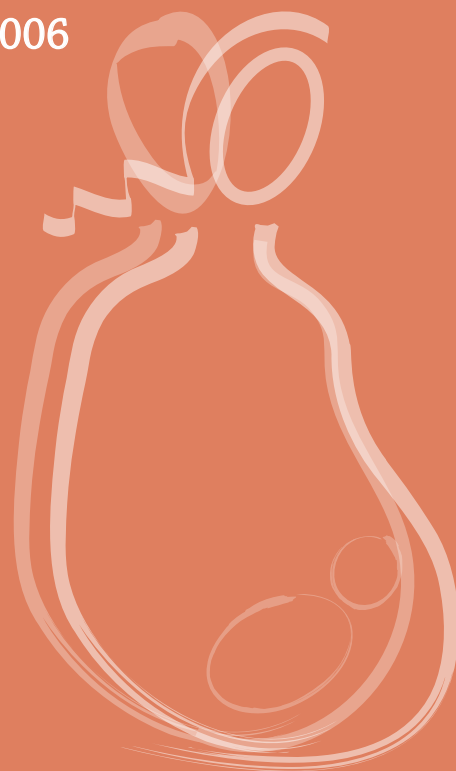


report

# Technical Consultation on the Integration of HIV Interventions into Maternal, Newborn and Child Health Services

Geneva, Switzerland, 5–7 April 2006



World Health  
Organization

**Technical Consultation on the Integration of HIV Interventions  
into Maternal, Newborn and Child Health Services**

**Report of a WHO Meeting  
Geneva, Switzerland, 5–7 April 2006**

Department of Making Pregnancy Safer  
Department of HIV/AIDS



**World Health  
Organization**

**© World Health Organization 2008**

All rights reserved. Publications of the World Health Organization can be obtained from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: [bookorders@who.int](mailto:bookorders@who.int)). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press, at the above address (fax: +41 22 791 4806; e-mail: [permissions@who.int](mailto:permissions@who.int)).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

The named authors [Juliana Yartey and Kuor Kumoji] alone are responsible for the views expressed in this publication.

Printed by the WHO Document Production Services, Geneva, Switzerland

## CONTENTS

EXECUTIVE SUMMARY .....	44
1. BACKGROUND .....	47
<b>1.1 Purpose of the meeting .....</b>	<b>48</b>
<b>1.2 Objectives.....</b>	<b>48</b>
<b>1.3 Expected outcomes.....</b>	<b>48</b>
2. PROCEEDINGS OF THE MEETING.....	49
<b>2.1 Context and status of PMTCT.....</b>	<b>49</b>
<b>2.2 Concept, rationale and framework for HIV/MNCH integration and other         programme experiences.....</b>	<b>52</b>
<b>2.3 Implementation of PMTCT programmes: Country experiences .....</b>	<b>56</b>
<b>2.4 Strengthening health systems for HIV/MNCH integration .....</b>	<b>62</b>
<b>2.5 Clinical and programmatic tools to support integration of HIV/MNCH         services .....</b>	<b>66</b>
<b>2.6 Strategies to support the adoption, implementation and scale up of integrated         HIV/MNCH services at country level .....</b>	<b>69</b>
3. CONCLUSIONS AND RECOMMENDATIONS .....	75
<b>3.1 Definition and scope of integration .....</b>	<b>75</b>
<b>3.2 Framework for integration .....</b>	<b>75</b>
<b>3.3 Implementation and scale-up of integrated approach.....</b>	<b>76</b>
<b>3.4 Recommendations for “Next Steps” .....</b>	<b>79</b>
4. CLOSING .....	82
5. ANNEXES .....	83
<b>5.1 Annex I: Agenda .....</b>	<b>83</b>
<b>5.2 Annex II: List of Participants .....</b>	<b>88</b>
<b>5.3 Annex III: Matrix for Integration Process (Group Output).....</b>	<b>48</b>

## **Executive Summary**

About 90% of HIV infections occurring in children under the age of 15 are acquired through mother-to-child transmission (MTCT) of HIV during pregnancy and childbirth, and through breastfeeding. Despite the availability of highly effective interventions to prevent mother-to-child transmission of HIV, less than 10% of pregnant women worldwide have access to these interventions. In sub-Saharan Africa, where most of these infections occur, less than 5% of pregnant women receive any interventions to prevent the transmission of HIV to their babies.

The "Abuja Call to Action" in 2005 to eliminate HIV infection in infants and young children reinforces the commitment of the United Nations General Assembly Special Session (UNGASS) on HIV/AIDS in 2001 to the goal of reducing the proportion of children infected with HIV by 50% by the year 2010, by ensuring access to effective interventions for 80% of pregnant women.

Achievement of these goals requires renewed efforts at expanding access to effective interventions, especially in intense transmission areas, through existing health systems and routine health-care delivery mechanisms, to reach the largest number of at-risk populations. In most high prevalence countries, utilization of maternal, newborn and child health (MNCH) services is high. Integrating HIV interventions into MNCH services offers a unique opportunity to reach women, children and families with a comprehensive package of effective interventions for HIV prevention, treatment and care.

The purpose of this consultation was to achieve consensus on the concept of integration and modalities for integrating HIV prevention, treatment and care interventions into maternal, newborn and child health services, and agree on follow-up actions to support the scale-up of the integrated approach in countries.

## **Conclusions and Recommendations**

The meeting agreed that the current status of PMTCT implementation in countries was unacceptable, with an urgent need for a renewed public health approach to HIV control that ensures improved access to HIV prevention, treatment and care interventions for women and their children. A comprehensive approach to care, based on simplification, standardization and integration is needed to scale-up interventions and strengthen health systems to support integrated service delivery and improve quality of care.

Country experiences demonstrate that integrating HIV interventions into maternal, newborn and child health services improves uptake of HIV prevention, treatment and care interventions for women, children and families, and is achievable.

## ***Definition and Scope of Integration***

Consensus was achieved on the definition of HIV integration within MNCH services as follows:

*“Integration of HIV interventions into maternal, newborn and child health (MNCH) services involves the reorganization and reorientation of health systems to ensure the delivery of a set of essential interventions for HIV prevention, treatment and care as part of the continuum of care for women, newborn, children and families.”*

The integrated approach must be guided by the principle of ensuring a continuum of care through the life-cycle and must be family-centred with the full participation of communities.

### ***Operational Guidance***

The framework for integration was reviewed and adopted with specific recommendations for operationalization as follows:

- Country-level processes to develop and scale-up integrated HIV/MNCH services must be government-owned and country-led, with complementary donor roles.
- Political commitment is critical and advocacy at all levels (local, national, regional, global) is essential.
- Continuous planning, coordination and management activities are essential at the central and district levels to support integrated service delivery at facility level.
- Additional resources, providers and supervision will be required at the district and facility levels to facilitate implementation.
- Community involvement is necessary for successful implementation and scale-up.
- Collaboration is necessary at structural, operational and service delivery levels. However, programme-specific changes and linkages will not be sustainable without overall health system strengthening to support improved service delivery.

Although integration requires specific actions at all levels of the health system, the health facility level is most critical and warrants increased attention for success. Consensus on the package of interventions to be offered in an integrated service delivery framework is critical. Dialogue, careful planning and strong coordination are essential for successful integration of HIV/MNCH services.

In addition to identifying the essential package of the HIV interventions that should be provided routinely to women and children through MNCH services and the key programme areas for collaboration, there was agreement on the various complex contextual and health system challenges that need to be addressed.

A five-step action plan is proposed to inform the development of an "implementation guide" and an "integration tool kit" that are to be developed to guide the process of integration at country level. Related key messages for operational guidance include the following:

- HIV testing and counselling processes must be simplified and streamlined into routine care, as these are prerequisites for critical life-saving interventions for HIV prevention, treatment and care.
- The limited information and emphasis on primary prevention interventions to keep HIV-negative women infection-free was identified as a major gap that needs to be addressed and strengthened within integrated HIV/MNCH services.
- Strategies to increase demand and service utilization must be employed concurrently with strategies that address supply issues. Mechanisms for increasing access and utilization of skilled care at birth to facilitate the provision of interventions for PMTCT during labour, childbirth and the immediate postpartum period need to be developed.
- Community level involvement and participation is essential for assuring a continuum of care through the various levels of the health system

### *"Next Steps"*

The meeting recommended the following "Next Steps":

1. Develop *policy brief or statement* summarizing the rationale, definition and process of integration of HIV interventions into MNCH services with Partners endorsement for dissemination.
2. A *regional consultation and high level donors meeting* that brings countries together for experience sharing and engages donors to explore resource allocation and harmonization mechanisms that would facilitate and support integrated MNCH service delivery and related activities at country level is critical, and is likely to empower countries to initiate implementation.
3. Country support for implementation and the provision of guidance tools for integration are important next steps. An *"integration toolkit"* which includes the framework for integration, assessment and training tools, implementation guide and advocacy plan is to be developed to facilitate the integration process at country level, as well as facilitate country level adaptation and use.
4. WHO to engage partners in supporting learning sites in selected countries in Africa and identify potential sites in Latin America, Asia and the Pacific regions for further operations research and documentation of best practices to inform guidance for country implementation.

## 1. Background

Currently, nearly 1,800 new HIV infections occur daily in children under the age of 15 and approximately 1,400 children in this age group die of AIDS-related illness each day. Many of these children are infected through mother-to-child transmission (MTCT) of HIV during pregnancy and childbirth, and through breastfeeding. Despite the existence of highly effective interventions to prevent transmission of HIV to their infants, fewer than 10% of pregnant women worldwide have access to these interventions. In high-income countries, access to effective interventions has led to the virtual elimination of HIV infection in infants and young children with near zero transmission from mother-to-child, demonstrating the efficacy of available interventions. By contrast, in the majority of sub-Saharan African countries where the epidemic is most intense, less than 5% of pregnant women receive any interventions to reduce transmission of the infection to their babies.

In 2001, the United Nations General Assembly Special Session (UNGASS) on HIV/AIDS committed its signatories to the goal of reducing the proportion of children infected with HIV by 20% by the year 2005 and 50% by the year 2010, by ensuring access to effective interventions for 80% of pregnant women. In July 2005, the world's richest nations (G8) committed to the achievement of an AIDS-free generation in Africa, by working with WHO, UNAIDS and other international agencies to significantly reduce HIV infections and achieve universal access to interventions for HIV prevention, treatment and care by 2010. In December 2005, a global Partners Forum in Abuja also issued a "Call to Action" to eliminate HIV infection in infants and young children.

***"The Abuja Call to Action: Towards an HIV-free and AIDS-free Generation" (Dec. 2005)***

- Improving standards of care and uptake of services for PMTCT with measurable time-bound targets
- Mobilizing resources to strengthen health systems for the delivery of PMTCT services
- Integrating PMTCT interventions into MCH services
- Decentralizing programmes
- Engaging communities and PLWHAs in programme expansion
- Undertaking operations research to continuously improve PMTCT programme

The elimination of HIV infection in infants and young children – which can largely be achieved by increasing access to interventions for the prevention of mother-to-child transmission – is expected to accelerate global HIV prevention efforts by reducing new infections by an estimated 15%. Expanding access to HIV interventions to reach the largest number of at-risk populations can be achieved through the use of existing health services. Maternal, newborn and child health (MNCH) services offer a unique opportunity to reach women, children and families with effective interventions for HIV prevention, treatment and care. Integrating these interventions into MNCH services for routine delivery is critical to achieving universal access and coverage of HIV interventions.

The WHO Departments of MPS, CAH and HIV/AIDS have developed several tools to support the implementation of the integrated approach in countries. These include a Position Paper on *Integrating HIV Interventions into Maternal, Newborn, and Child*

*Health Services* (which served as a background document for this meeting), a *Framework for Integration of HIV Interventions into Maternal, Newborn, and Child Health Services* and other relevant tools and operational guides such as the *Assessment Tool for the Integration of HIV Interventions into Maternal, Newborn and Child Health Services*. These documents were provided to meeting participants to review and to achieve consensus on the framework and modalities for implementation of the integrated approach.

### **1.1 Purpose of the meeting**

To achieve consensus on the concept of integration and discuss technical and programmatic approaches to the integration of HIV prevention, treatment and care interventions into MNCH services.

### **1.2 Objectives**

1. Achieve consensus on the concept of integration of HIV interventions into MNCH services.
2. Identify technical and programmatic issues, including health systems constraints related to the integration of HIV interventions into MNCH services, and explore mechanisms for effective delivery of interventions for HIV prevention, treatment and care within MNCH services.
3. Share experiences from various countries, including best practices and available tools to support the integration of HIV interventions into MNCH services, and identify gaps.
4. Obtain Partners' commitment and define roles and responsibilities of Partners to support collaborative implementation of HIV/MNCH integrated activities at the country level.

### **1.3 Expected outcomes**

1. A common understanding and consensus on the concept of integration
2. Consensus on the technical and programmatic approaches, including health systems issues, to the integration of interventions for HIV prevention, treatment and care within MNCH services
3. Framework and assessment tool for integration of HIV interventions into MNCH services reviewed and refined, and relevant gaps identified.
4. Commitment of Partners and collaboration among stakeholders to support implementation of HIV interventions as an integral component of MNCH services.

The meeting agenda and list of participants are provided in Annexes 1 and 2.

## **2. Proceedings of the meeting**

Proceedings of the three-day meeting were divided into seven (7) thematic sections:

- I: Context and status of PMTCT
- II: Concept, rationale and framework for HIV/MNCH integration and other programme experiences
- III: Implementation of PMTCT programmes: Country experiences.
- IV: Strengthening health systems and relevant tools to support HIV/MNCH integration.
- V: Clinical and programmatic tools to support integration of HIV/MNCH services.
- VI: Strategies to support the adoption, implementation and scale up of integrated HIV/MNCH services at the country level
- VII: Conclusions and recommendations.

### **2.1 Context and status of PMTCT**

*Dr Monir Islam, Director, Department of Making Pregnancy Safer, WHO, Geneva*

Dr Islam welcomed participants to the meeting and presented the background, objectives and expected outcomes of the meeting. Increasing HIV infection in women and children requires intensified efforts to ensure universal access to HIV prevention, treatment and care interventions for women and their children, if the goal of a HIV/AIDS-free generation is to be achieved. Such efforts call for a common strategy by HIV and MNCH programmes to take advantage of the high level of contact of pregnant women with the formal health-care delivery system through ANC and ensure that each contact opportunity is utilized to provide women and their children, born and unborn, with all the necessary interventions, including those for HIV prevention and treatment, to ensure the well-being and survival of both mother and child. Pursuing this strategy requires a common understanding of the technical and programmatic issues involved, as well as the definition of standards of care, processes for action at the country level and plan for scale-up at national, regional and global levels. Dr Islam urged participants to “let the outcome of this meeting on the *Integration of HIV Interventions into Maternal, Newborn and Child Health Services* serve as an opportunity for launching the integrated approach to MNCH service delivery.”

*Mrs Joy Phumaphi, Assistant Director-General, Family and Community Health Cluster, WHO, Geneva*

Mrs Phumaphi alerted participants to the feminization of the HIV epidemic and the need to develop an appropriate response to curb the tide of the epidemic in relation to women and children. Currently, 60% of the HIV burden in sub-Saharan Africa is in

women and female youth, creating substantial social and economic burdens to households and families. Although interventions, drugs and tools exist to provide evidence-based care to women and children, HIV programmes continue to fail to meet their goals, due to issues of accessibility. Modified service delivery strategies, using action-oriented approaches with targets extending beyond small successes, are needed to respond to both maternal and child health needs in the context of the HIV/AIDS epidemic. Integrating HIV interventions within MNCH services is a major response to the Abuja Call for concerted action towards the achievement of an HIV- and AIDS-free generation, and one that aims to remove existing dichotomy between PMTCT and routine MNCH services.

### **2.1.1 Positioning women and children in the universal access to HIV/AIDS Prevention, Care and Treatment Initiative**

*Dr Kevin De Cock, Director, Department of HIV/AIDS, WHO, Geneva*

Positioning the health needs of women and children within the strategic plan to achieve the G8's declaration of universal access to HIV interventions is crucial.

“[...] with the aim of an AIDS-free generation in Africa, significantly reducing HIV infections and working with WHO, UNAIDS and other international bodies to develop and implement a package for prevention, treatment and care, with the aim of as close as possible to universal access to treatment for all those who need it by 2010.”

Universal Access: G8, July 2005

Two important issues relevant to PMTCT and universal access must be addressed. First, the concept of universal access is not limited to accelerating treatment scale-up. It also emphasizes maximizing access to a package of essential HIV prevention, treatment and care interventions, delivered through joint efforts. Second, focus must be on interventions for both the mother and the child across several maternal and child health service areas for maximum benefit.

To scale up services in resource-constrained settings, public health approaches that are evidence-based, simple, standardized and decentralized are needed. These should make use of existing health-care workers innovatively and be built on partnerships.

### **2.1.2 Status of implementation of PMTCT programmes and targets**

*Dr Myo Nyunt, Regional Adviser HIV/AIDS, UNICEF Regional Office for South Asia*

The 1994 landmark study Pediatric AIDS Clinical Trials Group (PACTG) protocol 076 originally initiated the global PMTCT response, demonstrating efficacy of long-arm AZT in reducing MTCT of HIV. In 2001, UNGASS set PMTCT targets to be achieved through increasing the provision of both HIV prevention services in antenatal care (ANC) settings and treating both HIV-infected women and infants at

risk. A summary of global trends in PMTCT implementation revealed very slow progress towards achieving universal access to prevention and treatment services. In 2004, PMTCT programmes had been established in 101 countries but only 16 had achieved national coverage of services. Lessons from countries that successfully expanded services include strong political commitment, effective programme management and coordination, good health infrastructure, and decentralized approaches to scale-up. It has become clear that new service delivery approaches are required to get women and children the interventions they desperately need. These new approaches should include country-driven national programmes, institutionalized provider-initiated offers of HIV testing, strengthening MNCH services and their links with ART programmes, as well as community-based delivery of interventions for PMTCT of HIV.

### **2.1.3 Discussion**

Participants agreed that the global status of PMTCT programming is not acceptable. There is an urgent need to scale-up interventions and strengthen health systems to support integrated service delivery and improve quality of care. The current high level of commitment among global partners and national governments presents real opportunities for change.

Change in donor practices is critical to successful health system strengthening. Current funding systems encourage vertical and fragmented services. Donors should develop funding streams at country level that encourage partnerships and joint programming, and that are coordinated within a unified purpose.

One strategy to increase donor support of integrated MNCH service delivery is through advocacy. A collectively endorsed statement about integration is likely to be an effective advocacy tool for donors and the international community. Packaging a carefully crafted message on the need for integration – one emphasizing successes in infections averted versus the increasing gap between demand and unmet need – will help to position the needs of women and children prominently within global health priorities in the context of the HIV/AIDS epidemic.

In relation to the package of essential interventions for integrated service delivery, two important issues stand out. First, it is important to recognize that MNCH services include antenatal, childbirth, postnatal and childcare, and that the package of essential services must include interventions for parents, the newborn and the child within the continuum of care. Second, development of a comprehensive and integrated MNCH service delivery strategy needs to include the participation of communities as well as the private sector, making use of their experiences and lessons learnt to ensure a holistic approach to care.

## 2.2 Concept, rationale and framework for HIV/MNCH integration and other programme experiences

### 2.2.1 *Concept and rationale for integration of HIV interventions into MNCH services*

*Dr Juliana Yartey, Department of Making Pregnancy Safer, WHO, Geneva*

The key principle for integration of services conceptualized at Alma Ata in 1978 remains applicable today as the guiding principle for integrating HIV interventions into MNCH services. The Alma Ata Declaration on making services available, accessible and acceptable to all is a means to achieving universal access to essential interventions.

“[...] making services available, accessible, and acceptable to all, especially to the poor and the most vulnerable ...”  
PHC Alma Ata Declaration, 1978

The rationale and justification for integrating HIV interventions into MNCH services takes into account the increasing burden and risk of HIV infection among women and girls (“feminization” of the HIV/AIDS pandemic), the increase of HIV infection in children as a result of mother-to-child transmission, and the inherent biological and clinical relationships between HIV and sexual and reproductive health. Maternal and child health services are well patronized. Integrating HIV interventions into MNCH services is expected to maximize the benefits from visits to health facilities for both mothers and children, and enable health systems to be more responsive to the needs of women, children and their families.

Adoption and implementation of the integrated approach requires a clear definition and understanding of the concept of integration and related processes. A clear and concise definition will guide country-level operational strategies and facilitate the adoption and promotion of the concept among local and external stakeholders. The definition should specify the related programme components of the services to be integrated, which includes RH, FP, nutrition, malaria, HIV and the related programmatic processes (management, coordination, financing, supervision, monitoring and evaluation). The integration process builds on managerial and operational changes within health systems and on combined input from related programmes to support comprehensive and improved service delivery, especially in relation to access, acceptability, affordability, quality and efficiency.

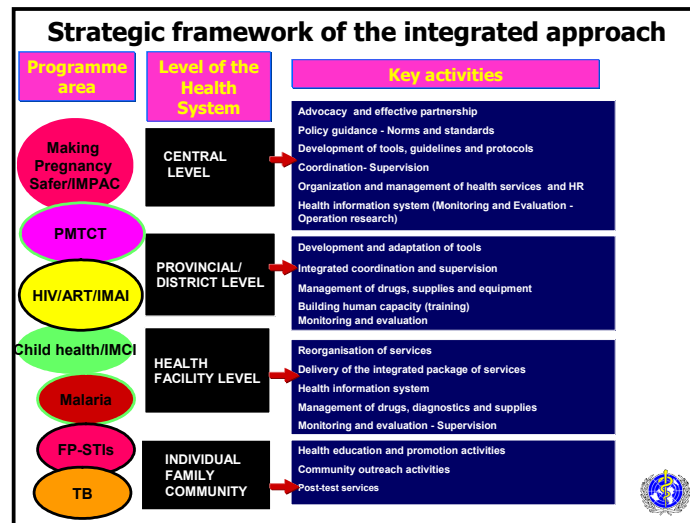
In order to stimulate discussion on a working definition, an operational definition of “integration” was proposed as follows:

*“Integration of health services involves the organization, coordination and management of multiple activities and resources to ensure the delivery of more efficient and coherent services in relation to cost, output, impact and use (acceptability).”*

## 2.2.2 Framework for integration of HIV/AIDS interventions into Maternal, Newborn, and Child Health Services

Dr René Ekpini, Department of HIV Treatment and Prevention Scale-up, WHO, Geneva

A conceptual framework for integration was proposed. In contrast to needs-based rationale for integration, this framework follows service-based rationale whereby addressing PMTCT is seen as an opportunity to improve the quality and extend the coverage of ANC, delivery and postpartum care.



It focuses on *strengthening* health systems to deliver essential care for women, neonates and children, and *mainstreaming* HIV-related gender and human rights issues into MNCH services.

The framework conceptually links functional levels of the health system, programme areas involved in the integration process and specific key activities. Related core programme areas for integrated HIV/MNCH services include Sexual and Reproductive Health programmes, including Making Pregnancy Safer (MPS), FP and STI, Malaria, TB, Child Health/IMCI and Infant Feeding, and HIV/IMAI/PMTCT programmes. The framework also demonstrates that MNCH services provide a useful and feasible platform from which essential interventions including HIV prevention, treatment, and care/support can be provided to women and children through the life-cycle approach.

## 2.2.3 Integration of HIV interventions into MCH services: PMTCT/MCH integration with ART

Dr Halima Dao, Global AIDS Program, Centers for Disease Control and Prevention, Atlanta, GA, USA

The four elements of the WHO comprehensive approach to HIV PMTCT can be used to identify links to MNCH services. In this approach, key issues associated with the integration of HIV/MNCH services are identified, including training, human resources and roles, commodities, family-focused approach, HMIS and monitoring.

Both the HIV/AIDS infection and disease and related behavioural patterns are diverse. An integrated service delivery approach is complex and additional heterogeneity exists in the supporting health systems. Strategies must accommodate this diversity/complexity. Dialogue, careful planning and strong coordination are essential for successful integration. Treatment and prevention services must be provided concurrently. It is important to increase access to and utilization of services at the facility level as this is the main determinant of success; however, adequate human resources are often lacking at this level, with direct implications for the success of integration efforts.

A public health approach is needed, one based on simplification, standardization and integration. Linkages among programmes are also important and need to be highlighted, since the concept of “programmatic linkages” is different from “service integration”.

#### **2.2.4 “TB/HIV = HIV/TB: Two Diseases – One Patient”**

*Dr Haileyesus Getahun, Department of TB/HIV and Drug Resistance, WHO, Geneva*

Several programme experiences with integrating health services can be reviewed to provide valuable lessons for HIV/MNCH integration. One example is the relationship between HIV and TB. A global TB/HIV Workgroup was created to coordinate a global response to rising TB incidence. Principles for integration included developing national policy on a global scale, rapid scale-up of effective interventions, mainstreaming strategies for both diseases and patient-focused care. Collaboration between TB and HIV control programmes and integrated services is current WHO policy; however, progress has been hampered by slow rates of implementation at the country level and slow rates of adoption of the integrated approach by the various programmes’ service delivery components.

#### **2.2.5 *Integrating interventions for the control of malaria during pregnancy into ANC: Use of a quality improvement approach***

*Dr Chilunga Puta, Regional Centre for Quality of Health Care, Institute of Public Health, Makerere University Medical School, Uganda*

The successful integration of interventions for the prevention and control of malaria during pregnancy into antenatal care services is a good example from which to learn. Lessons include the need for sensitization of health-care providers, involvement of all health facility workers, promotion of teamwork and facilitative supervision. In addition, government support at all levels – from the central through to the community level – and creating and maintaining stakeholder involvement were critical to local ownership. Other recommendations for facilitating integration of

services at the country level include identifying and recruiting local champions for advocacy, development of supervisory systems and on-site training programmes. A supportive national health policy framework, plan and budget are also necessary to facilitate successful integration.

The main lessons derived from the MIP programme were that integrated services are more effective than vertical programmes, and that consensus on the package of interventions to be offered is critical. Key challenges include donor-driven funding and preferences, weak health systems, unskilled care and limited resources to support activities.

#### ***2.2.6 Review of programme experiences: Integrating family planning and prevention of mother-to-child transmission***

*Dr Nathalie Broutet, Controlling Sexually Transmitted and Reproductive Tract Infections, Department of Reproductive Health and Research, WHO, Geneva (on behalf of Dr Naomi Rutenberg)*

Programme experiences in the integration of FP and STI services with HIV/PMTCT provide good examples of integrated services. Family planning counselling and education is currently routinely provided during antenatal care. At many MCH clinics, weak FP services during the postpartum period result in missed opportunities to provide FP counselling and services. Rates of undetected syphilis in pregnant women, for example, are increasing, and interventions to eliminate congenital syphilis should be included in the package of essential interventions for integrated care within MNCH services.

System constraints to effective integration include low priority given to FP and STI interventions within MCH and PMTCT programmes, vertical programming and separate administrative and funding mechanisms at the national level.

#### ***2.2.7 Linking paediatric and maternal HIV/AIDS care and treatment with MCH services***

*Dr Youssef Tawfik, USAID, Washington, DC, USA*

The incidence of HIV infection in children continues to rise, primarily due to MTCT, and the gap is widening between children who receive and those who need ART. Paediatric HIV services need to identify and reach children at risk, diagnose infection, provide ART for eligible children and provide a basic health-care package for all infected children. That package must include routine childhood services and HIV-related interventions.

Routine MNCH services, such as immunizations, provide opportunity to identify children at-risk for HIV infection. Paediatric HIV services have traditionally focused on ART but expansion is needed to include prevention, treatment, care and support interventions delivered within a basic package of care. MCH services should be seen as entry points for expansion of HIV services for mothers and children. Scaling-up

such services will require integration of services, capacity building and quality-improvement strategies.

### **2.2.8 Discussion**

Experiences from integration efforts in various programmes demonstrated that integration of HIV/MNCH services is achievable. Complexities are inherent in providing HIV/PMTCT interventions in various settings. The proposed framework must be adaptable to different settings and to local context. Although integration requires specific actions at all levels of the health system, the health facility level is most critical and warrants increased attention for success. The integrated approach cannot progress successfully without consensus on the basic package of health interventions/services and consideration for ownership of integration. If the proposed framework is to be effective, there is need for further clarity on whether “programmes” *or* “services” are to be integrated. Concerns remaining include the lack of defined targets and milestones to drive the process, measures of accountability and systems to increase childbirth with skilled care at facilities where interventions for HIV/PMTCT can be provided.

An integration toolkit would be useful for countries. It should include the strategic framework for integration, based on country experiences and lessons learnt, as well as training tools for programme managers and providers to facilitate integration processes at the country level.

Evidence-based clinical guidelines are available to guide the integrated approach: The WHO, IMCI and IMPAC clinical guidelines include HIV components for mothers and children, and promote an integrated approach to care. Integrated TB/HIV guidelines are also available. Further guidance is expected from WHO to address difficulties in treating HIV infection in younger children. Strategies that would increase demand and service utilization must also be considered concurrently with strategies that address supply issues.

Additional factors critical for successful integration of services include:

- a supportive resource base;
- maternal and paediatric patient-tracking;
- ensuring a continuum of care; and
- adequate and flexible funding.

## **2.3 Implementation of PMTCT programmes: Country experiences**

### **2.3.1 PMTCT integration model: Mozambique**

*Dr Paula Libombo, Consultant, PMTCT/MNCH Integration, MOH/WHO Country Office, Mozambique*

The PMTCT Integration programme in Mozambique aims to develop and test a model to demonstrate the feasibility and effectiveness of integrating HIV/PMTCT interventions into routine MNCH services. Mozambique MOH is a strong advocate

for integration and ranks PMTCT within MNCH services as a national priority. The programme is relatively new (activities began in February 2006) and progress to date has occurred primarily at the central level. Initial activities included a baseline assessment that identified service gaps and health system weaknesses requiring focused attention. Key challenges to integration identified include: increasing the quantity and quality of human resources; adapting infrastructure to support PMTCT; developing referral systems; developing monitoring and evaluation systems; strengthening postnatal care, FP and clinical support services, and community involvement. Despite the limited time since implementation was initiated, Mozambique's programme experience provides validation of the preliminary activities necessary for building a strong foundation to sustain the integration of HIV interventions into MNCH services (see Table 1).

### 2.3.2 Experiences of integration of HIV/PMTCT into MNCH services in Uganda

*Dr Ramathan Lukoda, Consultant, HIV/MNCH Integration Project, MOH, Uganda*

In Uganda, comprehensive PMTCT interventions are integrated into MCH services. Uganda's programme is to be commended for implementing activities to strengthen the health system to deliver integrated MNCH and HIV/AIDS services, and for developing the tools for planning, implementing, monitoring and evaluating the integrated approach. Key findings from a needs assessment included, but were not limited to, a favourable national policy environment and district level support for the integrated approach. However, at all levels of the health system, FP and postnatal services in health facilities were weak, and at the community level, there were significant knowledge gaps and perceptions of poor quality care that negatively influenced uptake of available services. Activities included integrating the clinical management guidelines and training materials for PMTCT, ANC, EmOC and PNC. To accelerate scale-up of activities, a national interagency coordination committee must be enforced and integration planning meetings must occur regularly at the district level. Additional resources, providers and supervision will be required at the facility level.

**Table 1: Activities for Integration of HIV Interventions into MCH Services**

	<b>Mozambique (PMTCT interventions)</b>	<b>Uganda (HIV/AIDS interventions)</b>
National Level	Government advocacy MOH Support: Prioritize PMTCT <ul style="list-style-type: none"> <li>• Harmonize with National Strategic Plan</li> <li>• Integrate into RH National Programme</li> </ul> Coordination meetings Joint planning with Partners Development of tools	Advocacy activities Directorate support Supportive policy environment Establishment of coordination team Build technical capacity Development of tools Central trainers

District Level	Partnerships with local NGOs Communication strategy for community involvement – IEC	Advocacy Integration planning meetings Capacity-building for health-care workers and managers
Facility Level	Adapt infrastructure Strengthen postnatal services Training for all HCW providing PMTCT Include in routine supervisory systems	Equip facilities according to gaps Establish postnatal clinics Training for providers Facilitative supervision

### **2.3.3 Prevention of mother-to-child transmission of HIV in Botswana**

*Dr Lucy Maribe, WHO Country Office, Botswana*

Botswana's programme integrating PMTCT interventions through the National AIDS Control Program is based on the WHO comprehensive strategy for PMTCT. It delivers a package of interventions for treatment, care and support to infected pregnant women and prophylaxis for babies at risk. PMTCT is structured at the national level to include a Reference Group, Technical Advisory Committee and a central Programme with 12 full-time staff who interface with the District Health Teams. PMTCT is integrated into obstetric practices, prenatal and postnatal care, the Safe Motherhood Initiative and all MCH registries and health records for mothers and infants. Lay counsellors receive training and the “opt-out” strategy for HIV testing is used. Significant increases in HIV testing and PMTCT uptakes have been achieved. Challenges remain to strengthen implementation of the national infant feeding policy and the supply systems that support alternate feeding options. Lessons for successful implementation include strategies to address determinants of low uptake of services, establishing links to treatment programmes, strengthening community components and using a family-centred approach.

### **2.3.4 Scaling-up PMTCT services in Cameroon**

*Dr Tih Pius Miffih, CBC Health Board, Cameroon*

The successes of the Cameroon Baptist Convention Health Board are evidence that faith-based organizations can be credible providers of health interventions. In partnership, the MOH and EGPAF work together to integrate and scale-up PMTCT interventions through ANC services. A bottom-up advocacy strategy, from the community level to the national level, effectively mobilizes support. What began as a small programme has expanded rapidly; however, the programme structure was developed using a top-down approach from a national PMTCT focal point, through to district and facility levels.

**Key Strategies for Successful Integration**

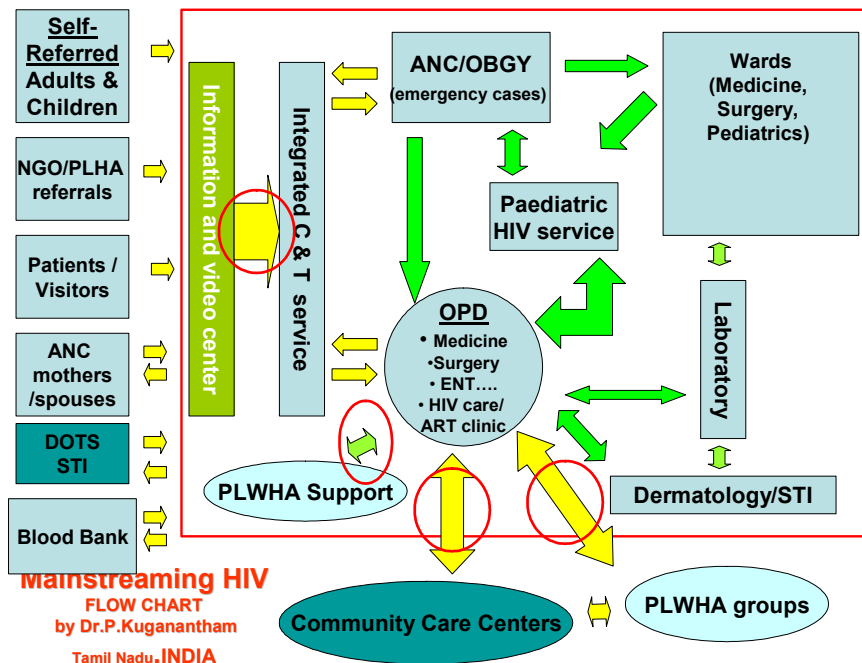
- Political commitment
- Coordination
- Monitoring and evaluation
- District level scale-up

Programme experiences echo elements previously identified as key to successful integration. This inclusive programme also emphasizes primary prevention of HIV in youth, young girls, and women of childbearing age, and has links to partners for HIV/AIDS education, TB and malaria control, and community-based care and support for women, children and health workers. Programme recommendations from experience include opt-out testing, quality control for clinical and support services, and modifications to the “Road to Health Card”.

**2.3.5 The strategy for scaling-up PMTCT in India**

*Dr Periaswamy Kuganatham, Tamil Nadu State AIDS Control Society, Tamil Nadu, India*

**Mainstreaming HIV Flow Chart**

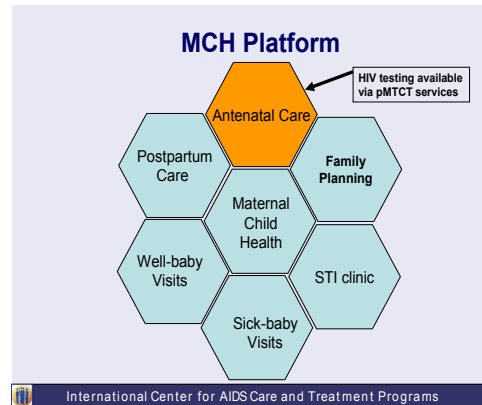
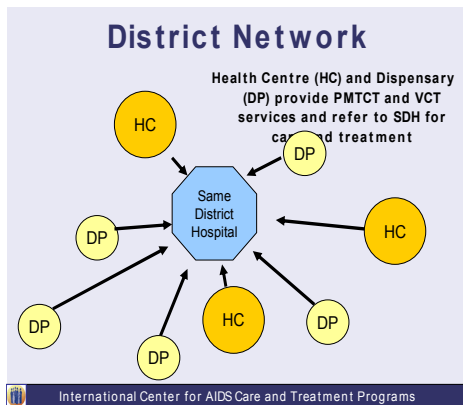


The programme strategy involves integrating HIV counselling and testing centres into all levels of the continuum of care, i.e. public and private practice, primary, secondary and tertiary health care services, other public facilities, and establishing links between facility and community-based HIV-related services. Programme experiences shed

light on weaknesses within MNCH service delivery with regards to the integration of HIV interventions into MNCH services. These include births within the private sector, unregistered emergency services, dropouts from delays in HIV testing results and discriminatory behaviours of health-care providers. In response, the programme has engaged the private sector, developed people-friendly services, employed rapid testing techniques and provided 24-hour access to PMTCT interventions in health facilities. Outcomes include progressive rate increases in use of MNCH counselling services, identification of HIV infected pregnant women and families and uptake of ARV for prophylaxis. Government commitment and resource support at policy and bureaucracy levels has been key to programme success.

### 2.3.6 Novel models for scaling-up access to care and treatment services for women and children in Tanzania

*Dr Bazghina-werq Semo, 'PMTCT-Plus in Kilimanjaro', Tanzania.*



The District Network approach uses health centres and dispensaries to provide VCT, PMTCT and referral services. This strategy decongests hospitals, strengthens PHC at the facility level and expands access to needed services. The MCH platform approach provides prevention and treatment interventions through PMTCT interventions integrated into MCH services. This is convenient, minimizes loss to follow-up and promotes the family-centred approach. Both approaches use HIV-positive women as entry points to reach partners and children. Interventions include HIV testing and counselling as well as prophylaxis for mothers and exposed babies. Essential start-up activities include facility development, procurement and management of supplies, strengthening laboratory capacity, establishing links within and between sites, community mobilization, and monitoring and tracing systems. Status disclosure, client loss with referrals and denial are client-related challenges, while human resources and quality of care are system-related challenges.

### **2.3.7 Integration of HIV interventions in MNCH services in Zambia**

*Dr Maximillian Bweupe, Department of Reproductive Health, MoH Zambia*

This programme has been implemented as part of the Zambia National Response to AIDS. Supporting policy to facilitate uptake of services includes a national HIV/AIDS policy, free MNCH and ART care, and universal counselling and testing of expectant mothers with an opt-out option. Strategies to scale-up implementation include maternity counselling job aids, use of TBAs, mobile counselling and testing units in rural areas, and rapid-testing for neonates. HIV interventions have been integrated into all MNCH data tools, and the “SmartCard” system was introduced to ensure patient privacy and minimize stigma. An IATT task team provides in-country support for scaling-up PMTCT of HIV and improving HIV services for children. Operational research on barriers to ART has recently been initiated.

### **2.3.8 Discussion**

Participants were motivated by the experiences and successes described in the country presentations, which was followed by an in-depth panel discussion. Integrated services are primarily delivered through the facility and community levels; however, significant and continuous planning, coordination and management activities are necessary at the central and district levels as well to support integration. Weakness in MNCH services was evident in both contextual assessments in Uganda and Mozambique. Weak postnatal and FP services, as well as inadequate referral and communication systems, are two examples. These weaknesses could potentially hamper comprehensive integrated service delivery.

The limited information and emphasis on primary prevention interventions to keep HIV-negative women infection-free in all programme experiences was recognized as a major gap that needed to be addressed and strengthened within integrated HIV/MNCH services. Human resource issues of concern discussed included maintaining acquired HIV-related skills in low-prevalence settings and the role of constraints of potentially over-burdening midwives with multiple responsibilities that divert them from their primary role. The need to make HIV interventions accessible to women at all levels of the health system, including the community level and all stages of the pre- and post-pregnancy experience, including labour and childbirth, was a topic of intense discussion. Participants concurred that many women enter skilled-care facilities in active labour, a time most unsuitable for implementing counselling and testing interventions for PMTCT. In addition, health-care providers have other priorities to ensure the survival of the mother and baby during the intrapartum period. These issues make improving quality of antenatal and childbirth care a priority, and strengthening postnatal services as vital to effective delivery and increased uptake of PMTCT interventions within the continuum of care.

The issue of programme ownership and whether integration efforts should be country-led or donor-driven was discussed. Participants recognized that while government leadership and support is necessary, donor influence cannot be ignored, although donor-funding preferences may conflict with country needs and national plans. There may be some difficulty in involving government officials in positions above the

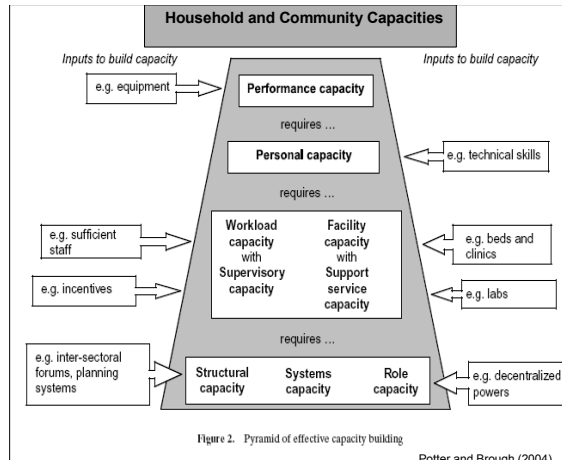
directorate level; however, integration efforts should be government-owned and country-led, with complementary donor roles.

## 2.4 Strengthening health systems for HIV/MNCH integration

### 2.4.1 Evaluation of a PMTCT programme in South Africa: Lessons for integration

*Dr Mickey Chopra, Health Systems Research Unit, South Africa Medical Research Council, Tygerberg, SA*

The “Good Start Study” in South Africa was designed to evaluate the operational effectiveness of a PMTCT programme delivered through MCH services across three sites in the country. The study assessed staff performance in delivering PMTCT interventions during ANC, childbirth and PNC, infant feeding practices and behaviours of mothers, and the impact of PMTCT on the health and survival of infants of HIV-positive mothers. Significant differences in programme functioning and child health outcomes were observed across the three sites. Sociodemographic factors and health system issues such as quality of care contributed to observed differences in HIV transmission rates. Community factors and health provider attitudes and skills influenced service utilization and health outcomes.



“In addition to a wide range of technical capacities specific to each action, there is a need for institutional and procedural capacity for integration ... we need to address critical capacities at multiple levels, for multiple functions...”

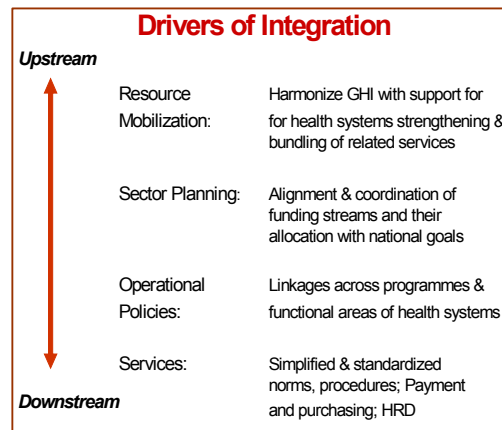
The notion of “limited capacity” – frequently used to denote "lack of capacity" – needs to be expanded to address poor coordination and inefficiencies in interrelated functional components of the health system. Different capacities must have their reciprocal relationships recognized and strengthened for multiple core functions (see model example in box above). In conclusion, although poor integration of programmes has a detrimental impact on overall maternal and child health outcomes, adequate planning and support are critical to sustain integrated processes.

## 2.4.2 Strengthening health systems for integrated HIV/MNCH service delivery

Dr Dale Huntington, Technical Cooperation with Countries for Sexual and Reproductive Health, Department of Reproductive Health and Research, WHO, Geneva

A strengthened health system:

- is *government-owned*;
- *aligns* health policy with health reform;
- *harmonizes* system processes with interventions; and
- is *accountable* to both the state and the people served.



An effective health system bridges state stewardship with the health needs and demands of the population. The resource component, financial and otherwise, of the health system influences service delivery, which in turn requires organization and management to influence health outcomes, universal coverage and social protection. Strengthening the financial component includes harmonization of funding with financial policy and systems development, and alignment of resources with goals. Resource functions can be strengthened by developing operational policies for integrated logistical systems and managing inflows and outflows of human resources and commodities. Establishing collaborative and coordinated public-private partnerships is an effective way to strengthen and scale up service delivery functions, while ensuring accountability to the communities served. This has been translated into a practical framework for driving the integration process at the country level, while linking the more general upstream processes (i.e. repackaged essential services) with focused downstream activities (i.e. facility-wide structural changes to support integrated service delivery). However, maintaining focus on what needs to be accomplished at the level of service delivery, while embedding the more specific downstream activities into the overarching system changes upstream, is the challenge to be overcome.

### **2.4.3 HIV and scaling up human resources for health**

*Dr Gulin Gedik, Department of Tools, Evidence and Policy, WHO, Geneva*

In relation to the challenges posed by the skilled health worker crisis within MNCH services, there are opportunities for strengthening human resources for MNCH within the context of HIV/AIDS. Specific human resource challenges at the country level include low staff morale and motivation, disease-related reduction in the health workforce and lack of a human resource development plan for the increased programme uptake associated with achieving universal access. These issues are only a sub-set of the general human resources challenges faced by countries, including out-migration, inappropriate or inadequate training, poor access to evidence-based information, inequity in health worker distributions and limited involvement of the private sector. Human resource functions and tasks must be integrated across priority programmes, with a goal to achieve the five messages of the WHR 2006:

1. Educate and train;
2. Support and protect health workers;
3. Enhance effectiveness of health workers;
4. Tackle imbalances and inequities; and
5. Governments must provide leadership to achieve the above, through promoting partnerships and building trust among all stakeholders

### **2.4.4 Communication tools as key elements in the scaling up of HIV interventions within MNCH services**

*Dr Bérengère de Negri Community & Training, AED, USAID, Washington, DC, USA*

The concept of integration can be expanded to include the roles of communication and community in scaling up integrated services. Communication is an essential tool for advocacy, research, clinical intervention and community mobilization. Community awareness, acceptance and participation are essential to the integration process, and communities have useful key players who can facilitate achievement of the goals of integrated service delivery and universal access. Strong links between health facilities, communities and families is necessary for effective partnership among skilled care facilities and the communities they serve. MNCH services should take advantage of the synergism created by such collaborative ventures during scale up of integrated HIVMNCH interventions.

Training of all health workers must also focus on empowerment and community sensitization in addition to knowledge and skills.

### **2.4.5 Discussion**

Strengthening health system functioning is important to sustain specific programme changes. There is need for *collaboration* across programmes to support related structures and systems for integrated service delivery. Discussions primarily revolved

around exploring strategies to make effective and efficient use of the health workforce, including the role of the private sector (Pakistan's experience is a good model), regulatory mechanisms (advocacy, safe working environments, reimbursements), re-engineered roles and franchising models such as those implemented in the Philippines to support nurse-midwives. The World Health Report 2006 is a good source of information on this topic. It embraces community health workers who contribute in diverse ways to improve health. MNCH services should take advantage of this cadre of personnel and develop functional ways to improve the contributions of the numerous “unskilled” providers who supported the health system during the skilled health workforce shortage crisis.

Concerns were raised that integration of services may introduce unrealistic expectations from health workers during client visits. Of major concern to participants was the anomaly regarding expectation of health workers to achieve the maximum output with minimum resources. In many MNCH programmes, the highest burden of care is often relegated to the lowest cadre of health workers. Task shifting and empowerment of health workers may be required to address this problem. Many programmes have inherited testing and counselling models without substantive justification for the approach – some programmes use trained lay counsellors for testing and counselling, while others use professional health workers. Each approach presents a unique set of potential advantages and problems that need to be anticipated and addressed proactively. Role restructuring and task shifting for professional versus lay workers may need to be considered. Restructuring and redefining human resources for health will be a major challenge requiring innovative approaches and flexible mindsets.

Some participants argued that strengthening the capacity of an alternative cadre of personnel for purposes of integrated service delivery might not be the best approach. This is because experience from previous MCH initiatives aimed at strengthening the capacity of TBAs to improve maternal health care have not been successful; TBA training and engagement did not significantly reduce maternal mortality. It is now evident that there is not one solution but, rather, a need for a set of complex interventions embedded within the structural and systemic context.

Concerns about the issue of repeated training and possibility of over-training of health care workers were raised, to which caution was given, that training should be repeated when necessary but over-training should be avoided. While training is important for acquiring knowledge and skills, without relevant monitoring and supervision, achievement of quality health outputs remain questionable. Health workers’ training should include sensitization on behaviours and attitudes regarding HIV/AIDS, and the values of the integrated approach, since acceptability and uptake of services are influenced by health provider behaviours. The performance of many health-care workers is driven by what they are required to record; this aspect of service delivery needs to be carefully reviewed as it may present an opportunity to improve health workers’ performance.

Another issue of concern that is often ignored is the health of the caregiver. Experiences from Malawi and Botswana have shown that health risk in the workplace is a contributory factor to out-migration of health workers. It is important to include strategies that protect the health of healthcare workers in the human resource plan.

In general, health systems are not adequately funded by governments to support the changes needed to improve MNCH service delivery, nor have sector-wide approach funds been allocated to health system strengthening. Maternal and reproductive health programmes in general have also not been adequately funded. In conclusion, participants agreed that focus should be on opportunities to strengthen the health system as a whole, to develop strategies and lobby for policy reform and accountability to address weakness within the health sector and health system in particular. Potential roles for the TBA in health system strengthening should also be considered.

## **2.5 Clinical and programmatic tools to support integration of HIV/MNCH services**

### **2.5.1 WHO clinical guidelines for improving MNCH in the context of HIV/AIDS**

#### ***Integrated Management of Childhood Illnesses (IMCI) tool***

*Dr Lulu Muhe, Department of Child and Adolescent Health and Development, WHO, Geneva*

The IMCI tool is a clinically integrated strategy for common childhood conditions, including diarrhoea, acute respiratory infection and pneumonia, nutrition and immunization. It is a simplified system providing guidance for triage to a health facility, referral or counselling, with an added component for actions when referral is not possible. The tool is easily adapted to local epidemiology and sociocultural context, and is applicable at the facility and community levels. HIV interventions have already been incorporated in the tool and work is in progress for integrating care of the newborn.

#### ***Integrated Management of Pregnancy and Childbirth (IMPAC) guidelines***

*Dr Jelka Zupan, Department of Making Pregnancy Safer, WHO, Geneva*

IMPAC guidelines are a set of evidence-based practice guides outlining required health-care worker competencies at primary (plus community and home) and secondary levels of care. The guide for primary level care is *Pregnancy, Childbirth, Postpartum, and Newborn Care (PCPNC)*, and secondary level care guides are *Managing Complications of Pregnancy and Childbirth (MCPC)* and *Managing Newborn Problems (MNP)*. The guidelines focus on decision-making for the management of FP, malaria and anaemia, immunizations, RH/STI, and HIV/AIDS. They were all developed in collaboration across WHO clusters and departments, are complementary and build on current WHO guidelines for HIV, malaria, STI control, FP, nutrition, etc. Tools are also available for counselling and communication for MNH, for upgrading health systems, and for estimating upgrade costs.

### ***Integrated Management of Adolescent and Adult Illnesses (IMAI) tool***

*Dr Sandy Gove, Department of HIV, WHO, Geneva*

IMAI is a public health approach developed within the framework of the 3x5 initiative and in the context of scaling up care and treatment for HIV/AIDS. The tool consists of a standardized package of job aids (for acute, palliative, chronic care and paediatrics) and training materials for district managers. It should be noted that all of the tools require adaptation to country context.

### ***2.5.2 Programmatic tools to support integration of HIV/MNCH services***

#### ***WHO/CDC PMTCT Generic Training Package***

*Dr Tin Tin Sint, Department of HIV Treatment and Prevention Scale-up, WHO, Geneva*

This evidence-based tool was developed to standardize PMTCT training approaches, strengthen national training plans for human resource capacity building and support the scale up of PMTCT interventions. The tool also provides programme managers and health-care workers in resource-constrained settings with the knowledge and introductory skills to organize and deliver PMTCT services. The tool is based on international guidelines and standards, and includes guidance on its adaptation to the local context. The complete package includes programme and course director guides, trainer and participant manuals, a presentation booklet, a pocket guide, and wall charts. The training course consists of nine interactive modules, adult learning strategies and materials to support a five-day course with an optional half-day field visit.

#### ***WHO IMPAC/IMAI PMTCT Training Modules***

*Dr Margareta Larsson, Department of Making Pregnancy Safer, WHO, Geneva*

The IMPAC/IMAI training modules are adaptable to the baseline skill and knowledge of course participants. They can be implemented as an orientation to PMTCT interventions for health professionals who are actively providing HIV/ART services, or as a more detailed clinical training course for integrating PMTCT interventions for health workers providing MNCH outpatient or inpatient services. The package is based on current WHO guidelines with links to IMPAC, IMAI and the HIV and infant feeding tools. It consists of a facilitator's guide, a participant reference manual, handouts, self-study exercises and a clinical logbook. The three modules provide training in the delivery of HIV prevention, treatment and care interventions within routine MNCH services and across antenatal, childbirth and postpartum care. Special consideration is given to the immediate postpartum and newborn periods, and to referrals for follow-up within the continuum of care. Comparative strengths of this training programme include being competency-based with clinical practice components and adaptable for all categories of MNCH workers.

***HIV and Infant Feeding in the Context of Integration: Training and Related Tools***  
*Dr Peggy Henderson, Department of Child and Adolescent Health and Development, WHO, Geneva*

Dr Henderson provided information on the global strategy for infant and young child feeding, HIV and infant feeding framework, and WHO-recommended feeding options for HIV-positive mothers. The global strategy is linked to IMCI and IMAI.

A five-day training course for integrated infant feeding counselling, developed in collaboration with UNICEF, is also available to assist health workers providing PMTCT services to acquire the basic competencies for appropriate infant feeding counselling.

***Baseline Assessment Tool for the Integration of HIV in MNCH Services***  
*Dr Inam Chitsike, Regional Adviser, MTCT, Department of Reproductive Health, WHO/AFRO, Brazzaville, Republic of Congo*

This tool is to be used for assessing the status of health systems and the extent of collaboration and linkages among the various programmes and aspects of the health system, and identify gaps and provide guidance for the planning and implementation of integrated MNCH service delivery at the country level. Its operational framework reinforces links between policy and regulatory processes, the health-care delivery system and communities. The first phase of administering the tool involves a desk review of related policy and programme, epidemiological and sociodemographic context at the national level. The next phase involves data collection at national, district, health facility and community levels to characterize the structure, functioning, management and linkages of existing MNCH services and HIV/AIDS programmes. The tool currently focuses on the following programme areas: MPS, HIV/PMTCT, malaria, RH/FP/STIs and IMCI/Child Health, and there are intentions to include issues related to nutrition, gender and adolescent health. Analysis of the baseline assessment data will identify strengths, weaknesses and gaps within the health system that require strengthening to support integrated service delivery and form the basis for a plan of action.

### ***2.5.3 Discussion***

The various PMTCT tools complement each other and should be used to facilitate the process of integration. Participants suggested that perhaps harmonizing IMPAC, IMAI and IMCI into one tool to facilitate use at country level would be useful. Consideration should be given to how the IMCI module currently in development for newborn care will link with the current PCPNC and MNP guides.

Concerns were expressed about increased provider training taking time away from patients and service delivery. Suggestions were made to reduce post-graduate training through the use of modular approaches, integrate the tools into the formal pre-service education of nurses, physicians and other health care workers, and use competency-based training with emphasis on the practical aspects of clinical interactions and skills.

Participants questioned the need to develop a new assessment tool when there were several useful assessment tools in existence, It was suggested that the development of the tool be assigned to an “expert group” to revise according to the conceptual framework. Aspects of quality of care, supervision, community and gender considerations also need to be incorporated. The facility level assessment section may benefit from restructuring in order that it conform with the COPE (Client-Oriented Provider-Efficient) strategy currently used by Child Health, as COPE was built on concepts that are critical/relevant to integration. The tool should subsequently be piloted in select countries and modified accordingly prior to dissemination to countries and global implementation.

#### **2.5.4 Marketplace**

The session ended with a marketplace of relevant tools and resources from WHO, Partners and participating countries. Participants had opportunities to review, discuss and receive complimentary documents from the WHO departments of Child and Adolescent Health, Health Systems: Evidence and Information for Policy, HIV/AIDS, Making Pregnancy Safer, Malaria, Nutrition for Health and Development, and Reproductive Health and Research.

### **2.6 Strategies to support the adoption, implementation and scale up of integrated HIV/MNCH services at country level**

#### **2.6.1 Small group discussions**

*Group A:* Discuss and make recommendations on processes and mechanisms at national, regional, provincial, district and health facility levels to support integrated HIV/MNCH service delivery.

*Group B:* Define the package of essential and routine MNCH services and interventions characteristic of integrated HIV prevention, treatment, care and support.

*Groups A&B:* Define integration from an operational perspective, including the linkages required for comprehensive delivery of HIV interventions for women and children, into MNCH services.

The outcome of the small group discussions were presented as follows:

#### ***Group A: Operational Definition and Process of Integration***

*Dr Tih Pius Miffih*

The *operational definition* of integration presented by Dr Juliana Yartey in session II was accepted with minor modifications:

A matrix summarizing the action plan for the integration process at the various levels of the health system, including *which* activities are to be implemented, *who* is to be

held responsible/accountable and *how* strategies/activities are performed to achieve the desired outcomes was developed. (See Annex III)

*Key processes and mechanisms* for integration of HIV/MNCH services were outlined as follows:

- reorientation and reorganization of services and resources at the national level for more visible and increased advocacy and support;
- develop national policy for maternal and child health that captures the integrated approach to care and includes RH/FP/STIs, TB, HIV, malaria, nutrition, etc.; and
- scale up and scale out starting with a comprehensive national strategy that incorporates practical ways to integrate service delivery at the facility level.

Concerns were expressed about the comprehensiveness of the integrated approach with a caution that perhaps integration is too ambitious for MNCH services to consider at this time. It was suggested that emphasis should instead be on strengthening linkages among programmes and services or revitalizing the PHC approach adopted at Alma Ata and abandoned in the face of major health systems constraints and human resource challenges at country level. Opposing views held that the drive for selective PHC came from a milieu of changes and resource constraints during the 1980s, which continue to persist and needs to be addressed through a comprehensive approach.

It was agreed that reorientation of vertical programmes to support integrated service delivery is key to the process of integration. Collaboration and joint planning are essential elements of the integration process and should be emphasized. Programmes need to communicate and share information at the national and district levels, and active collaboration needs to be enforced at all levels throughout the integration process. The discussions clearly demonstrated a need for further discussion and consensus on the concept of integration.

***Group B: Minimum Package of Services***

*Dr Emmanuel Hammond, Department of Obstetrics and Gynaecology, University of Zimbabwe*

Group consensus was reached on the four main components of MNCH service delivery and the interventions defining the package of essential services. Psychosocial support was recognized as an essential intervention at all levels of care. The Focused ANC approach was endorsed as a good strategy to support comprehensive MNCH service delivery with specific interventions linked to each of the WHO-recommended four ANC visits while ensuring quality of care. Interventions for EmOC and early health care seeking also need to be included in the minimum package of essential services.

### **Minimum Package of Essential Care for Integration**

#### ***Quality/Focused ANC***

- Counselling on skilled birth attendance, universal precautions, testing and counselling for HIV, nutritional counselling and support, breastfeeding counselling, deworming, malaria prevention and treatment, clinical procedures for HIV-positive woman.

#### ***Quality labour, delivery and immediate newborn care***

- Skilled care for labour and essential newborn care, verification of HIV status, routine offer of testing and counselling if of unknown status, universal precautions.

#### ***Postpartum care***

- Postnatal care for mother and baby within the first 7 days, FP/RH counselling and services, continued infant feeding counselling and support.

#### ***Continuity of care***

- Immunization, growth monitoring, co-trimoxazole prophylaxis for mothers and children, continued infant feeding counselling and support, and postnatal longitudinal follow-up.

## **2.6.2 Summary of discussions and key issues identified**

*Dr Kim Dickson, Department of HIV Treatment and Prevention Scale-up, WHO, Geneva*

There was agreement on the HIV prevention, treatment and care interventions that should be provided routinely to women and children through MNCH services. In addition to identifying the essential package of care and the key programme areas for integration, there was also agreement on the various complex contextual and health system challenges that need to be addressed. Postpartum care and patient tracking were identified as weak aspects of MNCH services. Recommendations for specific actions to strengthen follow-up care, reduce missed opportunities and capture mothers and babies accessing health services who are at risk for HIV, as well as for targeting male partners, have been made.

However, the following related issues remain unresolved:

- Lack of clarity and consensus on the definition of integration.
- What is the process of integration and how will it be achieved? How will MNCH and related programmes reorient and reorganize health systems and services to effectively deliver the appropriate package of services/interventions?

- How will countries be supported to operationalize the integrated approach at country level? Practical guidance is needed to help programme managers initiate and sustain integration efforts at all levels of the health system.

Three working groups were formed to further brainstorm on the following issues:

Group 1: *Operational definition of the concept and process of integration*

The group will build on the definition outlined in the concept paper and initial presentation.

Group 2: *Country level guidance to promote integration plans and activities*

Recommend basic steps to move the process forward at country level.

Group 3: *Advocacy plan for global support*

Define key messages for the international community including policy makers, donors and stakeholders

### 2.6.3 Group reports

#### ***Operational Definition of Concept and Process of Integration***

*Dr Mary Pat Kieffer, USAID/REDSO, Kenya*

Consensus was reached on the following definition of HIV integration within MNCH services, which reflects the need for a “family-centred approach” that includes men and the continuum of care:

*“Integration of HIV interventions into maternal, newborn and child health (MNCH) services involves the reorganization and reorientation of health systems to ensure the delivery of a set of essential interventions for HIV prevention, treatment and care as part of the continuum of care for women, newborn, children and families.”*

Regarding the *process* of integration, it was emphasized that coordination was necessary at all levels of the health system. Harmonization of resources, management, supervision, monitoring and evaluation were identified as essential elements of the process.

The *process of integration* addresses structural, managerial and operational issues at all levels of the health system and entails the following:

1. Development of aligned policies and allocation of financial and human resources at the national level;
2. Foster coordinated organizational frameworks at all levels;
3. Create effective mechanisms of coordination between departments, programmes and other stakeholders to support integrated service delivery;
4. Support integrated procurement and supply management systems for HIV and MNCH commodities
5. Support integrated training and capacity building at pre-service and in-service;

6. Establish systems at all levels for coordinated planning, management, and monitoring and evaluation
7. Establish joint supervision of integrated services; and
8. At the facility level, ensure that women receive comprehensive care at all points of MNCH service delivery with appropriate linkages and referral mechanisms and structures in place.

***Country Level Guidance to Promote Integration Plans and Activities***

*Dr Mickey Chopra*

A five-step plan of action is proposed to move integration forward at the country level:

1. An effective advocacy plan should target key stakeholders, including active and passive resistors of integrated service delivery, and should strategize appropriately. The plan should include key messages and demands, and should be externally driven.
2. A situational assessment must include policy and planning at the national level, and supervision and implementation at the district and facility levels.
3. Key indicators must be carefully identified, as they represent markers of progress and will also drive processes. Good examples are “35% of MTCT of HIV occurs after delivery” and “5% of women in SSA who need ART are receiving these”.
4. Priority activities for restructuring the health system are derived from the analysis of the situational assessment. Development of a guidance tool will be useful for achieving the activities related to this step.
5. Resource mobilization can then occur to support the identified priorities.

**Country Level Action Plan**

1. Advocacy
2. Situational Assessment and Analysis
3. Identification of Key Indicators
4. Prioritization of Activities
5. Resource Mobilization

Developing and disseminating a *guide* on the country-level processes will facilitate standardized actions among countries. Government commitment and working with donors to reprioritize the global health agenda in relation to integrated MNCH service delivery should be a part of any advocacy plan. Other suggestions include identifying key indicators for monitoring and evaluation, capacity-strengthening activities and reorienting health-worker views and roles. These action steps are considered broad and generic, with more specific activities embedded within the broader activities. The draft Baseline Assessment Tool presented in Session V includes the components of the action plan. Finalizing the Baseline Assessment tool with the suggested additions would be a good starting point to achieve this step.

### ***Advocacy Plan for Global Support***

*Dr Lily Kak, USAID, Washington, DC, USA*

A two-part statement is proposed. Part One rationalizes the need for integration and refers to three global goals and statements: MDGs, UNGASS and UA. It emphasizes that the goals cannot be achieved through current approaches but can be attained by adopting the integrated approach to MNCH services.

Part Two consists of five statements on the following issues:

- *Missed Opportunities* – MNCH services serve as a platform to identify and reach women and children at risk for HIV infection; those needing treatment with MNCH services is high, but characterized by missed opportunities.
- *Health System Strengthening* – is necessary to improve the quality of care and to support the scale-up of integrated services.
- *Community Participation* – support reorientation of health care to capitalize on the strengths, resources and contributions of communities.
- *Evaluation and Operational Research* – will demonstrate the effectiveness and efficiency of linked programmes and integrated service delivery, and identify weaknesses and gaps for improvement.
- *Funding* – needs to be flexible and bundled.

The group agreed to the development of a single-page advocacy statement along the issues proposed for distribution to key stakeholders at national and international levels. The statement is expected to provide leverage and encourage partners to support the integrated approach, and convince donors to adopt appropriate and supportive funding practices. The statement is to be refined by Dr Lily Kak per the group discussions.

### **3. Conclusions and Recommendations**

The global status of PMTCT programming and uptake of interventions is dismal and unacceptable. The increasing burden and risk of HIV infection in women and related increasing infection in children through mother-to-child transmission necessitates a renewed approach to HIV control that ensures improved access to HIV prevention, treatment and care interventions for women and their children.

A public health approach based on simplification, standardization and integration is needed to scale-up interventions and strengthen health systems to support comprehensive service delivery and improve quality of care. Routine MNCH services provide opportunity to identify women and children at risk of HIV infection and serve as an entry point for reaching the family with HIV prevention, treatment and care interventions.

Country experiences demonstrate that integrating HIV interventions into maternal, newborn and child health services improves uptake of HIV prevention, treatment and care interventions for women, children and families, and is achievable.

#### **3.1 Definition and scope of integration**

A definition of the concept of integration of HIV interventions into MNCH services was adopted by consensus as follows:

*“Integration of HIV interventions into maternal, newborn and child health (MNCH) services involves the reorganization and reorientation of health systems to ensure the delivery of a set of essential interventions for HIV prevention, treatment and care as part of the continuum of care for women, newborn, children and families.”*

The prevention of mother-to-child transmission of HIV and reaching the ultimate goal of eliminating HIV infection in children require a comprehensive approach that encompasses treatment, care and support, as well as interventions for primary prevention of HIV infection in women and their families. A family-centred approach is therefore critical to the effective implementation of interventions for the prevention of HIV infection in mothers and their children. The package of essential services must include interventions for the parents, the newborn and the child within the continuum of care.

A life-cycle approach must also be adopted to prevent the woman from becoming infected even before pregnancy and after childbirth, and to prevent transmission to the child through inappropriate infant feeding and family practices.

#### **3.2 Framework for integration**

- The integration framework demonstrates that MNCH services provide a useful and feasible platform from which interventions for HIV prevention, treatment

and care can be provided to women, children and families through the life-cycle approach.

- HIV/AIDS infection and disease, and related behavioural patterns, are diverse and complexities are inherent in the delivery of HIV interventions in various settings. Additional heterogeneity exists in the supporting health systems. The HIV/MNCH integration approach must therefore accommodate this diversity/complexity. The framework is adaptable to different contexts and local settings.
- Although integration requires specific actions at all levels of the health system, the health facility level is most critical and warrants increased attention for success. Consensus on the package of interventions to be offered in an integrated service delivery framework is critical. Dialogue, careful planning and strong coordination are essential for successful integration of HIV/MNCH services.
- Development of a comprehensive and integrated MNCH service delivery strategy needs to include the participation of communities as well as the private sector, making use of their expertise and experiences to ensure a holistic approach to care.

### **3.3 Implementation and scale-up of integrated approach**

Although complex, the integration of HIV prevention, treatment and care and support interventions into routine MNCH services using ANC as an entry point is feasible. Countries must be supported to implement and scale-up integrated HIV/MNCH services to minimize duplication and maximize the use of available resources to achieve maximum impact.

#### **3.3.1 *Process of integration***

- Country-level processes to develop and scale-up integrated HIV/MNCH services must be government-owned and country-led, with complementary donor roles.
- A national interagency coordination committee is essential and continuous planning, coordination and management activities are essential at the central and district levels to support integrated service delivery at facility level.
- Integration planning and coordination meetings must occur regularly at the district level to facilitate action.
- Collaboration is necessary at structural, operational and service delivery levels.
- Programme-specific changes will not be sustainable without overall health system strengthening to support improved service delivery.
- Additional resources, providers and supervision will be required at the district and facility levels.
- Community involvement is necessary for successful implementation and scale-up.

- Political commitment is necessary and advocacy at all levels (local, national, regional, global) is needed.

Programme managers require guidance on implementation at the country level. Simple practical steps and an integration tool kit would be helpful.

### **3.3.2 *Health systems strengthening***

- Strengthening of health systems is essential to successful integration of HIV/MNCH services. Persistent weaknesses within the health system must be addressed to support MNCH services as a platform for integrated service delivery.
- Key health system weakness and challenges to integration identified include: i) the quantity and quality of human resources; ii) adapting infrastructure to support integrated service delivery; iii) adopting commensurate logistics procurement and supply management systems; iv) strengthening laboratory capacity; v) developing referral systems; vi) developing patient tracking and monitoring and evaluation systems; vii) improving quality of care; viii) strengthening postnatal care, family planning and clinical support services; and ix) early infant diagnosis; x) linkages among programmes; xi) community involvement; and xii) communication.
- Capacity building should not be limited to skill building and provision of resources but should include restructuring and reorganizing of functional capacity at various levels of the health system for improved coordination and efficiency. Health worker training must be comprehensive and include self-assessment of values and attitudes in addition to acquisition of skills. Pre-service training must include elements of integrated service delivery and programme management. Roles and performance expectations of health-care workers must be re-engineered based on knowledge and skills.
- HIV testing and counselling processes must be simplified and streamlined into routine care, as these are prerequisites for critical life-saving interventions for HIV prevention, treatment and care.
- The limited information and emphasis on primary prevention interventions to keep HIV-negative women infection-free was identified as a major gap that needs to be addressed and strengthened within integrated HIV/MNCH services.
- Strategies to increase demand and service utilization must be employed concurrently with strategies that address supply issues. Mechanisms for increasing access and utilization of skilled care at birth to facilitate the provision of interventions for PMTCT during labour, childbirth and the immediate postpartum period need to be developed.
- Community level involvement and participation is essential for assuring a continuum of care through the various levels of the health system

### 3.3.3 *Supporting tools*

- Evidence-based clinical guidelines are available to guide the integrated approach. The WHO, IMCI and IMPAC clinical guidelines and integrated TB/HIV guidelines include guidance on HIV care for mothers and children, and promote an integrated approach to care. The IMAI/IMPAC training materials for PMTCT are also a useful resource for an integrated approach to the training of health workers.
- The draft “assessment tool” is to be revised and aligned to the integration framework. Aspects of quality of care, supervision and community and gender considerations need to be incorporated.
- The various PMTCT tools complement each other and should be harmonized to facilitate country level adaptation and use. An “integration toolkit” will be useful for countries and is to be developed. It should include the framework for integration, based on country experiences and lessons learnt, as well as the assessment and training tools and guidance for programme managers and providers to facilitate integration processes at the country level.

### 3.3.4 *Operational guidance*

- A five-step plan of action is proposed to move integration forward at the country level as follows: i) advocacy; ii) situational assessment and analysis; iii) identification of key indicators; iv) prioritization of activities; and v) resource mobilization.
- An *implementation guide* is to be developed, following the above steps, to guide the process of integration at country level.
- An advocacy statement is to be developed, guided by issues proposed during the meeting, for distribution to key stakeholders. Advocacy is necessary to reposition integrated MNCH services prominently within global health priorities and to redirect resources to support country efforts. Donors must be provided with justification for prioritizing maternal health within the global health agenda and for supporting integrated HIV/MNCH services: An evidence base for demonstrating the benefits of integrated HIV/MNCH services, which links outcomes to inputs, must be developed and packaged for advocacy purposes.
- Change in donor practices is critical to successful health systems strengthening and implementation of the integrated approach. Current funding mechanisms encourage vertical and fragmented programming and services. The advocacy statement is also expected to encourage partners to support the integrated approach and to convince donors to adopt appropriate and supportive funding practices that encourage joint programming and integrated service delivery at country level.

- Coordination and harmonization of partners' efforts and resources are essential to facilitate implementation and scale-up.

### 3.4 Recommendations for “Next Steps”

*Dr Kim Dickson and Dr Juliana Yartey*

#### 3.4.1 *Communicating outcomes of the meeting*

It was suggested that a *statement* be developed summarizing the rationale for integration of HIV interventions into MNCH services, the definition and process for integration, and the action steps to move integration forward at the country level. The statement should be originated by WHO with Partner endorsement. Timing of the statement's release should also be synchronized with country-level advocacy activities.

Other options for consideration are as follows:

1. Synthesize a succinct *statement* from the meeting, obtain endorsement from all participants and disseminate it. The background paper, group work and discussions have provided most of the elements for a statement: the rationale for the meeting, the definition and process of integration, and recommendations of the meeting.
2. Summarize the meeting *proceedings* without vetting by participants.
3. Involve participants in developing the meeting *report* based on the proceedings and recommendations, obtain WHO/Partner endorsement and disseminate to countries. Follow up with a *high-level forum for donors*, using the statement from this meeting as either a communiqué or a joint statement from WHO and partners.
4. Develop a *policy brief* based on the outcome of this meeting to include the concept, rationale and key steps for integration, and next steps for global action, among other topics, and disseminate to key stakeholders.

#### 3.4.2 *Engaging key stakeholders: High-level donor versus regional meeting*

Participating representatives at the consultation may not have the authority to make decisions on commitment on behalf of their organizations. Having a high-level meeting of donors and governments, specifically decision-makers, would be a good strategy for obtaining endorsement for HIV/MNCH integration and to secure commitment for reorganizing health service delivery.

Specific issues were discussed during the consultation and consensus was achieved on the following:

- operational definition and the process of integration; and
- package of essential interventions for mothers and children, and for comprehensive and integrated care at various points of service delivery.

In planning the next steps, however, consideration must be given to creating opportunities for sharing in-depth and varied country experiences, and empowering

countries. A *regional consultation* that brings countries together and focuses on experience sharing as a next step is likely to empower countries to initiate implementation. There should be donor, partner and government representation at the regional consultation to commit to supporting countries in implementation. Donor involvement is important to the success of integration because many countries will need external funding and support to implement and scale-up integrated MNCH services. The proposed regional consultation should not necessarily focus on technical issues, but rather engage donors and explore resource allocation and harmonization mechanisms that would facilitate and support integrated HIV and MNCH service delivery and related activities at country level.

Donors must be encouraged to earmark funding for supporting the integration of services within MNCH programmes. Country resource allocation mechanisms, such as the SWAPs, must be adapted to support the integrated health service delivery approach. The process should focus on moving from examples of best practices to scaling-up. Countries must take leadership within a regional context. High-level involvement is needed and political support is critical. Working through regional counterparts would accelerate commitment and stimulate action at country level. Participating partners at this meeting also have a role to play in initiating advocacy activities through their regional and country offices.

The proposed regional consultation, however, should only occur after the background documents and outputs from this meeting are finalized.

### ***3.4.3 Country support: The Integration Toolkit***

Country support and the provision of guidance tools for integration are important next steps since these tools are needed to support implementation in countries. Useful tools include, but are not limited to, the advocacy statement and plan, implementation guide, integration framework, baseline assessment tool, integrated clinical guidelines and health provider training tools, community mobilization strategies, and monitoring and evaluation tools. WHO needs to review currently existing tools at the country level and revise and refine these into standardized and adaptable format for timely use.

Dr Doyin Oluwole, on behalf of the *Africa Health 2010 Project, AED, Washington, DC, USA*, offered the support and expertise of programme staff for the development of advocacy materials, review of the Baseline Assessment tool and the development of monitoring and evaluation tools for integration. Patient tracking is critical and existing tools will most likely need modification and adaptation to capture relevant information.

### ***3.4.4 Progress tracking – Targets***

Global targets and milestones need not be developed for integration of MNCH services; the MDGs targets are adequate to drive the process. National targets might be necessary for assessing progress; however, these can be defined locally based on local context and information from the baseline assessment, but should link to the


achievement of global targets, such as the UNGASS and millennium development goals and targets.

### **3.4.5 Operational research, learning sites and best practices for integration**

Learning experiences are important to inform the documentation of best practices for country guidance. WHO expressed interest in working with selected countries from various regions to implement and document their experiences with integration. Zambia, Swaziland and Tanzania have ongoing integration programmes with support from USAID that could produce useful practical lessons. Cameroon has ongoing integrated HIV/MNCH activities with lessons to share. Additional sites need to be identified in Latin America, Asia and the Pacific. Operational research should be a key component of learning site evaluations and USAID may be able to support at least one operational research study in collaboration with partners.

### Next Steps

---

1. **Develop a policy brief on Integration of HIV Interventions into MNCH services**
2. **Finalize and disseminate meeting documents**
  - Meeting proceedings**
  - Background materials**
    - . **Position paper on HIV/MNCH Integration**
    - . **Framework for integration**
3. **Convene a high level meeting for donors and governments**
4. **Organize regional meetings**
5. **Develop an Integration toolkit**
  - . **Advocacy tools**
  - . **Baseline Assessment tool**
  - . **Monitoring and Evaluation tool**
  - . **Implementation Guide**
6. **Support integration learning sites, in varied contexts** 

The meeting recommendations form the basis for the “Next Steps”. It was agreed that the recommendations should be implemented simultaneously using multiple actions and not on a step-by-step basis.

Immediate next steps include a similar integration meeting to be held by WHO Regional Offices for Africa, South-East Asia and the Western Pacific, where the outcome of this meeting will be shared, and a learning event to be organized by the World Bank in May 2006 in Kenya.

## **4. Closing**

***Dr Isabelle de Zoysa*** (Session Chair)

*Senior Adviser for HIV/AIDS, Office of the Assistant Director General, Family and Community Health, WHO, Geneva*

Dr de Zoysa congratulated participants for their commitment, hard work and collaborative interactions, as well as their insightful deliberations to achieve consensus on many salient issues on a rather challenging topic.

***Dr Monir Islam***

*Director, Director, Department of Making Pregnancy Safer, WHO, Geneva*

Dr Islam thanked participants for their participation and valuable contributions. Participants were assured that prompt follow-up action on the next steps would be taken to continue the momentum generated at the meeting. He commended participants on their commitment to developing strategic solutions to address a complex problem and urged them to maintain the vision of providing integrated comprehensive HIV/MNCH services to women, children and their families. He thanked participants for taking an important and overdue first step to make pregnancy safer in the context of many debilitating diseases and pledged the continued support of WHO to Member States to facilitate improved health care for mothers and their children.

## 5. Annexes

### 5.1 Annex I: Agenda

Family and Community Health Cluster (FCH)  
Departments of Making Pregnancy Safer (MPS) and HIV/AIDS

## Technical Consultation on the Integration of HIV Interventions into Maternal, Newborn, and Child Health Services

5 – 7 April 2006

WHO/HQ, Geneva, Switzerland  
Salle D and Executive Boardroom

## A G E N D A

### Day 1: Wednesday, 5 April 2006 (Salle D)

08:30–09:00	Registration	
<b>Session I: Introduction</b>		
<b>CHAIR:</b> Dr Monir Islam, Director, Making Pregnancy Safer, WHO <b>Rapporteur:</b> T. Sint		
09:00–09:10	Opening: Review of agenda, objectives and expected outcomes; Introduction of Participants	M.Q. Islam
09:10–09:20	Introductory Remarks	J. Phumaphi
09:20–09:30	Positioning Women and Children in the Universal Access to HIV/AIDS Prevention, Care and Treatment Initiative	K. de Cock
09:30–10:00	Status of Implementation of PMTCT Programmes and Targets	M.Z. Nyunt
10:00–10:30	<b>TEA / COFFEE BREAK</b>	
<b>Session II: Framework for HIV/MNCH Integration and other Programme Experiences</b>		
<b>CHAIR:</b> Dr Kevin de Cock, Director, HIV/AIDS, WHO <b>Rapporteur:</b> K. Kumoji		
10:30–11:00	Concept and Rationale for the Integration of HIV Interventions into MNCH Services (10 min) Discussion (20 min)	J. Yartey
11:00–11:30	Strategic Framework for Integration of HIV/PMTCT Interventions into MNCH Services (10 min) Discussion (20 min)	E. Ekpini

11:30–11:50	Integration of HIV Interventions into MCH Services: PMTCT/MCH Linkages with ART (10 min) Discussion (10 min)	H. Dao
11:50–12:45	Programme Experiences with Integration (10 min each) <ul style="list-style-type: none"> <li>• TB/HIV = HIV/TB: Two Diseases – One Patient</li> <li>• Integrating Services for the Control of Malaria During Pregnancy into ANC</li> <li>• Integrating Family Planning and Prevention of Mother-to-Child Transmission</li> <li>• Linking Paediatric and Maternal HIV/AIDS Care and Treatment with MCH Services</li> </ul> Discussion (15 min)	H. Getahun C. Puta N. Rutenberg Y. Tawfik
12:45–13:45	<b>LUNCH</b>	
<b>Session III: Implementation of PMTCT Programmes: Country Experiences</b>		
<b>CHAIR:</b> Dr Geeta Sethi, Geographic Liaison & Country Programming, UNAIDS		
<b>Rapporteurs:</b> R. Kabra and O. Sentumbwe		
13:45–14:00	Evaluation of PMTCT in South Africa: Lessons for Integration (10 min) Discussion (5 min)	M. Chopra
14:00–14:30	Learning Sites for Integration (10 min each) <ul style="list-style-type: none"> <li>• PMTCT Integration Model: Mozambique</li> <li>• Experiences on Integration of HIV into MNCH in Uganda</li> </ul> Discussion (10 min)	P. Libombo R. Lukoda
14:30–16:00	Presentations and Panel discussion: Status of PMTCT Implementation – <ul style="list-style-type: none"> <li>• PMTCT of HIV Programme: Botswana's Experience</li> <li>• Scaling-up PMTCT Services in Cameroon</li> <li>• Strategy for Scaling up PPTCT (PMTCT) in India</li> <li>• PMTCT-Plus in Kilimanjaro: New models for scaling up access to care</li> <li>• Integration of HIV Interventions in Maternal, Newborn and Child Care services in Zambia</li> </ul> Discussion (30 min)	L. Maribe T. P. Muffih P. Kuganatham B-w. Semo M. Bweupe
16:00–16:15	<b>TEA/COFFEE BREAK</b>	
16:15–16:20	Introduction to Group Work	J. Yartey
16:20–18:00	Group Discussions: Review of the Concept of Integration and Strategic Framework based on Country and Programme Experiences: Key issues and lessons learnt.	

18:00–20:00	<b>RECEPTION (Main Restaurant)</b>	
-------------	------------------------------------	--

**Day 2: Thursday, 6 April 2006 (Executive Boardroom)**

**Session IV: Strengthening Health Systems for HIV/MNCH Integration**

**CHAIR:** Dr Lily Kak, Maternal and Neonatal Health Advisor, USAID

**Rapporteur:** A. Portela

09:00–10:00	Feedback from previous day's group discussions and consensus on Concept of Integration and Strategic Framework (60 mins)	
10:00–10:30	<b>TEA/COFFEE BREAK</b>	
10:30–11:30	<p>Strengthening Health Systems for Integrated HIV/MNCH Service Delivery (10 min)</p> <p>HIV and Scaling-up Human Resources for Health (10 min)</p> <p>Communication is key to Scale-up Integrated HIV within MNCH Services (10 min)</p> <p>Discussions (30 min)</p>	<p>D. Huntington</p> <p>G. Gedik</p> <p>B. de Negri</p>
11:30–13:00	<p><b>Clinical and Programmatic Tools to Support Integration of HIV/MNCH Services</b></p> <p><b>Clinical Guidelines</b></p> <ul style="list-style-type: none"> <li>♦ Integrated Management of Childhood Illnesses (IMCI)</li> <li>♦ Integrated Management of Pregnancy and Childbirth (IMPAC)</li> <li>♦ Integrated Management of Adolescent and Adult Illnesses (IMAI)</li> </ul> <p><b>Market Place:</b></p> <p><b>Materials from other WHO Departments</b></p> <ul style="list-style-type: none"> <li>♦ Child and Adolescent Health</li> <li>♦ Evidence and Information for Policy</li> <li>♦ HIV/AIDS</li> <li>♦ Making Pregnancy Safer</li> <li>♦ Malaria</li> <li>♦ Nutrition for Health and Development</li> <li>♦ Reproductive Health and Research</li> </ul> <p><b>Materials from other Organizations</b></p>	<p>L. Muhe</p> <p>J. Zupan</p> <p>S. Gove</p>
13:00–14:00	<b>LUNCH</b>	

**Session V: Programmatic Tools to Support Integration of HIV/MNCH Services**

**CHAIR:** Dr Charlie Gilks, Director/Coordinator, HIV/TPS, WHO

**Rapporteur:** A. Carbonell

14:00–14:25	Presentation of Training Tools (5 min each)	
-------------	---	--

	<ul style="list-style-type: none"> <li>• WHO/CDC PMTCT Generic Training Package</li> <li>• WHO/JHPIEGO PMTCT Training Module</li> <li>• HIV and Infant Feeding Tools</li> </ul> <p>Discussion (10 min)</p>	T. Sint M. Larsson P. Henderson
14:25–14:50	<p>Presentation of Programmatic Tools in Development</p> <ul style="list-style-type: none"> <li>• Baseline Assessment Tool for Integration of HIV/MNCH Services (10 min)</li> </ul> <p>Discussion (10 min)</p>	I. Chitsike
	Introduction to Group Work (5 min)	E. Ekpini
14:50–16:00	<p>Small Group Sessions: Review of Programmatic Tools for Integration</p> <ul style="list-style-type: none"> <li>• Baseline Assessment Tool for Integration of HIV/MNCH Service</li> </ul>	
16:00–16:15	<b>TEA / COFFEE BREAK</b>	
16:15–17:30	<p>Feedback from Small Group Sessions</p> <p>Presentations (10 min per group) followed by 15 min discussion)</p>	

### Day 3: Friday, 7 April 2006 (Salle D)

#### Session VI: Next Steps – The Way Forward

**CHAIR:** Dr Isabel de Zoysa, Senior Adviser HIV/AIDS, WHO/FCH

**Rapporteurs:** K. Kumoji and I. Chitsike

09:00–09:20	<p>Summary of Discussions and Key Issues Identified (15min)</p>	K. Dickson
	Introduction to Group Work (5 min)	
09:20–10:00	Group Discussion on Implementation Support: Scaling up Integrated HIV/MNCH Services in the context of Universal Access	
10:00–10:30	<b>TEA / COFFEE BREAK</b>	
10:30–11:00	Group Discussion on Implementation Support: Scaling up Integrated HIV/MNCH Services in the context of Universal Access (continued)	
11:00–12:00	Feedback from Group Work	
12:00–13:00	Discussion on Joint Efforts by Partners in Selected Countries – Roles and Responsibilities of Stakeholders	Chair
13:00–14:00	<b>LUNCH</b>	

14:00–14:45	Key Recommendations and Outcomes (15 mins) Discussion (30 mins)	K. Dickson & J. Yartey
14:45–15:00	Next Steps: The Way Forward	Chair
15:00–15:15	Closing Remarks	Chair & M. Islam

## 5.2 Annex II: List of Participants

### Departments of Making Pregnancy Safer & HIV/AIDS World Health Organization

---

#### TECHNICAL CONSULTATION ON THE INTEGRATION OF HIV INTERVENTIONS INTO MATERNAL, NEWBORN AND CHILD HEALTH SERVICES

Salle D, World Health Organization, Geneva, 5–7 April 2006

### List of Participants

#### *External Participants*

**Dr David Alnwick (unable to attend)**

UNICEF Regional Office  
East and Southern Africa  
Email: [danlwick@unicef.org](mailto:danlwick@unicef.org)

**Dr Alfred V Bartlett III (unable to attend)**

USAID, Bureau for Global Health  
1300 Pennsylvania Ave., N.W.  
Washington, D.C. 20523-3700, USA  
Email: [abartlett@usaid.gov](mailto:abartlett@usaid.gov)

**Dr Dirk Buyse**

UNICEF/WCARO  
P.O. Box 29720. Dakar, Senegal  
E-mail: [dbuyse@unicef.org](mailto:dbuyse@unicef.org)

**Dr Maximilliam Bweupe**

Department of Reproductive Health, MOH.  
P. O. Box 30205, Lusaka, Zambia  
E-mail: [bweupem2001@yahoo.com](mailto:bweupem2001@yahoo.com)

**Dr Mickey Chopra**

South Africa Medical Research Council  
Health Systems Research Unit  
P. O. Box 10970, Tygerberg,  
7505 South Africa  
E-mail: [mickey.chopra@mrc.ac.za](mailto:mickey.chopra@mrc.ac.za)

**Dr Lynn Collins**

United Nations Population Fund (UNFPA)  
220 East 42nd Street  
New York, NY 10017, USA  
E-mail: [collins@unfpa.org](mailto:collins@unfpa.org)

**Dr Halima Dao**

CDC - Global AIDS Program  
1600 Clifton Road  
Mailstop E04, Atlanta, GA 30333, USA  
E-mail: [hcd1@cdc.gov](mailto:hcd1@cdc.gov)

**Hans de Knocke (unable to attend)**  
UNFPA  
Email: [hdk@yahoo.com](mailto:hdk@yahoo.com)

**Dr Stella Goings**  
Bureau for Africa, USAID  
1325 G Street, NW, Suite 400  
Washington, D.C. 20005, USA  
Email: [sgoings@af-r-sd.org](mailto:sgoings@af-r-sd.org)

**Dr Emmanuel Hammond**  
Dept. of Obstetrics and Gynaecology  
Univ. of Zimbabwe.  
P.O. Box A 178  
Avondale, Harare, Zimbabwe  
E-mail: [ehammond@africaonline.co.zw](mailto:ehammond@africaonline.co.zw)

**Dr Karen Heckert**  
USAID/RCSA  
2170 Gaborone Place  
Washington, D.C. 20521-2170, USA  
E-mail: [kheckert@usaid.gov](mailto:kheckert@usaid.gov)

**Dr Dinh Thi Phuong Hoa**  
MOH - Department of Reproductive Health  
138A Giang Vo Street  
Ha Noi, Viet Nam  
E-mail: [hoadp@fpt.vn](mailto:hoadp@fpt.vn)

**Dr Lily Kak**  
USAID. GH/HION/MCH RRB 3.07-061  
1300 Pennsylvania Avenue, NW  
Washington, D.C. 20523, USA  
E-mail: [lkak@usaid.gov](mailto:lkak@usaid.gov)

**Dr Mary Pat Kieffer**  
USAID/REDSO, Kenya  
Email: [mkieffer@usaid.gov](mailto:mkieffer@usaid.gov)

**Dr P. Kugantham**  
Tamil Nadu State Aids Control Society  
417, Pantheon Road, Egmore,  
Chennai - 600 008. Tamil Nadu, India  
E-mail: [drkugan@yahoo.com](mailto:drkugan@yahoo.com), [tansacs@tn.nic.in](mailto:tansacs@tn.nic.in)

**Dr Paula Libombo**  
MOH / WHO Country Office  
Mozambique  
Email: [libombop@mz.afro.who.int](mailto:libombop@mz.afro.who.int)

**Dr Ramathan Lukoda**  
HIV/MNCH Integration Project,  
MOH – Uganda, Kampala  
E-mail: [drlukoda@yahoo.com](mailto:drlukoda@yahoo.com)

**Dr Elizabeth Lule (unable to attend)**  
The World Bank  
1818 H Street, N.W.  
Washington, D.C. 20433, USA  
Email: [elule@worldbank.org](mailto:elule@worldbank.org)

**Ms Sandra MacDonagh**  
DFID  
1 Palace Street  
London SW1E 5HE, UK  
Email: [S-MacDonagh@dfid.gov.uk](mailto:S-MacDonagh@dfid.gov.uk)

**Dr Rabia Mathai**  
Catholic Medical Mission Board  
10 West 17th Street,  
New York, NY 10011-5765, USA  
Email: [rmathai@cmmmb.org](mailto:rmathai@cmmmb.org)

**Ms Fran McConville**  
DFID  
1 Palace Street  
London SW1E 5HE, UK  
Email: [f-mcconville@dfid-gov.uk](mailto:f-mcconville@dfid-gov.uk)

**Dr Suman Mehta**  
20, Avenue Appia  
CH-1211 Geneva 27, Switzerland  
E-mail: [mehtas@un aids.org](mailto:mehtas@un aids.org)

**Prof Tih Pius Muffih**  
Babanki Tungo, NW Province  
CBC Health Board, P.O. Box 9 NSO  
NW Province, Cameroon  
Tel. (237) 776 4781, (237) 750-4068  
E-mail: [piustih@aol.com](mailto:piustih@aol.com)  
[BBHCameroon@aol.com](mailto:BBHCameroon@aol.com)

**Dr Doreen Mulenga**  
HIV and Health, Health Section, UNICEF  
New York, NY 10017, USA  
Email: [dmulenga@unicef.org](mailto:dmulenga@unicef.org)

**Dr Berengere de Negri**  
Community & Training  
1825 Connecticut Avenue NW

Washington, D.C. 20009, USA  
Email: [bdenegri@aed.org](mailto:bdenegri@aed.org)

**Dr Ngashi Ngongo (unable to attend)**  
333 East 38th Street  
New York, NY 10016, USA  
E-mail: [nngongo@unicef.org](mailto:nngongo@unicef.org)  
[ngogongashi@hotmail.com](mailto:ngogongashi@hotmail.com)

**Dr Myo Zin Nyunt**  
Regional HIV/AIDS Officer  
UNICEF Regional Office for South Asia  
PO Box 5815, Lekhnath Marg  
Kathmandu, Nepal  
E-mail: [mnyunt@unicef.org](mailto:mnyunt@unicef.org)

**Dr Doyin Oluwole**  
AED - Africa Health 2010 Project,  
1875 Connecticut NW  
Washington, D.C. 20009, USA  
E-mail: [doluwole@aed.org](mailto:doluwole@aed.org)

**Dr Chilunga Puta**  
Regional Centre for Quality of Health Care  
Institute of Public Health  
Makerere University Medical School  
Kampala 7072, Uganda  
E-mail: [cputa@rcqhc.org](mailto:cputa@rcqhc.org)

**Dr Naomi Rutenberg (unable to attend)**  
Horizons, Population Council Inc.  
4301 Connecticut Ave. NW, Suite 280  
Washington, D.C. 20008, USA  
E-mail: [nrutenberg@pcdc.org](mailto:nrutenberg@pcdc.org)

**Dr Gloria Sangiwa**  
Family Health International (FHI)  
2101 Wilson Boulevard, Suite 700  
Arlington, VA 22201, USA  
E-mail: [gsangiwa@fhi.org](mailto:gsangiwa@fhi.org)

**Dr Bazghina-werq Semo**  
Columbia University  
Mailman School of Public Health  
MTCT-Plus Initiative, 7<sup>th</sup> Floor  
722 W. 168th Street,  
New York, NY 10032, USA  
E-mail: [sb2550@columbia.edu](mailto:sb2550@columbia.edu)

**Dr Youssef Tawfik**  
USAID  
Ronald Reagan Building  
1300 Pennsylvania Avenue, NW  
Washington, D.C. 20523-3700, USA  
Email: [ytawfik@usaid.gov](mailto:ytawfik@usaid.gov)

**Dr Marleen Temmerman**

International Centre for Reproductive Health  
Faculty of Medicine and Health Sciences  
Ghent University, De Pintelaan 185,  
9000 Ghent, Belgium  
Email: [marleen.temmerman@rug.ac.be](mailto:marleen.temmerman@rug.ac.be)

**Dr Lalla Touré**

UNICEF/WCARO  
P.O. Box 29720  
Dakar, Senegal  
Email: [ltoure@unicef.org](mailto:ltoure@unicef.org)

**Dr Stewart Tyson (unable to attend)**

DFID  
1 Palace Street  
London SW1E 5HE, UK  
Email: [s-tyson@dfid.gov.uk](mailto:s-tyson@dfid.gov.uk)

**John Worley**

DFID  
1 Palace Street  
London SW1E 5HE, UK  
Email: [jm-worley@dfid.gov.uk](mailto:jm-worley@dfid.gov.uk)

***WHO Regional & Country Offices***

***AFRO***

**Dr Esther Aceng-Dokotum**

HIV/AIDS  
WHO Country Office, Lesotho  
E-mail: [acenge@ls.afro.who.int](mailto:acenge@ls.afro.who.int)

**Dr Alicia Carbonell**

FCH  
WHO Country Office, Mozambique  
Email: [carbenella@mz.afro.who.int](mailto:carbenella@mz.afro.who.int)

**Dr Inam Chitsike**

MTCT. DRH  
AFRO – Brazzaville, Republic of Congo  
E-mail: [chitsikei@afro.who.int](mailto:chitsikei@afro.who.int)

**Mrs Lucy Maribe**

WHO Country Office, Botswana  
E-mail: [maribel@bw.afro.who.int](mailto:maribel@bw.afro.who.int)

**Dr Tigest Ketsela Mengestu**

Department of Reproductive Health  
AFRO – Harare, Zimbabwe  
E-mail: [ketselat@afro.who.int](mailto:ketselat@afro.who.int)

**Dr Seipati Mothebesoane-Anoh**

Department of Reproductive Health/MPS.  
AFRO – Brazzaville, Republic of Congo  
E-mail: [mothebesoane@afro.who.int](mailto:mothebesoane@afro.who.int)

**Dr Olusola Odujinrin**

WHO Country Office, Abuja, Nigeria  
Email: [odujinrin@ng.who.int](mailto:odujinrin@ng.who.int)

**Dr Charles Sagoe-Moses**

IMCI, DDC  
AFRO – Brazzaville, Republic of Congo  
E-mail: [sagoemosesc@afro.who.int](mailto:sagoemosesc@afro.who.int)

**Dr Olive Sentumbwe-Mugisa**

WHO Country Office, Kampala, Uganda  
Email: [sentumbweo@ug.afro.who.int](mailto:sentumbweo@ug.afro.who.int)

**Dr Eleannor A Ba-Nguz**

Malaria Unit  
AFRO – Harare, Zimbabwe  
E-mail: [ba-nguze@whoafro.org](mailto:ba-nguze@whoafro.org)

**Dr Antoine Seruflira**

Department of Reproductive Health  
AFRO – Brazzaville, Republic of Congo  
E-mail: [serufliraa@afro.who.int](mailto:serufliraa@afro.who.int)

**Dr Miguel Rui Vaz**

HIV. RPA/VCT  
AFRO – Harare, Zimbabwe  
E-mail: [vazr@whoafr.org](mailto:vazr@whoafr.org)

**EMRO**

**Dr Ahmad Mohit**

Health Protection and Promotion  
Email: [mohita@emro.who.int](mailto:mohita@emro.who.int)

**EURO**

**Dr G. Magnusson**

Division of Tech Support Reducing  
Disease Burden  
Email: [gma@euro.who.int](mailto:gma@euro.who.int)

**SEARO**

**Dr Dini Latief**

Family and Community Health  
Email: [latiefd@whosea.org](mailto:latiefd@whosea.org)

**Dr Ardi Kaptiningsih**

MPS, SEARO – India

E-mail: [kaptiningsiha@whosea.org](mailto:kaptiningsiha@whosea.org)

**WPRO**

**Dr A. S. Tee**

Combating Communicable Diseases

Email: [teeas@wpro.who.int](mailto:teeas@wpro.who.int)

**Dr Linda Milan**

Building Healthy Communities  
and Populations

Email: [milanl@wpro.who.int](mailto:milanl@wpro.who.int)

**WHO/HQ**

**CAH**

Elizabeth Mason  
Peggy Henderson  
Lulu Muhe

**EIP/HS**

Phyllida Travis  
Gulin Gedik

**FCH**

Joy Phumaphi  
Isabel de Zoysa

**HIV**

Kevin De Cock  
Siobhan Crowley  
Kim Dickson  
Rene Ekpini  
Charlie Gilks  
Sandy Gove

**Malaria**

Allan Schapira  
Wilson Were

**MPS**

Monir Islam  
'Kuor Kumoji  
Margareta Larson  
Matthews Mathai  
Juliana Yartey  
Jelka Zupan

**NUT**

Randa Saadeh

**PNMCH**

Francisco Songane

**RHR**

P. F. A Van Look

Nathalie Broutet

Tim Farley

Dale Huntington

**STB**

Dermot Maher

Getahan Haileyesus

### 5.3 Annex III: Matrix for Integration Process (Group Output)

#### Group 2: Process and Mechanism

**Assumption: We affirm and agree on definition of “integration”**

- ✓ Includes maternal and paediatric care
- ✓ Defines services at each level: National, Regional, District
- ✓ Defines Health Providers' roles at each level
- ✓ Policy and standards based on agreed definition

**The Process: Reorient vertical programmes**

→ Collaboration → Coordination → Integration

**The Process is the mechanism**

***Start with the National Policy and Strategy, but***

- find practical ways to *integrate* at the service delivery level
- National policy must capture RH, TB, HIV, Paediatric, etc.
- Mindset must change at top level to reallocate resources and to reorient and reorganize services

***Donors* must buy into integration and reallocate funds**

**Human resource development must adapt to requisite changes**

**Scale up and Scale out**

## Matrix for Integration Process

Levels	What	Who	How	Remarks
National Regional Provincial District	<ul style="list-style-type: none"> <li>◦ Political commitment</li> <li>◦ Institutional commitment</li> <li>◦ Policy</li> <li>◦ Standards</li> <li>◦ Guidelines</li> <li>◦ Government and Partners' coordination</li> <li>◦ Resource mobilization</li> </ul>	<ul style="list-style-type: none"> <li>◦ Decision-makers</li> <li>◦ Stakeholders</li> <li>◦ National Committee</li> </ul>	<ul style="list-style-type: none"> <li>◦ Advocacy</li> <li>◦ Consensus meetings</li> <li>◦ Pre-service and in-service training</li> </ul>	
Facility & Community Levels	<ul style="list-style-type: none"> <li>◦ Planning</li> <li>◦ Reorientation</li> <li>◦ Reorganization</li> <li>◦ Capacity building</li> <li>◦ Structural change</li> <li>◦ Infrastructure</li> <li>◦ Equipment and supplies</li> <li>◦ Resource mobilization</li> <li>◦ Health information systems</li> <li>◦ Social mobilization</li> <li>◦ Minimum package of services</li> </ul>	Teams of: <ul style="list-style-type: none"> <li>◦ Health-care providers</li> <li>◦ Managers</li> <li>◦ Clients</li> <li>◦ Communities</li> </ul>	<ul style="list-style-type: none"> <li>◦ Working teams</li> <li>◦ In-service training</li> <li>◦ Team building</li> <li>◦ Plan and redefine roles</li> <li>◦ Reorientation</li> <li>◦ Define new skills</li> <li>◦ Supervision</li> <li>◦ Training</li> </ul>	<ul style="list-style-type: none"> <li>◦ Situational analysis</li> <li>◦ Planning to reorient and reorganize</li> <li>◦ Change way of thinking</li> <li>◦ Reorient skills and competencies to deliver integrated services</li> <li>◦ Involve donors and implementing partners</li> <li>◦ Community mobilization</li> <li>◦ Harmonize training and client data collection</li> </ul>
<b>= Revitalize Primary Health Care</b>				

Department of Making Pregnancy Safer  
World Health Organization  
Avenue Appia, 20  
Geneva 27, Switzerland  
Fax: +41 22 791 5853  
E-mail: [MPSPublications@who.int](mailto:MPSPublications@who.int)  
[www.who.int/making\\_pregnancy\\_safer/en/](http://www.who.int/making_pregnancy_safer/en/)

