

PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV IMPLEMENTATION TOOLKIT

Authors: Beatriz Alonso, Esther C. Casas, Laura Moreto, Kemi Ogundipe, Charles Ssonko, Nelly Staderini, Elizabeth Szumilin, Gilles Van Cutsem.



Editor: Aurelie Nelson

Copyeditor: Liz Sparg

Designer: Orli Setton

Contributors: Laboratory Working Group; Monitoring and Evaluation Group; Nutrition Working Group; Paediatrics Working Group; Sexual and Reproductive Health Working Group; Patient Support Education and Counseling Contact Group; Melissa McRae; Cristian Casademont

This guidance document was tested by various Médecins Sans Frontières field members in the different occupational centres and we owe them a big thank you for their valuable feedback.

For any feedback or comments, please contact

Esther.casas@joburg.msf.org

2021

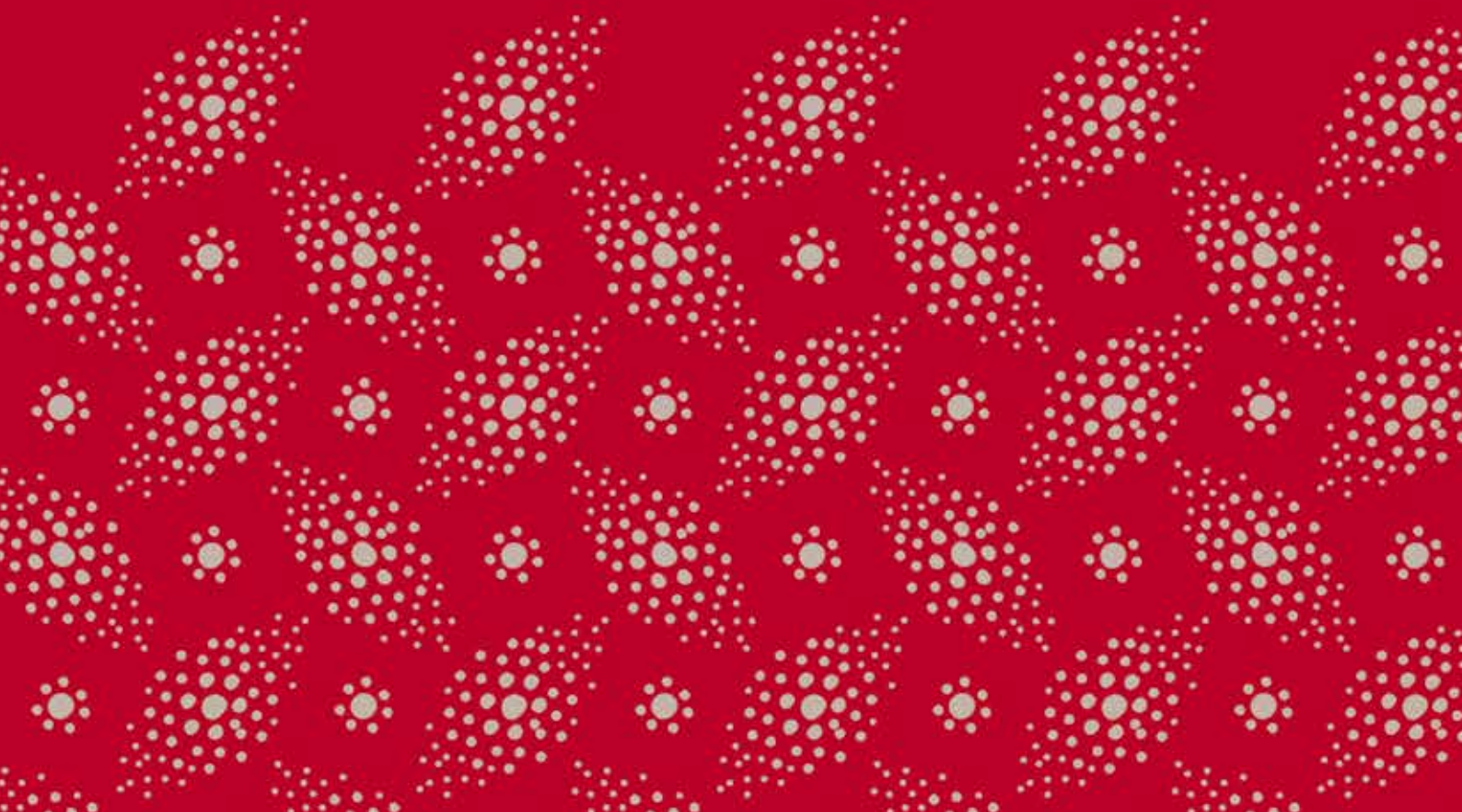


TABLE OF CONTENTS

LIST OF RESOURCES	4
ABBREVIATIONS	6
INTRODUCTION	8
SECTION 1: DESCRIPTION OF INTEGRATION OF SERVICES	10
1.1 INTEGRATION OF PMTCT CARE IN ROUTINE MATERNAL AND CHILD HEALTH SERVICES: BENEFITS, CHALLENGES AND SOLUTIONS	10
1.2 STEPS FOR INTEGRATION OF CARE	11
1.2.1 ASSESSMENT TOOL	11
1.2.2 HUMAN RESOURCES	12
1.2.3 RE-ORGANISATION OF FLOW	14
1.2.4 ASSESSMENT OF REFERRALS	15
1.2.5 MEDICATION ORDER	16
1.2.6 TOOL FOR PLANNING OF INTERVENTION	16
1.2.7 EXAMPLES OF STATIONERY	16
1.2.8 INDICATORS	16
SECTION 2: COMPREHENSIVE INTEGRATED PACKAGE OF CARE	17
2.1 HOW TO USE THIS PART OF THE GUIDE	17
2.2 ANTENATAL CARE	18
2.2.1 ESSENTIAL ACTIVITIES DURING ANTENATAL CARE	18
2.2.2 HIV TESTING (ESSENTIAL)	19
2.2.3 IF HIV NEGATIVE	20
2.2.4 IF HIV POSITIVE	21
2.2.5 FURTHER PREVENTION OF HIV AND OTHER DISEASES (ESSENTIAL – ALL WOMEN)	24
2.3 DELIVERY	25
2.3.1 FLOW DIAGRAM OF LABOUR	25
2.3.2 MATERNAL HIV TESTING (ESSENTIAL)	26

2.3.3 FURTHER PREVENTION OF HIV AND OTHER DISEASES (ESSENTIAL – FOR ALL WOMEN)	26
2.3.4 CARE FOR HIV-EXPOSED INFANTS	26
2.4 POSTNATAL CARE	28
2.4.1 CHALLENGES FACED IN DELIVERING POSTNATAL MATERNAL AND INFANT CARE AND SOLUTIONS	28
2.4.2 DESCRIPTION OF INTEGRATED CARE FOR MOTHERS AND INFANTS	30
2.5 FURTHER INTEGRATION OF SERVICES	34

SECTION 3: CONTEXTUALISING PMTCT TO SPECIFIC SITUATIONS 35

3.1 HIGH PREVALENCE SETTING WITH HIGH ART COVERAGE	35
3.2 HIGH HIV PREVALENCE SETTING WITH LOW ART COVERAGE	35
3.3 COMPLEX HUMANITARIAN CRISES	36
3.4 SEX WORKERS	37
3.5 CHILDREN	38

SECTION 4: OTHER STRATEGIES FOR RETENTION IN CARE 39

4.1 PEER OR MENTOR SUPPORT AND LAY WORKERS OR CHW SUPPORT	39
4.2 TRACING MOTHERS OR INFANTS WHO DISENGAGED FROM CARE	39
4.3 DIFFERENTIATED MODELS OF CARE	40
4.4 MEN’S INVOLVEMENT	41
4.5 COMMUNITY ENGAGEMENT	41
4.6 USE OF MOBILE PHONES IN HEALTH CARE	42

CONCLUSION 42

Annex 1: Assessment tool	43
Annex 2: List of trainings available	43
Annex 3: Referral assessment tool	44
Annex 4: HIV medication order	44
Annex 5: Tool for planning of intervention	44
Annex 6: Examples of stationery	44
Annex 7: List of indicators	45
Annex 8: Antenatal care flowchart	45
Annex 9: HIV testing flowchart	46
Annex 10: PMTCT counselling summary	46
Annex 11: Couple testing counselling guidelines	47
Annex 12: Examples of educational tool on HIV testing in pregnancy	47
Annex 13: Postpartum contraception: MSF Contraceptive guidelines- coming soon, contact your SRH referent	48
Annex 14: PrEP implementation tools used in Eswatini	49
Annex 15: Example of birth plan	49
Annex 16: TB screening and referral	49
Annex 17: Delivery flowchart	50
Annex 18: Risk stratification checklist	50
Annex 19: Example of PNP administration counselling	50
Annex 20: Early infant diagnosis flowchart	51
Annex 21: Examples of integrated maternal and infant care	52
Annex 22: Postnatal flowchart	54
Annex 23: Triage system	54
Annex 24: Integrated management of childhood illnesses booklet	55
Annex 25: Growth chart for children.....	55
Annex 26: Development milestones	56
Annex 27: Infant and young children breastfeeding toolkit:	56
Annex 28: Example of health education for infant and child feeding messages	56
Annex 29: Counselling on danger signs for new-borns	56
Annex 30: Counselling on danger signs for children 1 month to 5 years	57

LIST OF RESOURCES

HOW TO USE THIS TOOLKIT



In each section, tools are available to be downloaded as an annex. **Click** on this icon when you want to download the annex.

Please note should this not work you may have removed the PDF or the annex from the same folder. For the annexes to open everything needs to be kept in the folder that was downloaded. If you have moved something by mistake simply place it back in the folder and it should work again. Please watch the video in the folder if you need more clarifying information or read the word document.



For external resources, or guidelines, used in this document, click on the links that are [underlined and in blue italics](#) and it will take you to the corresponding website.

SECTION 1:

TOOLS NECESSARY FOR INTEGRATION OF SERVICES

Annex 1: Assessment tool	43
Annex 2: List of trainings available	43
Annex 3: Referral assessment tool	44
Annex 4: HIV medication order	44
Annex 5: Tool for planning of intervention	44
Annex 6: Examples of stationery	44
Annex 7: List of indicators	45

SECTION 2:

GUIDELINES TO BE USED IN WHOLE SECTION

[MSF PMTCT guidelines](#)

[MSF TB/HIV clinical guide for primary care MSF Adults](#)

[PSEC guidelines for HIV/TB](#)

[MSF obstetric and neonatal guidelines](#)

2 ANTENATAL CARE

Annex 8: Antenatal care flowchart	45
Annex 9: HIV testing flowchart	46
Annex 10: PMTCT counselling summary	46
Annex 11: Couple testing counselling guidelines	47
Annex 12: Example of educational tool on HIV testing in pregnancy	47
Annex 13: Postpartum contraception: MSF Contraceptive guidelines- coming soon, contact your SRH referent	48
Annex 14: PrEP implementation tools used in Eswatini	49
Annex 15: Example of birth plan	49
Annex 16: TB screening and referral	49

3 DELIVERY

Annex 17: Delivery flowchart	50
Annex 18: Risk stratification checklist	50
Annex 19: Example of PNP administration counselling	50
Annex 20: Early infant diagnosis flowchart	51

4 POSTNATAL CARE

Annex 21: Examples of integrated maternal and infant care	52
Annex 22: Postnatal flowchart	54
Annex 23: Triage system	54
Annex 24: Integrated management of childhood illnesses booklet	55
Annex 25: Growth chart for children	55
Annex 26: Development milestones	56
Annex 27: Infant and young children breastfeeding toolkit:	56
Annex 28: Example of health education for infant and child feeding messages	56
Annex 29: Counselling on danger signs for new-borns	56
Annex 30: Counselling on danger signs for children 1 month to 5 years	57

5 FURTHER INTEGRATION OF SERVICES

[SRH toolkit](#)

[mhGAP Intervention guide](#)

[MSF MH guide](#)

ABBREVIATIONS

ANC: antenatal care

ART: antiretroviral therapy

ARV: antiretroviral

AZT: zidovudine

CE: community engagement

CHW: community health worker

CRAG: cryptococcal antigen test for detection of cryptococcal meningitis

CTX: cotrimoxazole

DBS: dried blood spot

EID: early infant diagnosis

EPI: extended programme of immunisation

ePNP: enhanced postnatal prophylaxis

HIV: human immunodeficiency virus

HE: health education

HP: health promotion

IMCI: integrated management of childhood illnesses

IPD: in-patient department

MOH: ministry of health

MNCH: maternal, newborn and child health

MTCT: mother-to-child transmission

OI: opportunistic infection

OPD: out-patient department

PCR: polymerase chain reaction (also sometimes referred to as NAAT testing)

PMTCT: prevention of mother-to-child transmission of HIV

PNC: postnatal care

PNP: postnatal prophylaxis

PSEC: patient support, education and counseling

POC: point-of-care

PREP: pre-exposure prophylaxis

SRH: sexual and reproductive health

STI: sexually transmitted infection

TB-LAM: tuberculosis-lipoaribomannan assay

TB: tuberculosis

TPT: tuberculosis prophylactic treatment

VCT: Voluntary HIV counselling and testing

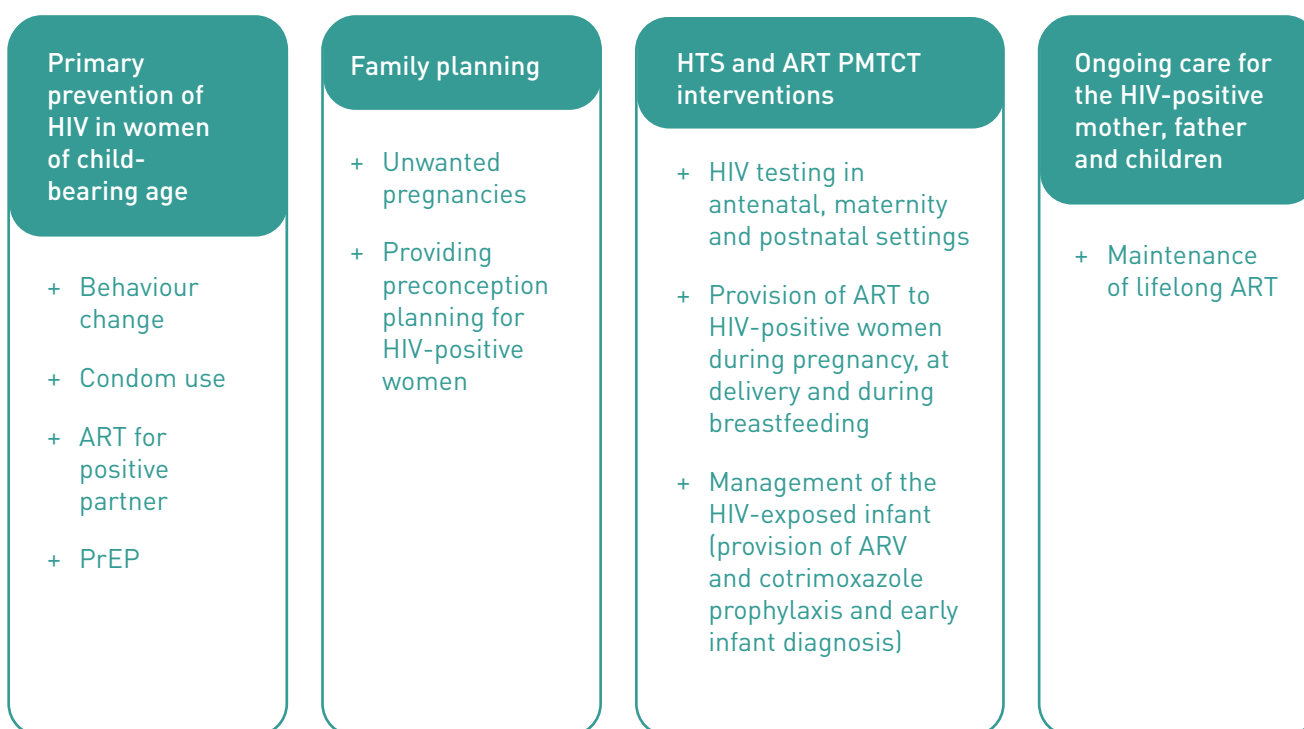
VL: viral load (HIV RNA – ribonucleic acid – viral load)

INTRODUCTION

Prevention of mother-to-child HIV transmission (PMTCT) has been a success in many respects but there is still much to do to eliminate mother-to child transmission (MTCT), particularly in low antiretroviral therapy (ART) coverage areas and in the postnatal phase. The success of PMTCT is highly dependent on the availability and accessibility of patient-centred care, which enables women and their families to take informed decisions about their health and the health of their infant. For this reason, it is recommended to have a patient-centred approach when implementing PMTCT. PMTCT success is also linked to the partners' involvement, as well as to community acceptance of HIV.

Traditionally, PMTCT is described in four pillars¹. In this toolkit, we would like to emphasise the importance of the integration of services to include all pillars of PMTCT.

Figure 0.1 The pillars of PMTCT programming



¹ [MSF HIV/TB Guide for Primary Care \(2018 with 2021 updates\)](#)

TARGET AUDIENCE:

We have written this toolkit to assist:

- + programme managers to identify and integrate programmes of care in PMTCT;
- + health care workers to implement the programmes.

The toolkit can be used in programmes already involved in PMTCT or that aim to start PMTCT.

OBJECTIVES OF THE TOOLKIT:

- + to provide tools to facilitate integrated PMTCT services in antenatal, delivery, postnatal and paediatric settings (ensuring the integration of maternal and infant care);
- + to allow adaptation of the services to a variety of complex humanitarian contexts and key populations; from high prevalence, high ART coverage settings to high prevalence, low ART coverage settings.

NB: This toolkit does not replace available PMTCT clinical guidelines. It is a programmatic guide and a compilation of tools that should be used in conjunction with existing MSF and Ministry of Health clinical guidelines. Links to relevant documents are included in the toolkit. It is recommended to have the support of an experienced staff to build the PMTCT programme.

CONTENTS:

Each of the following sections can be used independently but we recommend starting with Section 1.

- + **Section 1:** Provides tools to design and implement integration of PMTCT in routine maternal and child health services in a stepwise manner.
- + **Section 2:** Provides tools for specific services (antenatal, maternity/delivery and postnatal).
- + **Section 3:** Contextualises the elements described in the second section.
- + **Section 4:** Provides further strategies to improve retention in care of the mother-infant pair.

SECTION 1: DESCRIPTION OF INTEGRATION OF SERVICES

1.1 INTEGRATION OF PMTCT CARE IN ROUTINE MATERNAL AND CHILD HEALTH SERVICES: BENEFITS, CHALLENGES AND SOLUTIONS

Integration of PMTCT with maternal, new-born and child health services at all levels of care (community, primary, secondary, tertiary) has been recommended by various recognised international bodies^{2,3} and implemented with MSF support mostly in the antenatal period (ANC).

Table 1.1 Recognised benefits and challenges of integration

<p>Recognised benefits:</p> <ul style="list-style-type: none">+ for patients:<ul style="list-style-type: none">✓ less waiting time✓ fewer visits to health facilities✓ holistic care from one provider✓ increased satisfaction+ for health care workers:<ul style="list-style-type: none">✓ more work satisfaction✓ able to follow patient's full medical needs✓ acquire multidisciplinary skills+ for the health system:<ul style="list-style-type: none">✓ improved efficiency at health facility✓ rationalisation of resources	<p>Recognised challenges:</p> <ul style="list-style-type: none">+ for health care workers:<ul style="list-style-type: none">✓ need to understand the reasons for integration, to adapt patient flow and services✓ perception that it takes more time✓ additional burden of activities+ for the health system:<ul style="list-style-type: none">✓ negative impact on documentation and monitoring and evaluation (i.e. more registers)✓ more training needed for health care workers✓ redirected health education activities⁴
---	---

² UNAIDS. 2015 progress report on the global plan towards the elimination of new HIV infections among children and keeping their mothers alive. https://www.unaids.org/en/resources/documents/2015/JC2774_2015ProgressReport_GlobalPlan

³ [MSF Strategic Framework for Responding to the HIV Epidemic: 2019 – 2023.](#)

⁴ MSF. 2014. Lessons learnt for the implementation of PMTCT integrated services in Nsanje District

However, it is possible to overcome many of these challenges and, with this toolkit, we aim to give you tools to facilitate the integration of care.

SOLUTIONS TO THOSE CHALLENGES

Solutions will come from first assessing your context, in particular the **human resources** that are available and the capacitation that will be needed. There are different models to achieve integration, depending on your set-up:

- + In a “**one-stop shop**”, one key health worker, often a midwife, provides all services. This model is very “woman-infant pair” centred, but it can be demanding.
- + In other contexts, some activities (such as patient support, education and counselling; and patient tracing) are “**task shifted**” (delegated, where appropriate, to less specialised health workers).

These considerations, as well as understanding what **referral services** are available, will dictate how to re-organise the **patient flow**. Finally, use the helpful tools provided in this toolkit, such as the **planning tool**, **drug order tool**, examples of **stationery** and **monitoring and evaluation** tools (links or list of indicators).

PMTCT integration in your project **does not need to happen all at once**. Take your time. Integration can be designed as a progressive, stepwise approach. Plan activities according to existing resources and gradually add components of care progressively. The components of the packages of care, described in Section 2, are ranked from basic/essential to desirable (relevant for certain contexts), allowing you to build a stepwise strategy that suits your project’s needs and resources.

1.2 STEPS FOR INTEGRATION OF CARE

For integration of care of the different PMTCT activities (as detailed in Section 2), we recommend following the steps below, in the order described:

1.2.1 ASSESSMENT TOOL: ANNEX 1

Assess your project’s capacity. The assessment will focus on understanding partnerships (MSF, MoH, other partners) and human resources capacity. It should happen at three levels: at the **country level** to understand epidemiology and context, at the **catchment area level** and at the **project** level to understand provision of services.

When you use the assessment tool, particularly focusing on the postnatal aspect, consider the following questions:

- ✓ What paediatric services are available (under-5 clinic, immunisation, outpatient department, inpatient department, nutrition, follow-up of premature babies, etc.)?
- ✓ Who is responsible for paediatric services (MoH, MSF, other stakeholders)?
- ✓ Where does paediatric HIV care happen?
- ✓ Do mothers get postnatal follow-up, and for how long?
- ✓ Where do HIV-positive mothers get followed up?
- ✓ Who runs the follow-up services (MSF, MoH or other actors) for HIV-positive mothers?
- ✓ What is the quality of the services (paediatric, HIV, follow-ups)?
- ✓ What training and number of staff are needed in each service?

1.2.2 HUMAN RESOURCES

HUMAN RESOURCES DISTRIBUTION

Distribute your human resources. In this guide, we describe who could do which activity and what tasks can be shifted to less specialised health workers or to lay workers⁵ when possible.

Not every type of activity needs a dedicated staff member and one staff member can carry on more than one type of activity. It is, however, necessary to be aware of workloads and of capacitating staff to do new skills when needed.

The different job profiles described and their potential role in PMTCT are:

- + **Midwives/nurses:** As main actors in antenatal care (ANC) and maternity and postnatal services, midwives and nurses are key to the integration of PMTCT services, and they will carry the responsibility of the clinical consultations. They should be trained to include PMTCT in their services.
- + **Medical doctors/clinical officers/medical assistants:** People with this profile can act as project clinical advisors (depending on expertise), supporting the management of complicated cases.

⁵ Lay worker definition (WHO): "Health worker who performs functions related to health care delivery and is trained in some way in the context of an intervention, but who has not received a formal professional or paraprofessional certificate or tertiary education degree".

- + **Counsellors:** In some settings, there may be a staff member who is dedicated to counselling. If this is the case, they can integrate counselling requirements of PMTCT to their other activities. However, a dedicated job profile is not essential, and patient education and counselling can be delivered to beneficiaries – after training – by any health care worker, lay worker or peer educator. It is important to consider who will provide regular HIV/ART training as well as supportive and systematic supervision to ensure quality of care.
- + **Community health workers (CHWs):** As CHWs provide a link between the clinical services and the community, they can support or implement the health education, community engagement and tracing activities.
- + **Mentor mothers/peer educators/counsellors/supporters:** People living with HIV are often better accepted by their peers (particularly mothers) and can work as lay counsellors, or support or implement health education and community engagement activities.
- + **Laboratory technicians:** Laboratory personnel will be involved in running some laboratory tests used in the PMTCT programme.

Use **job descriptions, clear briefings** and, if needed, an **organisational chart** to show the levels of responsibility and accountability and the relationships between the different positions.

Expected number of staff needed: For the full calculation, please refer to the integrated TB/HIV guidelines⁶. **(NB: This is an estimate and is not prescriptive.)**

⁶ [MSF New TB/HIV integration guidelines 2020](#)

Table 1.2 Expected number of staff needed based on PMTCT cohort size

Component	0–100 patients in PMTCT cohort	100–500 patients in PMTCT cohort	>500 patients in PMTCT cohort
PMTCT and ANC/delivery	1–2 midwives trained	1–2 midwives trained	>2 midwives trained 1–2 clerks
Monitoring and evaluation			
PMTCT and postnatal care	1–2 midwives or nurses trained	1–2 midwives or nurses trained	>2 midwives or nurses trained
Prevention	1–2 counsellors, part-time to full-time (think also of peer mothers)	1–2 counsellors, part-time to full-time (think also of peer mothers). If needed separate VCT and adherence.	Dedicated prevention staff member
Patient education and counselling	1–2 counsellors or trained lay workers	1–2 counsellors or trained lay workers	>2 counsellors
Health Promotion (HP) and community engagement (CE)	1–2 HP and CE staff part-time to full-time	1–2 HP and CE staff part-time to full-time	2 HP and CE staff
Laboratory	1–2 lab technicians trained or referral	1–2 lab technicians trained or referral	>2 lab technicians

TRAININGS AVAILABLE AND NEEDED: ANNEX 2 

Assess what trainings are available and what is needed.

1.2.3 RE-ORGANISATION OF FLOW

Re-organise the flow. When doing this, it is important to **get the full clinic buy-in** for better acceptance of the changes, sustainability and easier exit. If you are working in partnership with other non-governmental organisations or the MoH, plan to have a **workshop** that includes them and, when indicated, members of the community.

Example of workshop plan:

- + **Buy-in:** How to get the buy-in from all staff (including non-medical staff such as clerks, receptionist, security etc), from management and from the community, including **stigma** discussion.

- + **Flow:**
 - What is the existing flow and mapping of activities? (For the mapping of activities, refer to 1.2.1 Assessment tool)
 - Where you want to get to? For example: How to integrate maternal and infant care in the postnatal phase – what stigma could exist? How to take stigma and culture into account when building the flow.
- + Realistic **timelines:** How to get there, step by step.
- + **Who will be doing what:** What referrals are available?
- + **Stationery:** Review what is existing (registers, patient card, etc.), what needs to be used and how they fit in with the flow.
- + **Medication delivery:** How will it work and when to order it?
- + **Monitoring and evaluation:** How will you monitor the activities' progress (agree on indicators with the clinic)?

1.2.4 ASSESSMENT OF REFERRALS: ANNEX 3

Assess which activities to integrate and when to refer. The assessment shows whether there are HIV/PMTCT/postnatal activities, etc. available close by through the MoH and/or other actors. Depending on those referral options, and after an assessment of the quality of care provided, you can choose which activities to integrate into your project and when to refer. Keep in mind that if you choose to refer, you should have a good idea of the **quality of care in the referral site** and a **plan on how to follow up** on referrals. If you identify that the referral options are not appropriate (some essential services are not available or the quality of care is questionable), we encourage you to discuss it further with your HIV/TB care and SRH referents.

1.2.5 MEDICATION ORDER: ANNEX 4

Order the medication. For more information on **how to make the order**, there is an intersectional dedicated tool to assist with forecasting and/or ordering the drugs needed for small integrated HIV programmes (including adults and children). The tool includes a PMTCT tab to calculate the needs for PMTCT women and for infant HIV prophylaxis. Other drugs needed for the programme (e.g. for contraception and for opportunistic infections, or for paediatrics) can be ordered with the rest of the project drugs.

The HIV drug order calculation tool is accessible through the Sharepoint link for staff members with an MSF username and password. If you do not have these log-in details, please make contact with your coordinator or HIV/TB referent.





1.2.6 TOOL FOR PLANNING OF INTERVENTION: ANNEX 5

Use a planning tool to plan main activities, chronogram and training to be delivered. Annex 5 is an example of a planning tool for an existing ANC with no PMTCT integrated yet. Each project should adapt it to suit their own context and needs.



1.2.7 EXAMPLES OF STATIONERY: ANNEX 6

Use and adapt the necessary stationery.

a. Patient card: Some examples/templates are provided.

- + Antenatal
 - maternal card 
 - HIV care card 
 - child health card 
- + Postnatal integrated tool for HIV-positive mothers and HIV-exposed babies 

b. Registers

- ANC register 
- maternity register  with HIV testing and care integrated.

In many contexts, MSF uses MoH registers for HIV testing and care, as they are well developed and used. Generally, more than one register is needed as HIV testing happens in many different locations (ANC, labour ward, PNC, child follow-up clinic, family planning clinic, HIV testing room, etc.).

1.2.8 INDICATORS: ANNEX 7

*Monitor your project's PMTCT activities, **using the indicators provided by your MSF section.** If these are not available, you can consult a list of indicators that were developed as part of the typology by the MSF HIV working group. Depending on your operations, variations to the indicators will occur.*

SECTION 2: COMPREHENSIVE INTEGRATED PACKAGE OF CARE

2.1 HOW TO USE THIS PART OF THE GUIDE

We have grouped the activities per stage of care for the pregnant women/mothers (antenatal, delivery, postnatal: see 2.2–2.4) and used the building blocks below to build tables that differentiate the **what/who/when/where** for each activity at each stage⁷. This approach follows the patient-centred framework of differentiated service delivery.

Figure 2.1 A patient-centred framework



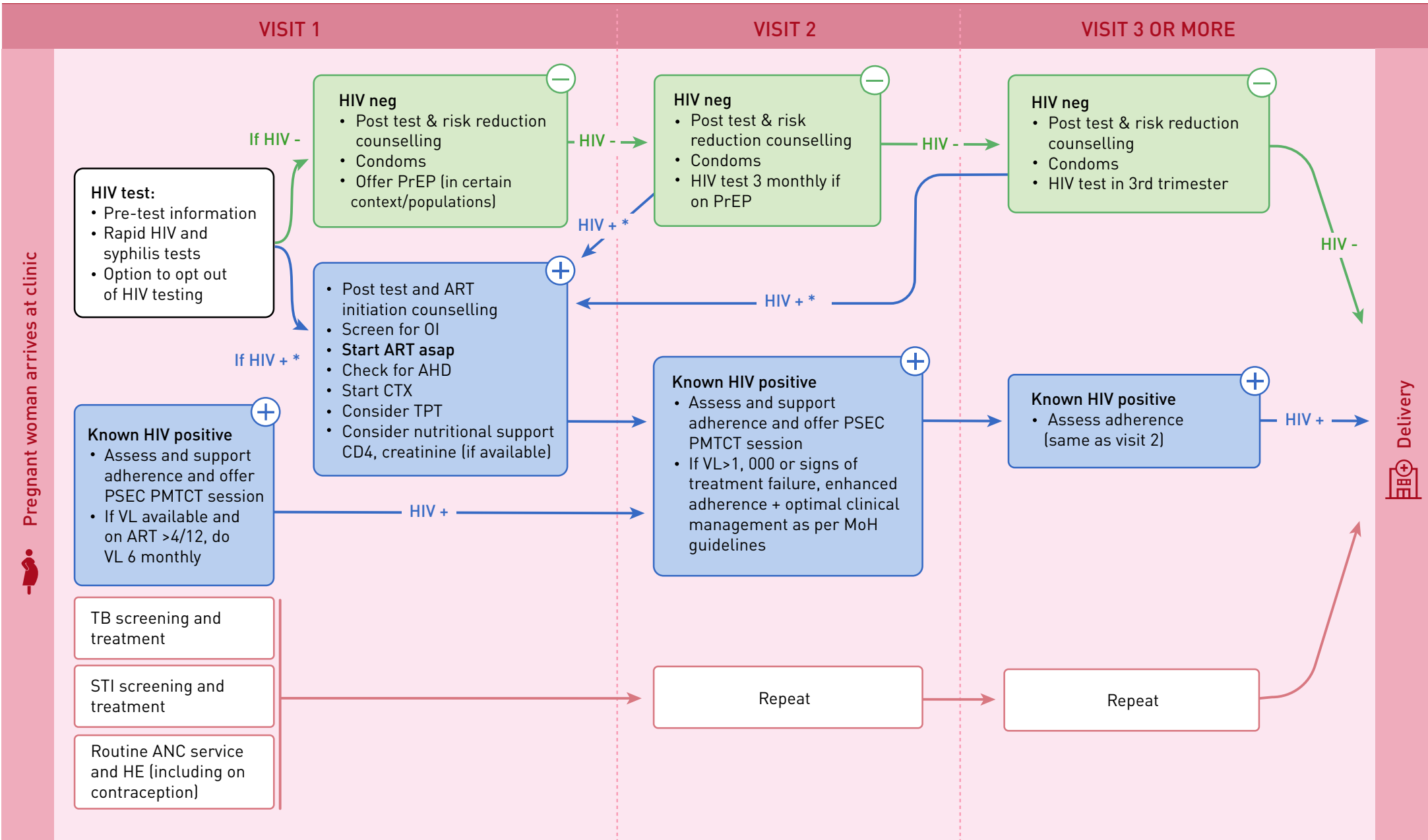
For a **stepwise implementation**, in the tables, we have written in what is **essential** or **basic** PMTCT package of care, applicable to all contexts. We have specified in **purple** the **desirable** interventions to improve quality of care, or for certain contexts/populations. In 2.5 we have looked at further SRH integration – if resources are available. There is some repetition to allow you to use the parts of the toolkit that are more relevant to you.

2.2 ANTENATAL CARE

2.2.1 ESSENTIAL ACTIVITIES DURING ANTENATAL CARE

⁷ <https://www.differentiatedservicedelivery.org/about>

Figure 2.2 Flowchart of the essential activities during antenatal care (Go to Annex 8 for printable version or download here) 



*Confirmed HIV test:
two positive rapid tests

Abbreviations:
AHD: advanced HIV disease
ANC: antenatal care

ART: antiretroviral therapy
CTX: cotrimoxazole
HE: health education

OI: opportunistic infections
PrEP: pre-exposure prophylaxis
TB: tuberculosis


TPT: tuberculosis prophylaxis treatment
STI: sexually transmitted infections
VL: viral load

2.2.2 HIV TESTING (ESSENTIAL)

Access to ANC is a major entry point for women into PMTCT care and should be encouraged as early as possible in the pregnancy for better health outcomes.

Table 2.1 HIV testing and counselling

WHAT		WHO	WHERE	WHEN			
HIV TESTING (provider-initiated testing and counselling)	Pre-testing information: Option 1 – group session (<i>preferred</i>) Option 2 – confidential session	Trained peer/ CHW/ counsellor	Option 1: Waiting space in ANC clinic Option 2: Confidential space	<ul style="list-style-type: none"> At first antenatal visit In third trimester/labour While breastfeeding, 6-monthly 			
	HIV/syphilis dual rapid test⁸ <i>(desirable)</i>				Trained counsellor/ CHW/ midwife/ nurse	Confidential space in clinic or community	Dual test at initial visit, then HIV test only (if not available, two rapid tests to be used)
	Couple testing <i>(desirable)</i>						

At the first antenatal visit, offer provider-initiated testing and counselling of HIV, with group pre-testing and display health education messages (example available here ). This approach saves time and decreases stigma by normalising the test.

NB: Remember to offer the woman the chance to opt out of HIV testing. HIV testing should not be imposed on the woman but is a choice. If she does opt out of HIV testing, explore why and provide relevant support. Continue to offer her and her partner a separate syphilis test (couple/family testing).

Alternative testing strategies for partners and families include using **oral self-testing⁹** as well as **community-based strategies** (door-to-door visits, events, etc.). Community-based activities can provide an opportunity to identify other vulnerable pregnant women (including in key populations, such as sex workers) who might not have access to ANC.



⁸ The dual HIV/syphilis rapid test is in the process of being validated intersectionally; please refer to your laboratory advisor for more details.

⁹ WHO. 2016. Guidelines on HIV self-testing and partner notification: Supplement to consolidated guidelines on HIV testing services. <https://apps.who.int/iris/handle/10665/251655>

2.2.3 IF HIV NEGATIVE

PREVENTION FOR ALL WOMEN WHO ARE HIV NEGATIVE (ESSENTIAL)

Table 2.2 Giving the HIV result

WHAT		WHO	WHERE	WHEN
GIVING HIV RESULT	Post-test counselling 	Trained peer/ CHW/ counsellor/ midwife/ nurse	Confidential space	When HIV testing done
	Contraception HE 	Trained peer/ CHW/ counsellor/ midwife/ nurse	Group/ confidential space	

In **high HIV prevalence settings or for high-risk populations**¹⁰, advise women who tested negative to repeat their HIV test in their third trimester/delivery, at their first postnatal visit, and then 6-monthly while breastfeeding. Offer PrEP when indicated or available (see Table 2.3). In **other contexts**, repeat HIV testing is encouraged.

PREVENTION THROUGH PREP (DESIRABLE IN CERTAIN CONTEXTS/ POPULATIONS)

PrEP consists of the use of daily oral tenofovir disoproxil fumarate (TDF) or co-formulated TDF/emtricitabine (TDF/FTC) to prevent HIV acquisition. PrEP has been shown to be effective in a wide range of HIV-negative populations. **In certain contexts (such as sub-Saharan Africa) or high-risk populations** with an HIV incidence > 3 per 100-person years, pregnant and breastfeeding women are at a substantial risk of acquiring HIV, and PrEP is recommended¹¹. When adherence to oral PrEP is good, there is a 51% overall risk reduction of acquiring HIV; thus protecting pregnant women/mothers and babies. Please note that other HIV prevention methods (i.e. Dapivirine ring, Cabotegravir-long acting injectable...) are being validated as additional preventive strategies. Please speak to your HIV referent for more information.

How to start a PrEP programme and what method to use is beyond the scope of this toolkit. Refer to the [MSF TB/HIV guidelines](#) and to examples of tools in [Annex 14](#) (click to view all the different downloadable files that make up Annex 14 in the appendix).

¹⁰ High-risk populations: e.g. sex worker; partners of intravenous drug user; partner in serodiscordant couple – with HIV-positive partner with unsuppressed VL, or partner with unknown status

¹¹ Preventing HIV during pregnancy and breastfeeding in the context of PrEP, WHO, 2017 <https://www.who.int/publications/i/item/WHO-HIV-2017.09>

Table 2.3 Prevention through PrEP


WHAT	WHO	WHERE	WHEN	
PrEP <i>(desirable)</i>	Create demand for PrEP	Trained peers/ CHW/ counsellors/ any clinical person	Waiting space/ consulting space/ community	When possible
	PrEP initiation: <ul style="list-style-type: none"> • Screen for HIV infection and assess need for PrEP • Perform blood tests (creatinine, hepatitis B rapid) • Start PrEP and give 1–3 months PrEP 	Nurse/ midwife	Confidential space	Initiation: Review after one month
	PrEP maintenance: <ul style="list-style-type: none"> • Give risk reduction counselling • Review adherence; integrate visits with contraception • Give 3 months PrEP and 3-monthly HIV testing 			Maintenance: Review 3-monthly

2.2.4 IF HIV POSITIVE

NEWLY DIAGNOSED HIV POSITIVE (*ESSENTIAL*)

It is critical to confirm a positive result as per Annex 9, downloadable in *Table 2.4* below. In *Table 2.4*, we refer to testing happening in ANC for better integration of care. However, in **particular contexts or populations (such as unstable contexts or marginalised women)**, decentralising of testing to the community might be needed.

Table 2.4 Giving the HIV positive result

WHAT		WHO	WHERE	WHEN	
GIVING HIV RESULT	Confirm positive result 	Trained peer/ CHW/ counsellor/ nurse/ midwife	Confidential space	As soon as possible	
	Give post-test counselling				
	Couple/ family testing (desirable)				
ART INITIATION	Give ART initiation counselling	Trained peer/ CHW/ counsellor/ midwife/ nurse		Confidential space	Same day if possible
	Check for opportunistic infections (specially for TB) and time ART initiation accordingly.	Nurse/ midwife			
	Start CTX. Consider TPT if TB screening negative. Review if need for nutritional support.				
	Give 1–3 months treatment.				
	Blood: CD4, creatinine, if suspect AHD: CrAg, TB-LAM (desirable)	Midwife/ nurse (trained)/ lab technician			


If near point-of-care (PoC) or laboratory tests are available, consider doing a CD4 cell count as well as a creatinine test at initiation and at month 4, to monitor for ART toxicity. If you suspect advanced HIV disease, consider using CrAg and TB-LAM PoC (if available) or refer if not available¹². Midwives or nurses can be trained by a laboratory technician to do these tests.

Adjust to your setting the duration of treatment to be given to the patient: 2 weeks–1 month ART is ideal to review for side effects and adherence, but in more unstable or rural contexts, 3 months ART might be more adequate. In situations where ART provision is not available at the local/ MSF facility, it is important to have a system to follow up HIV-positive women to ensure their ART initiation.

¹² [MSF HIV/TB Guide for Primary Care \(2018 with 2021 updates\)](#)

ALREADY ON ART (ESSENTIAL)

Table 2.5 Monitoring adherence to ART

WHAT	WHO	WHERE	WHEN	
MONITORING OF ADHERENCE (essential)	Assess adherence. Look for signs of clinical failure, check for opportunistic infections (e.g. TB).	Nurse/ midwife	Confidential space in ANC	At each visit
	Do VL test if VL testing is available and patient has been on ART for >4/12 months (desirable)	Midwife/nurse/lab technician		At initial antenatal visit then 6-monthly until end of breastfeeding
	If VL >1 000 or evidence of treatment failure: <ul style="list-style-type: none"> provide enhanced adherence counseling Switch to effective regimen according to national guidelines. Infant is high risk 	Counselling: Midwife/ nurse/ counsellor  Change of regimen: midwife/ nurse/ clinical assistant/ doctor		At follow-up visit
	If VL <1 000 and/or stable: <ul style="list-style-type: none"> Give 1–3 months treatment. Consider continuing ART clubs if patient is in one. Infant is low risk 	Midwife/ nurse		




If **VL is available**, it is the **best way to monitor adherence** and ART response. It is recommended to have a VL before delivery to stratify risk. A **high VL** is the **single most important risk factor for MTCT**. If the VL is Undetectable, the virus is Untransmissible (**U=U**) to the infant (while the future mother is pregnant) or to the partner. It is critical to act on a high VL result as soon as possible in pregnancy to prevent HIV transmission.

The **use of near PoC** has dramatically improved the turnaround time for results and allows us to act fast. If there is no PoC available, **a system to enable fast turnaround time of results** to the clinic and to the future mother should be implemented: for example, by giving the future mother a follow-up appointment and if she does not come back, a system to trace her back to the community (using phone, CHWs home visits, etc.).

However, **in contexts where VL monitoring is not possible**, look for clinical evidence of signs of clinical failure or immunological failure and act based on those ([HIV TB Clinical Guide for Primary Care](#)).

2.2.5 FURTHER PREVENTION OF HIV AND OTHER DISEASES (ESSENTIAL – ALL WOMEN)

Table 2.6 Antenatal follow-up, STI screening and treatment, contraception health education and TB and hepatitis B screening

WHAT		WHO	WHERE
Routine antenatal follow-up and HE (<i>essential</i>)	Routine clinical interventions, such as tetanus	Routine: Clinical services by midwife/ nurse	Confidential space and waiting space/ community
	Health education (see the example of a birth plan) 		
STI screening and treatment (<i>essential</i>)	Syphilis/HIV testing ¹³	HE and counselling by trained peer/ CHW/ counsellor/ clinician	
	Screen and test for STI symptoms		
	Risk reduction counselling and provision of condoms		
Contraception HE (<i>essential</i>)	Explain different methods of contraception post delivery 		Waiting space/ community
TB screening and treatment (<i>essential</i>)	Screen for TB symptoms and TB contacts 		Group/ confidential space
Hepatitis B screening (<i>desirable in high burden contexts</i>)	When doing HIV/syphilis test, do HBsAg rapid test at same time. Neonatal hepatitis B birth vaccination recommended to all new-borns.		Confidential space

“Prevention” in PMTCT encompasses some of the usual HIV prevention measures described

¹³ Please discuss with your laboratory advisor the availability of the dual HIV/syphilis rapid test

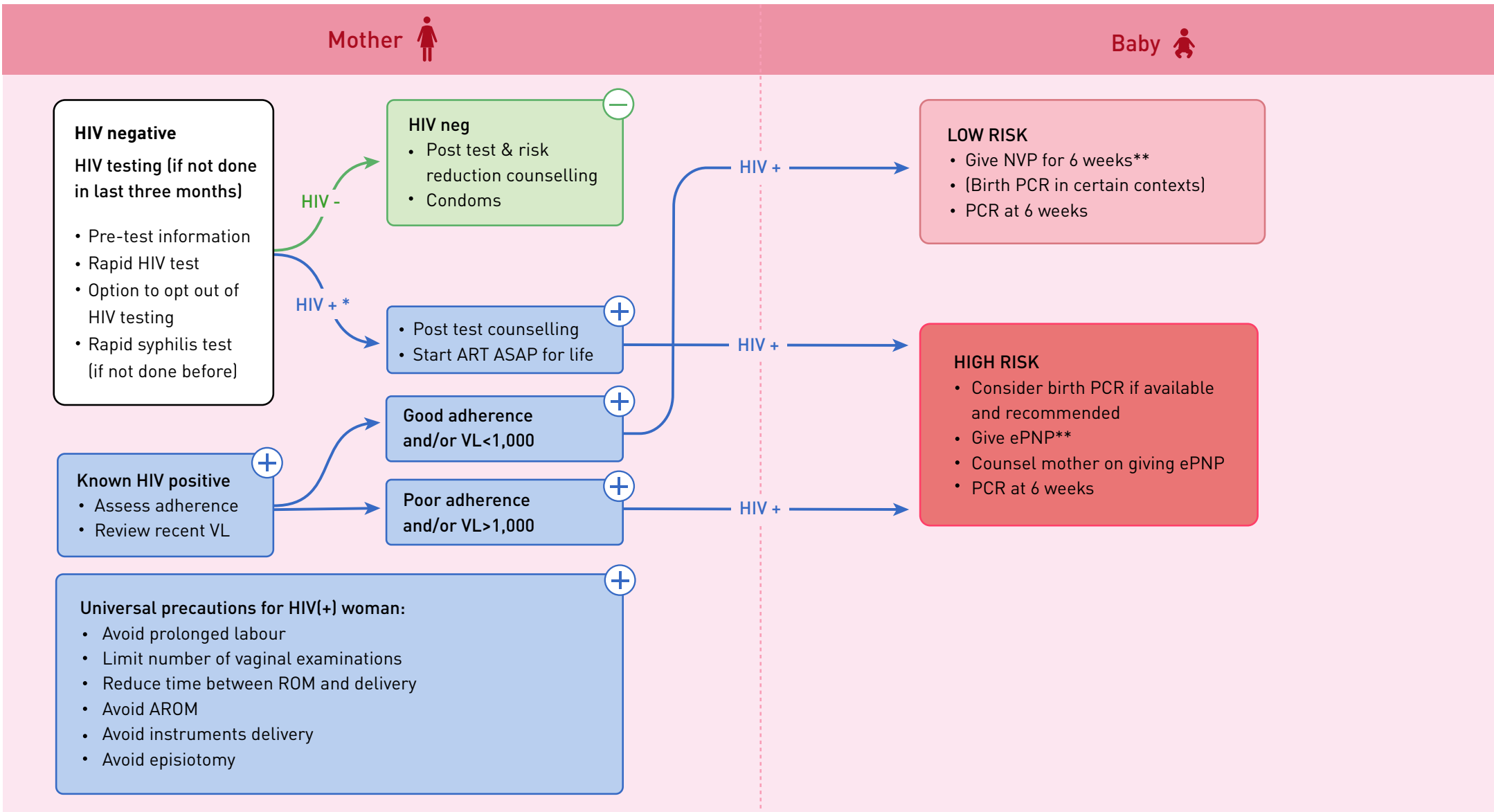
in other sections. However, “prevention” also encompasses preventing pregnancy by using contraception appropriately. As we are working towards the elimination of HIV/syphilis and hepatitis B, we describe how to implement **hepatitis B screening** in (future) mothers as well. In contexts where hepatitis B has a prevalence >5% (or where prevalence is unknown), hepatitis B screening in pregnant women should be offered with rapid HbsAg, as well as birth hepatitis B vaccination to **all new-borns**, regardless of the mother’s test result.

2.3 DELIVERY

2.3.1 FLOW DIAGRAM OF LABOUR

Figure 2.3 Delivery PMTCT flow diagram (view on the following page)

Figure 2.3 Delivery PMTCT flow diagram (Go to Annex 17 for printable version or download) 



HIV - 

HIV + 

* Confirmed HIV test: two positive rapid tests

** Refer to local MoH guidelines or MSF PMTCT 2020 guidelines

Abbreviations:

AROM: artificial rupture of membranes
 ART: antiretroviral therapy
 ePNP: enhanced prophylaxis

NVP: nevirapine
 ROM: rupture of membranes
 VL: viral load

2.3.2 MATERNAL HIV TESTING (*ESSENTIAL*)

For **women presenting for the first time** to antenatal care, refer to Section 2.2: HIV testing is critical.

In settings where there is a **high prevalence of HIV** or certain high-risk populations¹⁴, women who tested HIV negative in their first trimester (or who were not tested before) should be retested in the third trimester/labour (preferably before delivery). In settings where there is a low prevalence of HIV, re-testing is encouraged.

- + **If the HIV test is still negative**, post-test counselling should be offered.
- + **If the HIV test is positive and the woman is not yet on ART**, start ART as soon as possible (one dose in labour) and continue treatment for life. Start the new-born on enhance neonatal prophylaxis (ePNP) (see Section 2.3.4).

If the pregnant woman/mother is known to be HIV positive, follow universal precautions to prevent HIV transmission during labour. Assess what the most recent VL or adherence is (see Section 2.2), including if there was treatment interruption (or delay in ART initiation). This will be key in identifying if the neonate is low risk, or high risk and needing ePNP.

2.3.3 FURTHER PREVENTION OF HIV AND OTHER DISEASES (*ESSENTIAL – FOR ALL WOMEN*)

This is similar to what is described in Section 2.2.5

2.3.4 CARE FOR HIV-EXPOSED INFANTS



RISK STRATIFICATION OF NEW-BORNS AND PNP ADMINISTRATION

To optimise PMTCT, it is very important to give **PNP** to the infant as soon as possible after birth. However, health care workers often find the **risk stratification** of infants difficult, which can delay the process. Using a checklist may help the clinical team to decide who is high risk. Refer to Table 2.7 below.

¹⁴ High-risk populations: e.g. sex worker; partner of intravenous drug user; partner in serodiscordant couples – with HIV-positive partner with unsuppressed VL, or partner with unknown status



It is also important to understand which syrups to give at what doses and when. Giving syrups to an infant is not so easy, especially for first-time mothers. An example of counselling on syrup administration is provided in Table 2.7 below.

Table 2.7 Neonatal risk stratification and administration of postnatal prophylaxis

WHAT		WHO	WHERE	WHEN
Risk stratification	Risk stratification checklist 	Trained nurse/ midwife/ clinician	Confidential space in labour ward/ postnatal ward	After delivery
High-risk/ low-risk infant PNP administration	Weight of infant			
	Identify syrups available and doses required.			
	Counsel and demonstrate to mother how to give PNP. 			
	Give mother appointment for next contact with clinic for PNP.			

TESTING AT BIRTH: DESIRABLE IN CERTAIN CONTEXTS

Table 2.8 Testing for HIV at birth

WHAT		WHO	WHERE	WHEN
Birth HIV testing (only in certain context)	Pre-test HIV information 	Trained nurse/ midwife/ clinician	Labour ward/ maternity ward	0–2 days after birth
	PCR (near PoC or DBS)			
	Indeterminate result: Repeat PCR test			
	Negative result: PCR result counselling Give next test appointment as per EID algorithm 			
	Positive result: PCR result counselling Paediatric ART initiation			

As described in the [PMTCT guidelines](#), **birth testing should be considered only in certain settings**. For further information on this, discuss with your TB/HIV care referent. **Prioritise 6-weeks PCR**, as it identifies both antenatal and intrapartum transmissions.

Depending on the setting, consider PCR by dried blood spot (DBS) sent to a central laboratory or by near PoC. If DBS is used, it is important to ensure adequate sample transportation. It is also

important to make sure the results are received and communicated to the mother or caregiver of the infant. Strategies such as sending results via SMS¹⁵ can be used.

- + If the result is **negative**, provide appropriate counselling to ensure the mother will continue follow-up and will bring the child back for **further testing** at 9 and 18 months of age (or 3 months after the end of breastfeeding): only then can the child be considered truly HIV negative. Please follow early infant diagnosis algorithm as per Annex 20 in *Table 2.8* above.
- + If the new-born tests **HIV positive**, prompt initiation or referral for [ART initiation](#) is necessary.

2.4 POSTNATAL CARE

2.4.1 CHALLENGES FACED IN DELIVERING POSTNATAL MATERNAL AND INFANT CARE AND SOLUTIONS

After delivery, there is mounting evidence that **HIV retention in care is poor**. Studies show that up to 30% of mothers are lost to follow-up in the first 6 months postpartum. This poor retention of mothers in care is thought to be due to a variety of factors such as:

- + increased demands on the mother because of caring for their infant;
- + non-disclosure of HIV status;
- + travel costs;
- + stigma;
- + regimen fatigue; and
- + lack of partner involvement ^{16,17,18}

¹⁵ UNICEF, "Evidence-based practices for retention in care of mother-infant pairs in the context of eliminating mother-to-child transmission of HIV in Eastern and Southern Africa" 2019 <https://www.unicef.org/esa/reports/evidence-based-practices-retention-care-mother-infant-pairs>

¹⁶ Clouse K et al. *What they wanted was to give birth; nothing else : Barriers to retention in option B+ HIV care among postpartum women in South Africa*. 2014. *J Acquir Immune Defic Syndr* 67(1):12–8.

¹⁷ Phillips et al. *Disengagement of HIV-positive pregnant and postpartum women from antiretroviral therapy services: a cohort study*. *J Int AIDS Soc* 2014;17:19242.

¹⁸ WHO. *Integrating antiretroviral therapy into antenatal care and maternal and child health settings: a systematic review and meta-analysis*. *Bull World Health Organ*. 2013;91(1):46–56. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3537248/>

Health system related factors are:

- + long waiting times due to high number of patients; and
- + high frequency of follow-up visits, with different days/sites for mother and baby.

One strategy to improve postnatal care and postpartum HIV care is **integration of services**:

integration of HIV care with other services but also integration of mother and infant care, and eventually integration with family care. Although integration is known to be beneficial, it has often been **poorly implemented**. **Reasons** for this lack of implementation include:

- + **vertical programmes**, with different actors and funding, are unable to accommodate integration;
- + **referral places** with poor quality of care;
- + **poor follow-up** in many settings, for children under 5 and after the postnatal period;
- + **HIV-exposed children presenting to other services** (such as OPD, IPD, nutrition tent, etc.) where they might not be recognised as HIV-exposed and where the mother's care is not being followed up;
- + **lack of staff training** to do maternal and infant care as well as HIV care.


One of the main questions about this integrated approach is **where** and **how to do it**.

There are many ways to follow the mother and infant together. These can be grouped broadly into **three approaches**:

- 1. Integrate maternal clinical care with child's care:** from regular follow-up (e.g. EPI, follow-up of high-risk babies) to opportunistic visits (e.g. nutrition, OPD, IPD, etc.).
- 2. Integrate child's visits to maternal clinical care** (testing, ART provision but also postnatal visit, contraception visit, etc.).
- 3. Create integrated spaces to review both mother and child** (e.g. postnatal clubs).

To design your own integrated service, which will work in your context, we recommend that you **follow the steps described in Section 1**. Use the assessment tool to evaluate your setup and what the current flow is.

NB: Changes and implementation should be considered in a stepwise approach to adjust to the implementation capacity of the project and to ensure consolidation and team confidence in the programme implementation. This will also allow you to define activities, taking available resources into account, and plan and forecast additional resources for the scale-up of activities. For example, start by following the mothers and babies until 6 weeks and slowly build it up to 18 months.

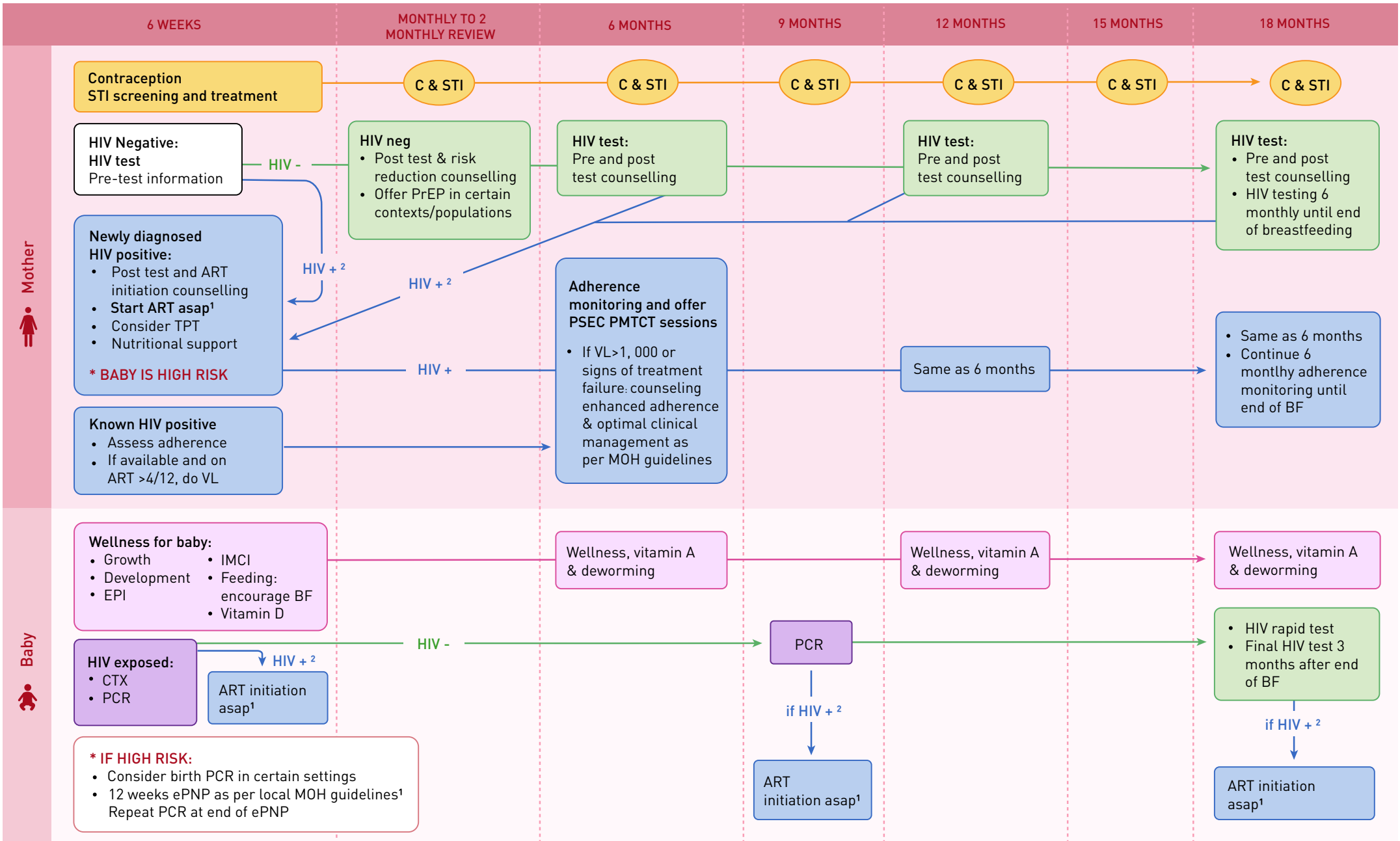
We have described **three examples** [Annex 21]  these examples are not prescriptive but are just attempts at describing what is possible to implement. For help on how to adapt your flow, please contact your HIV/TB referent or medical information officer.

2.4.2 DESCRIPTION OF INTEGRATED CARE FOR MOTHERS AND INFANTS

FLOW DIAGRAM OF POSTNATAL PERIOD

Figure 2.4 Postnatal PMTCT flow (view on the following page)

Figure 2.4 Postnatal PMTCT flow (Go to Annex 22 for printable version or download) 



NB Test mother or baby at any point if any clinical suspicion of HIV

1. Refer to local MoH guidelines and MSF TB/HIV care guidelines
 2. Positive result needs 2nd confirmatory positive result

Abbreviations:
 AHD: advanced HIV disease
 ART: antiretroviral therapy
 BF: Breastfeeding










C: contraception
 CTX: cotrimoxazole
 EPI: expanded program on immunisation

ePNP: enhanced prophylaxis
 IMCI: integrated management of childhood illness
 PrEP: pre-exposure prophylaxis

STI: sexually transmitted infections
 TPT: tuberculosis prophylaxis treatment
 VL: viral load

HIV NEGATIVE MOTHERS

Table 2.9 HIV test and contraception

WHAT		HOW	WHO	WHERE	WHEN
Mother	Infant				
HIV test (pre-test, test, post-test), contraception (essential) 	Triage,  IMCI,  growth  and  development, EPI, review of feeding, (essential)	HE on infant feeding,  infant danger signs   	Lay counsellor/ peer mother/ midwife/ nurse/ clinician	Waiting spaces/ community	6-week visit then following EPI schedule (review at least 2-monthly in first 6 months)
		PrEP <i>(desirable in certain contexts/ populations)</i>			

In settings that have **high HIV prevalence and high ART coverage (or high-risk population)**²¹, women who tested HIV negative during pregnancy or labour should retest whilst breastfeeding, preferably at the first postnatal visit and then 6-monthly. HIV-negative breastfeeding mothers should be encouraged to use PrEP and test 3-monthly.

In an unstable context, or if the mother is not seen 6-monthly, use opportunistic testing (e.g. infant is presented to malnutrition tent, IPD, OPD; mother presents for contraception, etc.).

In settings that have **high HIV prevalence and low ART coverage**, re-testing is advisable when possible.

¹⁹ Use integrated mother and child stationery (see example in annex 6)












²⁰ View annex 14

²¹ High-risk populations: e.g. sex worker; partner of intravenous drug user; partner in serodiscordant couples – with HIV-positive partner with unsuppressed VL, or partner with unknown status

HIV-POSITIVE MOTHER AND HIV-EXPOSED INFANT

Newly diagnosed mother while breastfeeding

Table 2.10 ART initiation in HIV-positive mother and breastfeeding infant

WHAT		HOW	WHO	WHERE	WHEN
Mother	Infant				
Confirmation of positive test results and post-test counselling  	High-risk baby (PMTCT) HIV test on the day (PoC or DBS) Start CTX Start ePNP Feeding advice (<i>essential</i>)	Counselling for mother (post-test, ART initiation and readiness) as well as for infant (testing, feeding, danger signs and syrup administration)    	Lay counsellor/peer mother/midwife/nurse/clinician Trained nurse/ doctor/clinician	Confidential space	At HIV diagnosis of mother
ART initiation and provision ²²	Triage 				
Contraception (<i>essential</i>) 	IMCI 				
	growth 				
	and development, EPI, review of feeding, (<i>essential</i>) 	“One-stop shop” for clinical interventions ²³ Consider near PoC for infant testing			

For clinical recommendations on **maternal ART initiation** process, refer to [PMTCT guidelines](#).

For **infant PCR testing**, depending on the context, a near **PoC** should be considered for faster turnaround time. With or without near PoC, **giving the PCR result** back to the mother or carer is key and arrangements should be made accordingly (give appointment date for results, make sure to trace the mother/carer if they do not come back for results, particularly for positive results).

If the **infant tests positive** for HIV, he/she should be started on ART as soon as possible, either at the same site or at a referral site, and a second PCR sample should be collected for confirmatory testing. For more information on which treatment to start, refer to your MoH guidelines as well as to the [MSF HIV TB primary care handbook](#). The use of near PoC will be dependent on your context. For more information on which PoC to use and whether it is applicable to your context, discuss further with your TB/HIV care advisor.

²² Please refer to Section 2.2 and to TB/HIV primary care guidelines regarding ART initiation

²³ Use integrated mother and child stationery (see example in annex 6)

If the mother is diagnosed whilst breastfeeding, the infant should be given enhanced prophylactic syrups (ePNP) until the infant’s HIV test result is available. Please refer to your local MoH policies and [MSF guidance](#). Consider what is available locally and what is easier for the mother to administer, when you decide on which PNP to use.

Counselling of the infant’s mother can be task shifted to counsellors, trained lay workers, peer mentors, etc., or done by the clinician in a “**one-stop shop**”. It is important to reassure the mother that it is safe to breastfeed the infant, as long as she is taking her ART treatment daily and giving the infant his/her ePNP.

MOTHER ALREADY ON ART

Table 2.11 HIV-positive mother who is already on ART

WHAT		HOW	WHO	WHERE	WHEN
Mother	Infant				
ART review of adherence (and VL when accessible) ²⁴ TB screening and TPT as appropriate (↓) Contraception (↓)	PMTCT: Start CTX at 4–6 weeks 6 weeks PCR (↓) 9 months PCR 18 months rapid (and/or 3 months after cessation of breastfeeding)	Counselling (↓) for mother (adherence) as well as (↓) for infant (feeding, (↓) danger signs (↓) and syrup administration) (↓)	Lay counsellor/ peer mother/ midwife/ nurse/ clinician	Confidential space	4–6 weeks postnatally then follow EPI schedule (include visit at 9 months and 18 months)
(↓) Nutritional review	Triage (↓) IMCI (↓) growth and development, EPI, review of feeding, (essential) (↓)	“One-stop shop” for clinical interventions described in the how ²⁵	Trained nurse/ doctor/ clinician		

Regarding review of maternal ART adherence and what to do if poor adherence or high VL: refer to [PMTCT guidelines](#). Note that during breastfeeding, **VL monitoring is recommended 6-monthly in all settings**. See previous section following Table 2.10 regarding PoC.


²⁴ Refer to section on adherence monitoring in Section 2.2 and to MSF TB HIV guidelines https://msfintl.sharepoint.com/sites/msfintlcommunities/RH_SVcare_WG/SitePages/Home.aspx

²⁵ Use integrated mother and child stationery (see example in annex 6)

2.5 FURTHER INTEGRATION OF SERVICES

As described in Section 2.2, **contraception advice for the mother as well as STI screening and TB screening** should also be considered in the postnatal period.

If more resources are available, **other integration of services** could be considered. Some interventions might be more relevant in some settings compared to others.

- + **Mental health screening for depression:** HIV-positive pregnant women in difficult socio-economic conditions are particularly vulnerable to depression²⁵. Many depression screens can be administered by trained lay workers, e.g. the PHQ-9. Before starting the screening process, try to either map referral systems (e.g. psychologist, social worker, etc.) or build in-house capacity to assist women identified with depression (e.g. nurse, midwife, etc.). For diagnosis and treatment of mental health, you can refer to the [MSF MH guidelines](#) and [MH GAP intervention guide](#).
- + **Cervical cancer screening:** Cervical cancer is a common problem in women living with HIV. Attending postnatal care represents a good opportunity to do cervical cancer screening. There is no MSF toolkit on cervical cancer screening at present, but you can contact your SRH referent for more information.
- + **Screening for sexual violence:** Pregnancy (and HIV) can be a result of sexual violence, especially in situations of conflict and displacement. For more information on how to implement screening for sexual violence, refer to the sexual violence toolkit ²⁶.
- + **Hepatitis B screening and vaccination:** Refer to [PMTCT clinical guidelines](#).
- + **Early childhood development activities and peer support groups:** Refer to example of postnatal club (PNC) in Annex 21  for more details on how to implement a peer support group.

²⁵ <https://www.who.int/teams/mental-health-and-substance-use/maternal-mental-health>

²⁶ https://msfintl.sharepoint.com/sites/msfintlcommunities/RH_SVcare_WG/_layouts/15/AccessDenied

Please consult your SRH referent for more information

SECTION 3: CONTEXTUALISING PMTCT TO SPECIFIC SITUATIONS

Despite major progress in PMTCT, global figures still sit at 12%, with some regions where the number of HIV-infected children is growing. The latest UNAIDS annual reports have highlighted that most new HIV paediatric infections in Western and Central Africa are due to low ART coverage among pregnant HIV-positive women and breastfeeding women²⁷. In contrast, in Eastern Africa, more than half of transmissions occur during breastfeeding, due to new incident maternal HIV infection or interruption of ART treatment. In Southern Africa, the picture is more mixed, with lack of ART coverage in pregnancy and HIV acquisition during breast feeding being the two major factors for MTCT. This data suggests that the PMTCT interventions described in this toolkit should be tailored to the different contexts. We provide a few suggestions.

3.1 HIGH PREVALENCE SETTING²⁸ WITH HIGH ART COVERAGE

In countries with high HIV prevalence and high ART coverage, such as most of Southern Africa, PMTCT has been in place for many years now. In those set ups, most of the package of care described in this toolkit would be applicable. In particular:

- + **Access to PrEP for pregnant and breastfeeding HIV negative women;**
- + **Access to differentiated models of care,** including for pregnant HIV-positive women and mother/infant pair, to ensure retention in care, especially during the postnatal period; and
- + **Focusing on community strategies and decentralising care** (for example, to provide integrated HIV and maternal, new-born and child health care in an outreach site).

3.2 HIGH HIV PREVALENCE SETTING WITH LOW ART COVERAGE

Contexts with high HIV prevalence and low ART coverage (such as Central and Western Africa) contribute to more than 30% of total HIV deaths, with less than a third of HIV-positive children on

²⁷ [MSF Strategic Framework for Responding to the HIV Epidemic: 2019 – 2023.](#)

²⁸ UNAIDS. *Communities at the centre defending rights breaking barriers reaching people with HIV services.* (2019) <http://rstes.unaids.org/publications/global-publications/2019/item/209-global-aids-update-2019-communities-at-the-centre>.

ART and less than half of HIV-positive adults on ART²⁹. In those contexts, finding the HIV-positive pregnant women is even more important and it is therefore essential to focus on:

- + **Maternal HIV testing in antenatal care, maternity and postnatal care and linkage to ART.**
- + **Retention in care through community strategies** (focusing on community engagement and health education to reduce stigma), **support group** with peer mentor mothers, etc;
- + **Integration of HIV care to nutritional activities and other paediatric services** to identify babies at high risk of exposure to HIV; and
- + **Decentralising models of care** (HIV/PMTCT care integrated with other services) closer to the community.

Remember that referring newly diagnosed HIV-positive mothers and infant follow-up to MoH programmes will require a degree of trust in the quality of care of the services provided. Refer to Annex 3 for more information.

3.3 COMPLEX HUMANITARIAN CRISES

MSF is also committed to integrating HIV care in complex humanitarian crises. In emergency situations, stigma, insecurity or violence and long distances to health care facilities are major barriers.

Strategies to work around stigma include **community engagement and health education** on HIV. Because of complex situations, strategies should be adapted and focus on:

- + **HIV testing**, e.g. using a decentralised approach to testing integrated with **access to contraception and safe abortion care** (see Yambio example³⁰);
- + **Linkage to care and retention in care**: fewer visits might be more feasible;
- + **ART distribution** using longer refills and **contingency planning** for maternal ART and also for infant PNP (4–6 months ART refill to be distributed when insecurity is mounting, to allow patients to stay on treatment);
- + **Sexual violence**: as this is more common, **screening** also becomes more important³¹;

²⁹ High HIV prevalence is defined as HIV prevalence >1%

³⁰ MSF. 2018. HIV Test and Treat Pilot project in Yambio comes to a close. Press release. <https://www.msf.org/yambio-test-and-treat>

³¹ For more information on sexual violence screening, refer to your SRH referent or to the toolkit https://msfintl.sharepoint.com/:f/s/msfintlcommunities/RH_SVcare_WG/EmdPx4fcHiFArxylehzzUowBF4yo-tM5u-Ks50vDMhyi1g?e=DZyeGo

- + **Health travel card:** patients are encouraged to travel with their national ART card where ART regimen, date of HIV diagnosis, etc., are documented;
- + **Empowering women** on the knowledge and sharing of their health; and
- + **Screening for malnutrition:** this is compounded by HIV and in an emergency setting.

3.4 SEX WORKERS

Key populations, and particularly sex workers, are at high risk of unplanned pregnancies and HIV infection. Because of lack of access or late presentations to ANC, they are also at high risk of HIV vertical transmission. This highlights the need for **“one-stop shop” integrated intervention**, where PMTCT, contraception and safe abortion care should be available.

Many pregnant women/mothers may not disclose they are sex workers for fear of stigma, discrimination and criminalisation. To enable their access to care, services should be friendly, acceptable and adaptable. This can be achieved through sensitising MSF and MoH staff through training and workshops on stigma reduction and the needs of sex workers and their vulnerabilities in pregnancy ; sex worker community engagement and empowerment (including trained peer-led ART distribution in between clinical visits³²; and differentiated models of care led by peers to allow flexible clinic hours, in both existing clinics or delocalised sites³³).

When adapting the PMTCT intervention to this vulnerable group, try to focus on a few key points:

- + Health care workers who are **friendly and sensitised** to sex workers;
- + **Integrated care in a “one-stop shop”:** this is particularly critical, in both the antenatal and postnatal phases (mother and baby as a pair as well as access to contraception are key);
- + **HIV prevention (PEP, PrEP, PNP); frequent HIV testing (3-monthly); condom and STI screening;**
- + **Screening for hepatitis B and C antenatally;**
- + Other “optional” interventions, such as **screening and management of mental health screening and management of sexual violence and cervical cancer:** these become more important in this population (refer to section 2.5);
- + **Longer refill** (such as in emergency context) due to high mobility and migration;

³² WHO HIV prevention, diagnosis, treatment and care for key populations. Policy brief consolidated guidelines (2017)
<https://apps.who.int/iris/bitstream/handle/10665/258967/WHO-HIV-2017.05-eng.pdf?sequence=1>

³³ [For more information on all these elements, refer to the Key Populations page on the SAMU SharePoint](#)

- + Working with **peer educators**; and
- + **Access to social workers** when possible (to help with documentation, protection, adolescent pregnancies, etc.).

3.5 CHILDREN

In Section 2.4 on postnatal care, we looked at how to integrate maternal and infant care. In this section, we want to draw attention to children as being key to addressing the **integration of care and PMTCT when the child presents to other MSF services**.

HIV-exposed children might present to your services through other doors, and it is very important to keep a high index of suspicion for HIV infection, particularly if the infant or child is sick (IPD, malnutrition wards, etc.). We recommend that the infant/child as well as the mother are tested before the infant/child is discharged (not only to diagnose HIV-positive children but also HIV-exposed children). If the results are not available before discharge, ensure that the results are communicated at a later stage to the mother (follow-up appointment made).

If this is not possible, then make every effort to assure testing as soon as possible, by fixing the actual date of the appointment and facilitating the appointment where possible (e.g. transport, etc.).

Furthermore, paediatric services (in particular IPDs and neonatal wards) should try to ensure they have the adequate ARV syrups and CTX preparations, in case the mother does not have the PNP supply at the hospital.

SECTION 4: OTHER STRATEGIES FOR RETENTION IN CARE

As mentioned earlier, maternal HIV and postnatal retention in care after delivery are problematic. In this toolkit, we focus on integration of services for maternal and child care (as well as HIV and non-HIV care) as a strategy for retention in care. Other strategies that are also important to retain pregnant women/mothers in care include:

4.1 PEER/MENTOR SUPPORT AND LAY WORKERS/CHW SUPPORT

Peer or mentor mothers are HIV-positive mothers who have gone through the PMTCT intervention themselves and are able to provide psychosocial support to other HIV-positive mothers. One example are the mothers2mothers (m2m) mentors³⁴. A few studies have shown that patients paired with m2m mentors or other structured mentor mother programmes had overall better PMTCT outcome. This included better retention in care of the mother-infant pair at 18 months and of the mother 6 months post-partum^{35,36}.

Counseling and tracing of pregnant women/mothers who disengaged from care can be effectively task shifted to lay counsellors or CHWs. This will improve the efficiency of the system and reduce the work burden on the clinical team, and has been proven to have good results regarding retention in care³⁷.

4.2 TRACING PREGNANT WOMEN/MOTHERS OR INFANTS WHO DISENGAGED FROM CARE

One way to retain women and infants in care is to “trace” them if they miss appointments, through phone calls, letters, home visits, etc. It is very important to have a system to identify and follow up pregnant women/mothers and infants who did not come to their visits, for example, using an

³⁴ For more information, check m2m.org

³⁵ Igumbor JO et al. Effect of a mentor mother programme on retention of mother-infant pairs in HIV care: A secondary analysis of programme data in Uganda. 2019. *PLoS One*. 14(10).

³⁶ Sam-Agudu NA et al. The impact of structured mentor mother programmes on 6-month postpartum retention and viral suppression among HIV-positive women in rural Nigeria: A prospective paired cohort study. 2017 *J. Acquir. Immune Defic. Syndr.* 75: S173-S181

³⁷ UNICEF, “Evidence-based practices for retention in care of mother-infant pairs in the context of eliminating mother-to-child transmission of HIV in Eastern and Southern Africa” 2019 <https://www.unicef.org/esa/reports/evidence-based-practices-retention-care-mother-infant-pairs>

appointment diary or electronic identification of defaulters. Follow-up those pregnant women/ mothers who have disengaged from care with text messages, phone calls and/or home visits by a CHW. Structure monthly meetings between the clinic staff and “tracers” (CHWs, mentor mothers, etc., who doing the home visits) to discuss progress in returning to care someone who disengaged.

4.3 DIFFERENTIATED MODELS OF CARE

Differentiated models of care (such as ART adherence clubs) have the objectives of improving the efficiency of the health system and implementing a more patient-friendly and patient-centred approach. They offer many advantages, such as decongesting health facilities, longer refill times for patients and improving patients’ retention in care³⁸. Until recently, these services excluded pregnant and breastfeeding women but this recently changed with the following recommendations:

- + **Pregnant and breastfeeding women who are stable on ART** should have the choice of continuing in their ART adherence clubs or having their ART care integrated with maternal, new-born and child health care.
- + **Pregnant women who are newly initiated on ART during pregnancy** should have the choice of joining clubs and longer ART refill options, once they are stable on ART and VL<1 000 (for example in the breastfeeding period) with the first infant PCR test negative. Ideally, they should join a club that offers integrated care for mothers and their infants if available.
- + A third option is to offer **differentiated models of care to both women who are newly initiated on ART and women who are stable on ART**. This model could be done antenatally and/ or postnatally. In South Africa, the model of **postnatal clubs**, which offer integrated care to mothers and babies, showed improved retention in care for the mothers and babies, as well as good VL completion and suppression³⁹. This model has been adapted to other settings, like in Eswatini. The model was also adapted to run perinatally in Mozambique. For more information on PNC, check <https://www.msf.org.za/access-medicines/post-natal-clubs-toolkit>

4.4 MEN’S INVOLVEMENT

Non-disclosure to their partners and stigma are recognised as major reasons for women to stop their ART. Men’s involvement in PMTCT services and MNCH services leads to increased retention in

³⁸ UNICEF, “Evidence-based practices for retention in care of mother-infant pairs in the context of eliminating mother-to-child transmission of HIV in Eastern and Southern Africa” 2019 <https://www.unicef.org/esa/reports/evidence-based-practices-retention-care-mother-infant-pairs>

³⁹ <http://programme.aids2020.org/Abstract/Abstract/7275>

care and adherence from the pregnant women/mothers and infant. **Encouraging male testing** is key and can be done at the community level and at the facility level.

- + At the **community level**, engagement can happen in many ways: through dialogue and health education with traditional and religious leaders, training of CHW, working with male champions, etc.⁴⁰.
- + At the **facility level**, men can be encouraged to be involved in testing (through couple/family testing, assisted partner notification services, oral self-test) and to attend **differentiated models of care** (e.g. as caregiver for the infant in PNC or through family support groups).

Other facility-based incentives exist, such as having “**male friendly**” ANC and postnatal services (shorter waiting queues for men, staff who are trained to welcome men, flexible clinic hours, etc.)⁴¹. We recommend that, before engaging in the activities described above, an in-depth analysis of the context and gender norm values is established, to prevent potential rise in gender-based violence.

4.5 COMMUNITY ENGAGEMENT

Community engagement is recommended with any public health intervention but is particularly key to the success of HIV and PMTCT interventions, as it can make an important and positive difference to stigma and discrimination⁴². Community engagement takes many shapes, including:

- + **Community advisory boards** as well as empowerment and training of young girls and key populations;
- + **Community health workers** or lay workers who help with HE, tracing and follow-up of pregnant women/mothers and infants, as well as provide ART adherence counselling and support;
- + **Decentralised care to the community:** e.g. community differentiated models of care); and
- + **School programmes:** Education on HIV, STI screening, pregnancy testing and referral to antenatal services.

⁴⁰ WHO policy brief: Improving men’s uptake of HIV testing and linkage to services, Feb 2021 <https://www.who.int/publications/i/item/9789240018938>

⁴¹ <https://www.unicef.org/esa/reports/evidence-based-practices-retention-care-mother-infant-pairs>

⁴² <http://rstes.unaids.org/publications/global-publications/2019/item/209-global-aids-update-2019-communities-at-the-centre>

4.6 USE OF MOBILE PHONES IN HEALTH CARE

As more and more people own mobile phones and there is increased network coverage in Eastern and Southern Africa, the use of mobile phones as a strategy to improve retention in care has increased. For example, it can be used for **health education** on PMTCT through SMSs, phone calls and apps. The increased possibility of dialogue with the women leads to decreased stigma. Mobile phones can also be used for **appointment reminders** and to **trace** women/infants who have missed visits. Although some studies show mixed results in the use of mHealth⁴³, other studies show that its use leads to improved retention in care of infants and mothers⁴⁴.

When looking at implementing mobile health interventions, it is important to first assess the mobile use and coverage in your area of work, get consent from the women who will engage in these activities, plan and budget costs for data/airtime, and ensure that the content of messages is in accordance with local culture and practices.

CONCLUSION

Through this implementation toolkit of the PMTCT clinical guidelines, we aim to highlight the importance of integration of PMTCT with other services, particularly for the mother-infant pair. This document gives a framework and tools to build this integration of care in a step-by-step approach to be adapted to different contexts. It provides a comprehensive description of the programmatic aspects of PMTCT, which can be used independently in antenatal care, labour care or postnatal care. It also aims to provide a framework to contextualise the different PMTCT interventions. Finally, implementation of wider strategies to improve retention in care are described.

⁴³ mHealth is defined by the World Health Organization as the “use of mobile and wireless technologies to support the achievement of health objectives”.

⁴⁴ <https://www.unicef.org/esa/reports/evidence-based-practices-retention-care-mother-infant-pairs>

ANNEXES

ANNEX 1: ASSESSMENT TOOL

When filling the assessment tool and particularly focusing on the postnatal aspect, here are some questions to think about:

- ✓ What paediatric services are available (under-5 clinic, immunisation, outpatient department, inpatient department, nutrition, follow-up of premature babies, etc.)?
- ✓ Who is responsible for paediatric services (MoH, MSF, other stakeholders)?
- ✓ Where does paediatric HIV care happen?
- ✓ Do mothers get postnatal follow-up, and for how long?
- ✓ Where do HIV-positive mothers get followed up?
- ✓ Who runs the follow-up services (MSF, MoH or other actors) for HIV-positive mothers?
- ✓ What is the quality of the follow-up services for HIV-positive mothers?
- ✓ What training and number of staff are needed in each service?

Click the icon to download Annex 1



ANNEX 2: LIST OF TRAININGS AVAILABLE

Please consult the following website for detailed instructions on how to apply and register for the following training: <https://msfintl.sharepoint.com/:u:/s/jnb/samu/EdgidqstELtMmgCaPwIBIZYBJtqlzBHfsT6bJ3oLYzYvQQ?e=GjNINg>

- + **HIV/TB e-learning** available online (with one module on PMTCT)
- + **HIV/TB clinical training** offered on site (upon request) and an advanced training course in Cape Town.
- + **HIV/TB programmatic training** for programme managers which includes programmatic integration.

Please consult the learning and development unit catalogue of your occupational centre for the following training:

- + **Sexual and reproductive health training** on contraception
- + **Patient support, education and counselling training on HIV**

Additional onsite implementation support can be obtained through a mobile implementing officer (MIO).

In-country training programmes: There are in-country training programmes organised by MSF, MoH and/or other stakeholders. These include training on national guidelines, monitoring and evaluation tools (data collection) in HIV/TB, TB, etc.

Double click the icon to download Annex 2



ANNEX 3: REFERRAL ASSESSMENT TOOL

Double click the icon to download Annex 3



ANNEX 4: HIV MEDICATION ORDER

The HIV drug order calculation tool is accessible through the Sharepoint link for staff members with an MSF username and password. If you do not have these log-in details, please make contact with your coordinator or HIV/TB referent.

[Visit the Sharepoint link here](#)

ANNEX 5: TOOL FOR PLANNING OF INTERVENTION

This is an example of a planning tool that could be used and adapted to your context.







Double click the icon to download Annex 5






ANNEX 6: EXAMPLES OF STATIONERY

- + integrated registers (ANC, delivery)
- + patient card (maternal, child health card, integrated postnatal HIV-positive mother and HIV-exposed infant card)

These tools can be used and adapted to your context.

Integrated ANC register		HIV care card	
Labour delivery register		Child health care card	
Maternal health card		Updated pediatric CCT stationery	


[Click to return to page 32](#)  [Click to return to page 33](#)  [Click to return to page 34](#) 

ANNEX 7: LIST OF INDICATORS


Here are some general indicators, developed by the HIV working group:

Number (%) HIV-positive pregnant women started on ART in MSF projects
Number of women in MSF projects on different contraception options
Mother-to-child transmission rate in MSF projects with PMTCT

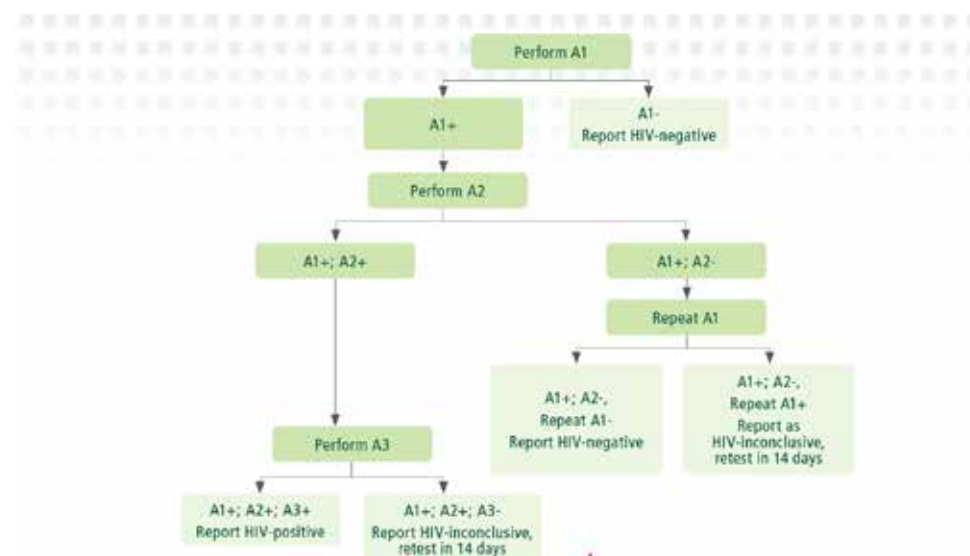
For more detailed monitoring of your project, we suggest you refer to your occupational centre and contact your monitoring and evaluation support person.

Double click the icon to download Annex 7 

ANNEX 8: ANTENATAL CARE FLOWCHART

Double click the icon to download Annex 8 

ANNEX 9: HIV TESTING FLOWCHART⁴⁵



A1: Assay 1 (first test); A2: Assay 2 (second test); A3: Assay 3 (third test). Assay (tests) are HIV rapid diagnostic tests (RDTs) or enzyme immunoassays (EIAs).



Double click the icon to download Annex 9

ANNEX 10: PMTCT PATIENT SUPPORT, EDUCATION AND COUNSELLING SUMMARY⁴⁶

PMTCT services		
Step in the cascade	Session	Topics
HIV Testing Services	Pre-test information	Benefits of HIV testing Meaning of HIV test result Follow-up services in case of a positive result
	Post-test counselling	Emotional support Meaning of result Linkage to PMTCT services
ART initiation and early follow-up during antenatal care	ART initiation session at ANC 1	ART/PMTCT education in nutshell How to take medication as prescribed
	PMTCT/ART education session at ANC 2	Basic facts on ART and PMTCT
	Planning for birth session at ANC3	Evaluate and support adherence Plan for delivery, feeding of the baby and medication for the baby
	<i>Review of adherence at ANC 4</i>	<i>Evaluate and support adherence</i>
Follow-up during postnatal care	Feeding and treatment follow-up session	Evaluate and support adherence to medication of mother and baby, feeding Explain need for PCR testing
	PCR session	Evaluate and support adherence Explain family planning Explain switch to Cotrim syrup for the baby
	PCR result session	Give PCR result and support accordingly
	Complementary feeding session	Evaluate and support adherence How to introduce other foods
	Weaning session	Evaluate and support adherence How to stop breastfeeding
	Rapid HIV test session	Explain the result of the rapid HIV test for the baby at 18 months of age
ART initiation for HIV-infected infant	ART initiation sessions	Why and how to take medication



Double click the icon to download Annex 10

⁴⁵ Consolidated guidelines on HIV testing service for a changing epidemic, WHO, Nov 2019 Policy Brief

⁴⁶ "PATIENT SUPPORT, EDUCATION AND COUNSELLING Guideline for Adults Living with HIV and/or TB/MSF," 2017

ANNEX 11: COUPLE TESTING SUPPORT, EDUCATION AND COUNSELLING GUIDELINES"⁴⁷



Double click the icon to download Annex 11

4.2.3 Couple HIV testing and counselling

Specific considerations need to be taken into account when testing couples.

HIV pre-test information for couples

Couples should be seen together for the pre-test information. The wish to receive the results as a couple or individually needs to be discussed during the pre-test phase, at which point we may promote that the partners receive their results simultaneously in order to facilitate disclosure and mutual support. The possibility of sero-discordancy needs to be explained.

HIV post-test counselling for sero-discordant results

When sero-discordant results are delivered to a couple, it often raises a lot of questions on the future of the relationship.

- It is important to reduce tension and blame in the couple. The counsellor needs to listen to the couple and encourage them to find a solution together. It is important not to choose sides with any of the partners.
- Sero-discordant couples need to be counselled on risk reduction strategies. It is recommended that the HIV positive partner in a discordant couple is started on treatment regardless of CD4, to reduce the risk of infecting the HIV-negative partner. The couple needs to know that chances of infection are very low when the partner on ART is adherent and maintains an undetectable viral load. Secondly, protective strategies such as condom use need to be discussed.
- Reproductive options and choices need to be discussed (see chapter 3.10.2).

[Visit the Sharepoint link here](#)

ANNEX 12: EXAMPLE OF EDUCATIONAL TOOL ON HIV TESTING IN PREGNANCY

Double click the icon to download Annex 12



ANNEX 13: POSTPARTUM CONTRACEPTION: MSF CONTRACEPTIVE GUIDELINES- COMING SOON, CONTACT YOUR SRH REFERENT

Full MSF contraceptive guidelines coming soon, please contact your SRH referent











Double click the icon to download Annex 13



⁴⁷ ["PATIENT SUPPORT, EDUCATION AND COUNSELLING Guideline for Adults Living with HIV and/or TB MSF," 2017](#)


ANNEX 14: PREP IMPLEMENTATION TOOLS USED IN ESWATINI AND KHAYELITSHA

Here we have included some examples used in the Eswatini project. These tools and guidelines have been developed for a specific context (Eswatini) and you will need to adapt them to your context and project. Tools include a screening tool, follow-up tool for patients on PrEP, example of patient file, example of PrEP appointment card, example of PrEP flow, counselling tools (developed by MOH of Eswatini to counselling tools from PrEP study in Khayelitsha), monitoring and evaluation examples and PrEP register examples.


PrEP risk assessment eligibility screening 	PrEP treatment follow up 
PrEP client file 	PrEP appointment card 
Guidance for PrEP demonstration projects 	PrEP Education & Counseling Guidelines KHA 
Monthly summary 	PrEP register 
PrEP counselling guidelines 	PrEP tools and counselling 

[Click to return 2.2.3 and main text on page 19](#) 

ANNEX 15: EXAMPLE OF BIRTH PLAN

[Double click the icon to download Annex 15](#) 

ANNEX 16: TB SCREENING AND REFERRAL

[Double click the icon to download Annex 16](#) 

ANNEX 17: DELIVERY FLOWCHART

Double click the icon to download Annex 17



ANNEX 18: EXAMPLE OF RISK STRATIFICATION CHECKLIST

Double click the icon to download Annex 18



ANNEX 19: EXAMPLE OF PNP ADMINISTRATION COUNSELLING⁴⁸

Procedure for administering the PNP medication after delivery:

- + Use the smallest syringes to administer the medication (2ml/5ml)
- + Mark the dosage point on the syringes with a plain sticker or with a marker
- + Put the same coloured sticker (e.g. green) on, for example, both the AZT bottle and AZT syringe to avoid mixing up of the syringes and medication.
- + Explain the frequency of when medication should be administered and let the mother / caregiver decide which times work best for her.
- + If infant vomits within 30 minutes of giving it, give it again.
- + Demonstrate to the mother how the syrups should be administered, (insert the syringe at the corner of the infant's mouth into the cheeks and slowly push the medication in) and let her practise in front of you.
- + Emphasise to the mother that the medication should be administered daily as prescribed for the specified duration. Make sure it is also written on the bottles.
- + Provide PNP for the first 6 weeks and advise the mother to go back to her local clinic for more PEP at her next visit.

Encourage the mother to come back to clinic if infant seems to experience any side effects or if she is having any problems administering the medication.

Documentation:

- + Document on the infant's health card which PNP you are giving to the infant and if infant is high risk.
- + Complete the labour ward PMTCT register.

Double click the icon to download Annex 19

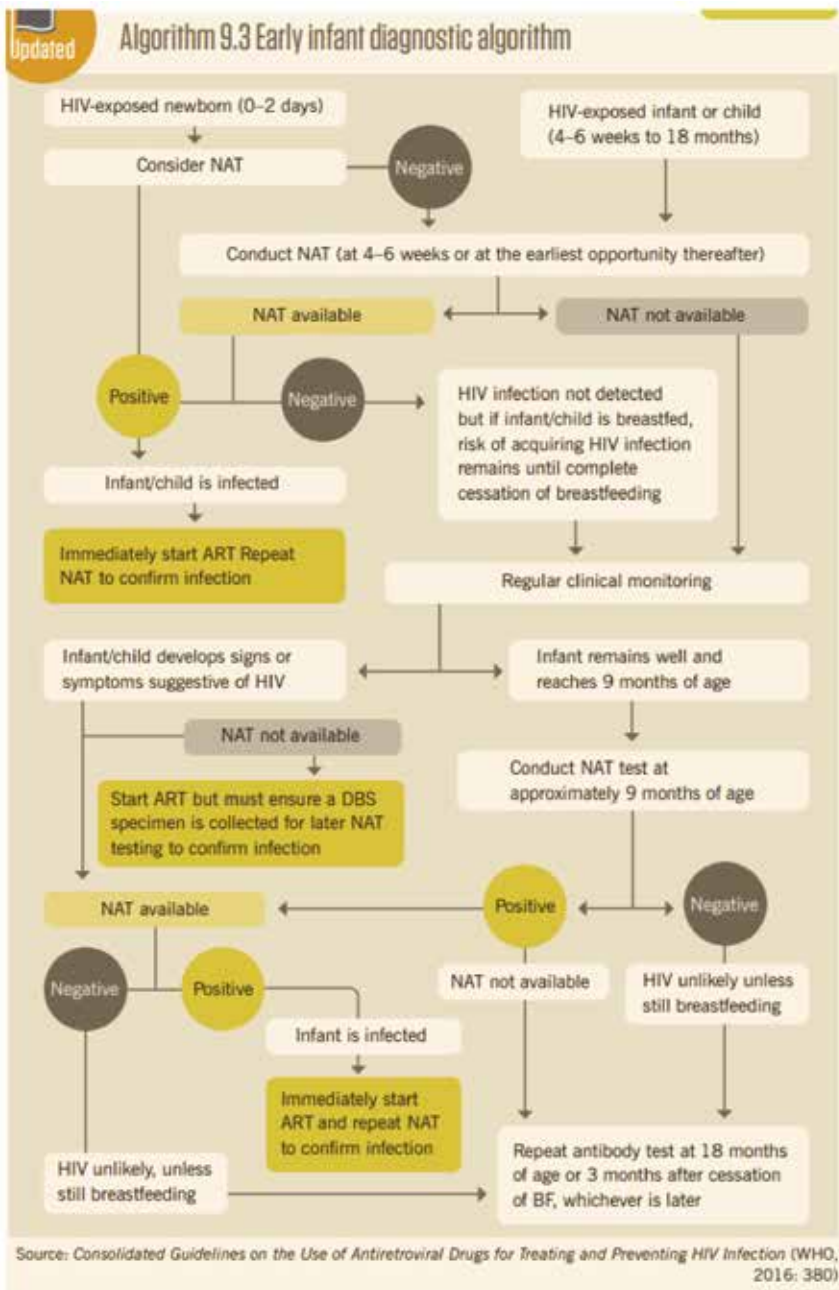


⁴⁸ [Patient and Education and Counselling Guide for PMTCT B+, MSF OCB 2013. Annex 21](#)

ANNEX 20: EARLY INFANT DIAGNOSIS FLOWCHART⁴⁹



Double click the icon to download Annex 20



ANNEX 21: EXAMPLES OF INTEGRATED MATERNAL AND INFANT CARE

There are three case studies:

- Castor, Bangui, CAR (OCB)
- Conakry, Guinea (OCB)
- Postnatal clubs, Khayelitsha, South Africa (OCB)

CAR: Integrating PMTCT short-term postnatal follow-up in the MSF maternity in Castor (Bangui, CAR)

⁴⁹ [MSF TB/HIV clinical guide for primary care](#)

Description: In Bangui, MSF is supporting a vertical project focused on maternity and SRH programme. Activities include maternity care, provision of termination of pregnancy, treatment of victims of sexual and gender-based violence and family planning. HIV testing is integrated in all services but there is no further provision of HIV care or ART in the Castor clinic.

Women were provided with one month supply of ARV, and HIV exposed babies were supplied with one month supply ARV prophylaxis and referred to health centres without further follow-up. The teams were concerned about the lack of follow-up of HIV-exposed babies.

Epidemiology: The prevalence of HIV is 7% in Bangui, however access to ART is very poor and many pregnant women have never received HIV testing or access to PMTCT services. The prevalence of HIV infection amongst pregnant women who come to deliver at the maternity is 6%.

Context: Urban. Some health centres are supported by partners implementing PMTCT. There are low rates of follow-up of babies after birth, but the national programme aims to integrate PMTCT in all ANCs.

HIV/TB integration project: The project decided to improve the integration of postnatal follow-up in a stepwise approach. There was no capacity to immediately integrate the follow-up of babies up to 18 months, as there was no routine OPD. The babies in need of special kangaroo care at the maternity section were already followed routinely for 6 weeks after birth. The follow-up of HIV-exposed babies was integrated with the consultation of kangaroo babies and a 6-week PCR was scheduled. GeneXpert PCR was integrated in the laboratory services. A referral system to the paediatric hospital for early ART initiation of babies with early infant diagnosis was set up.

Guinea: Integrating postnatal care in MoH primary health centres in Conakry

Description and context: In Conakry, Guinea, MSF supports primary health care centres in the city to integrate all components of HIV care. The MoH agreed that the model of decentralising would be based on integrating HIV care within the rest of the activities in six health centres. All centres have PMTCT integrated in routine ANC delivered by the ANC staff. Some centres have maternity centres. Babies are referred to paediatric consultation after birth and mothers used to be followed up in adult OPD consultation.

Epidemiology: In Conakry, the HIV prevalence is 2.3% in a generalised epidemic.

PMTCT integration: A MSF team composed of: clinician (nurse, MD or midwife), a counselling, and a monitoring and evaluation officer was created to give ongoing mentoring support to the facilities MoH staff. Objectives were to ensure that all HIV-exposed babies would be well identified at the maternity side and offered prophylaxis. A scheduled follow-up consultation would be planned at 6 weeks in the paediatric OPD, where a PCR would be done. Medical personnel (MDs or nurses) at the paediatric OPD would be mentored on postnatal follow-up of HIV-exposed babies and procedures were supported by a mentoring approach. Progressively, mothers and babies would be followed up

together in the paediatric OPD during the infant follow-up period. The mentoring approach had a defined PMTCT curriculum.

South Africa: Integrating mother-infant pair care in a differentiated model of care (postnatal club) in Khayelitsha

Description and context: MSF has been involved in PMTCT in Khayelitsha since 2001, initially running the PMTCT services. Nowadays, ART services are run by the MoH and MSF plays more of a catalytic role, piloting intervention to improve the health system. Generally, MTCT has improved much in South Africa, particularly for the antenatal and delivery periods. Postnatal MTCT, however, remains a problem, with a high rate of maternal and infant loss to follow-up.

Epidemiology: Antenatal prevalence in Khayelitsha was 31% in 2016.

Postnatal club: In 2016, MSF created the postnatal club in partnership with mothers to mothers (m2m) and City of Cape Town. Based on the ART adherence club model, mother and infant pairs are recruited into the postnatal clubs after birth. They are initially seen monthly, then 3-monthly. At each visit, the mentor mothers provide psychosocial support and early childhood development activities. The mother infant pair then sees a nurse for a “one-stop shop”. The model has shown good patient satisfaction as well as an improvement in knowledge and attitudes, It has also showed better retention in care, VL completion and suppression for the mother, and lower MTCT rate than standard of care. For more information, go to <https://www.msf.org.za/access-medicines/post-natal-clubs-toolkit>

Double click the icon to download Annex 21



ANNEX 22: POSTNATAL FLOWCHART

Double click the icon to download Annex 22



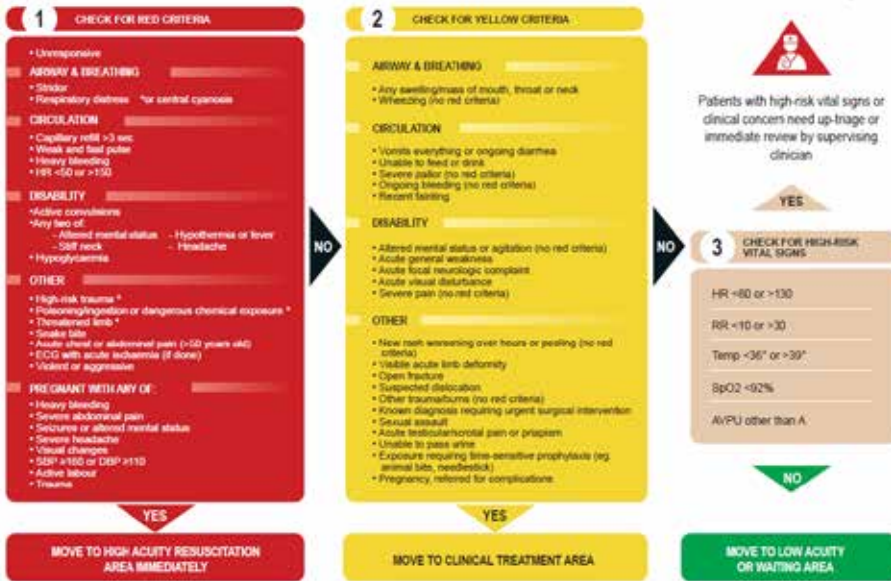
ANNEX 23: TRIAGE SYSTEM

Every child should be triaged when entering the clinic. Use a triage tool like ETAT, SATS or the new interagency tool devised by MSF, illustrated below:

Double click the icon to download Annex 23



INTERAGENCY INTEGRATED TRIAGE TOOL: Age ≥ 12



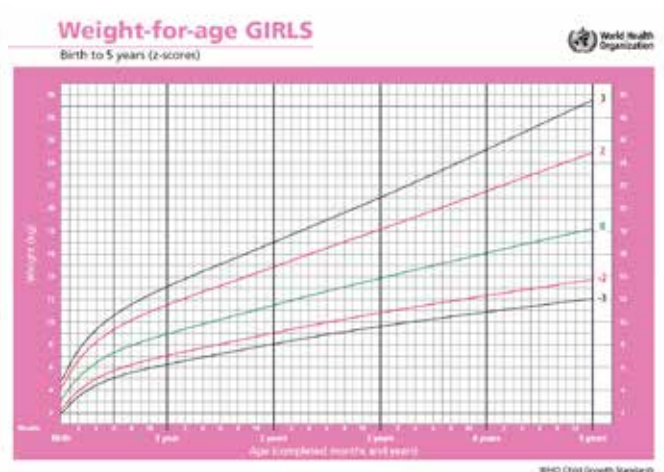
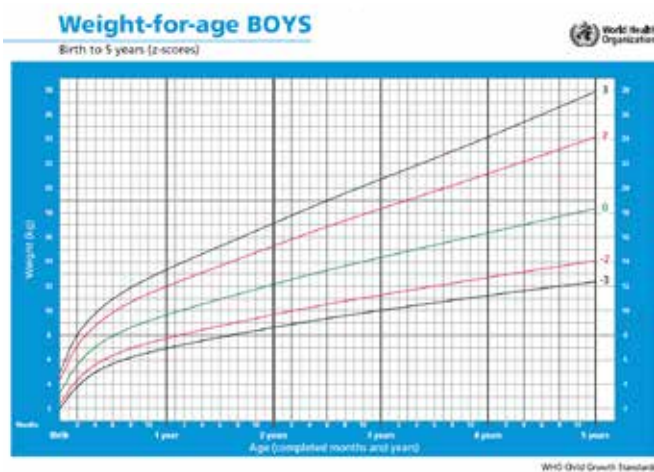
*See Reference Card

ANNEX 24: INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESSES BOOKLET

Double click the icon to download Annex 24



ANNEX 25: GROWTH CHART FOR CHILDREN⁵⁰



Double click the icon to download Annex 25



⁵⁰ MSF Paediatric HIV handbook, 2015, Annex F.1

ANNEX 26: DEVELOPMENT MILESTONES⁵¹

Age	Milestone	Normal age variations
1 month	Looks at faces Brings head up at 45° when pulled seated	0 to 2 months
2 months	Social smile in response Sits head steady	2 to 4 months
4 months	Roll over Grabs and holds objects	4 to 6 months
6 months	Sits by itself	6 to 9 months
9 months	Pulls itself standing up with support	9 to 12 months
12 months	Walks Plays with examiner Puts objects in a cup First words	10 to 18 months
2 years	Speech understandable Scribbles	2 to 4 years
3 years	Hops, plays ball Dresses alone Draws a three part man	3 to 4 years
5 years	Social games Invents stories Copies (letters, drawings)	5 to 6 years

For more information, consult: <https://sites.unicef.org/ffl/resources/factsforlife-en-full.pdf>

Double click the icon to download Annex 26



ANNEX 27: INFANT AND YOUNG CHILDREN BREASTFEEDING TOOLKIT:

Please follow the hyperlink: [toolkit](#)

ANNEX 28: EXAMPLE OF HEALTH EDUCATION FOR INFANT AND CHILD FEEDING MESSAGES

Double click the icon to download Annex 28



⁵¹ [MSF Paediatric HIV handbook, 2015, Annex F.1](#)

ANNEX 29: COUNSELLING ON DANGER SIGNS FOR NEW-BORNS

Double click the icon to download Annex 29



ANNEX 30: COUNSELLING ON DANGER SIGNS FOR CHILDREN 1 MONTH TO 5 YEARS

Double click the icon to download Annex 30



