</td>
</tr>
</tbody>
</table>

### Stage 3: Strategies for program review

Program review will be the responsibility of the Central Board of Health, Health Information System unit and the Reproductive Health Specialist and will consist of:

- a) Routine monitoring stated in stage 2
- b) Annual program review by all implementing districts
- c) Annual partners’ review to be integrated in RH review
- d) Formal program evaluation to be conducted in mid-2004 and 2005 to:
  - Identify the main problems
  - Summarize lessons learned
  - Recommend the way forward

### 5. Roles and responsibility of various stakeholders

#### a) Ministry of Health (MOH)

The Ministry of Health has the responsibility for provision of health services in Zambia under the vision of Health reforms.

#### b) Central Board of Health (CBOH)

The Central Board of Health is the administrative agency of the Ministry of Health for the technical management of health services. It deals with: Commissioning of health services from district health boards and teams

- Technical management of health
- Supervision of districts
- Programme co-ordination
CBOH will be responsible for providing the infrastructure, health workers and ensuring that the program is monitored, supervised and quality is maintained.

c) Provinces
The provinces will be responsible for district preparedness, monitoring and co-ordinating district activities including capacity development.

d) Districts
District Health Management Teams and clinical staff in health facilities will be the implementers of the integrated PMTCT program. DHMTs will collaborate with local community-based organizations, NGOs, and Faith-Based Organizations for communication activities and ensuring the delivery of a holistic package of care to HIV infected women and their families.

e) The HIV/AIDS/STD/TB Council and Secretariat (under revision)
The HIV/AIDS/STD/TB Council and its Secretariat (NACS) has the national mandate for providing leadership, coordination, policy guidance and mobilising resources for an expanded HIV/AIDS response in Zambia. While it is not an implementing body, it has within it a number of Technical Working Groups that play an advisory role to all sectors in response to the HIV/AIDS epidemic.

The PMTCT Working Group falls under the NACS and has the following terms of references:

1) To act as an advisory body for the Central Board of Health to the government, through the Ministry of Health in all matters pertaining to preventing and mitigating HIV MTCT in Zambia.

2) To advocate for the development of appropriate policy and strategic responses by the Government in order to reduce HIV MTCT consistent with the political, economic, and social and cultural context in Zambia.

3) To coordinate and provide liaison for ongoing and future research and interventions in relation to HIV MTCT. Additionally, the MTCT working group will provide scientifically and technically accurate information on HIV/MTCT to the National HIV/AIDS Research Committee and any other Research and Ethics Committees that may be institution-bases which require this information in assessing proposals for research.

4) To foster the establishment of local, national and international networks that address issues of HIV MTCT in liaison and consultation with the Ministry of Health, Central Board of Health, the National AIDS Council and Secretariat and any other relevant institutions.

5) To collect and disseminate up-to-date and scientifically accurate information on HIV MTCT. This entails keeping abreast with new global thinking and interpreting this within the context and realities that prevail in Zambia.
6) To be proactive in identifying actual and potential sources of funding (local and external) for HIV MTCT research and interventions and to advise groups seeking such assistance of the availability of such support.
EXPANSION PLAN 2003-2005

1. Phase one: Expansion to each provincial capital + 1 district (by end 2003)
2. Phase two: Expansion to at least 60% of the districts within each province (by end 2004)
3. Phase three: Expansion to MCH facilities in 100% of the districts (by end of 2005)

Table 4 – Expansion targets by province, district and health facility

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Province</th>
<th>Districts</th>
<th>Health facility</th>
<th>Partnering agencies/ NGOs</th>
<th>Cumulative % of districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>All I</td>
<td>20% of districts</td>
<td>40% of health facilities in each district</td>
<td>All partners as per defined role and responsibility</td>
<td>20%</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td>40%</td>
<td>40% of all health facilities in new and 80% in old districts</td>
<td>All partners as per defined role and responsibility</td>
<td>60%</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td>40%</td>
<td>100% of all health facilities in new districts and 100% in old districts</td>
<td>All partners as per defined role and responsibility</td>
<td>100%</td>
</tr>
</tbody>
</table>

Annual work-plans will be developed based on annual review of the programme