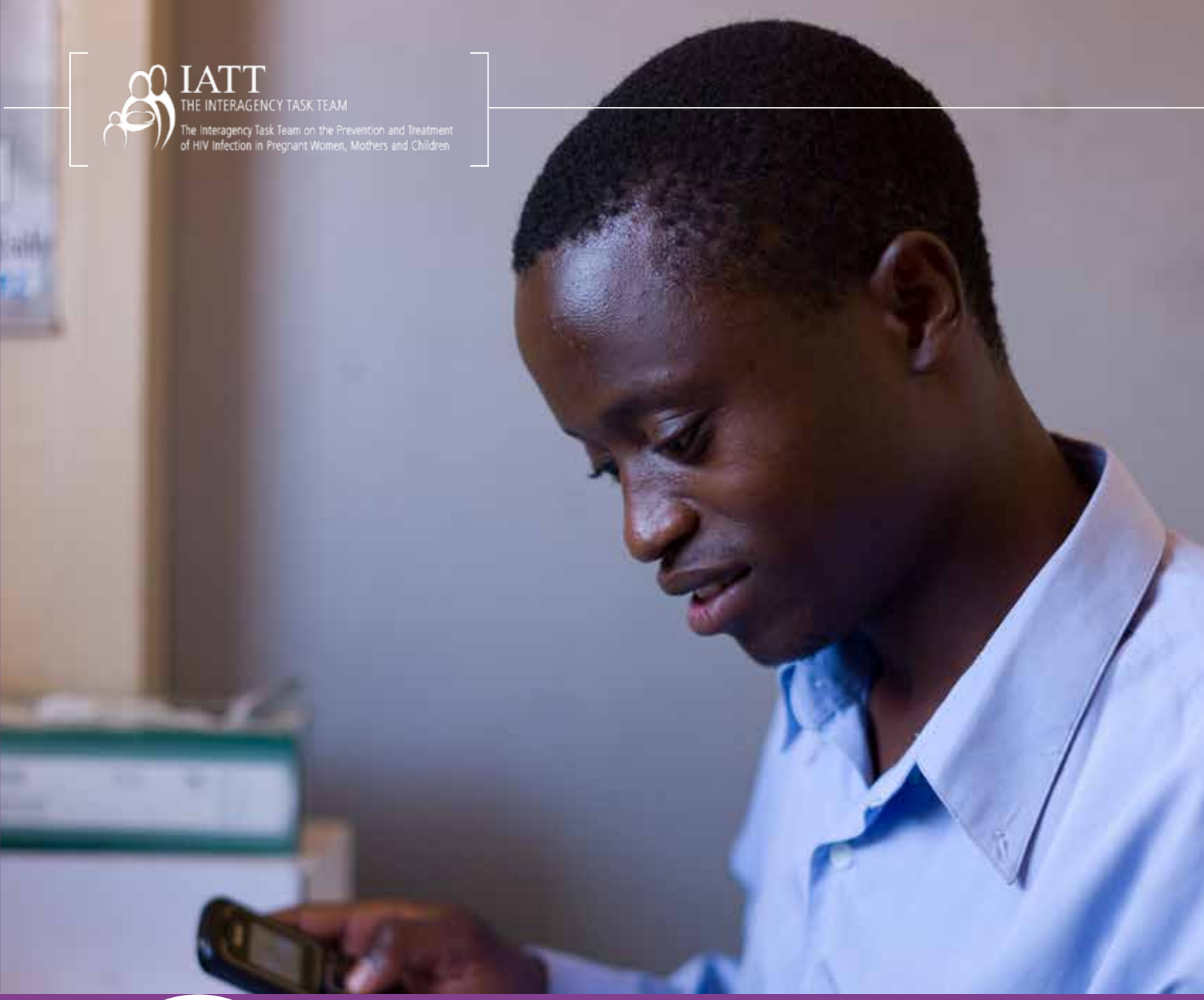

IATT
THE INTERAGENCY TASK TEAM
The Interagency Task Team on the Prevention and Treatment of HIV Infection in Pregnant Women, Mothers and Children

9 Enhanced Monitoring & Evaluation Systems

9.1 Background Information

This document describes the characteristics of national and subnational M&E systems needed to optimize the monitoring and evaluation of programmes implementing Option B/B+ and targets MOH staff and M&E or Strategic Information specialists at the national level. Four key facets of an optimal M&E system are described, as well as critical operations research questions to consider prior to implementing Option B/B+.

Countries should have an M&E plan to monitor progress of national EMTCT efforts through 2015, including subnational monitoring [*See Global M&E Framework and strategy document (WHO, 2012)*.] National M&E systems should also meet the minimum standards outlined in the UNAIDS (2008) document *12 Components of a Functional National HIV M&E System.*

9.2 Six Key Points for M&E Systems

Key Point 1

PMTCT M&E and ART M&E systems must be integrated

Traditionally, PMTCT services are delivered in ANC sites and ART is initiated and delivered at ART sites using separate M&E systems and tools that typically do not link women across service delivery areas effectively. Given that Option B+ requires that ART services be integrated into the MNCH platform, M&E systems for ART and PMTCT will also need integration for accurate reporting of pregnant women newly initiating ART. An "integrated M&E system" is defined as a system where an individual patient can be followed from enrolment in first ANC visit through followup in ART services using a unique ART patient identification number to link a patient across registers, facilities and patient held cards across different service delivery areas.

Questions for country discussion:

- How will information on ART initiation be recorded if ART is initiated in ANC?
- If ART is not initiated in ANC, how is the woman's pregnancy clearly indicated in the ART register to permit tracking of pregnant women?
- How will the number of pregnant women initiating ART be aggregated for national reporting across service delivery models (e.g., pregnant women initiating ART in ANC or ART)?
- Will there be a single, consistent data source for pregnant women initiating ART for monthly aggregation and reporting? (Can the current drug-dispensing register be used to identify pregnant women starting and continuing ART?)

Key Point 2

Each pregnant woman should be assigned a unique patient identifier which permits tracking over time, and across service delivery areas when women's long term care is transferred from MNCH to ART and also links a mother to her infant.

Questions for country discussion:

- **Patient identifier (PID) for pregnant women:** Is there a single unique patient identifier for a pregnant woman? What programme does it represent (e.g., ANC number? MNCH number? Maternity number? ART number? Pre-ART? Other?) Who assigns the PID? Where is this number recorded? Registers, patient card, infant card?
- **Linking women across services and referral to ART:** Does the PID link a woman across services? Or does each programme assign a new PID? For example, does the woman use the same PID at ANC, maternity, postnatal care and ART? If the woman is referred to an ART programme at a different facility, is she assigned a new PID?
- **Linking mother and HIV exposed infant:** Is mother's PID recorded on infant records? Does infant receive a unique PID for tracking? Is the infant PID for HIV exposed infant follow up care (e.g., co-trimoxazole prophylaxis, PCR testing) linked with her ART number if she is determined HIV-infected?

Key Point 3

National M&E tools and methods must include longitudinal monitoring of pregnant women initiating Option B/B+ and mother-infant pairs in order to evaluate whether women who initiate ART during pregnancy remain on ART, and that infants receive clinical care, including determination of final HIV status.

Questions for country discussion:

- Are current PMTCT tools visit based or longitudinal? If visit-based, how feasible is it to introduce longitudinal registers?
- Does the current M&E system report retention of PMTCT or ART cohorts? What is the feasibility of reporting retention of pregnant and postpartum women on ART, 6, 12 and 24 months after ART initiation? Is there a system to identify women and infants who are lost to and require follow up? What is the feasibility of introducing a national indicator on retention of pregnant women and mother-baby pairs?
- Does M&E system use cohort reporting? [*see Malawi National M&E tools for useful examples*]

- How does the national programme intend to monitor retention following implementation of Option B+:
  - Retention of pregnant women 6, 12 and 24 months after initiating Option B/B+ treatment
  - Retention of women enrolled in PMTCT (possible outcomes: attendance at 4 ANC visits, ARV prophylaxis/ART dispensed or initiated; facility deliveries, infant ARV doses provided)
  - Retention of mother-baby pairs from first ANC visit through determination of final infant HIV status at 18 months
  - Retention of HIV-exposed infants (HEI) in follow up care and linkage to ART for children determined to be HIV-infected
  - Retention of HIV infected infants and children who started ART

Key Point 4

Data should be reviewed quarterly at district level and at least annually at national level and results used for quality improvement and programme adjustment.

Questions for country discussion:

- Is there an annual data review/validation process that includes M&E and programme personnel?
- Is there a system for using data for quality improvement at each level of the system? What mechanisms exist for programme and M&E staff to collaboratively develop tools and training materials to optimize documentation of Option B+ critical at the planning phase?
- Is there a system for disseminating and reviewing subnational data and using data for programme review and progress towards targets?
- Key indicators for programme review might include: 1) What is the retention rate of pregnant women 6 and 12 months after ART initiation? 2) What proportion of HIV exposed infants are enrolled in HEI follow up care and received co-trimoxazole and EID by 8 weeks of age; 3) What proportion of women initiating ART obtain CD4 (or VL) testing within 6 months of initiation; 4) What is the proportion of HIV exposed infants from the PMTCT cohort who have a final status at 18 months?
- If country sees the need for revising tools (registers, patient cards for ART, introduction of longitudinal registers for mother-infant pair, HEI follow up), what is the process for reviewing and revising tools? Timeframe?

- Have the financial costs for annual data review meeting, revising tools, printing registers, patient cards, training materials and training sessions been included in programme budget?

Key Point 5

Routine data quality assurance activities should be included in programme implementation plans in order to accurately measure achievements of a new programme. Assessing the accuracy and completeness of routine indicators is a key activity.

Questions for country discussion:

- Data quality:
  - Are data quality audits or assessments conducted routinely (at least annually) at facility, district and national level?
- Will districts verify that facilities are using the most recent version of the national data collection tools? Are all staff trained on how to use the data collection tools?
- How do current data collection tools impact data quality? What steps are taken to avoid double counting of women receiving services at different service delivery areas?
- How will districts validate the accuracy of monthly programme data after implementation of Option B/B+? Will this require updating current methods for validation?
- Quality of clinical services:
  - What site supervision systems are currently in place to ensure quality service provision and data collection? Is the routinely collected M&E data used for assessment and improvement of quality of care? What other measures are used to assess quality of care in-country?
- Have health care workers been trained in latest national ARV guidelines? Are current ARV regimens available at the facility? Have registers and patient tools been updated to reflect latest national ARV guidelines? Is there a process in place to do so?

Key Point 6

Operations research questions should be defined from the onset and integrated into programme roll-out.

There is currently limited evidence to guide many decisions about programme implementation. Where possible, comparisons of different service delivery approaches can be built into operational plans, although specific protocols and additional data collection may be required. MOH staff, M&E specialists and programme implementers at the national level should prioritize programme implementation questions and coordinate operations research efforts among donors as they roll-out their programmes.

Questions for country discussion:

- Data collection:
  - Is there a data collection mechanism to review operational bottlenecks?
  - Do any data gaps exist? What data needs exist beyond data captured within routine monitoring? Is it feasible to establish sentinel cohort monitoring systems to provide more comprehensive review of programme outcomes and impact of Option B+ implementation?
- Integration and human resources:
  - How can the workforce and configuration of MNCH clinics be organized to manage the additional tasks and workload involved in initiating HIV-infected pregnant women on lifelong ART and engaging them in care?
  - How does increased workload affect other MNCH services?
- Acceptability/Feasibility of lifelong therapy:
  - What regimen options exist for HIV-infected pregnant women who decline lifelong ART?
  - Are there any myths and misconceptions around ART? What are community, facility and health care worker perceptions of Option B+?
- Programme outcomes:
  - Birth outcomes and toxicity monitoring of women and exposed infants since there is limited experience with the use of the recommended drugs in pregnancy, particularly first trimester exposures.
- Retention/Referral:
  - How will facilities with PMTCT programmes, but no ART services ensure functional linkages?
  - How can women and their infants be tracked across services delivery sites (i.e., ANC, MNCH, HIV clinics) to ensure an uninterrupted continuum of care?
  - What are the roles/functions of peer educators, community health workers and other community organisations to optimize retention in ART for post-partum

women? And what model of community support works best?

- Adherence:
  - What are the factors associated with ART adherence?
  - What is the best way to measure adherence in the absence of viral load monitoring?
- Equity:
  - How can male partner access to ART be assured in a resource constrained environment?
  - How will community messaging address the conflicting messages that all pregnant HIV infected women should start on ART for life for the benefit of themselves, their babies and partners, but other adults including partners and non pregnant women need to wait for decreased CD4 counts before starting ART?
- Logistics:
  - How can commodity forecasting be optimized to ensure an uninterrupted supply of test kits, ARV drugs, etc.?
  - What is the best configuration of clinic space and flow when integrating ART services into ANC?

Table 1: Key M&E discussion points by service delivery model

	MODEL 1	MODEL 2	MODEL 3	MODEL 4
ART INITIATION	ANC	ANC	ANC	ART
ART FOLLOW UP	MNCH until child is 18 months of age	ANC thru delivery, then transfer in to ART clinic	ANC thru postpartum visit at 6 weeks, then transfer in to ART clinic	ART
UNIQUE PATIENT ID ASSIGNED	ANC	ANC	ANC	ART
PROCEDURE FOR REGISTERING PREGNANT WOMAN ON ART	Transfer in	Transfer in	Transfer in	New patient
TO AVOID UNDERESTIMATION OF PREG WOMEN INITIATING ART	Record ART regimen, initiation date	Record ART regimen, initiation date	Record ART regimen, initiation date	Record pregnancy status
MEASURE RETENTION OF WOMEN ON ART AT 6 MONTHS	MNCH	ART	ART	ART
FOLLOW UP OF HIV-EXPOSED INFANT	MNCH (care for infant coordinated with ART follow up visits for mother)	HIV exposed infant follow up clinic/ Immunisation/ Under 5 clinic	HIV exposed infant follow up clinic/ Immunisation/ Under 5 clinic	Immunisation/ Under 5 clinic
MEASURE RETENTION OF MOTHER-INFANT PAIR AT 12 MONTHS OF AGE	MNCH mother and infant patient records	Longitudinal/ Integrated mom-baby register	Longitudinal/ Integrated mom-baby register	Longitudinal/ Integrated mom-baby register