REGIONAL INITIATIVE FOR ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION OF HIV AND CONGENITAL SYPHILIS IN LATIN AMERICA AND THE CARIBBEAN

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3. Mother-to-Child Transmission of HIV
4. Maternal and Child Health
5. Caribbean

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May 2010

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<tr>
<td>ART</td>
<td>Antiretroviral therapy</td>
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<tr>
<td>AFASS</td>
<td>Acceptable, Feasible, Affordable and Safe</td>
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<td>CCH</td>
<td>Caribbean Cooperation in Health</td>
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<td>CLAP</td>
<td>Centro Latino Americano de Perinatologia y Salud de la Mujer y Reproductiva</td>
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<td>CRC</td>
<td>Convention on the Rights of the Child</td>
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<td>CRSF</td>
<td>Caribbean Regional Strategic Framework</td>
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<td>CS</td>
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<td>HAART</td>
<td>Highly Active Anti Retroviral Therapy</td>
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<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>ICPD</td>
<td>International Conference on Population and Development</td>
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<td>MCH</td>
<td>Maternal and Child Health</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>PAHO</td>
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<td>PANCAP</td>
<td>Pan Caribbean Partnership against HIV and AIDS</td>
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<td>PHCO</td>
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<td>PITC</td>
<td>Provider Initiated Testing and Counseling</td>
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<td>PMTCT</td>
<td>Prevention of mother-to-child transmission of HIV</td>
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<tr>
<td>SRH</td>
<td>Sexual Reproductive Health</td>
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<td>STI</td>
<td>Sexually transmitted infections</td>
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<td>UNAIDS</td>
<td>United Nations Joint Program on HIV/AIDS</td>
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<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<td>UNGASS</td>
<td>United Nations General Assembly Special Session on HIV/AIDS</td>
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<td>UNICEF</td>
<td>United Nations Children's Fund</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Definitions

1. Elimination of mother-to-child Transmission of HIV:
   - Reduction of the transmission of HIV from HIV+ pregnant women to their infants to 2 percent or less.
   - Incidence of mother-to-child transmission of HIV is reduced to 0.3 cases or less per 1000 live births.

2. Elimination of congenital syphilis: reduction of the incidence of congenital syphilis to 0.5 or less cases, including stillbirths, per 1000 live births.
I. Introduction And Background

HIV and syphilis are major public health problems directly affecting women and their newborns, and indirectly affecting all communities in Latin America and the Caribbean.

HIV infection of infants creates a life-long chronic condition that potentially shortens life expectancy and contributes substantially to the cost of providing health services.

Without interventions an estimated 15 to 45 percent of infants born from HIV positive women will become infected with HIV during pregnancy, delivery or through breast-feeding.

Without treatment an estimated 50 to 80 percent of pregnancies with syphilis infection result in adverse events, including abortion, fetal death, neonatal mortality, premature labor, low birth weight, and congenital syphilis.

In 2007 an estimated 6400 children in Latin America and the Caribbean were infected with HIV\(^1\), the majority of these through mother-to-child transmission; more than 164,000 infants were born with congenital syphilis\(^2\). Efficacious and affordable interventions are available to prevent mother-to-child transmission of both HIV and syphilis.

Prevention of mother-to-child transmission of HIV and congenital syphilis will contribute to reduction in maternal and neonatal morbidity and mortality, improvement of sexual and reproductive health of women and men, infant and child health, and achievement of national, regional, and global targets, including the CRC, ICPD, The UNGASS targets, the Caribbean Cooperation in Health (CCH-III), and the Caribbean Regional Strategic Framework for HIV/AIDS (CRSF), and the Millennium Development Goals, in particular:

#4. reduction of infant mortality;
#5. improvement of maternal health, and
#6. combat HIV, malaria and other diseases.

Prevention of mother-to-child transmission of HIV and congenital syphilis will also result in substantial savings in cost associated with treatment and care for preventable cases of mother-to-child transmission of HIV and congenital syphilis.

Several countries in the region made significant progress towards elimination of mother-to-child transmission of HIV and congenital syphilis as public health problems, while significant gaps remain in others.

To intensify action and accelerate progress, PAHO and UNICEF, working along with other organizations, proposed the Initiative for Elimination of Mother-to-Child Transmission of HIV and Congenital Syphilis in Latin America and the Caribbean.
The Elimination Initiative embraces and integrates several commitments and calls to action, including:


- 1995: formulation of the “Plan of Action for Elimination of Congenital Syphilis” during the 116th meeting of the Executive Committee of the Pan American Health Organization\(^{(3)}\).


- 2006: UNICEF and PAHO/WHO launched an initiative in Central America and the Dominican Republic to strengthen the Prevention of Mother-to-Child Transmission of HIV and Syphilis (PTMI) as part of the strategy to control the HIV epidemic.

- August 2008: PAHO/WHO and UNICEF hosted a technical consultation during the XVII International AIDS Conference with public health authorities from the Caribbean, experts in HIV and maternal-child health, to review the status of Mother-to-Child transmission of HIV and congenital syphilis, and assess the feasibility of elimination.


- March 2009: PAHO and UNICEF, collaborating with UNAIDS organized a technical consultation in Panama, bringing together programme managers from reproductive health and HIV/STI programs from 10 countries in the region, to identify existing barriers to achieve elimination of mother-to-child transmission of HIV and congenital syphilis, and for further development of a Monitoring and Evaluation Framework initiated at the Port of Spain meeting.

- May 2009: during the World Health Assembly in Geneva, UNAIDS proposes the goal to eliminate mother-to-child transmission of HIV.

- November 2009: the Regional Initiative for the Elimination of Mother-to-Child Transmission of HIV and of Congenital Syphilis in Latin America and the Caribbean is launched in technical and political events in the region, including the V Latin American and Caribbean Forum in HIV/AIDS (Lima, Peru) and the 18th Meeting of Ministers of Health of CARICOM (Washington, D.C, United States).
• March 2010: **Global Fund to fight AIDS, Tuberculosis and Malaria** launches a report which states that the elimination of mother-to-child transmission of HIV for 2015 is a goal within reach(6).

• April 2010: **World Health Organization** launches a document urging the international community to establish new and more ambitious objectives that promote progress toward the elimination of HIV in children by 2015(7).

The Caribbean has a history of leadership and success in public health mobilization. The region has been a pioneer in the elimination of measles and polio, and was the first region to embrace the target of elimination of mother-to-child transmission of HIV and syphilis as public health problems. Through targeted and harmonized action the Caribbean has the potential to become the first region in the developing world to achieve this target.
II. Mother-To-Child Transmission Of HIV And Congenital Syphilis In The Caribbean

Around 800,000 children are born in the Caribbean each year. The region has a high estimated coverage of antenatal care (95.5 percent in non-Latin Caribbean and 92.9 percent in Latin Caribbean)\(^6\). The estimated coverage of skilled attendance at birth is also high in the non-Latin Caribbean countries (95.1 percent)\(^8\), and significantly lower in the Latin Caribbean countries (69.2 percent)\(^8\).

The Caribbean region has an estimated 0.9 - 1.2 percent adult HIV prevalence, the second highest estimated burden of HIV infection in the world\(^1\). Mother to child transmission of HIV constitutes an estimated 8-10 percent of all HIV transmissions in the Caribbean, and the estimated HIV prevalence among pregnant women in the Caribbean is 1.1 percent\(^1\). Without intervention an estimated 2200 – 3000 children will be born with HIV infection in the Caribbean each year. An estimated 32,000 cases of gestational syphilis occur in the Caribbean annually\(^2\). Without treatment 50-80 percent of these pregnancies will have adverse outcomes.

While major gaps remain elsewhere, several countries in the Caribbean reported promising progress in the coverage of services to prevent mother-to-child transmission of HIV over the past years. Most countries reported significant increases in the coverage of HIV screening of pregnant women between 2005 and 2007\(^9\). Reported HIV screening of pregnant women ranged from 93 percent to less than 50 percent\(^9\).

**Figure 1:** Coverage of HIV screening for PMTCT in selected Caribbean countries.
The estimated percentage of pregnant women with HIV in the Caribbean who received ARV for PMTCT increased from 29 percent in 2007 to 52 percent in 2008\(^{10}\). Caribbean countries and territories reported ART coverage of HIV positive pregnant women ranging from 100 percent of women tested, to less than 50 percent\(^{10}\). The actual coverage gap of PMTCT treatment becomes more significant, when combining the gap in HIV testing with the gap in treatment of pregnant women who test HIV positive. Reported mother-to-child transmission rates of HIV ranged from 0 percent to 28 percent\(^{11}\).

The majority of the countries and territories in the Caribbean conduct routine syphilis screening of pregnant women, and the reported prevalence of positive blood tests of syphilis in pregnant women for the period 2000-2005 ranged from 0.5 percent to 4.0 percent (PAHO, 2007). In 2004 Cuba reported 98 percent coverage of antenatal syphilis screening, with a prevalence of maternal syphilis of 1.7 percent, 100 percent treatment coverage for infants and zero cases of congenital syphilis in the preceding 3 years\(^{11}\). In 2008 Belize reported 100 percent syphilis screening of pregnant women, and 0.98 percent prevalence\(^{12}\). Haiti reported 35 percent syphilis screening of pregnant women, with 4.10 percent seroprevalence\(^{13}\).

The annual number of cases of congenital syphilis reported to CAREC has declined from 26 cases in 2001 to 4 cases in 2005\(^{14}\), but due to inconsistent reporting by countries, the reports cannot be compared over time. These figures also do not include data from Haiti and the Dominican Republic, countries with a high estimated burden of disease, which together account for 70 percent of the annual births of the region.

The high antenatal coverage in the Caribbean forms a solid basis and opportunity for accelerated expansion of services for prevention of mother-to-child transmission of HIV and syphilis. The relatively low coverage of skilled attendance at birth in some countries provides a challenge that needs to be addressed in order to achieve the elimination targets.

Above presented information indicates that antenatal screening for HIV and syphilis are well-established in the region. However challenges persist for prophylactic treatment coverage for these diseases. Impact data on both congenital syphilis and MTCT are very limited. The weaknesses of surveillance and tracking systems, and the limited regional capacity for infant HIV diagnosis, compromise the capacity of the region to adequately document the impact of these services.
Review of the evidence indicates that two core conditions for selection of candidate diseases for elimination are within reach of the Caribbean region. They are:
1. The availability of efficacious means to interrupt HIV and syphilis transmission from mother to child (Biological Feasibility).
2. The availability of practical, simple diagnostic tools, and affordable, sustainable interventions (Programmatic and Financial Feasibility).

**Biological Feasibility**
Mother-to-child transmission of HIV can be reduced to less than 2 percent with HAART and replacement feeding\(^{15}\). Mother-to-child transmission of syphilis can be interrupted by administration of an appropriate dose of penicillin\(^{16}\).

**Programmatic and Financial Feasibility**
- Reasonable to high coverage of maternal and child health services.
- Availability of technology for diagnoses, prophylaxis, and treatment for HIV and syphilis:
  - HAART
  - Capacity for safe and affordable substitution of breast-feeding for replacement feeding
  - Penicillin
  - VDRL and RPR, rapid tests for diagnosis of HIV and syphilis, virological tests for detection of HIV
- The same services implemented for PMTCT can also address syphilis.
- Regional commitment and cooperation.
- The majority of countries have HIV resources which provide opportunities to improve quality of care for women and infants, including addressing syphilis in an integrated approach.

Based on these considerations the elimination of Mother-to-Child transmission of HIV and Congenital Syphilis is an achievable target for most countries in the region in the medium term, and ultimately in the whole region.

**Costs and benefits of elimination**
While health care decision-making should not be driven exclusively by economic factors, cost-benefit considerations are extremely important in the context of advocacy and political mobilization, and to guide managerial decision-making and planning, particularly in resource-poor settings.

The cost-benefit analysis includes the costs for all components of the service or programme, the costs associated with averted events, and the life-time losses and savings. In the context of mother-to-child transmission of HIV and congenital syphilis, cost estimates include assessment of costs and savings related to a variety of services and events; including antenatal, intra partum, post partum and newborn services, HIV infection, congenital syphilis, pre-term birth, low birth weight, unsafe abortion and maternal mortality, stillbirth and neonatal mortality.
There is limited information available in the Caribbean to allow for cost-benefit analysis. However, global evidence and information from some countries indicate that prevention of mother-to-child transmission of HIV and congenital syphilis is cost-effective.

- In Haiti the integration of rapid testing for syphilis in PMTCT programs proved to be cost-effective, especially in rural areas. Schackman et.al (2007) estimated that an annual investment of US$ 525,000 could prevent 1125 cases of congenital syphilis and 1223 neonatal and fetal deaths^{17}.

- A PAHO-supported evaluation of the national health system response to HIV in the Dominican Republic estimated that lifetime cost of caring (HAART only) for preventable cases of mother-to-child transmission of HIV ranged between 20 to US$51 million, while the cost for preventing the transmission was estimated at around US $7 million^{18}.

- The Ministry of Health in Belize calculated that the total cost for care and treatment of an HIV-positive woman and infant, including laboratory services, milk supplements, and specialist care, equals US$1600. With an estimated lifetime cost of US$200,000 – $400,000 for treatment of an HIV positive child, each prevented case equals more than US$198,000 in savings (2008, Ministry of Health Belize; MCH/PMTCT Programme).

In addition to the monetary costs and benefits, the intangible costs associated with premature death, lifetime disability, interruptions to family life and other social costs, must be taken into account when considering the cost-benefit of eliminating mother-to-child transmission of HIV and congenital syphilis.
IV. The Strategy For Elimination Of Mother-To-Child Transmission Of Hiv And Congenital Syphilis In The Caribbean

To achieve and sustain the elimination of mother-to-child transmission of HIV and congenital syphilis, a comprehensive public health approach is required. The strategy builds on the current technical and programmatic guidance and achievements in the Caribbean. It proposes an integrated approach to leveraging HIV-specific resources for the effective provision of interventions to prevent HIV and syphilis in maternal and child health services. Improvement of coverage and quality of maternal and child health services constitute an integral part of the strategy and success factor. In addition to women and infants, men are recognized as key stakeholders in this initiative. Male involvement is critical to achieve the targets in an equitable and sustainable approach.

Vision:
“Generations free of HIV and Syphilis”

Goal:
To eliminate mother-to-child transmission of HIV and congenital syphilis in all the Caribbean countries and territories by 2015.

Impact Indicators
• Transmission of HIV from HIV positive mothers to their infants is reduced to 2% or less.
• Incidence of mother-to-child transmission of HIV is reduced to 0.3 cases or less per 1000 live births.
• Incidence of congenital syphilis is reduced to 0.5 cases or less, including stillbirths, per 1000 live births.

Programmatic Objectives:
1. Increase the coverage of antenatal care and skilled attendance at birth to 95 percent or more;
2. Increase the coverage of routine HIV and syphilis screening of pregnant women to 95 percent or more;
3. Increase the coverage of adequate HIV prophylactic management and treatment of syphilis in pregnant women and HIV prophylactic management of HIV in children to 95 percent or more;
4. Increase the percentage of first-level health care centers that provide services for prevention and diagnosis of HIV/STI in an integrated manner with other services (antenatal care, sexual and reproductive health, services for adolescents, gender violence) to 95 percent or more;
5. Increase the percentage of countries that have information systems for monitoring and evaluation of progress towards the elimination of MTCT of HIV and SC and support decision to 95 percent or more.
Guiding Principles:

- **UNIVERSAL ACCESS:**
  The Initiative will support countries and territories to review their national plans, strategies and targets for HIV/AIDS, SRH, and MCH, and develop strategies for scale-up towards universal access to comprehensive services.

- **PRIMARY HEALTH CARE:**
  Efforts to scale-up HIV services reinforce the importance of a Primary Health Care approach that aims to provide a comprehensive package of services within reach of all, with focus on the most vulnerable groups.

- **CLIENT-CENTERED:**
  This initiative will aim to ensure the availability of a low-threshold full package of services for the current and future pregnant woman, her partner and family, with efficient referral, counter-referral, and access to rehabilitative services in collaboration with partner agencies and the community.

- **COUNTRY-DRIVEN:**
  Implementation of the elimination strategy will be tailored to the specific context of each country and territory, including the status and patterns of the local HIV and syphilis epidemiology, the health care system, the organization of maternal and child health services, the current coverage of services, available resources, and the capacity of the system to expand. Aiming for sustainable scale-up of coverage of quality services, the country-specific situation will determine the local approach.

- **REGIONAL PERSPECTIVE:**
  The Caribbean Community through its institutions such as COHSOD and Cariforum has longstanding recognition of the importance of, and established mechanisms for, regional collaboration and cooperation such as CCH and PANCAP. Building on the existing fundamentals of horizontal cooperation in the region, this initiative will encourage and facilitate sharing of experiences, resources, lessons learned, and promising practices. A regional perspective is of particular relevance when considering the significant levels of migration taking place in the region, and the need for developing mechanisms to ensure optimal access to services for migrants.

- **PARTNERSHIP AND COMMUNITY INVOLVEMENT:**
  Inclusive, country driven processes, including consultations with relevant stakeholders such as non-governmental organizations, civil society and the private sector will be facilitated to ensure strong partnerships that will increase technical and financial resources as well as encourage the participation of all sectors in society.

- **HUMAN RIGHTS APPROACH:**
  Human rights are fundamental in health services and of particular importance in the HIV/STI response, to reduce vulnerabilities and protect the fundamental freedoms and human dignity of all persons. A human rights approach guarantees every client access to quality services, informed consent, and confidentiality. In line with the CRC, optimal protection of the rights of children will be pursued, as well as promotion and protection of the reproductive rights of women. Appropriate information will be provided for all clients to make informed decisions about treatment, feeding options, and reproductive life.
• **INTERCULTURAL PERSPECTIVE:**
The ethnic and cultural diversity in the region necessitates an approach that takes into account and responds to the specific characteristics and needs of the different ethnic and cultural groups, including the indigenous and other ethnic minorities, for the development of interventions that are appropriate for the cultural context and beliefs of the different subgroups.

• **GENDER MAINSTREAMING:**
Gender constitutes an important determinant of health, and should be considered in all aspects of health care delivery. In this initiative, gender has particular significance when considering the interrelationship with sexuality and sexual-reproductive health. Increasing access to, and utilization of services will require consideration of gender inequalities generated by gender stereotypes, norms, and roles, and development of gender-transformative strategies. Fostering of male involvement is essential. Active male participation can contribute to reduction of gender-based violence, improved adherence and effective service delivery.

**Lines of action:**

1. **Enhancing capacity of MCH and newborn services for the early detection, care and treatment of HIV and Syphilis in pregnant women, their partners and infants;**

2. **Strengthening Surveillance of HIV and Syphilis in MCH services and health information systems.**

3. **Integrating HIV/STI interventions with sexual/reproductive health and other relevant services;**

4. **Health Systems Strengthening.**

These lines of action should be complemented with strategies, programs and services that would improve prevention, care and treatment of HIV, Syphilis and other STI’s in most-at-risk populations.

**Strategic interventions under each line of action:**

1. **Enhancing capacity of MCH and newborn services for the early detection, care and treatment for HIV and syphilis in pregnant women, their partners and children:**
   - Increasing coverage of maternal and child health services through integration and decentralization, and removal of obstacles to access services.
   - Strengthening prevention programs for women of reproductive age and their partners, to ensure optimal availability and use of sexual/reproductive health and antenatal services.
• Routine HIV and syphilis testing for all pregnant women to ensure early detection of infection. The use of rapid HIV and syphilis tests can contribute to testing uptake and reduction of loss to follow-up.

• HAART as a standard for care of pregnant women with HIV. Several studies indicated that HAART drastically reduces mother-to-child transmission. All countries in the Caribbean currently have access to HAART.

• Early treatment for pregnant women with syphilis and their partners. An appropriate dose of penicillin during pregnancy can effectively prevent syphilis transmission.

• Early HIV and syphilis diagnosis of infants for timely treatment and reduction of infant mortality.

• Appropriate prophylactic treatment for infants exposed to HIV and syphilis.

• Appropriate nutritional guidance for mother and child, counselling on all the possible options on infant feeding, and referral to appropriate services when necessary.

• Replacement feeding using a feasible, affordable, sustainable and safe approach.

• Appropriate referral to counselling services for sexual/reproductive health, domestic violence, and other psycho-social support services for women infected with HIV or syphilis, and their families.

• Community participation and mobilization, and strengthening of support networks.

2. **Strengthening Surveillance of HIV and Syphilis in MCH and information systems:**
   • Implementation of HIV and syphilis case-based surveillance in MCH services.

   • Improvement of perinatal information systems (SIP)\(^{(16)}\) for the surveillance of diagnosis and treatment of HIV and syphilis, and introduction or improvement of the registration of abortion and fetal death in maternal and child health services.

   • Strengthening of health information systems for the production, analysis, dissemination and use of strategic information to monitor progress towards the achievement of the elimination targets and to inform planning and designation of resources.

   • Implementation of operational research.

   • Establishment of regional coordinating mechanisms for surveillance.
3. **Integration of HIV/STI with SRH and other relevant services:**
   - Integration of sexual/reproductive health promotion and HIV/STI prevention in SRH programs, antenatal services and family health programs.
   - Integration of appropriate services for adolescents in reproductive health services and other priority services (STI, family planning, etc.) followed by appropriate treatment and necessary referrals.
   - Integration of Provider Initiated Testing & Counseling (PITC) for HIV and syphilis in reproductive health services and other priority services (STI, family planning, etc.) followed by appropriate treatment and necessary referrals.
   - Integration of HIV/STI, PITC and post exposure prophylaxis in programs and services addressing gender-based violence.
   - Integration of programs for condom promotion and risk reduction in MCH services.
   - Interventions for the prevention of unintended pregnancies among HIV positive women.
   - Interventions to prevent teenage pregnancies.

4. **Health Systems Strengthening:**
   - Improve the delivery of services for women of reproductive age, pregnant women, their partners, and their newborns, in a package of integrated services and approaches that respond to the specific context and needs of sub-groups.
   - Improve coverage of MCH services through integration and decentralization and removal of barriers to access services.
   - Improve access to affordable medicines, diagnostics and commodities, including formula for HIV and syphilis in MCH services. Delivery of these commodities must ensure they are timely, appropriate, high quality and of equitable access.
   - Capacity building and training of service providers to provide integrated and quality services, including addressing stigma and discrimination.
   - Strengthen human resources to support the expansion and implementation of policies and programs necessary to achieve the elimination targets.
• Strengthen the capacity of the health systems for strategic and operational planning, monitoring and evaluation, and collaboration between MCH and National AIDS Programs.

• Strengthen partnerships with key stakeholders, reinforce public-private sector collaboration, and increase technical expertise and sources of human and material resources.

Guidelines and standards of care

In collaboration with UNICEF, regional and global experts, PAHO has developed integrated guidelines and standards of care to support the implementation of this initiative presented in the "CLINICAL GUIDE FOR THE ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION OF HIV AND CONGENITAL SYPHILIS IN LATIN AMERICA AND THE CARIBBEAN".

These guidelines drew on the WHO publication “ANTIRETROVIRAL DRUGS FOR TREATING PREGNANT WOMEN AND PREVENTING HIV INFECTION IN INFANTS: TOWARDS UNIVERSAL ACCESS: RECOMMENDATIONS FOR A PUBLIC HEALTH APPROACH” issued in 2006(20).

The guidelines are based on the most recent scientific evidence and international recommendations, applying a public health approach adapted to the social and contextual realities of our region. These guidelines introduce three key recommendations with the aim of maximizing the impact of interventions;

• HAART for all HIV positive pregnant women starting at week 14 of pregnancy, regardless of the clinical or immunological status of the pregnant women.
• Replacement feeding for all infants exposed to HIV, where the conditions of AFASS (acceptable, feasible, affordable, sustainable, safe) can be met.
• In exceptional cases where replacement feeding cannot be implemented, exclusive breast-feeding with maternal ARV during the period of breast-feeding.

The guidelines propose an integrated approach towards prevention, diagnosis and management of HIV and syphilis infection that does not end with delivery, but continues to care for infant and mother in the context of primary and family health care.

The guidelines are presented as an essential tool for service providers and decision makers to attain the required reduction in mother-to-child transmission of HIV and syphilis in our region, summarized in the programmatic targets.

The Perinatal Information System (SIP)

The clinical perinatal history constitutes a valuable data source for service providers to understand the characteristics of the target population, evaluate the results of service delivery, identify priority problems, and implement operational research. A critical condition for improving
maternal and child health services constitutes the existence of mechanisms that facilitate rapid collection, validation and use of relevant data. As a response to the need for such mechanisms, PAHO, through its regional centre CLAP/SMR, developed the Sistema Informatico Perinatal (SIP), an information system that integrates all the care components. The SIP consists of the clinical perinatal history form, the perinatal passport, and an electronic data management system. The clinical perinatal history form facilitates the collection of a set of internationally-agreed data in one single sheet that summarizes the necessary minimal information for adequate care for the pregnant woman and the newborn. It constitutes an effective yet simple and low-cost tool.

The salient characteristics of the SIP can be summarized as follows:

- It facilitates local processing of data and strengthens the capacity for self-evaluation of perinatal services through the analysis of data in the service delivery agencies.
- It reinforces the importance of accurate record-keeping among service providers.
- It facilitates internal and external communication between service providers, encourages adherence to norms, and facilitates audit of service delivery.
- It forms a basis for planning of service delivery through provision of necessary information to describe the target populations, evaluate service delivery, and conduct operational research.

At the national level the data can be consolidated and analyzed to describe the status of the different indicators over time by geographical area, levels of service delivery, and other population characteristics. This makes the Perinatal Information System (SIP) a very useful tool for the surveillance of maternal and neonatal events, and for evaluation of programs at the national level.
V. Implementation Issues

**Country-level implementation**
Strategic leadership, political commitment and allocation of necessary financial and human resources will be critical for achievement of the ambitious elimination targets. On country level, implementation of the Elimination Initiative will require the development of operational plans.

The planning process needs to harmonize policies, plans and initiatives in the area of HIV, STI, Maternal and Child Health, adolescent health, and SRH, to arrive at an integrated, decentralized, comprehensive approach.

The planning process must include formulation of programmatic and service delivery targets, identification of human and financial resources, needs and gaps, and definition of organizational strategies and priority interventions, with clear identification of stakeholders, roles and tasks, and measures for monitoring and evaluation.

**Regional implementation**
A central aspect of the implementation of this regional initiative will be the fostering and facilitation of horizontal collaboration between the countries for optimal sharing of expertise, regional resources, and lessons learned.

The planning, implementation, monitoring and evaluation of the initiative has been, and will continue to be, a collective, collaborative process with a strong emphasis on the ownership of the initiative by the different regional and national stakeholders. Evidence generated by operational research in the region will inform the further development of the strategic lines of action and priority actions.

A Technical Working Group (TWG) has been established consisting of PMTCT, STI and MCH experts from the Caribbean, people living with HIV, representatives from CARICOM/PANCAP, and UN agencies for ongoing provision of technical guidance and support.

The Technical Working Group serves as the regional mechanism for joint planning, implementation and monitoring of the Initiative for Elimination of Mother-To-Child Transmission of HIV and Syphilis in the Caribbean. Linkages will be established with existing mechanisms such as the annual EPI Managers meeting, CCNAPC, and PANCAP AGM. PAHO and UNICEF provide joint support for the TWG through secretariat at PHCO, technical guidance, resource mobilization, and oversight of the certification process.

At country level PAHO and UNICEF will also provide joint support through the country representation and technical advisors. Within PAHO, several units support this initiative: CLAP, FCH/HIV, Gender & Ethnicity Unit, and THR. PAHO and UNICEF are fully committed to facilitate the necessary collaboration with UNFPA, UNAIDS, and other relevant UN partners.
Certification
A regional Monitoring and Evaluation Framework has been developed that proposes a set of indicators for the evaluation of progress towards the elimination targets. This M&E framework will serve as the reference for certification of the elimination of mother-to-child transmission of HIV and congenital syphilis.

Countries that may have achieved the elimination targets and conditions, can apply for certification. In the Caribbean the Technical Working Group for Elimination of Mother-To-Child Transmission of HIV and Congenital Syphilis will coordinate the certification process.

Financing the Elimination Initiative
This document serves as programmatic guidance for the development of regional and country plans and projects to mobilize resources needed for implementing the Elimination Initiative. The funding approach of the Initiative aims to strengthen the national capacity for planning and harmonization of existing funding sources towards an integrated and efficient allocation.

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CONCEPTUAL FRAMEWORK OF THE CARIBBEAN INITIATIVE FOR ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION OF HIV AND CONGENITAL SYPHILIS

VISION
- Health Systems Strengthening
- Enhancing the capacity of maternal and Child services for the early detection, care and treatment of HIV and syphilis in pregnant women, their partners and children.
- Strengthening surveillance of HIV and Syphilis in MCH services and Health Information Systems
- Integration of HIV/STI interventions with SRH and other relevant services

LINES OF ACTION
- Increased coverage of antenatal care and skilled attendance at birth to 95% or more.
- Increased coverage of routine HIV and syphilis screening of pregnant women to 95% or more.
- Increased coverage of HIV prophylaxis and syphilis treatment for pregnant women and their infants to 95% or more.
- Increased percentage of first level health centers providing integrated package of health services for prevention, diagnosis, and treatment to 95% or more.
- Increased percentage of countries with adequate information systems to 95% or more.

PROGRAMMATIC OBJECTIVES
- Increased coverage of antenatal care and skilled attendance at birth to 95% or more.
- Increased coverage of routine HIV and syphilis screening of pregnant women to 95% or more.
- Increased coverage of HIV prophylaxis and syphilis treatment for pregnant women and their infants to 95% or more.
- Increased percentage of first level health centers providing integrated package of health services for prevention, diagnosis, and treatment to 95% or more.
- Increased percentage of countries with adequate information systems to 95% or more.

RESULTS
- Reduction of incidence of MTCT of HIV to 0.3 cases per 1000 live birth or less.
- Reduction of MTCT of HIV from HIV positive women to infants to 2% or less.
- Reduction of incidence of congenital syphilis to 0.5 cases per 1000 live birth or less.

GOAL
- ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION OF HIV AND CONGENITAL SYPHILIS IN THE CARIBBEAN.

GUIDING PRINCIPLES
Universal access, primary health care, client-centered, country driven, regional perspective, partnership and community involvement, human rights approach, gender mainstreaming.
Annex II: Regional plans and commitments relevant to the Initiative for Elimination of Mother-To-Child Transmission of HIV and Congenital Syphilis

- The Caribbean Cooperation in Health (CCH-III)
- MOU signed by PAHO and UNICEF for joint action to address mother-to-child transmission of HIV and congenital syphilis in 2005.
Cited References

8. PAHO. Basic Indicators - Health Situation in the Americas. PAHO. 2009.