MEDECINS SANS FRONTIERES

Integrating HIV & TB care in basic health care package in MSF projects

A programmatic guide

Internal document

2015 edition

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Introduction

As a result of the intersectional strategic HIV meeting in 2007, MSF committed to address the following questions:

1. Why should we include HIV care in MSF projects?
2. Where to include HIV care in MSF projects?
3. What components should be included as part of HIV care in MSF projects?
4. How to include HIV care in MSF projects?

Whilst clinical recommendations and protocols are integrated in existing MSF/WHO guidelines, the need to provide a practical framework to aid implementation of HIV activities in MSF projects was recognised. This document aims to guide heads of mission, medical coordinators, medical team leaders and project coordinators through this process. Of note where HIV care is included it is presumed that this will incorporate TB care as part of the integrated approach to HIV and TB co-infection management.

Some Assumptions:

1. This document intends to be an "implementation" tool to guide field teams on WHERE, WHAT and HOW to include HIV/TB care. It aims to be in line with already existing and updated clinical guidelines.
2. We do not only foresee HIV/TB as a co-infection but also as separate disease entities (TB and non HIV, HIV and non TB), including DRTB care.
3. This document is applicable for projects in both stable or unstable settings.
4. Universal precautions, safe blood transfusion, provision of PEP, condom distribution and management of STI's should be in place in any project regardless of provision of HIV care. Since blood donation are always tested for HIV , blood donors are systematically asked if they wish to receive the result of the first HIV test . If he agrees and if the first test is positive, the patient will be refer to VCT to get a proper pré and post test counselling.

Comments should be addressed to Suna.Balkan@paris.msf.org and your VIH/TB advisor.

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Abbreviations and acronyms

3TC	Lamivudine
ABC	Abacavir
AIDS	Aquired Immune Deficiency Syndrome
AFB	Acid Fast Bacilli
ANC	Ante Natal Care
ATFC	Ambulatory Therapeutic Feeding Center
ATV/r	Atazanavir/ritonavir
ART	Anti Retroviral Therapy
AZT	Zidovudine
BF	Breastfeeding
CHW	Community Health Worker
CM	Cryptococcal Meningitis
CT	Counseling and Testing
CTX	Cotrimoxazole
CXR	Chest X-ray
DBS	Dry Blood Spot
DRTB	Drug Resistant Tuberculosis
DRV/r	Darunavir/r
DST	Drug Sensitivity Test
DSTB	Drug Susceptible Tuberculosis
E	Ethambutol
EFV	Efavirenz
EID	Early Infant Diagnosis
EMTCT	Elimination of Mother To Child Transmission
EPI	Enlarged Program of Immunisation
EPTB	Extra-pulmonary tuberculosis
FDC	Fixed-Dose Combination
FMC	Forecasted Monthly Consumption
GDF	Global Drug Facility
GF(ATM)	The Global Fund (to fight Aids Tuberculosis and Malaria)
H	Isoniazid
HAT	Human African Trypanosomiasis
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HCT	HIV Counselling and Testing
HQ	Headquarters
HR	Human Resources
IC	Infection Control
ICF	Intensive Case Finding
IEC	Information Education Communication
IMO	International Medical Order
IPD	In Patient Department
IPT	Isoniazid Prophylactic Treatment
IT	Information Technology
ITFC	Intensive Therapeutic Feeding Centre

KA	Kala-Azar
KS	Kaposi's Sarcoma
LAM	LipoArabinoMannan
LFA	Lateral Flow Assay
LPV/r	Lopinavir/ritonavir
LRA	Lord's Resistance Army
M&E	Monitoring & Evaluation
MDR-TB	Multi-Drug-Resistant Tuberculosis
MoH	Ministry of Health
MSL	Medical Supply List
MTB	Mycobacterium Tuberculosis
NTP	National TB Program
NVP	Nevirapine
OCA	(MSF) Operational Center Amsterdam
OCBA	(MSF) Operational Center Barcelona
OI	Opportunistic Infection
OPD	Out patient department
PCR	Polymerase Chain Reaction
PEP	Post Exposure Prophylaxis
PEPFAR	President's Emergency Plan For AIDS Relief
PHC	Primary Health CAre
PI	Protease Inhibitor
PIH	Partners In Health
PLWH	People Living With HIV
PMTCT	Prevention of Mother-To-Child Transmission
PNC	Post Natal Consultation
PoC	Point of Care
PQ	Prequalified/prequalification
PITC	Provider Initiated Testing and Counselling
PNC	Post Natal Consultation
PTB	Pulmonary Tuberculosis
QC	Quality Control
R/RIF	Rifampicin
RDT	Rapid Diagnostic Test
S	Streptomycin
SAM	Severe Acute Malnutrition
SAT	Self Administered Therapy
SRA	Stringent regulatory authorities
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infection
TB	Tuberculosis
TDF	Tenofovir
TSR	Total Stock Review
VCT	Voluntary Counselling and Testing
VL	Viral Load
WHO	World Health Organisation
WFP	World Food Program
XDR-TB	eXtensively Drug-Resistant Tuberculosis
Z	Pyrazinamide
ZN	Ziehl Neelsen

1. Why should we include HIV and TB care in MSF projects?

In 2014 MSF re-confirmed its commitment (MSF international HIV/AIDS Strategic Framework for 2014-2017) **to the fight against the HIV/AIDS and TB epidemics with specific attention to contexts where populations lack access to HIV/TB prevention, testing, care and treatment**:

- MSF should catalyse the scale up of HIV prevention care and treatment in these contexts.
- This should be achieved through new programmes focusing on HIV and inclusion of an HIV/TB package in all MSF projects where relevant.
- Ensure access to HIV testing care and treatment in paediatric and nutritional projects.
- In emergency setting and in displaced population, MSF should ensure as a minimum continuation of HIV/TB care and treatment. Wherever possible a comprehensive package of HIV/TB prevention, care and treatment should be provided.
- MSF should reinforce the integrated management of HIV and TB including DRTB.

The 2014 MSF TB Policy Paper reconfirmed its commitment to strive effective care to TB patient in all situations including conflict settings with specific attention to most vulnerable populations (children, HIV infected patients, prisonners, displaced people, migrants). TB care should include DR-TB and short simplified MDR-TB régimen can be considered in unstable settings.

Even though a great effort has been made in terms of ART coverage in many countries, still more than 40% of patients in need of ART do not have access to ART at the end of 2013. ART coverage is also extremely varied across countries, ranging from 80% (Zambia, Swaziland) to less than 20% (CAR, DRC, Sudan). In many of these low ART coverage countries, MSF currently has active and large scale projects.

Although progress has been made in reaching global targets with reduction of new TB cases (reducing by 2.2% between 2010 and 2011) and TB mortality (decrease of 41% since 1990), TB burden remains enormous and increasing incidence of DR TB a major concern.

2. Where to include HIV and TB care in MSF projects?

Efforts should be focused to provide HIV care at least in MSF projects where the HIV prevalence in the adult population is ≥ 1% and TB care where TB incidence exceeds 20/100 000/year. In these settings implementing HIV/TB care should be part of the routine basic health care package of care.

- **Where HIV/TB services are accessible but are of poor quality:**
  - Strengthen quality of care of existing HIV/TB services with a particular focus on PMTCT and paediatric care.
  - Align with local HIV/TB protocols if consistent with WHO recommendations. If not, aim to implementation of international recommended practices and advocate for change.
  - Lobby for the joining/merging of HIV and TB services to facilitate the integrated management of people with both infections.
- **Where HIV/TB services are not accessible or are too far away:**
  - Implement HIV/TB services according to the defined minimum package of care (see following page).
  - Provide PMTCT using WHO/MoH protocols with at least the minimum PMTCT package in any MSF program involved in ANC and /or deliveries and/or PNC. Align with national HIV/TB and PMTCT protocols if existing and consistent with WHO recommendations. If not, aim to implementation of international recommended practices and advocate for change.
  - To include advocacy at local and national level in the implementation plan for HIV/TB care and PMTCT to be available locally.
- **Where existing HIV/TB services have been disrupted (conflict or other emergency):**
  - Prevention of treatment interruption as immediate priority with TB drugs and ARV supply.
  - Aim to provide prevention measures including PMTCT.
  - As soon as possible and at latest when the acute emergency phase is over, include in the emergency planning a minimal contextual TB and HIV assessment including mapping of local partners' HIV/TB related activities.
  - Implement HIV/TB services (see following page, minimum package of care).

3. What components should be included as part of HIV care in MSF projects?

Beside the standard provision of basic prevention measures that should be available in all MSF projects[a], MSF has defined: "**Minimum HIV Care package**". It relates to the provision of HIV counselling and testing, prophylactic treatment, provision of life-saving OI treatment (including TB) and antiretroviral therapy (ART) that should be implemented in all MSF projects where relevant. It can be implemented in a stepwise approach.

"**Extended package of HIV Care**" refers to a wider range of activities and tools that should be considered by each operational section as context and burden of the project itself will determine the resources that can be invested in HIV/TB care (see Appendix 1).

Projects implementing the minimum package can select some elements of the extended package if they feel these are feasible in their setting.

Minimum HIV/TB Care Package

Prevention
• Universal precautions • Condom distribution • PEP • Safe blood transfusion • Syndromic management of STI • PMTCT when MSF is involved in ANC and/or Delivery, including PMTCT in breastfeeding women with no previous intervention during ANC/delivery • Infection control
HIV testing
• HIV testing in all TB patients • HIV testing in SAM children requiring hospitalisation • HIV testing in ANC & Labour • PITC allowing "opt out" for patients suspected of HIV disease in Adult IPD ward • PITC allowing "opt out" for patients suspected of HIV disease in other health care services (OPD, ATFC, IPD paediatric) • HIV testing in HIV exposed children < 18 months when clinical signs are suggestive of HIV[b]
Pre-ART care
• Cotrimoxazole prophylaxis • Systematic clinical screening of TB • Treatment of common OIs • ICF and IPT for children with age < 5 years in contact with active TB

[a] Universal precautions, safe blood transfusions, condom distribution, treatment of STI's, post-exposure prophylaxis for occupational blood exposure of our staff or after rape (PEP).

[b] If the RDT is positive, ART can be started without DNA confirmation. Final status with HIV RDT when > 18 months and 6 weeks after end of BF exposure.

ART eligibility
• > 5 years old: Clinical staging (WHO stage III and IV) • < 5 years old: all HIV+ children regardless clinical staging • Pregnant women: all HIV+ pregnant women regardless clinical staging
ARV treatment regimen
• Take into consideration MOH protocol • If no MOH protocols: – First-line ART regimen for adults and pregnant women: TDF/3TC/EFV – First-line ART regimens for children: AZT/3TC/NVP or ABC/3TC+ NVP – First-line ART regimens for children < 3 years when appropriate formulation of LPV/r will be available (2016): AZT/3TC or ABC/3TC + LPV/r
PMTCT as soon as "MSF" is involved in reproductive health activities[c]
• Follow MOH protocol • If no MoH protocol: Option B/B + • Give ART at least during the period at risk of transmission (option B) or lifelong (option B+)
TB screening and diagnosis
• Cough triage for all patients in the health care facility • Clinical screening to all HIV+ patients & TB contacts • Access to AFB smear microscopy or GeneXpert (on site or sputum referral) • Diagnostic clinical algorithms (smear- PTB and EPTB) • Presumptive TB diagnosis for suspected children using a defined algorithm
TB treatment
• Standard TB treatment with adapted dosing for children: 2RHZE/4HR (or 2RHZE/10RH if meningitis or osteo articular disease) • Supported self-administration for TB therapy ("SAT") and ambulatory care • Availability of the 9 months DRTB regimen on ad hoc basis (contact your HIV/TB advisor)
Adherence, patient education and support
• Health promotion & IEC to integrate in existing activities • Patient education and adherence counselling at each step[d]: patient diary for appointments and early notice of defaulters and/or delayed patients • Adherence evaluation based on self reporting

c See the PMTCT mínimum package in *Directives for PMTCT implementation as part of ANC* and *Obstetric care in MSF programs*, SHR & AWG, October 2012.

d Pre ART preparation and counselling, on-going adherence support, enhanced adherence triggered by clinical & patient story.

Laboratory diagnostic tools and monitoring strategies[e]
• 2 HIV rapid tests • No baseline and ART monitoring tests are mandatory to provide HIV treatment and care • Identify a laboratory to refer suspected TB sputum: sputum smear microscopy (ZN or fluorescence) or Genexpert • Haemoglobin (AZT) with Haemocue
Drug supply in addition to the essential drugs available in the field
• Adult and paediatric ARV formulations • Prophylaxis: CTX adult and paediatric, pediatric Isoniazid • First line adult and paediatric TB treatment & Pyridoxine • OI drugs: CTX, Fluconazole, Aciclovir • Second line anti-TB drugs on ad hoc basis[f] • Therapeutic food
Data collection and monitoring
• Integrate with the MoH monitoring and evaluation system • Patient HIV card and TB card • Paper based registers (VCT, pre-ART and ART registers for cohorts < 500 patients, ANC registers, TB patients registers and TB laboratory registers) • Report on minimum indicators: TB standard quarterly report, HIV report, PMTCT report
Human resources
• No additional HR • If needed, temporary implementation support

[e] Laboratory provision of services: few additional laboratory examinations are needed for diagnosing OIs and starting ART compared to the ones that the program might be already providing (e.g. CD4, Indian ink or LFA). None of the laboratory test is mandatory (except HIV test) and should not be a reason to delay implementation and start HIV/TB care for patients.

[f] Approach on access to DR TB treatment might differ between sections, discuss with your HIV/TB advisor.

4. How to include HIV and TB care? Implementation strategies

4.1. Assessment

Prior to implementation of HIV/TB activities, perform an assessment of the situation, level of care, level of implementation of activities, actors providing HIV and/or TB care in the area. This will allow the project to map the current situation and to establish priority areas of concern. This assessment should be part of the initial exploration and discussions when a project is set-up. The TB&HIV assessment tool (Appendix 2) will assist in collecting all the information needed for this assessment and for its evaluation[g].

To decide if it is acceptable to refer patients to existing structures providing HIV/TB care you need to consider the following points:

- correct criteria for treatment initiation are in place;
- adequate supply of quality drugs (including paediatric drugs and PMTCT);
- minimum clinical follow up and data monitoring are ensured;
- proposed referral site accessible to patients (considering transport fees).

4.2. Deciding on a minimum or extended package of HIV/TB care

If MoH or other actors are providing HIV/TB care which is accessible to patients within the MSF Project area, this should be noted and made clear as a reason why MSF should not implement activities independently. A strategy could be to support the MoH for some selected components of the HIV or TB activities.

Depending upon the outcome of the assessment, implementation of HIV activities may be introduced in a step wise approach with further expansion if needed and possible (ie: from provision of care to only sick stage 3 and 4 patients and PMTCT up to a VCT with ART in asymptomatic adults and children). The implementation strategy will be strongly defined by the testing strategy adopted: testing sick patients attending a care service or testing asymptomatic patients who voluntarily want to know their status. The choice of testing strategy will depend on the context and burden (workload/capacity) of the ongoing project services.

Depending upon the outcome of the assessment, implementation of TB activities may be introduced to address the shortcomings: poor quality of the laboratory, drugs of unknown quality, drug and reagents shortages, lack of paediatric formulations, inadequate treatment regimens, etc.

A targeted Provider-Initiated Testing and Counselling (PITC) strategy will target HIV testing for patients suspected of HIV infection. Clinicians and medical personnel identify patients with clinical criteria to be offered HCT (i.e. sick patients in stage 3 or 4, TB patients, hospitalised severe malnourished children) who would be eligible for ART on the basis of clinical assessment. This strategy may be used when the project activities have many competing priorities (nutrition, paediatrics, vaccination, surgery, IPD) and it is included in the minimum package of services.

[g] A Check-list for the evaluation of a TB service is also available in 2014 MSF/PIH guideline, *Tuberculosis*, Appendix 35 p.298.

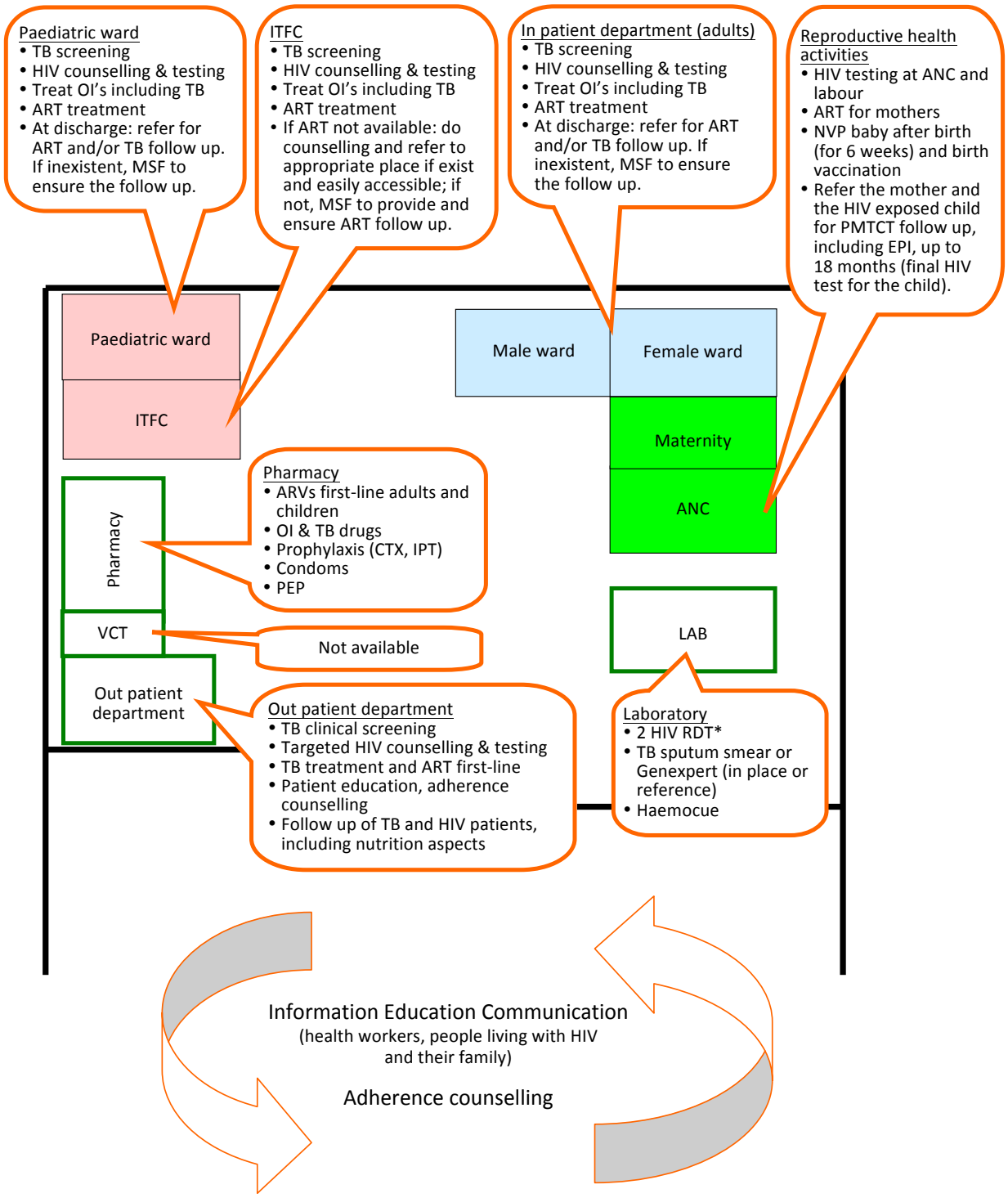
Voluntary Counselling and Testing (VCT) targets and offers HIV testing to any individual in the health care setting or in the community on a voluntary basis and all those eligible will be started on treatment.

4.3. Where to start with HIV diagnosis, care and treatment?

In order of priority:

1. TB department
2. ITFC
3. Antenatal care and maternity services
4. IPD adults and paediatrics
5. Ambulatory therapeutic feeding centre and Outpatient department services

4.4. Organization of HIV/TB services at the level of hospital and primary health care clinic



* Discuss HIV testing protocol with your section as there might be variations.

Figure 1: Example Minimum Package of HIV and TB activities at hospital level

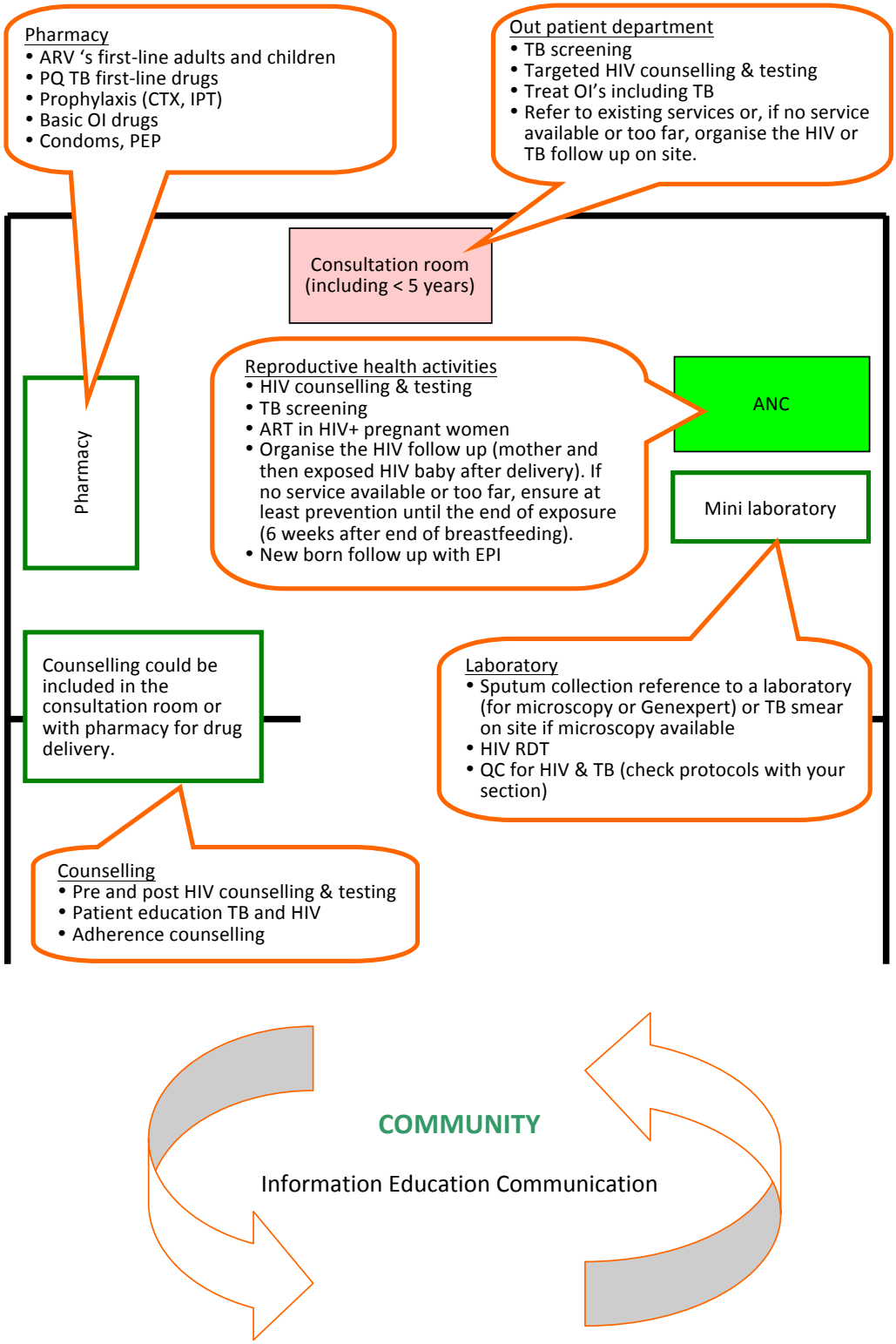


Figure 2: Example Minimum Package of HIV and TB activities in a primary health care setting

4.5. What do I need to implement on HIV and TB activities?

Available resources[h] are listed in Appendix 3.

- **HIV testing**

  For technical information about different HIV tests and procedures consult with your Lab Advisor.

  What needs to be implemented when MSF is involved in HIV testing?

  ✓ Training of personnel to perform testing and counseling: these activities can be performed by nurses, midwives, but also by non-medical staff such as community health workers or peer counselors;
  ✓ Good staff attitude toward HIV patients and willingness to provide emotional support;
  ✓ Testing operational procedures (discuss with your section);
  ✓ HIV tests and reagents in place;
  ✓ Define flow of patients;
  ✓ Quality control (QC) system from the beginning (refer to what is available by MOH and to your lab advisor);
  ✓ Basic paper-based registration system for data collection (e.g. number tested, number +ve, sex, age). Refer to existing MOH registers.

- **TB screening and diagnosis**

  What needs to be implemented when MSF is involved in TB screening?

  ✓ Training of personnel to perform clinical screening and sputum collection;
  ✓ Training of personnel on infection control measures;
  ✓ Ventilated room for consultation;
  ✓ Sputum microscopy or Xpert MTB/RIF (in place or sending to reference lab);
  ✓ Standard algorithms for diagnosis in children and in smear negative patients;
  ✓ Quality control (QC) system;
  ✓ Basic paper-based registration system for data collection (TB patient and laboratory registers).

- **HIV and TB consultation**

  For detailed technical information on clinical protocols refer to your HIV/TB advisor and country guidelines.

  HIV and TB care with ART provision should ideally be integrated within the ongoing structures (OPD and IPD) and activities in order to avoid creating a vertical model which would need extra resources; however in settings with high HIV prevalence and a high number of patients there could be a need for a separate clinic or to dedicate one specific day to HIV/TB.

h Relevant MSF sources of information included in appendix 3 and accessible online:
SAMU website: www.samumsf.org ; Bibop OCG: http://bibop.ocg.msf.org/

Frequent communication and regular exchanges between medical teams and HIV/TB advisors is encouraged.

What needs to be implemented when MSF is involved in HIV/TB care?

- ✓ Clinical training of medical staff according to the level of care. Task shifting: nurses can be trained for tasks such as ART initiation and ART patients follow up although be aware of local regulations. Lobby at district level and at MOH level for task shifting might be necessary even though more and more countries are now in favor of this strategy.
- ✓ Simplified clinical protocols;
- ✓ Definition of flow of patients ensuring minimal Infection Control;
- ✓ Patient education and adherence counseling system;
- ✓ Implementation of appointment diary that will allow organizing consultation workload and identifying defaulting patients ;
- ✓ Data collection system (HIV registers, patients file, etc): see HIV /TB data monitoring section.

- **PMTCT**

What needs to be implemented when MSF is involved in PMTCT?

- ✓ Simplified clinical protocols (option B+/B should be promoted);
- ✓ Training of medical staff (midwives, nurses, peer patients or CHW) on PMTCT and basics on HIV and TB;
- ✓ Inclusion of pré test HIV counseling session in the patient flow in ANC;
- ✓ Establish a link/referral between ANC, location where women deliver and PNC follow up;
- ✓ Standard Intra partum procedures during labor and delivery (see PMTCT guidelines);
- ✓ Follow-up of HIV exposed babies including immunization until the final HIV status is known;
- ✓ Family planning;
- ✓ Monitoring and reporting system in place (PMTCT register, see M&E section).

- **Patient education, HIV and TB counseling and adherence**

Counselling is a crucial component of HIV and TB care, aiming for better treatment results and an improvement in the patients' quality of life. Support activities for these patients will be focused on information, education, and psychosocial aspects, at all stages, from prevention to care. Usually counselling will be part of the consultation and done by the one providing care. When the cohort is growing, the teams should adjust and explore possibilities of organising group session counselling in the waiting room, and peer group involvement.

What needs to be implemented when MSF is involved in HIV counseling?

- ✓ Good staff attitude toward HIV patients, able to listen and be willing to provide emotional support;
- ✓ Training of medical staff (nurses, midwives, peer patients or CHW) on HIV adherence counseling skills;
- ✓ Training of medical staff (nurses, peer patients or CHW) on TB treatment counseling;
- ✓ Simplified counseling guidelines;
- ✓ Inclusion of counseling session in the flow of the patient (waiting room , patient group, individual);
- ✓ Check lists of topics to be discussed at each counseling session;
- ✓ Counseling tools/material available such as flip chart material, leaflets, etc.;
- ✓ Monitoring of quality of this intervention.

- **HIV and TB data management: Monitoring and Evaluation**

  All projects with HIV/TB activities will collect a minimum set of indicators in order to allow monitoring of the quality and implementation of activities in addition to sentinel surveillance and research if required.

  MoH patient monitoring and evaluation tools should be used and/or strengthened (TB register, Pre-ART register, ART register, ANC register). If no national tools exist standard WHO patients HIV cards and simplified registers should be used. The decision on the most adequate tool to implement should be made with your HIV/TB advisor and operational supervisor at HQ.

  M&E tools should be adapted to the local context, level of decentralization, resources available, logistic constraints (electricity, transport) and availability and access to continuous IT and data management support.

M&E tools	Opportunities	Challenges
Paper registers	**HIV** • Ideal for small facilities with low number of enrolments • Widely available in most of the countries and often adopted by MoH • Easy to fill • Immediate solution while waiting for electronic systems • Inexpensive **TB** • Essential for DS TB. • Simple to fill in and to analyse. • Largely standardized across countries	**HIV** • Difficult to ensure quality of data when size of the cohort > 500 patients • Reports need to be made manually • Difficult to monitor the continuum of HIV care (pre-ART to ART care) • Difficult to do cohort analysis **TB** • National registers may require adaptation • Specific registers are required for DR-TB • Not adapted for monitoring of > 20 DR-TB

M&E tools	Opportunities	Challenges
Offline Electronic Register (e.g HIV/TB reporting tool (OCA))	**HIV** • Ideal for facilities with larger and growing number of enrolments • Offline, simple but robust • It can produce automatic reports • Relatively inexpensive • Can quick back-capture data from paper registers • May also be used for decentralized clinics if logistical constraints can be addressed • Potentially possible to monitor continuum of HIV care (from pre-ART to ART care) **TB** • Not needed for DS TB treatment	**HIV** • Computer(s) needed, logistic constraints (e.g. electricity, etc.) • Number of indicators and variables included for collection should be balanced to prevent overload of work and decrease of quality on data collection. • There might be need of data encoder to guarantee quality of data collection
Electronic extended medical records databases (e.g. FUCHIA, Koch6, offline)	**HIV** • For centralized clinics with large number of new enrolments • Collects a large dataset and offers more management functions • Produces automatic reports • It can be used as a sentinel surveillance dataset and/ or research for more complicated questions • It may take away the burden of collection of large data sets away from the HIV clinic • Possible to monitor continuum of HIV care (from pre-ART to ART care) **TB** • No need for DSTB • Necessary when > 20 DR-TB patients (Koch6)	**HIV and TB** • Needs computer(s) and electricity • Difficult in very remote or decentralized settings • It requires allocated staff for data collection • Strong and continuous IT and data management support needed • If MSF/EPICENTRE electronic database used (e.g. FUCHIA or Koch6) may not be possible to handover to MoH • Relatively expensive (not FUCHIA nor Koch6)

There is a set of basic indicators for HIV/TB M&E to be collected:

1. For TB, quarterly reports with case finding and outcomes should be used (appendixes 32 and 33 p 294 and 296 of *Tuberculosis*, 2014 MSF/PIH guideline).
2. HIV indicators are listed in Appendix 4, with basic package of indicators as the minimal set for quarterly monitoring.

What needs to be implemented when MSF is involved in HIV and TB M&E?

- ✓ Paper-based registers: VCT, Pre ART & ART, TB and ANC;
- ✓ Patient card (TB and/or HIV);
- ✓ Staff trained to fill the registers and to perform the minimal description of the cohort;
- ✓ Patient Identification number (the same on Pre ART and ART register, links with HIV testing number, PMTCT number, TB number);
- ✓ Confidentiality, registers only accessible to the medical personnel: locked file cabinet to keep files and registers;
- ✓ Patient medical file.

4.6. Preparation to include HIV/TB activities in a routine MSF project

Planning

Basic health care projects face many competing medical priorities. After performing the assessment it is possible to define which HIV and TB activities can be included into the existing services and when and what resources may be needed. The example in Appendix 5 of a chronogram outlines the elements that may need to be considered in the timeline of implementation.

Pharmacy

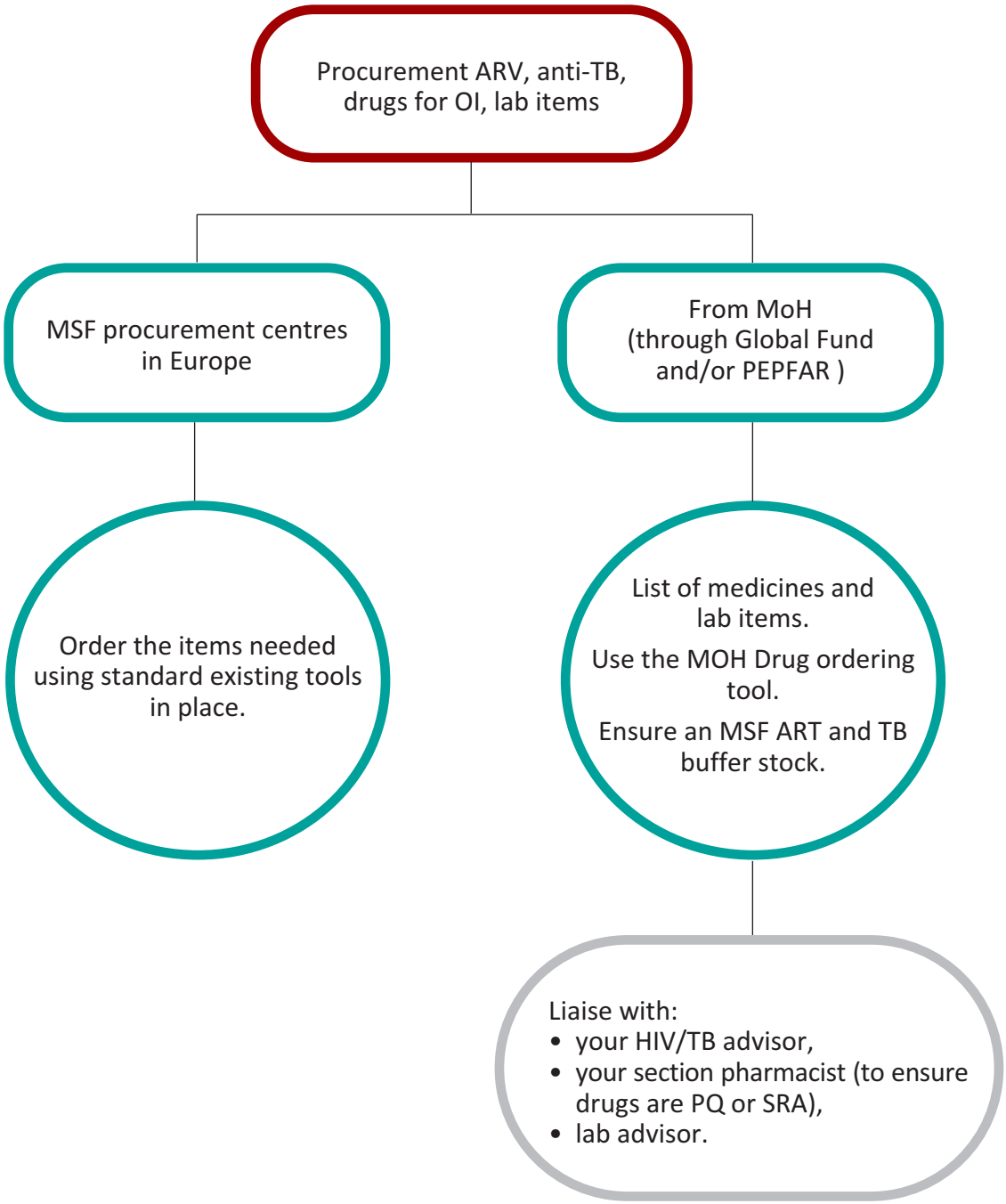
Access to drugs has to be ensured even when the supply comes from different sources. A regular follow up of the different supply lines is requested in order to detect as early as possible potential stock outs and react in time.
For HIV , drug orders have to be made with the forecasted needs taking into account the cumulative number of patients on treatment and the forecasted number of patients to be initiated on ART.
For TB , drug orders are done based on ordering total needs per treatment and number of patients foreseen to be included on treatment plus 3 months buffer stock.
For forecasting needs, see in appendix 6 the list of major items to help passing the first order.
For ordering ARV see in appendix 7 the ARVs drug order tool .
For ordering TB drugs see in appendix 7 bis the DS TB drugs order tool .
For drug forecasting of second line TB drugs contact your HIV/TB advisor (there are tools and guidelines available and adapted to the regimen and protocols to be implemented).

ARVs Procurement can be done either through MSF either through MOH (through GF and/or PEPFAR). For a first order, it can be easier to go directly through MSF. However whenever possible team should aim to go through MOH, as then HIV/TB activities in the setting get visibility at MOH level and it will ease the collaboration between MSF and MOH and later the hand over process.

TB drugs are mainly supplied to MOH by GDF (Global Drug Facility). No compromise should be done on the quality of the drugs. Only quality assured drugs should be used (WHO prequalified or registered by stringent regulatory authorities (SRA)).

– Storage
  The storage requirements for all medicine and laboratory items should follow MSF's good storage and distribution practices. Appropriate storage conditions and cold chain have to be maintained, clean store-room, appropriate labels and expired stock separated.

– Practical tools
  - List of major items to help passing 1st order (Appendix 6)
  - ART drug order tool (Appendix 7)
  - DS TB drug forecasting tool (Appendix 7bis)



Case studies of integration of HIV and TB care in basic health care package

See Appendix 8.

5. HIV and TB in unstable settings

5.1. HIV in emergency

In 2006 WHO, UNHCR, UNAIDS, UNICEF and MSF reached a consensus saying that delivering ARV treatment in emergencies is feasible and represents an obligation in terms of human rights and public health strategy[i]. Any interruption in drug supply can compromise health outcomes for people living with HIV and TB. The needs of this population should be included in the emergency response when it is cut off from original health services.

When opening an emergency response project, basic TB/HIV assessment should be realized to be able to map facilities and partners and to have national protocols. Emergency orders should contain some chronic disease medications including TB drugs and ARVs adapted to the national program. Preventing treatment interruption should be a minimum objective.

This guidance is applicable in any contexts where the emergency unit/desk plans to intervene (short term intervention). The objective of this intervention is to allow the continuation of treatment for people previously started on ARV (regardless of the HIV prevalence of the country) and/or TB drugs[j].

Possible scenarios:
- Natural disaster
- Acute violence and conflict
- Diseases outbreaks
- Any scenario leading to displacement of a population (refugee camps , internal displaced population settings)

Ensure continuation of treatment with provision of ART and TB therapy for people already under treatment without possibility of drug supply in their original clinics.

See example of drug order to ensure continuation of ART/TB treatment in Appendix 9.

- In case the treatment was interrupted with AZT/3TC/NVP or AZT/3TC + EFV for more than 2 weeks it is not an emergency to restart the treatment, as the interest of avoiding interruption to decrease the risk of resistance is already lost. Advise the patient to attend his previous care provider if accessible (the ART clinic not destroyed for example, staff still there). If not possible, restart his treatment.
- New treatment initiations are not an objective included here and thus, this activity will be discussed with your HIV/TB advisor and operational supervisor at HQ (except in circumstances such as PMTCT).
- In case the patient does not have documentation and is not able to remember which treatment s/he was on: it is recommended to test for HIV and to show a sample of drugs for identification, failing that prescribe the national first line regimen.
- Always ask about change of treatment in the past for side effects or severe rash.
- Provide a “health card” indicating the ART regimen and prophylaxis given. This health card should then be shown at subsequent visits.
- Ensure continuation of TB treatment.
- Ensure continuation of OI prophylaxis: CTX
- Ensure access to PMTCT care: option B/B+ should be used.
- Ensure PEP for victims of sexual violence and occupational exposure.

[i] *Delivering antiretroviral drugs in emergencies: neglected but feasible*, 20 septembre 2006, OMS.
[j] For further information, see MSF OCBA Guidelines, *HIV & TB during Emergency interventions*, 2012.

5.2 Contingency planning

Repeated interruption in drug supply can compromise health outcomes for patients under TB or ARV treatment and can potentially cause development or amplification of resistance to anti-tuberculosis and/or ARV drugs. According to the setting the contingency plan should be written and regularly updated and regularly shared with key people.

Contingency plan includes:

- An extra stock of drugs per patient, so-called “run-away” bags for TB with all the remaining drugs to finish the TB treatment course and ARVs given for a longer period (at least 3 months).
- Tail protection (ie continue with one week of AZT/3TC when AZT/3TC/NVP is over) is recommended if AZT/3TC/NVP tab is used. There is no need of tail protection if TDF/3TC/EFV or TDF/3TC + NVP or if PI based treatment is used.
- If evacuation of expatriate staff is necessary consider continuing provision of care through a remaining national staff team. If a reduced team is part of the contingency plan, the staff that remains must be adequately trained in advance on TB and HIV basics. Such projects may be managed on “remote management” for an ongoing period until it is considered appropriate or necessary for the full team to be reinstated.
- Patients should be instructed to carry their treatment card with them at all times
- Inform patients on possible safe health centres where they can receive HIV/TB treatment and give them at least 3 months treatment
- Contingency planning must be part of the initial counselling for patients starting treatment. High quality patient education and counselling is the key to face emergency situations.

All efforts should be undertaken to refer patients to a safe place where further clinical management and support through MSF and/or MoH staff can be offered. During imminent- or ongoing violence, no new TB or HIV patients should be enrolled on treatment.
See in appendix 10 different contingency plans examples.

6. Exit strategy

In any given context when MSF is planning to close a project, MSF should seek to handover responsibility for HIV and TB care to others to ensure that that provision of care and treatment can be continued. However, this will not be a precondition to provide HIV/TB care in these programs. The level to which this can be achieved will vary widely but planning for handover should begin as early as possible, ideally as part of the initial project strategy.

Handover may be partial as for example withdrawing from selected activities in order to focus on specific neglected activities or particular populations or complete with withdrawal of all MSF activity in the project area. A ”handover dashboard” (see appendix 11) has successfully been used in the handover of a number of vertical HIV/ TB projects. This dashboard is more adapted to contexts of vertical projects, but the key principles can also be used in MSF projects where HIV/TB care is part of the global package of care. Those key principles of the dashboard rely on the formation of a steering committee that develops the strategic objective, operational objectives and defines indicators of the handover. These indicators are then defined: red- not achieved; orange- almost achieved; green – achieved, and reported on quarterly. Regular feedback and action point planning related to the progress of the indicators is done in conjunction with the handover partners. Examples of HIV projects where this tool has been used include Lusikisiki (South Africa), Morija (Lesotho), Angonia (Mozambique) and Thyolo (Malawi),. The key principles of this tool are described in the MSF UK document “Making an exit”.

Appendices

1. Extended package of HIV/TB care
2. Assessment tool for HIV/TB situational analysis
3. List of available resources and guidelines
4. Minimum HIV data monitoring

4bis. Minimum PMTCT data monitoring

5. Chronogramme example for integration of HIV/TB activities
6. List of items for the first HIV and TB care order
7. ARV drug forecasting tool (MSF 2014)

7bis. DS TB drugs forecasting tool (MSF 2014)

8. Case studies of including HIV/TB care in MSF projects
9. Example of ARV & TB drug order for treatment continuation in emergency
10. Contingency plans - Case studies
11. Example of a hand over dashboard

Appendix 1. Extended package of HIV/TB care

(when minimal package is already ensured)

Prevention
• Circumcision • Treatment as Prevention for serodiscordant couples (ART for the HIV positive partner regardless CD4) • Treatment for any HIV positive patient (also called the Test and Treat or Treatment as Prevention strategy)
HIV testing
• VCT • HIV DNA PCR for infants < 18 months
Pre-ART care
• Regular monitoring with CD4 count • IPT in HIV+ adults • Screening for Cryptococcal Ag when CD4 < 100 and appropriate treatment if positive • Capacity to diagnose and treat severe OIs (CM ,KS, TB) • Alternative for CTX prophylaxis: dapsone
ART eligibility
• When CD4 testing available, patients with < 350 as a priority, then < 500 cells/µl • Regardless of CD4 count in specific populations (PMTCT option B+, serodiscordant couples)
ARV treatment regimen
• Access to alternative first line regimens, second and 3rd line (contact your HIV/TB advisor)
PMTCT as soon as "MSF" is involved in reproductive health activities[a]
• Option B+ • Partner involvement
TB screening and diagnosis
• Use of Xpert MTB/Rif according to the diagnostic algorithms available in MSF/PIH TB guideline 2014 (see with your TB/HIV advisor) • Referral for MTB culture/DST to all patients with positive Xpert and rifampicin resistance • Capacity to confirm the diagnosis of DRTB for all failing TB treatment patients (referral, sending sample for culture) • Access to X Ray
TB treatment
• Full DRTB component

[a] See AWG & SHRWG Directives mínimum package, *PMTCT*, Ocober 2012 .

Adherence, patient education and support
• Enhanced adherence counselling triggered by immunological results and if possible by VL • Mechanism to detect defaulters and simple defaulter tracing activities for TB and ART patients including mothers enrolled in PMTCT program • Encourage patient and community involvement (peer groups, patients association) • Involve civil society
Laboratory diagnostic tools and monitoring strategies
• CD4 for ART initiation decision and for monitoring (consider POC) if no VL testing available • Sputum Smear microscopy (Zn or fluorescence) • Indian ink and/or Crag LFA • Access to reference lab to send samples for MTB culture/DST • LAM TB test for severely immunosuppressed HIV patients (CD4 < 100) not able to provide sputum (see your HIV/TB advisor for introduction) • Access to HIV DNA PCR for babies < 18 months (consider POC technologies) • Targeted VL or if feasible routine VL monitoring (consider POC or DBS) • ALT (NVP) (when clinically indicated) • Creatinine test at TDF/3TC/EFV initiation (Consider PoC) • GeneXpert® MTB/Rif • Hepatitis B and C tests • Syphilis test • CXR
Drug supply in addition to the essential drugs available in the field
• OI drugs including amphotericin B, flucytosine, bleomycin and other cytostatic for KS, valganciclovir in certain contexts (mainly Asia) . • Alternative first line ART regimens • Second and third Line ART regimens (contact your HIV/TB advisor for 3rd line drug) • Second line anti-TB drugs
Data collection and monitoring
• Electronic database (eg FUCHIA, Koch 6, Tiernet, Open MRS) • DRTB bi annual cohort analysis
Human resources
• Additional trained staff (nurse or PLHA) for specific activities to maintain the quality of a growing cohort & to ensure VCT

Appendix 2. Assessment tool for HIV/TB situational analysis

HIV/AIDS situational analysis	Country-wide	MSF project/Region specific	Planned response
1) Population			
2) Funding			
Has the country received/planned GFATM/PEPFAR/ other major funds?			
If yes, which one?			
3) Epidemiology (including prevalence, risk behaviours and vulnerabilities)			
HIV/AIDS			
Prevalence of HIV[a]			
Estimated need on ART			
HIV Prevalence in different risk groups			
Number of HIV+ adults already in care			
Number of HIV+ children[b] already in care			
Number of HIV+ on ART			
Tuberculois			
TB Incidence			
Prevalence of MDR & XDR TB in new cases & retreatment cases			
Vulnerabilities relating to HIV infection			
Identified instability factors that influence HIV understanding, transmission, prevention in the community			

HIV/AIDS situational analysis	Country-wide	MSF project/Region specific	Planned response
4) Current HIV/TB - Related interventions			
National guidelines			
Do any of the following national guidelines exist (y/n)?			
Agreed upon, adhered to and applied?			
HIV/AIDS			
A national strategic plan			
A National AIDS program			
Sentinel sites for HIV prevalence in the country (where?)			
National protocols for HIV/AIDS management			
Tuberculosis			
A national strategic plan			
National Protocol for TB, MDR/XDR TB treatment and management			
All HIV-related actors			
Identify and list all other actors in the area working in HIV Partnerships and coordination mechanisms			
All TB-related actors			
Identify and list all other actors in the area working in TB Partnerships and coordination mechanisms			

HIV/AIDS situational analysis	Country-wide	MSF project/Region specific	Planned response
HIV/AIDS treatment protocol			
National protocol for HIV/AIDS treatment? a) CD4 threshold for ART initiation b) ART regimen c) PMTCT option			
TB diagnosis & treatment protocol			
National Protocol for TB, MDR/XDR TB treatment?			
What is the availability of CXR, sputum microscopy, Genexpert and cultures?			
HIV treatment provision			
Who are the main ART providers (describe gaps in service provision in both stable and unstable times)?			
What is each of their capacities for emergency supply/contingency plan?			
TB treatment provision			
Who are the main TB providers?			
What is each of their capacities for emergency supply/contingency plan?			

HIV/AIDS situational analysis	Country-wide		MSF project/Region specific	Planned response
5) Drug procurement and patents	**ARV drugs**	**Anti-TB drugs**		
Are drugs available (which)?				
Patented, registered, supplied (y/n)?				
Are generic drugs[c] available (y/n)?				
Which?				
Prixces?				
PQ?				
Available from who?				
For how long and for how many?				
Any documented stock ruptures?				
Can drugs be stored securely?				

HIV/AIDS situational analysis	Country-wide	MSF project/Region specific	Planned response
6) Existing HIV and TB-related services *For each service indicate if available (y/n) and provided by whom (list all organizations and rate service provided – using key below[d]).*			
HIV and TB-related services			
IEC			
Treatment preparedness			
VCT			
Medical follow up			
HAART			
PMTCT			
Home based care			
PLWHA group			
In patient care			
Palliative care			
TB services integrated with HIV services			

a Information from blood bank, ANC and the military can be used to substantiate other prevalence rates.

b Number of children is difficult to estimate, it can be roughly 10% of the adult population.

c Specifically d4T/3TC/NVP, AZT/3TC and D4T/3TC.

d Service Grading Notes:
A = Good quality service. Appropriate to refer without any need for MSF support/supervision.
B = Medium quality service. Appropriate to refer with increased support/supervision.
C = Poor quality service. Not appropriate for referral without major improvements.
E = Advocate for others to provide service/support. MSF should not get involved in provision.
F = Advocate for others to provide service but develop temporary MSF service while waiting.
G = MSF to provide main response for short to medium-term.

Appendix 3. List of available resources and guidelines

HIV testing and counseling

- *Patient Education and Counselling handbook for HIV/TB adult infected patients*, MSF March 2012, E/F.
- *Guidance on Provider-Initiated HIV Testing and Counselling in health facilities*, WHO 2007 E/F.

TB screening and diagnosis

- *Tuberculosis*, MSF-PIH 2014, E/F.
- *Guidance paper on intensive case finding, TB skin Testing and Isoniazid Preventing Therapy*, MSF 2011.
- *WHO policy on collaborative TB/HIV activities guidelines for national programmes and other stakeholders* + Annexes, WHO, 2012 E/F.

HIV and TB consultation

- National program protocols.
- *The use of antiretroviral drugs for treating and preventing HIV infection*, WHO 2013 E/F.
- *Tuberculosis*, MSF-PIH 2014 E/F.
- *Paediatric HIV handbook*, MSF 2015 E/F.
- *ARV for beginners* (ex dummies), MSF OCP 2012.
- *HIV/TB clinical guide*, MSF SAMU 2014.
- Samu website: www.samumsf.org.
- CHISTOL CD ROM, MSF OCP 2013 E/F.
- *Simplified HIV/ARV care modules*, MSF OCA.
- *WHO policy on collaborative TB/HIV activities guidelines for national programmes and other stakeholders* + Appendices, WHO, 2012 E/F.
- *Drug Resistant Tuberculosis Treatment Protocol (9 months - short regimen)*, MSF OCA January 2012 E/F.

PMTCT

- *Prevention of mother to Child Transmission of HIV Part 1 Protocol*, MSF 2015 E/F.
- *The use of antiretroviral drugs for treating and preventing HIV infection*, WHO 2013 E/F.
- *Patient education and counselling guide for PMTCT B+*, MSF OCB April 2013 (available at www.samumsf.org).
- WHO IATT toolkit on option B+.

Patient education, HIV and TB Counseling and adherence

- WHO guidelines, toolkits, flipcharts.
- *Checklists for Patient education/counselling sessions for those with active TB disease, Including drug-resistant TB*, MSF OCB 2013.
- *Patient Education and Counselling handbook for HIV/TB adult infected patients*, MSF March 2012, E/F.
- *Patient education and counselling guide for PMTCT B+*, MSF OCB April 2013 (available at www.samumsf.org).
- *Patient support for HIV infected children* + DVD, MSF OCB 2008 E/F/P.

HIV Data management: Monitoring and Evaluation

- *HIV data monitoring* (enclosed in this document annexe 4).
- *Simplified HIV/TB line list*, MSF OCA.
- *Three interlinked patient monitoring system for HIV care/ART, MCH/PMTCT and HIV/TB: standardized minimum data set and illustrative tools*, WHO 2012 revision.
- *Definitions and reporting framework for tuberculosis,* WHO 2013 revision.
- *Tuberculosis* ,MSF-PIH 2014 E/F - appendices 32, 33, 34, 35.

Handover

- *Making an exit: advise on successful hand-over of MSF project*, MSF UK July 2011.

Appendix 4. Minimum HIV data monitoring

Country: **0** Project: **0**	**All sites**
Month	January
Start of period	01-jan-14
End of period	31-jan-14
All data in the section below should be obtained from the VCT registers	
Date HIV program in project commenced	00-jan-00
Number Pré-tested counselling patients	0
Number CT patients tested for HIV during the period	0
Number CT patients HIV positive	0
% CT patients tested during period and HIV positive	
Data below should be obtained from the Pré ART & ART register and/or the FUCHIA reports and/or HIV/TB reporting tool (OCA)	
Outcome Report for HIV positive patients	
Start of period	00-jan-00
End of period	00-jan-00
Number new HIV patients < 15 enrolled in Pre ART care	0
Number new HIV patients ≥ 15 years enrolled in Pre ART care	0
Number HIV patients < 15 years commencing ARVs during the period	0
Number HIV patients ≥ 15 years commencing ARVs during the period	0
Number HIV patients < 15 years commencing ARVs since start of program	0
Of these, total number transferred out	0
Of these, total number lost to follow-up	0
Of these, total number dead	0
Number HIV patients ≥ 15 years commencing ARVs since start of program	0
Of these, total number transferred out	0
Of these, total number lost to follow-up	0
Of these, total number dead	0
Number HIV patients < 15 years on ARV treatment at end of period	0
Number HIV patients ≥ 15 years on ARV treatment at end of period	0

Appendix 4 bis. Minimum PMTCT data monitoring

ANC	Month 1	Month 2			
Number of first new ANC patient consultations					
Number of new ANC patients with unknown status tested for HIV					
Number of new ANC patients with unknown or previous negative status testing positive					
Number of new HIV positive patients put under ART (Option B/B+)					
Number of new ANC HIV positive patients already on ART					
Delivery (if programme providing delivery services)					

Delivery (if programme providing delivery services)	Month 1	Month 2			
Number of women who delivered in a health facility					
Number of women who delivered in a health facility with unknown HIV status					
Number of women who delivered in a health facility with unknown HIV status tested for HIV					
Number of women testing positive for HIV at delivery					
Number of women testing positive for HIV at delivery initiated on ART					
Number of women HIV+ under ART who delivered					

Newborns	Month 1	Month 2			
Number of babies tested DBS at 6-10 weeks during the period					
Number of babies tested DBS at 6-10 weeks positive during the period					

Appendix 5. Chronogramme example for integration of HIV/TB activities

Department	Activities	Resources	Job profile required	Chronogram of implementation			
				Month 1	Month 2	Month 3	...
ANC	1. HIV CT 2. TB clinical screening 3. Initiation of triple therapy to all pregnant women HIV+ 4. Liaison with OPD/TB consultation if TB clinical screening positive						
Maternity	1. Continuation of PMTCT care						
OPD/HIV/TB consultation	1. HIV CT and TB clinical screening 2. Referral of sputum sample for TB diagnosis 3. Initiation of ART/Anti-TB treatment 4. Implementation of agenda for consultation management 5. List of possible defaulters every 2 weeks from agenda 6. Liaison with community team for defaulter tracing for both HIV/TB						
Pediatric ward	1. HIV CT and TB clinical screening to all admissions 2. Referral of sputum sample for TB diagnosis (in case diagnostic possibility) 3. Initiation of ART/Anti-TB treatment 4. Liaison with ambulatory consultation after ward discharge						
Adult ward	1. HIV CT and TB clinical screening to all admissions 2. Referral of sputum sample for TB diagnosis (in case diagnostic possibility) 3. Initiation of ART/Anti-TB treatment 4. Liaison with ambulatory consultation after ward discharge						

Department	Activities	Resources	Job profile required	Chronogram of implementation			
				Month 1	Month 2	Month 3	...
Nutrition	1. TB score to all children not responding to therapy 2. HIV CT to all Severely Accute Malnourished Hospitalised children						
Laboratory	1. HIV confirmatory testing (depending on section requirements) 2. TB Sputum 3. TB Genexpert						
Community							
Data management	1. Implemenation of data management system: a) register books in consultation OR b) central electronic system (ie:Fuchia)						
Pharmacy	1. ARV and anti-TB drug management 2. Provision of drugs to consultation on a weekly basis						
Counselling	1. Pre-HIV test and post-HIV test counselling 2. Pre-treatment counselling sessions (both HIV and TB) 3. Adherence counselling sessions (post-treatment initiation for both HIV and TB)						

Appendix 6. List of items for the first HIV and TB care order

ART order - Scenario TDF based

- **Assumption for ART**
  10 adults/month + 3 children/month + 5 pregnant women PMTCT/month - 6 months order
- **Assumption for TB**
  10 adults/month + 10 children/month - 6 months order
- 6 PEP (TDF/3TC + atazanir/ritonavir)

HIV *10 adults - 3 children - 5 pregnant women / month for 6 months*

		Total treatment needed	Unit/motnh	Total tab. for 6 months
Adults	3TC 300/TDF 300/EFV 600, tab.	210	30	6300
Children	3TC 30/AZT 60/NVP 50, tab.	63	150	9450
	3TC 30/AZT 60, tab.	18	15	270
PMTCT option B/B+	NVP (10 mg/ml), 100 ml, bottle	30	1	30
	3TC 300/TDF 300/EFV 600, tab.	10	30	3150

TB *10 adults - 10 children / month for 6 months*

		Total cases	Days of treatment	Unit/day	Total tab. for 6 months
Intensive phase					
Adults	EHRZ 275/75/400/150, tab.	60	60	3	10800
Children < 23 kg	HRZ 30/150/60, tab.	30	60	5	9000
	E 100, tab.		60	3	5400
Children 23-30 kg	EHRZ 275/75/400/150, tab.	5	60	2	3600
	2H 100, tab.		60	1	1800
Continuation phase					
Adults	HR 75/150, tab.	60	120	3	21600
Children < 15 kg	HR 30/60, tab.	30	120	3	10800
Children 15-30 kg	HR 75/150, tab.	30	120	3	10800

Explanations
HIV: 10 sick adults, 5 PMTCT, 3 children/month, 50 Determine/months, 6 PEP. Children on AZT/3TC/NVP, 14--20 kg.
1 NVP bottle per exposed child.
TB dosages: refer to *Tuberculosis*, MSF/PIH 2014.

	Code	Item	Quantity
ART	DORATELE3T3	3TC 300/TDF 300/EFV 600, tab.	9450
	DORALZNV3T5	3TC 30/AZT 60/NVP 50 , tab.	9450
	DORANEVI1S1	NVP (10 mg/ml), 100 ml, bottle	30
	DORAYILA6TD	3TC 30/AZT 60, tab.	270
	DORATELA3T3	3TC 150/TDF 300, tab.	180
	DORAATVR3T1	ATAZANAVIR (ATV) 300 mg/RITONAVIR (r) 100 mg, tab.	180
TB	DORAETHA1T--	ETHAMBUTOL hydrochloride (E), eq. 100 mg base, tab.	5400
	DORAISON1T--	ISONIAZIDE (INH), 100 mg, breakable tab.	1800
	DORARHZE1FD	RIFAMP.150/ISON.75/PYRAZ.400/ETHAMB.275 mg, tab.	14400
	DORARHFD1T7	RIFAMPICINE 150 mg/ISONIAZIDE 75 mg, tab.	32400
	DORARHFD6T3	RIFAMPICINE 60 mg/ISONIAZIDE 30 mg, dispersible tab.	10800
	DORARHZF6T3	RIFAMP. 60mg/ISON. 30mg/PYRAZ. 150mg, dispersible tab.	9000
	DORAPYRI1T--	PYRIDOXINE (vitamin B6), 10 mg, tab.	11100
	DORAPYRI5T--	PYRIDOXINE (vitamin B6), 50 mg, tab.	3000
	ELINMASS3----	MASK, SURGICAL, IIR type, s.u.	400
	ELINMASP002	RESPIRATOR, FFP2 or N95 (Kimberly--Clark PFR95) Medium	400
OI drugs	DORACOTR8T--	COTRIMOXAZOLE, 800 mg/160 mg, tab.	6300
	DORACOTR1T--	COTRIMOXAZOLE, 100 mg/20 mg, tab.	1890
	DORAFLUC2T--	FLUCONAZOLE, 200 mg, tab.	1000
	SMSUCOND1----	CONDOM, lubricated + RESERVOIR, s.u.	2000
ZN TB microscopy	ELAECONT1S--	CONTAINER, SAMPLE, sputum, plastic, non-sterile	1200
	ELINMASP004	RESPIRATOR, FFP2 or N95 (IMG Europe)	200
HIV testing	ELAETUCA1E--	(Determine rapid test) TUBE, CAPILLARY, EDTA	300
	ELAETIME1E--	TIMER, electronic	2
	DDGTHIVD1T-	TEST, HIV 1 + 2 (Determine), ser/pl/wb, rapid, 100 tests, kit	3
	SLASBUFF70B	(Determine rapid test) BUFER CHASE, 2.5 ml	4
	DDGTHIVU20T	TEST, HIV 1 + 2 (Uni--Gold), ser/pl/wb, rapid, 20 tests, kit	7
	DEXTIODP1S2	POLYVIDONE IODINE, 10%, solution, 200 ml, dropper bottle	1
	SDRECOTW5R--	COTTON WOOL, hydrophilic, roll, 500 g	1
	ELAELANC1D--	LANCET, s.u., sterile, standard point	440
	DDGTHIVS20T	TEST, HIV 1 + 2 (STAT--PAK), ser/pl/wb, rapid, 20 tests, kit	1

Appendix 7. ARV drug forecasting tool (MSF 2014)

2014 VERSION 2.0 (see CD-ROM)
A tool to calculate the FMC's for Antiretroviral drugs
Status: September 2014

Before you start using this tool, please remember the following:
- No software application can act as a substitute for poor quality data.
- No software application can completely substitute your brain and common sense.

The ARV Tool is created with the following objectives:

- To help project medical teams to estimate their needs on ARV drugs (for adults, children, PMTCT and PEP) adapted to the use of smaller integrated HIV activities for international medical orders.
- To calculate FMCs based on medical data that will go to the actual order tool (TSR) as a next step and processed into final order quantities by the logistical team.

Main advantages of this tool:

- Evidence based calculation of needs based on patient numbers and treatment regimes.
- The options on treatment regimens are based on international recommendations and translated into items on the OCA GL.
- This tool considers regular HIV cohorts but also PEP and PMTCT activities.
- The outcomes of this tool are FMCs for all ARV drugs that can be integrated into the regular IMO FMC calculation for all other items for the specific project.

Main considerations of this tool:

- This tool does not include calculations for any items (tests, Co-trimoxazole, drugs for opportunistic infections treatment, etc.) other than ARVs
- The forecast can only be as good as the data that is given to make the calculation. Those needs (FMCs) are transferred to the actual order tool (logs -> TSR).
- Buffer stock is not part of the forecast of needs in this tool. Please consider to give the item category ‘critical’ to ARVs in the TSR for more months of buffer stock.
- This tool is not linked to any other tool. You must ensure that all items that you get a FMC for are part of your MSL. You can look at historical consumption in the project Consumption Tool. The FMCs need to be approved by the MedCo and handed over to the Logistical Team to be entered into the TSR.

How does the ARV Tool work?

- The user (project team such like MTL, MD) enters general data about the project and protocols in use and the order followed by patient numbers. As ART is long-life treatment, part of the total patient numbers is the already existing cohort on active follow up and treatment in your program and the other part is the estimation of future intakes or planned ART initiations (with a plan on a month by month basis) for the coming months divided in months of lead-time (red) and months of order period (white). Please update the forecast of new patients during the lead-time although drugs should already be in place with the last IMO because this tool calculates the FMCs based on needs for the lead-time + order period.
- Data is entered in two different types of cells:
  - The white cells that are bordered in red are “option” boxes where you have to choose an option from drop-down list that appears from the box.
  - The white boxes bordered in light black need individual input on number of patients both existing patients on treatment and expected number of patients to be initiated in the program.
- There is a box for comments/questions/notes in every sheet for communication and forecast memory.

- You can clear the tool for a new forecast in 2 different ways:
  a) Click the button 'Reset' on the option sheet and all data will be clear in every sheet and by default all regimens are on 'N'.
  b) Click the button 'clear form' on one of the individual sheets (adult, paediatrics, PEP, PMTCT) and only the patient data on that particular page is clears without any impact on other sheets.

What are the 7 different sheets in the tool?

1. *Start*: instructions page with useful information for every user.
2. *Options*: customizing sheet; here you choose the order parameters and treatment regimes.
3. *Adults*: to enter details of patients numbers of the adult patient cohort; depending of the months you have chosen previously you give the actual number of existing patients and future estimates.
4. *Pediatrics*: same as adult sheet just that it is about the pediatric cohort (under 25 kg), except for Tenofovir (TDF) use, which is > 35Kg.
5. *PEP*: to enter your estimations on PEP forecasted number of patients for both adults and paediatrics.
6. *PMTCT*: to enter the syrup option used in the PMTCT program and enter the estimated babies to be on PMTCT during the period.

   Note that mothers will be part of the regular adult cohort estimation as the option recommended is B (or B+), that is, triple ARV for all pregnant women. Given the order period all PMTCT regimens for pregnant women will be calculated for the entire duration of the order period (this might lead to slightly overestimation of needs).
7. *Forecast*: all input on the previous sheets will be summarized here and a Forecasted Monthly Consumption (FMC) is calculated. The MedCo can approve FMCs in a designated column.

Useful definitions and explanations – table of acronyms

PEP	Post Exposure Prophylaxis
PMTCT	Prevention of Mother to Child Transmission
FMC	Forecasted Monthly Consumption
IMO	International Medical Order
TSR	Total Stock Review
MSL	Medical Supply List
3TC	Lamivudine
ABC	Abacavir
ATV/r	Atazanavir/ritonavir
AZT	Zidovudine
DRV/r	Darunavir/ritonavir
EFV	Efavirenz
NVP	Nevirapine
LPV/r	Lopinavir/ritonavir
TDF	Tenofovir
FMC	Forecasted Monthly Consumption previously called EMC Estimated Monthly Consumption Every international medical order requires a new FMC per item. The FMC represents the need of the drug per months. For ARVs the needs are growing over time with existing patients who stay on treatment and new patients who are admitted to the program. Therefore the average here is based on patient treatment months during the order period.

In case of questions or problems with the tool please contact:

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Appendix 7 bis. DS TB drugs forecasting tool (MSF 2014)

DS TB order

Centre: **Date:**		Nb tab/day	Nb of days	Total nb of tab /patient	Nb of patients	Total
NEW PATIENT REGIMENS						
Adults and children 23 kg and over - FDC tablets						
Intensive phase 2 (HRZE)	tab HRZE 75,150,400,275	3	*60*	180		0
Continuation phase 4 (RH) ou 10 (RH)	tab HR 75,150 tab HR 75,150	3 3	*120* *300*	360 900	 or 	0 0
Children under 23 kg - FDC paediatric tablets						
Intensive phase 2 (HRZ)E	tab E 100 + tab HRZ 30,60,150	3 4	*60* *60*	180 240		0 0
Continuation phase 4 (HR) ou 10 (RH)	tab HR 30,60 tab HR 30,60	3 3	*120* *300*	360 900	 or 	0 0
Children 23kg-30 kg – supplementary non FDC tablets						
Intensive phase 2 (HRZ)E	tab E 400 tab H 100	1 1	*60* *60*	60 60		0 0
RETREATMENT PATIENT REGIMENS					**0**	
Attention, empiric retreatment regimens are non longer recommended. ***Streptomycin is contra-indicated in children.*** ***Only order this after discussion with TB referent.***						
Intensive phase 2 S(HRZE)/1(HRZE)	inj S 1 g + tab HRZE 75,150,400,275	1 3	*60* *90*	60 270		0 0
Continuation phase 5 (HR)E 5 (HRZE)	tab HR 75,150 + tab E 400 tab HRZE 75,150,400,275	3 2 3	*150* *150* *150*	450 300 450	 or 	0 0 0
TOTAL NUMBER OF NEW AND RETREATMENT PATIENTS						

		Nb tab/day	Nb of days	Total nb of tab /patient	Nb of patients	Total
PROPHYLAXIS IN CHILDREN		*Estimate 10% of adult numbers*				
6 H	tab H 100*	1	*180*	180		0
* *For children less than 10 kg, use isoniazid syrup.* *For example, for a child weighing 10 kg: 4 bottles of 500 ml for 6 months*						
ADVERSE EFFECTS						
Estimate 1% of total patients will require non FDC treatment						
	tab E 400 tab H 100 tab R 150 tab Z 400 tab HE 150,400	2 3 3 3 2	*60* *180* *180* *60* *180*	120 540 540 180 360		0 0 0 0 0
PYRIDOXINE						
	tab pyridoxine 10 mg tab pyridoxine 50 mg	1 4	*180* *30*	180 120		0 0
pyridoxine 10 mg: all patient at risk of peripheral neuropathy (malnourished, HIV, pregnant, breast feeding) pyridoxine 50 mg: for patients with peripheral neuropathy side effects						

TOTAL DRUG ORDER ESTIMATES

	Items	Quantity
FDC tab	tab HRZE 75,150,400,275	
	tab HRZ 30,60,150	
	tab HR 75,150	
	tab HR 30,60	
	tab HE 150,400	
Simple tab	tab E 400	
	tab E 100	
	tab H 100	
	tab R 150	
	tab Z 400	
	cp pyridoxine 10 mg	
	tab pyridoxine 50 mg	
	tab phytomenadione 10 mg *(enter a number according to needs)*	
Injections	inj S 1 g	
	water for injection 10 ml	
	syringes 10 ml	
	needles 21G	
	needles 19G	
	phytomenadione 1 mg *(enter a number according to needs)*	

Appendix 8. Case studies of including HIV/TB care in MSF projects

CAR

Where? Context	**CAR - Batangafo and Kabo - OCBA** • In 2006 MSF started a surgical intervention in Batangafo and Kabo to respond to victims of violence. • In 2007 it was decided to expand activities in the hospital including PHC, SRH, HAT and Secondary care. • In 2007 the team detected a high HIV prevalence among blood donors (17%) and IPD patients and proposed to include HIV activities. A "passive strategy" was decided only patients stage 3 and 4 where tested and started on ART. • In 2010 VCT began and MSF switched to an "active strategy".		
When?	**What?**	**How?**	**Comments**
2007	A minimal strategy: WHO Stage 3 - 4 at the IPD	• HIV test for Stage 3&4 patients • Treatment of main OI's • ARV initiation based on clinical stage. • Provision of PMTCT services at ANC • Training of national staff (nurses) to provide HIV care • 1 international Flying HIV & TB position to implement activities at Kabo and Batangafo • Basic paper based M&E • MSF 100% in charge of drugs supply	Since the beginning of the project and depending on the availability of HR, there has been a focal person for HIV & Tb who is in charge of the supervision of these activities.
2010	An extended strategy: VCT site inside the hospital	• MOH start VCT & MSF support with training and buffer stocks • MOH main drugs supply, MSF cover stock ruptures and TDF based regimens • Implementation of Dynabits for CD4 and POC Creatinine. • Send samples to Bangui for DNA PCR DBS for EID and VL for treatment failure • Advocacy at Bangui level to change national protocols • Extend same package of activities to Ndele project	
Main points to highlight End 2013, 833 patients were diagnosed with HIV, 481 (57.7%) commenced ART therapy. 348 (78%) patients are still under ART, 33 (7%) had died, 48 (11%) are lost to follow-up, and 13 (3%) have been transferred to another programme. Outcomes are similar to HIV vertical projects.			

Where? Context	**CAR - Paoua - OCP** OCP started to work in Paoua District Hospital in 2006 following violence and instability that lead the population to flee including the clinical staff from the hospital. As there were no staff except 2 MOH remaining (director of the hospital and one nurse) MSF was obliged to hire staff and most of them coming from Bangui. In 2008, the team was reporting HIV related diseases in the adult medical wards and patients highly suspected of HIV/AIDS attending the OPD for recurrent symptoms (diarrhea, feeling weak and loosing weight). In the Nutrition ward some children not responding to the nutrition protocol were suspected of HIV/AIDS.		
When?	**What?**	**How?**	**Comments**
2008	A minimum HIV care package	• Testing HIV suspected cases (priority to TB, stage 3/4) • Treatment OI • ART counselling • ART treatment as soon as the patient was ready (following MOH protocol D4T/3TC/NVP then AZT/3TC/NVP) • Lobby at Bangui level for access to ART in this area • Not enough space in the OPD overwhelmed with pediatric and adults consultations, so a 3 rooms for TB/HIV activities (consultation, counselling, administrative/drugs dispensary rooms) were made available • 3 existing staff were more dedicated to this activity (one doctor mainly involved in IPD , one nurse and one counsellor) but later, rotation of the hospital staff (partly effective) • No specific lab tools was implemented beside HIV test	Very low awareness on HIV/AIDs among the population: counselling for HIV testing was challenging (stigma +++ and confidentiality issues). Nutrition provided by WFP for ART patients for one year. Retention challenges were faced when food supply ceased.
2009	MoH started PMTCT (Option A)	• MSF support the organisation of the follow-up (mother and exposed baby) • MSF buffers ARV and NVP syrup • MSF supports data collection using a paper register system	Main challenge is the baby follow up until final status as this was done at EPI level where nurses had very low knowledge to detect clinical signs suggestive of HIV in HIV exposed children.
2010	MoH started a VCT service inside the hospital	• MSF refers stable ART patients to MOH and MOH refers to MSF for ART initiation and unstable patients. MSF helps with logistics (to do the drugs order , to bring the order form to the right person in Bangui and to bring the drugs from Bangui to Paoua) • ARV's from MoH GF and World bank. One common order done with MOH. MSF ensures buffer if needed	Ending to have 2 cohorts one MSF and one MOH . End 2013 merging the 2 cohorts in one MOH (with MSF support). Biggest challenge: patient come with delay at the ART clinic.

2012	Expand access to ART to stage 1 & 2 patients having immunological criteria to start (CD4 < 350)	• PIMA CD4 machine was implemented • M/E still done from the beginning with Pre-ART and ART register • Clinical file with ID number kept in a cupboard inside the consultation room • HIV health card and a specific ID kept by the patient	Team was trained at the start of the project to complete registers and to provide miminum data of the cohort (retention). But the turn over of the national team and expat team lead to a loss of memory on how to properly maintain the monitoring systems (diary and Pre ART & ART register).
Main points to highlight End 2013, 1235 HIV patient are followed up and 850 are under ART. However main challenge is patients coming with lot of delay at the consultation . Team wanted to understand the reason why in order to adapt better the care to the need of these patients but the events late 2013 did not allowed.			

Where? Context	**CAR, Zemio - OCA** OCA started to work in Zemio in 2010 based on the needs of internally displaced people due to LRA presence and refugees from DRC. MSF integrated activities within the hospital supporting IPD, ANC and OPD. Inpats were hired from Bangui. In 2011, the team was reporting HIV and TB care needed with many suspected patients.		
When?	**What?**	**How?**	**Comments**
2011	A minimum HIV care package	• Testing HIV suspected cases (priority to TB, stage 3/4), • Treatment OI • HCT and ART counselling with MoH staff still present at that moment • ART treatment with TDF/3TC/EFV • Activities started progressively with the support of a "Flying implementer'' from the Manson Unit and with a chronogram of time frame planned for activities • No specific lab tools was implemented beside HIV test • Integration of contingency planning in case of interruption of services	Community very receptive to the program, there had been an MoH program in the past.
2012	PMTCT (Option B)	• MSF supports the integration of care in ANC and ANC staff was from MoH • MSF supports data collection using a paper register system • ART for pregnant women started with high demand that required urgent attention	The main challenge is the high need of mothers HIV+ identified in the community as other organization was testing in the community.
2012	TB diagnostics	• MSF implemented GeneXpert in the lab (due also to lack of quality of smears in very basic laboratory)	
Main points to highlight Contingency planning was not accurately implemented despite being a priority in this setting.			

South Sudan

Where? Context	**South Sudan, Agok - OCG** Primary and secondary comprehensive health care through an OPD (< 5 years old), an IPD of 65 beds and mobile clinics for displaced people of Abyei. Long distance to the first facility dealing with HIV care, weak MoH. TB care since 2009. Skilled kenyan clinical officers and midwives. The request to include HIV care came from the field. The HIV prevalence seems to be low (< 1%). 2 visits of TB/HIV implementer (5 weeks each time) to support definition of the strategy, protocols, tools, bedside trainings.		
When?	**What?**	**How?**	**Comments**
2009	TB care	A dedicated nurse	Difficulties with retention in care (rainy season) Contingency plan not effective
Since Sept. 2012	PITC including "emergency PMTCT"	• All TB patients, patients non respondents to ITFC, STI patients, stage 3 & 4. • No added HR, key person trained. Counselling and drug dispensation done by a nurse assistant or a nurse. • Family approach (3 co-wifes, 5 children /wife) • TDF+3TC+EFV first line (MSF) • Creat PoC • CD4 count: PIMA planned • Contingency plan	Issue with respect of professional confidence Difficulties with the supply 1 clinical officer as a focal point and key nurses trained on counselling
	Blood donors	• Pre-test done by lab technicians, positive post-test done if patient wants to know his status in link with a medical person	
	VCT for MSF staff	• Free choice of a trained CHW • Encoding to ensure confidentiality	
	Awareness of the community/actions of prevention	• Meetings with community contacts, network with authorities, other partners, leaders of schools or churches, local woman association	Choice of tools to support awareness discussed with our local staff
	First DRTB patient confirmed (non HIV/ non HBV/non HCV)	• 9 months regimen	Delay in drug supply
	Defaulter tracing will be common for TB/HIV and malnutrition		
Nov. 2013	Systematic PMTCT during ANC consultations	• Needs additional trained HR. • Proper premises ensuring confidentiality needed.	National policy: option A in revision for option B+
Main points to highlight • 19 patients in the cohort after 8 months • Challenge of drug supply and retention in care during rainy season • Positive example of good integration within a MSF project without adding HR in a low prevalence setting. • No plan for hand over/full MSF for the moment			

Where? Context	**South Sudan, Leer - OCA** Primary and secondary comprehensive health care: OPD, IPD and outreach. Population disperse and coming for access to health care from broad region and big distances. TB care since many years; HIV integrated some years earlier and interrupted later on. No national staff with skills. HIV prevalence in blood donors around 7%. Visit of the TB/HIV implementer for intermittent visits during 7 months.		
When?	**What?**	**How?**	**Comments**
< 2010	TB care	• A dedicated nurse, parallel program for DSTB	
2010	PITC for HIV and TB care	• All TB and KA patients, STI patients, stage 3 & 4 in IPD • No additional HR, implementer training. • Identified staff for counselling. • TDF+3TC+EFV first line • All clinical officer trained and rotating • Samples of re-treatment patients and suspected patients referred to Antwerp for culture and DST • First patient with MDR TB identified • HIV testing for sick pregnant women or women with STI	Stigma issues in the community. Difficulties in implementing defaulter tracing. M&E and Fuchia fail, need to look for alternative on M&E. Paper-based registers in place.
2011	Integration of DRTB care	• Access to drugs for 9 months MDR TB regimen • First patient with MDR TB treated	Lack of acceptance of full integrating PMTCT
Main points to highlight 100 patients on ART after 1 year of implementation			

Mali

Where? Context	**Koutiala, Mali - OCP** Unstable. Paediatric project.		
When?	**What?**	**How?**	**Comments**
Ongoing	HIV PiCT	• All sick or severely malnourished children hospitalized and clinically suspicious of HIV. Identification by MSF. Counselling provided by MoH trained staff. Testing under MoH HIV service	Need to extend eventually to all hospitalized children in nutrition program and/or that required intensive care.
	Lab support	• Provision of reagents and RDTs for HIV testing due to MoH gaps. ELISA test immunocomb as 3rd test for discrepancies put in place by MSF.	

Starting mid-2013	Evaluate further integration of HIV care of children < 5 years into MSF activities	• Evaluate MoH capacity and feasibility of scaling up paediatric HIV care, incl counseling, testing, lab, ART, supportive and follow up activities.	Implement HIV care for children < 5 years in collaboration with MoH with MSF input according to evaluation done.
Main points to highlight MSF is a major player in the provision of preventive and curative health care to children under 5 years of age in the Koutiala district. With over 10,000 hospital admissions of children < 5 years/year and > 60% of Severely malnourished during the peak season, the number of sick and/or complicated malnourished children treated by MSF is very significant. The national HIV prevalence is 1.3%, but for the area covered 'Koutiala' has 4.3%. This region also has the highest prevalence nationally of HIV-TB co-infection. Although HIV care is free for all in Mali, very few people are seeking HIV testing. The MSF project focuses on children < 5 years, but HIV testing and care is an entry point for earlier HIV detection in adults as well (mothers). Most importantly, the project considers HIV care to be part of the overall package of paediatric care for children.			

DRC

Where? Context	**DRC, North Kivu, Mweso project - OCA** Active conflict, poverty, remote rural location.		
When?	**What?**	**How?**	**Comments**
2011	Start of HIV program + support for TB care (NTP MOH) at Mweso hospital	• Integrated HIV program in primary & secondary health care activities. Includes: HIV PICT (including all TB patients) + ART + OI treatment + patient support.	
2012	Inclusion of: PMTCT, CD4, EID (PCR using DBS), start of MDR TB component	• MOH started its own MDR TB program in the units MSF supports; MSF decides to support MDR TB activities.	
2013	Decentralization to health centres supported by MSF		
Main points to highlight Of the 3 MSF OCA DRC missions, North Kivu was the last to startto include HIV care; there was concern among decision makers at MSF (but not from the medical teams in the front line) that such chronic disease care would be impossible in North Kivu and that MSF should focus on other priorities. However, the complete lack of possibilities for HIV care from the MOH side was decisive in an agreement to start activities in 2011. As for TB, it was decided to provide support for MOH NTP in 2010, but there was great reluctance from MSF to include MDR TB activities for reasons similar as previously with HIV (conflict, other priorities, issues with adherence, etc.). It was finally decided to focus on MDR TB only after all components of HIV care (including PMTCT) were solidly in place. However, In 2012, the MOH decided to go ahead with MDR TB care in the Mweso area. Since the program had important issues in quality, MSF OCA decided finally to support MDR TB activities, from diagnosis (sending samples to Antwerp) to treatment and patient support.			

Where? Context	DRC, Katanga province, Dubie/Kilwa projects (& Shamwanna) - OCA 1998 – 2006: active conflict - After: post conflict - 2011-2012: recrudescence of fighting. Rural, remote, poverty..		
When?	**What?**	**How?**	**Comments**
2007	Start of HIV care program in Dubie & Kilwa	• HIV care including ART, CT, PMTCT, OI treatment, TB treatment, patient support. District & regional hospitals and health centers.	All comments in the section below, "Main points to highlight"
2010	Closure of Dubie/Kilwa project; continuation of HIV care for cohort already in care by closure ("closed" cohort) Opening of new project: Shamwanna	• No hand over partner possibility for Dubie/Kilwa; decided to continue ART provision for closed cohort (only those already receiving by closure) + "remote" control from Shamwanna (including 1-2 monthly visits) + 1 MSF nurse kept in each project + provision of ARVs & drugs for OIs. • Shamwanna: integrated HIV program (same components as Dubie/Kilwa).	
2011	Dubie/Kilwa "remote control" strategy improved	• Provision of HIV CT + ART + PMTCT for all immediate family members of patients already on ART; provision of ART for HIV+ patients in the cohort who have not started yet by the moment of closure (2010).	
2012	Active fighting in Shamwana area - displaced population	• Weak contingency - important losses on follow up	
2013	Dubie/Kilwa: start of hand over	• Hand over partner (ICAP + MOH) finally identified by MSF HIV/TB advocacy & implementer office in country. Joint plan designed for complete hand over by 2014 + monitoring visits after that.	

Main points to highlight

MSF started HIV care activities in an integrated program in 2007, with clinics in Dubie and Kilwa, at a time when active conflict was going on in Katanga.

Stability gradually developed and conflict ceased. As a result, MSF decided to stop its activities and leave the area in 2009, moving to another project location in a more remote and unstable area (Shamwanna, where ART started in the same year). However, in the 2 sites of Dubie and Kilwa, there were more than 100 patients on ART and after an exhaustive search, no hand over partner was identified (including the MOH, without funds or capacity). MSF OCA, against interrupting life saving ART, decided instead to keep a minimum presence in both sites, with 1 MSF nurse in each, continuing provision of ART for those patients already on ART and regular visits (around every 2 months) by a MSF doctor based in the current MSF program location (Shamwanna).

In 2011 problems with this approach were noted and corrected, allowing for provision of ART for immediate family members of those already on ART with criteria (husbands, wives and children) and establishment of PMTCT activities for the cohort.

Provision of care continued without any possibility of hand over until 2013, when efforts from national MSF DRC team (including a expat MSF doctor dedicated for HIV/TB advocacy focal person and implementer) brought fruits: another organization (ICAP) with secured funds (PEPFAR) agreed to receive our cohort (working together with MOH); a joint plan for hand over was made together, foreseeing gradual hand over of specific activities and, after that, regular supervision visits to guarantee that HIV care of quality continues, and to avoid collapse of activities (as happened in Bukavu, South Kivu).

In Shamwanna, of note is the unexpected recrudescence of active conflict in 2012, leading to displacement and insecurity in the project area. Contingency plans and their implementation were still being scaled up; many patients were lost to follow up, highlighting the importance of early implementation of those activities even in post conflict areas without evidence of high risk for active conflict.

Where? Context	**DRC, South Kivu, Baraka (& Bukavu & Kimbi Lullengue) project - OCA** Conflict (including sexual violence - until 2009 in Bukavu, still continuing for the other locations), unstable, remote rural setting (Baraka & Kimbi) or urban (Bukavu, provincial capital), mining & migrants (Kimbi Lullengue). Poverty.		
When?	**What?**	**How?**	**Comments**
2003	Start of HIV program in Bukavu project	• Vertical project with: HIV CT + ART + OI treatment + Lab (incl. CD4) + PMTCT + TB + patient support, all provided by MSF in regional & district hospital & health centers.	Conflict was active. One of the first ART programs in a conflict setting.
2004	Active fighting in Bukavu	• Contingency plans activate	
2006	Start of HIV program in new project location: Baraka (including TB program)	• Integrated HIV program in a primary & secondary health care project in an hospital and some health centres. • HIV program with similar components as in Bukavu. • TB care supporting MOH NTP.	Bukavu turned into a more stable setting. Activities moved away from Bukavu and focus on more unstable and remote areas to the south of the province.
2009	Closure of MSF HIV program in Bukavu	• Hand over to MOH + another NGO (GTZ)	
	Start of MDR TB program in Baraka	• Diagnosis: sending sputum to Antwerp Supra National lab by DHL (culture/DST; Hain test added later) + drugs (2 year WHO regimen) + accommodation + patient support provided by MSF. • On the second year of the project, move to full outpatient treatment. • On the third year, geneXpert in project (provided by another partner).	
2011	New project location started further south of the province, in Lulimba: HIV and TB care (later incorporating MDR TB)		One of the justifications for a new project location was the fact that many patients in the HIV or MDR TB cohorts actually come from this area, allowing for provision of life saving treatment closer to their homes.
2012	Start of HIV & TB (including DR TB) care in new project location: Kimbi Lullengue EID (PCR) in all projects	• Same activities & resources as in Baraka program. Patients receiving care in Baraka who are from Kimbi referred back to Kimbi.	
2013	MDR TB regimen: change to shortened 9 months regimen	• After very long negotiations with NTP/MOH, authorization given.	

Main points to highlight
In 2009, the whole Bukavu cohort (more than 1000 patients) was handed over to MOH supported by a German NGO (GTZ) and with Global fund financing.. MSF worked together with GTZ (and MOH) including providing data about numbers to be treated, consumption data, training, etc.
However, around 1 year after MSF's departure, GTZ ran out of funds and could not continue care of patients, leading to a decrease in enrolments, lack of provision of drugs for OI, losses to follow up. A new analysis was made regarding if MSF OCA should return to Bukavu and restart support. However, the MOH managed to refer patients to other units where ART was provided by the MOH, without need for MSF to go back to Bukavu.
As for Baraka, HIV care was decentralized gradually to other health centers supported by MSF (a work still in progress at the time of writing this document) including PMTCT. Early Infant Diagnosis is done by sending dried blood spot (DBS) samples to an approved laboratory in South Africa (where targeted viral load is also done).
Provision of TB care and support for MOH NTP was done from the start. Care included a unit for admission of patients, given that most lived far away and were in bad clinical condition. Gradually the program moved towards outpatient care during whole treatment; a geneXpert was installed in the project; and long negotiations with the MOH finally brought authorization to use the shortened 9 months MDR TB regimen, which seems particularly fit for remote and poor settings with conflict.

Somalia

Where? **Context**	**Somalia Galkayo North (GN) , Galkayo South (GS) and Marere - OCA** Active conflict. "Remote control" projects, only national staff present in country and being managed from office in Nairobi, no expats on the field. Flash visits (including expats) only to Galkayos. Galkayo North program focused on TB & malnutrition; Galkayo South provided primary and secondary health care (including support for a hospital, including maternity and surgery); Marere focused on primary care, TB and malnutrition..		
When?	**What?**	**How?**	**Comments**
2005 (GN) 2006 (GS) 2007 (Marere)	TB care provision (all locations)	• TB programs: diagnosis (sputum smear) + treatment and patient support provided by MSF (including TB villages).	See above the contingency plan Sending sample to Supra National Laboratory in Antwerp : irregular flights and unreliable DHL Closure in August 2013 - MSF departed Somalia due to insecurity
2011 in GN	HIV CT for TB patients added with referral for ART to another provider (Merlin clinic)	• HIV CT done by TB nurse. • HIV(+) referred for ART to HIV clinic supported by Merlin (with MOH). Plans to start provision of ART in MSF clinic in 2013.	
Jan. 2013 in GN	MDR TB care (GN) Shortened 9 months regimen (After agreement reached with the Puntland MOH)	• MDR TB (Galkayo): diagnosis of suspected cases (retreatments) by genexpert in the project + sending sputum for culture/DST and Hain test for confirmation in Antwerp whenever possible (unreliable DHL and irregular flights). • Outpatient care with MSF DOT providers. • Biochemistry capacity for creatinine + ALT in the project.	

Main points to highlight

MSF OCA has been operating in Somalia for many years with 3 projects: Galkayo North and South and Marere, all with "remote control" from Nairobi (as expat presence is not possible), with limited flash visits by capital teams (including expats) to Galkayo; for Marere, no visits have been possible for years (active conflict rampages in the country).

MSF started provision of TB care in all projects since start of activities; since expat staff evacuation, national staff have been responsible for TB programs including patient care.

Long discussions regarding start of MDR TB (and ART) - concerns regarding adherence, long term commitment, competing priorities in conflict zone, etc. Decided to test TB patients for HIV and refer to another provider (Merlin clinic). In 2012 started preparation (including training and drug orders) for MDR TB program in Galkayo North using shortened 9 months regimen (after approval from Puntland MOH), particularly fit for such challenging conflict settings.

However, after 19 patients were started on treatment (15 retained), MSF decided to stop all activities due to recurrent violence. The big question was: how to deal with TB patients, including those with MDR TB?

For "drug sensitive" TB (all TB patients receiving category 1 or 2): provision of ALL remaining drugs for completion of TB treatment (except Streptomycin since staff for administration of IM injections was not available) coupled with health education highlighting importance of good adherence + when to stop TB drugs permanently (in case of signs of liver toxicity, most of all jaundice).

For MDR TB patients in Galkayo: decision to support completion of the treatment of the 14 patients under care by: donation of all drugs for completion; technical support for clinical doubts by email; continuation of provision of care by national ex-MSF MD, with access to laboratory resources left behind (including creatinine tests and sputum smear). Of note, the Puntland MOH was extremely upset with the decision of MSF to leave, threatening "to go public" in case MSF did not support completion of treatment for its cohort.

Appendix 9. Example of ARV & TB drug order for treatment continuation in emergency

See CD-ROM.

Appendix 10. Contingency plans - Case studies

Contingency plan in place

Where?	**CAR - OCBA**
Nature of the risk/reason of the plan	Insecurity
Main lines of the contingency plan	Plan in place, staff and patients trained regarding use of "run away" bags with longer stock and tail protection
Contingency plan used?	Yes in 2013
If yes, lessons learnt?	Difficult to put in place although 86% of patients received their bags

Where?	**DRC, Bukavu, South Kivu (similar plans implemented in Baraka & Kimbi Lullengue) - OCA**
Nature of the risk/reason of the plan	Active conflict
Main lines of the contingency plan	Provision of extra amount of ARVs ("runaway pack") + "tail" regimen + health education; in addition (but not possible to implement): alternative sources of ARV provision; PMTCT option B
Contingency plan used?	Yes - Bukavu, 2004 (active fighting)
If yes, lessons learnt?	Importance of having strong & clear contingency plans in advance

Where?	**DRC, Katanga province, Shamwana Project - OCA**
Nature of the risk/reason of the plan	Post-conflict area, stable for years - risk of recrudescence of violence was under-estimated
Main lines of the contingency plan	Similar to South Kivu (see above); however, only partially implemented by the time of conflict
Contingency plan used?	Insufficiently - risk of active conflict was judged low
If yes, lessons learnt?	Huge lost of follow-up (but small cohort)

Where?	**Somalia, Galkayo North, Galkayo South & Marere projects - OCA**
Nature of the risk/reason of the plan	Violence, conflict
Main lines of the contingency plan	• For "normal" TB program: upon sudden interruption of activities, contingency options had been discussed different times, but no agreement; upon decision to close the projects, agreed to: provide all TB drugs (except Streptomycin) to all patients (unless severe mental impairment & nobody to support) for completion of full TB treatment course (categories 1 & 2), with intense health education (including regarding importance of adherence and clear instructions on when to stop treatment: signs of hepatitis,…). In the Galkayos, MOH and/or other partners continuing provision of care (therefore with possibility of further patient support); in Marere, rebel group took over hospital, so continuation of support for TB patients. Of note, no referral possibilities. • For HIV care in GN, continuation with the other provider. • For Galkayo North, MDR TB program: donation of drugs for completion of treatment for the whole cohort (15 patients), shortened 9 months regimen, chosen among other reasons because of risk of interruption of program; continuation of care by remaining MSF staff (now not under MSF responsibility after departure) using hospital structures (including laboratory supplies: sputum smears and creatinine and ALT); technical support for clinical questions until end of treatment (not formally from MSF but arranged).
Contingency plan used?	Yes - although, besides previous discussions and besides adoption of the shortened 9m regimen (among other reasons) because of risk of interruption of activities, final shape of contingency only defined shortly before mission closure.
If yes, lessons learnt?	• Importance of having a clear contingency plan agreed beforehand; however, if not possible (no consensus), intense advocacy for fast implementation before leaving. • Importance of using the 9 months DRTB regimen in unstable settings, as allow for continuation of care for shorter time and with more limited support. • Key role of national staff, who should be empowered in all MSF projects. • Long and persistent work needed to reassure, convince and finally start implementation of MDR TB & HIV care integrated in projects in unstable settings - but feasible.

No contingency plan in place

Where?	**Mozambique - OCG**
Nature of the risk/reason of the plan	Floods
Main lines of the contingency plan	No plan
Contingency plan used?	MSF assessment after the floods of the 22nd of January 2013: ARV provision and medical support for consultation given from the 30th of January
If yes, lessons learnt?	55% of HIV total cohort missed days of treatment Loss of patients file and registers

Appendix 11. Example of a hand over dashboard

Strategic objective

By June 2011, in 6 clinics in Buhera district, MoH is providing quality comprehensive HIV/TB cae with ongoing MSF mentorship.

Operational objectives	Indicators	Health Center 1	Health Center 2	Health Center 3	Health Center 4	Health Center 5	Health Center 6
Accreditation	Clinic to be accredited for follow up and initiation of ART						
Outcomes	% of all follow up patients seen by MoH						
	% of target adult initiations performed by MoH						
	% of target children ART initiation by MoH						
	RIP & LTFU						
	Supervision score						
HR nurses	2 nurses able to follow up all pre-ART and ART patients						
	2 nurses able to initiate ART						
	2 nurses able to follow up TB						
	2 nurses able to initiate TB						
	2 nurses able to carry out full PMTCT						

Operational objectives	Indicators	Health Center 1	Health Center 2	Health Center 3	Health Center 4	Health Center 5	Health Center 6
HR counsellors	1 MoH PC counsellor to provide health promotion, VCT, HIV, TB and PMTCT counselling						
HR admin	Observations, registration and filing to be performed by MoH						
Drug supply	ARV and OI order to be done by MoH						
	All drugs to be dispensed by MoH						
Lab services	All specimens to be taken by MoH staff						
M & E	MoH staff to fill pre-ART, ART, PMTCT and TB registers						
	Monthly reports to be filled by MoH on time						
Programme management	Joint clinical supervision with MoH to be performed monthly						
	Joint clinic supervision tool with MoH to be performed quaterly						

Achieved	
In progress	
Unsufficient	

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