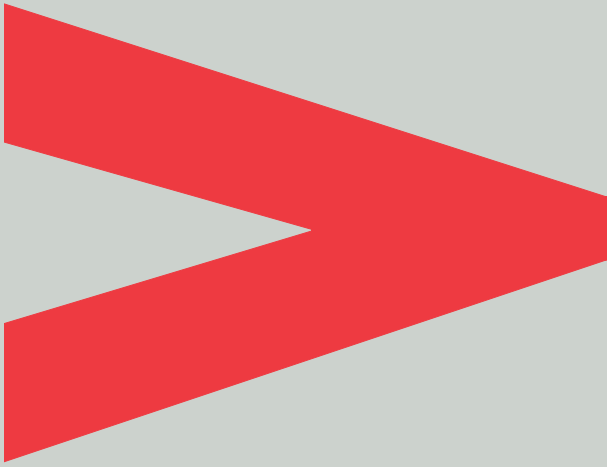
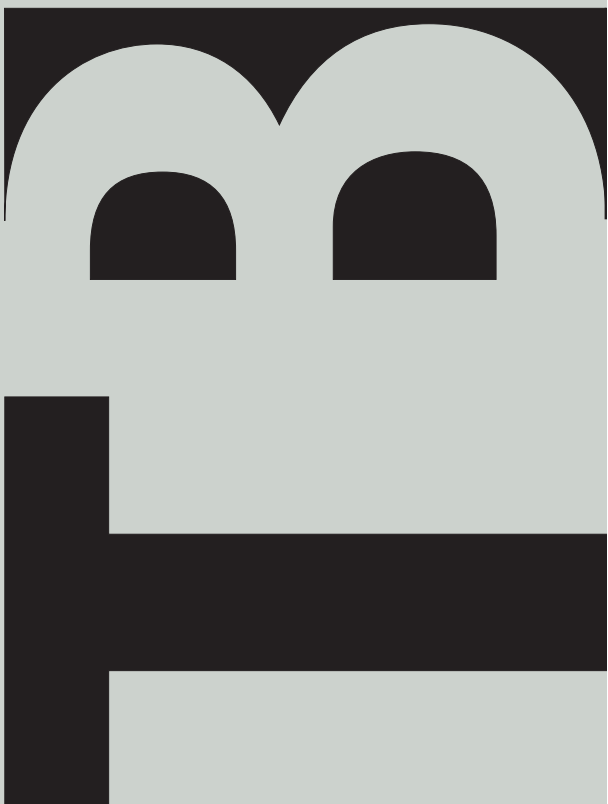


WORLD HEALTH ORGANIZATION

GUIDELINES FOR IMPLEMENTING COLLABORATIVE TB AND HIV PROGRAMME ACTIVITIES



GUIDELINES FOR IMPLEMENTING COLLABORATIVE TB AND HIV PROGRAMME ACTIVITIES

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List of abbreviations

AIDS	**A**cquired **I**mmuno**D**eficiency **S**yndrome
ART	**A**nti**R**etroviral **T**reatment
ARV	**A**nti**R**etro**V**iral
CBO	**C**ommunity-**B**ased **O**rganization
CD4	**CD4** count: a laboratory marker of immune function
CI	**C**onfidence **I**nterval
CMV	**C**yto**M**egalo**V**irus
CPT	**C**otrimoxazole **P**reventive **T**herapy
CXR	**C**hest **X**-**r**ay
DHMT	**D**istrict **H**ealth **M**anagement **T**eam
DOTS	"Brand name" of the WHO TB control strategy
DOT	**D**irect **O**bservation of (TB) **T**reatment
ELISA	**E**nzyme-**L**inked **I**mmuno**S**orbent **A**ssay
HAART	**H**ighly **A**ctive **A**nti**R**etroviral **T**reatment
HBC	**H**ome-**B**ased **C**are
HIV	**H**uman **I**mmunodeficiency **V**irus
HMIS	**H**ealth **M**anagement **I**nformation **S**ystem
IEC	**I**nformation, **E**ducation and **C**ommunication
IDU	**I**ntravenous **D**rug **U**se
INH	**I**soniazid
IPT	**I**soniazid **P**reventive **T**reatment
KAP	**K**nowledge, **A**ttitudes and **P**ractice
KS	**K**aposi's **S**arcoma
MCH	**M**other and **C**hild **H**ealth services
MDR-TB	**M**ulti-**D**rug **R**esistant **TB**
NACP	**N**ational **A**IDS **C**ontrol **P**rogramme
NGO	**N**on-**G**overnmental **O**rganization
NTP	**N**ational **T**uberculosis **P**rogramme
PLHA	**P**eople **L**iving with **H**IV or **A**IDS
PMTCT	**P**revention of **M**other-**T**o-**C**hild HIV **T**ransmission
PIAs	**P**hased **I**mplementation of collaborative TB/HIV **A**ctivities

PPD	**P**urified **P**rotein **D**erivative
ProTEST	WHO-coordinated initiative to **PRO**mote **TEST**ing for HIV by using VCT as an entry point to access a range of HIV/TB/STIs prevention and care interventions
PTB	**P**ulmonary **T**u**B**erculosis
QA	**Q**uality **A**ssurance
STIs	**S**exually **T**ransmitted **I**nfections
TB	**T**u**B**erculosis
TB/HIV	The intersecting epidemics of **TB** and **HIV**
UNAIDS	The joint **U**nited **N**ations programme on HIV/**A**IDS
VCT	**V**oluntary **C**ounselling and **T**esting (for HIV)
WHO	**W**orld **H**ealth **O**rganization

Introduction

The dramatic spread of the HIV epidemic throughout sub-Saharan Africa in the past decades has been accompanied by up to a fourfold increase in the number of TB cases registered by national TB programmes (NTPs). The incidence of TB is also increasing in other HIV epidemic countries, where populations with HIV infection and TB overlap. Even those few countries with well-organised NTPs have an increase in TB cases. This suggests that TB control will not make much headway in HIV prevalent settings unless HIV control is also achieved. TB is a common, treatable HIV-related disease and a leading killer of PLHA. As a consequence of all these issues, there is a strong need for close collaboration between HIV/AIDS programmes and TB programmes. This is necessary to implement the World Health Organization-recommended DOTS strategy for TB control and to improve care for people with HIV and TB.

Statistics show that very few countries in sub-Saharan Africa are fully implementing the DOTS strategy, achieving country-wide coverage and global WHO targets of 70 % case detection rate and 85 % cure rate. However, these statistics to not take into account the increased TB mortality in high HIV prevalent populations to accurately determine the performance of a DOTS programme. Comprehensive TB and HIV care and prevention rely on full implementation of the DOTS strategy as part of wide-ranging HIV/AIDS care and prevention programme as well as collaborative TB and HIV programme activities. These activities must not only be acceptable, feasible and affordable but also be a part of a strengthened national health service. The emphasis on collaborative TB and HIV activities should be the logical progression of an effective national DOTS programme.

The main aim of the guidelines is to enable the central units of national TB and HIV/AIDS programmes to support districts to plan, coordinate and implement collaborative TB/HIV activities. The guidelines are intended for countries with either an overlapping TB and HIV epidemic or where there is an increasing HIV rate which may fuel the TB epidemic.

The WHO “Strategic Framework to Reduce the Burden of TB/HIV" provides the evidence base for these guidelines. The guidelines are designed to implement the interventions as described in this framework. The guidelines reflect lessons learned from TB/HIV field sites including ProTEST with experience from comprehensive TB/HIV health services and interventions.

The guidelines are structured in line with the main theme of putting these interventions into action: **what to implement, how to implement it and by whom.**

The health situation is urgent and requires a move away from small scale, often costly and time-limited pilot projects to phased implementation of collaborative TB/HIV activities. Phased implementation will build on experience learned form ProTEST pilot sites. Human and financial constraints make phased implementation necessary.

These guidelines recognise that TB/HIV care and support is a fast-moving field where evidence for fully informed decision-making is currently incomplete. A small number of countries have embarked on the early phases of collaborative activities, and lessons will continue to emerge from these sites. A report from the ongoing ProTEST sites (in Malawi, South Africa and Zambia), will sum up the lesson learned so far and will be available in early 2003.

However, analysis of national TB and HIV/AIDS programmes, and emerging experience from collaborative TB/HIV sites shows that there are many unexploited potential synergies between TB and HIV/AIDS programme objectives and activities. Therefore, these guidelines suggest ways forward for collaboration between HIV/AIDS and tuberculosis programmes for implementing TB/HIV joint activities in support of local health services. It is expected that this will generate further evidence to build on phased implementation of collaborative TB and HIV activities at a country level. These guidelines will be updated, as new evidence of efficiency, affordability, feasibility and cost-effectiveness of TB/HIV interventions becomes available.

These guidelines also show how necessary collaborative TB/HIV interventions are at different levels of the health care system. Interventions depend on the human and material resources available. The TB/HIV interventions are outlined for the home/community, primary and secondary levels. However, some interventions requiring specialist management at tertiary level are not described in these guidelines. Interventions applicable at primary and secondary levels of the health system are also applicable at tertiary level.

Many of the activities described in the following pages can be implemented by using the existing resources of district TB and HIV service providers and without new external financing. However, other activities will require greater human and financial resource investments. This document does not directly estimate the costs of interventions. Cost and cost-effective analysis of the existing pilot projects is currently being undertaken. However, tasks and steps required at national and district levels are described to enable establishing the cost of interventions and resources. In fact, national and district planners should estimate the cost of the interventions and evaluate the human resources required, as an essential component of a joint TB/HIV work-plan.

These guidelines reinforce current medical understanding, that highly active antiretroviral treatment (HAART) has decreased TB incidence of people living with HIV/AIDS. However, the vast majority of the 40 million people living with HIV/AIDS in developing countries do not have access to HAART. It is hoped that these guidelines, in conjunction with WHO’s publication, "Scaling up antiretroviral therapy in resource-limited settings-guidelines for a public health approach", will contribute to the development of models to deliver HAART, building on the collaboration between the HIV/AIDS and TB programmes.

The guidelines are comprehensive if not exhaustive, giving an overview of the range of activities that could be undertaken in high burden TB/HIV countries or where a rising prevalence of HIV might fuel TB. Although generic they can be adapted for regions and countries according to their own needs and resources.

The activities outlined include comprehensive care, prevention and support for adults living with HIV/AIDS. TB treatment and prevention forms one part of these activities. In recognition of this fact, these guidelines have been co-produced by the Stop TB Department and the Department of HIV-AIDS of WHO. This document has been developed in consultation with the Controlling Sexual Transmitted Infections Team in the Department of Reproductive Health and Research

HIV-related TB remains overwhelming an adult infection. The number of people infected with HIV-related TB worldwide is of serious concern. Although child infection with either disease contributes little to the spread of either TB or HIV, it is strongly believed that children will benefit directly from the implementation of the activities described in these guidelines.


TB:HIV

Part 1

Background

The unprecedented scale of the epidemic of HIV-related tuberculosis demands effective and urgent action. The strategic goal is to reduce tuberculosis transmission, morbidity and mortality while minimising the risk of anti-tuberculosis drug resistance. This goal is part of overall efforts to reduce HIV-related morbidity and mortality in high HIV prevalence populations. This evidence-based paper concentrates specifically on tuberculosis control in high HIV prevalence populations, while addressing those aspects of the HIV epidemic relevant to tuberculosis. It is complementary to the Global Health Sector Strategy against HIV/AIDS under development by WHO. It sets out a new WHO/UNAIDS strategic framework to decrease the burden of the intersecting epidemics of tuberculosis and HIV (TB/HIV). Instead of the previous "dual strategy for a dual epidemic", the new framework represents a strengthened unified health sector strategy to control HIV-related tuberculosis as an integral part of the strategy for HIV/AIDS.

Up to now, the efforts to control tuberculosis among HIV-infected people have mainly focused on implementing the DOTS strategy for tuberculosis control, i.e. identifying and curing infectious tuberculosis cases among patients presenting to general health services. This targets the final step in the sequence of events by which HIV fuels tuberculosis, namely the transmission of Mycobacterium tuberculosis infection by infectious tuberculosis cases. ***The expanded scope of the new strategy for tuberculosis control in high HIV prevalent populations consists of interventions against tuberculosis (intensified case-finding and cure and tuberculosis preventive treatment) and interventions against HIV (and therefore indirectly against tuberculosis), e.g. condoms, STI treatment, safe injecting drug use (IDU) and highly active anti retroviral treatment (HAART).***

This paper provides the technical basis to inform and guide the development of national implementation strategies for joint tuberculosis and HIV programme activities in delivering the available interventions. The Global Working Group on TB/HIV aims to harness the efforts of many partners to support a strengthened health service response in the most badly affected countries. In response to demand for operational guidelines for joint tuberculosis and HIV programme activities, WHO will coordinate the development of these guidelines by a Scientific Panel of the Global Working Group. The guidelines will reflect the principles of the framework and lessons learned so far from field sites and from experience of comprehensive health service provision of interventions to decrease the burden of TB/HIV.

Extract from the executive summary of "A Strategic Framework to Decrease the Burden of TB/HIV".


TB:HIV

1 The overlapping TB and HIV epidemic

Overview of this chapter

The unprecedented scale of the epidemic of HIV-related tuberculosis demands effective and urgent action. This chapter will summarise:

- Global TB and HIV epidemics
- Current TB and HIV control strategies
- Rationale for specific additional interventions to control HIV-related TB
- Rationale for collaboration between TB and HIV/AIDS control programmes to deliver collaborative TB and HIV activities.

1 The global TB and HIV/AIDS epidemics

Despite the accumulated knowledge of the last two decades, the world has been unable to contain the spread of HIV infection or the illness and death that result from destruction of the immune system in those infected with HIV. At the end of the year 2002 a total of 42 million people were estimated to be living with HIV/AIDS, of whom 29.4 million (70%) were in sub-Saharan Africa and 7.2 million (17.1%) were in South East Asia. HIV continues to spread rapidly, with 13,600 new infections occurring each day, of which more than 95% are in low and middle-income countries. HIV is the leading cause of death from any single infectious agent, with an estimated 3.1 million people dying from AIDS in 2002 alone.

TB, although curable, is one of the most common causes of HIV-related illness and death. Eleven million adults living with HIV/AIDS (PLHA) are estimated to be co-infected with *Mycobacterium tuberculosis,* with 71% of those co-infected living in sub-Saharan Africa and 22% living in South-East Asia. TB case notification rates have risen up to fourfold in many African since the mid-1980s, including those with well-organized programmes. Many of these countries have TB case notification rates reaching peaks of more than 400 cases per 100,000 people.

1.1 How HIV epidemic drives the TB epidemic

In some countries in sub-Saharan Africa, up to 70% of patients with smear positive pulmonary TB are HIV-positive. HIV fuels the tuberculosis epidemic in several ways. HIV promotes progression to active TB both in people with recently acquired and with latent *M tuberculosis* infections. HIV is the most powerful known risk factor for reactivation of latent tuberculosis infection to active disease. HIV-infected people are more susceptible to be TB infected when they are exposed to *M tuberculosis*. The annual risk of developing TB in a PLHA who is co-infected with *M tuberculosis* ranges from 5 to 15 percent. HIV increases the rate of recurrent TB, which may be due to either endogenous reactivation (true relapse) or exogenous

re-infection. Increasing tuberculosis cases in PLHA pose an increased risk of TB transmission to the general community, whether or not HIV-infected.

1.2 How HIV changes the clinical course of TB

HIV not only increases the number of TB cases, but also alters the clinical course of TB disease. As HIV-related immunosuppression increases, the clinical pattern of TB disease changes, with increasing numbers of smear-negative pulmonary TB and extra-pulmonary TB cases. TB is more likely to be disseminated and more difficult to diagnose as immunosuppression progresses.

HIV-positive TB patients also suffer increased morbidity from other HIV-related diseases. It is therefore not surprising that national TB programmes in high HIV burden countries are reporting increasing case-fatality rates of up to 25% in smear-positive patients and 40-50% in smear-negative pulmonary TB patients. Worldwide there were an estimated 350,000 deaths from HIV-related TB (TB/HIV) in the year 2000.

Communities in high TB/HIV burden countries have also become aware of HIV's impact on TB. TB programmes risk losing credibility as communities notice the increasing mortality and HIV-related complications in TB patients. Dual stigma is common, with TB suspects failing to present for diagnosis for the fear of the label of AIDS if diagnosed with TB.

1.3 Impact of HIV on TB control programmes

- Increasing numbers of TB suspects and TB patients, in turn impacts on:
  - Human and infrastructural resources in the health sector
  - Services for diagnosis and case-holding
  - Risk of nosocomial TB infection
- Increasing HIV prevalence in TB patients
- HIV-related mortality and morbidity in TB patients
- HIV/TB-related mortality and morbidity in health care workers, reducing staff numbers and increasing the workload of remaining staff
- Low staff morale due to conditions of service, anxiety and powerlessness
- TB becomes associated with AIDS, possibly causing TB suspects to delay accessing health services due to the stigma of HIV/AIDS.

1.3.1 Impact of TB on HIV control programmes

- TB is one of the most common treatable infectious HIV-related disease of PLHA in high TB burden countries
- TB is one of the leading causes of death among PLHA.
- TB may accelerate the progression of HIV-related immunosuppression
- Late TB diagnosis contributes to increased death rates in PLHA.

1.4 Current TB control strategy

The current internationally recommended TB control strategy, namely DOTS, is a five-point policy package consisting of:

- Government commitment to sustained TB control activities
- Case detection among symptomatic patients self-reporting to health services, using sputum smear microscopy
- Standardised short-course chemotherapy using regimens of six to eight months for at least all confirmed smear-positive cases. Good case management includes directly observed therapy (DOT) during the intensive phase for all new sputum positive cases, during the continuation phase of regimens containing rifampicin, and during the entirety of a re-treatment regimen
- Establishment and maintenance of a system to supply all essential anti-TB drugs, and to ensure no interruption in their availability
- Establishment and maintenance of a standardised recording and reporting system, allowing assessment of treatment results.

This package is the cornerstone of global TB control, even when HIV is common. It represents the core business of TB control, namely case-finding and adequate treatment, which render patients non-infectious and no longer able to spread the disease to the community. In those countries where the DOTS strategy was implemented before the impact of HIV, the public health impact of DOTS was seen in the falling TB case notifications. Some evidence suggests that even in high burden HIV countries DOTS has helped to contain the TB epidemic. Modelling studies predict that much greater increases in TB case notifications would have been seen in high HIV burden countries in the absence of implementation of the DOTS strategy. Therefore, even in high HIV prevalent countries, country-wide implementation of the DOTS strategy is the basic minimum for TB control.

1.4.1 *Current HIV/AIDS control strategy*

The current WHO HIV/AIDS control strategy includes the following:

- **Prevention and health promotion**
  - Broad-based programmes to educate the general population about HIV/AIDS and promote safe and responsible sexual behaviour and practices. Access to condoms.
  - Youth sensitive programmes that specifically engage and respond to young people and their sexual and reproductive health needs. Also provide widely accessible voluntary counselling and testing (VCT)
  - Promote harm reduction among injecting drug users, including offering a wide access to sterile injecting equipment
  - Provide guidance to traditional healers to support their role in HIV prevention and care.

- **Treatment and care**
  - Programmes to prevent mother-to-child HIV transmission
  - Wide access to services to diagnose and treat sexually transmitted infections (STIs) and increased access to antiretroviral therapy in line with accepted treatment guidelines

- Diagnosis and treatment of HIV related opportunistic and concurrent infections
- Psychosocial support and palliative care to people with HIV/AIDS
- Continuum of care established from the home through to health facility based care, supported by a sound system of client referral
- Drug dependence treatment and outreach services to reduce injecting drug use.

- **Health standards and systems**
  - Supply safe blood and blood products
  - Review health systems and promote national policies and standards for public and private delivery of HIV/AIDS prevention, promotion, treatment and care programmes
  - Procurement plan for antiretrovirals and other essential HIV related drugs
  - Reduction of occupational HIV infection among health care workers and provision of post-exposure prophylaxis
  - Safe injection and surgical practices in health care settings provided

- **Other essential interventions**
  - Counter discrimination and stigma of people with HIV/AIDS
  - HIV and STIs epidemiological and behavioural surveillance
  - Provide an enabling environment through policies, laws and regulations that assist HIV and STIs programmes to work, in collaboration with government and non-government sectors
  - Mobilise involvement of the community sector, NGOs, PLHAs, vulnerable groups and business sector
  - Establish an HIV/AIDS funding plan for the health sector, as part of the national strategic plan and strengthen accountability systems for use of human and financial resources.

1.5 Rationale for additional interventions beyond TB case finding and treatment to control TB in high HIV prevalent populations

The aim of the DOTS strategy is to detect and treat infectious TB cases so effectively, that new TB infections are limited in the first place. However, the dynamics of the current HIV-related TB epidemic mean that many more new TB infections continue to occur as the number of new infectious TB sources greatly increases. It is recognized that HIV probably increases the risk of *M tuberculosis* infection following exposure and that HIV promotes progression to active tuberculosis in people with both recently acquired and with latent *M tuberculosis* infections. The increasing number of TB infectious cases in PLHA pose an increased risk of TB transmission to the general community. HIV has also been shown to increase the risk of recurrent tuberculosis. Therefore, in addition to there being a number of points at which specific anti-TB interventions can be made (BCG vaccination, preventive treatment for TB, and treatment of active TB cases), there are also a number of points at which anti-HIV interventions can be made that will reduce the chance of active TB developing e.g., condom promotion, STIs treatment, safe injecting drug use, and highly active antiretroviral treatment (HAART). The most powerful intervention against TB beyond case finding and treatment is to

prevent new HIV infections from occurring in the first place in people already infected with TB, as this will greatly reduce the likelihood that latent *M. tuberculosis* infection will progress to active TB disease.

1.5.1 *Rationale for collaboration between TB and HIV/AIDS control programmes to deliver TB and HIV activities.*

The above points demonstrate that HIV prevention and care should be a priority concern of TB programmes and TB care and prevention should be a priority concern of national HIV/AIDS control programmes. Whereas previously TB programmes and HIV/AIDS programmes have largely pursued separate courses, they need to exploit synergies in supporting health service providers to deliver these interventions.

The expanded scope of the new strategy for TB control in high HIV prevalent populations includes interventions against TB (intensified case-finding and cure and TB preventive treatment) and interventions against HIV (and therefore indirectly against TB), e.g. condoms, STIs treatment, harm reduction of IDU and HAART.

Some of the TB/HIV interventions described above clearly fall under the responsibility and expertise of the NTP (such as DOTS expansion), while others fall under the responsibility and expertise of the NACP (such as prevention of mother-to-child HIV transmission; VCT services, safe blood supply). However, most activities fall in the middle of the spectrum with much potential overlap between the programmes e.g.:

- Increased community involvement can benefit both TB diagnosis and care, and HIV/AIDS care and prevention
- IPT is a concern of both TB services (which are likely to supply and monitor the isoniazid) and of VCT/NACP services (whose clients will benefit).

At the service delivery level it can be seen that many potential reciprocal synergies exist between different services providers, e.g.:

- TB patients have a high rate of STIs (and would therefore benefit from STIs screening and treatment)
- HIV-positive VCT clients have a high rate of TB (and therefore benefit from TB screening and treatment) and TB patients have a high rate of HIV (and therefore benefit from VCT and associated services).


TB:HIV

2 Interventions to control TB in high HIV prevalent populations

Overview of this chapter

Case finding and treatment to ensure cure are the core TB control activities in all countries, including high HIV burden countries. This chapter will summarise:

- Additional interventions available to control TB in high HIV prevalent populations, and provide comprehensive care for HIV-infected TB patients:
  - Interventions directly against TB
  - Interventions against HIV, and therefore indirectly against TB
- Where joint TB/HIV interventions fit within the district health system.

2 Additional measures beyond tuberculosis case-finding and treatment

To counteract the impact of HIV, a significant expansion in scope of the strategy for TB control is required beyond effective case-finding and treatment, through additional interventions. Table 1 describes the interventions beyond case-finding and treatment acting directly against tuberculosis and those acting against the transmission and impact of HIV infection (and therefore indirectly against TB). The expanded scope of the new strategy for TB control in high HIV prevalent populations includes: intensified TB case-finding and treatment; TB preventive treatment as well as interventions against the transmission and impact of HIV infection (and therefore indirectly against tuberculosis) such as condom promotion, STIs treatment, cotrimoxazole preventive therapy, harm reduction of injecting drug use and ART.

2.1 Where joint TB/HIV interventions fit into the district health system

The framework of the Global TB/HIV strategy describes where TB and HIV interventions could be introduced at different levels within the district health system. The health system is divided into community, primary, secondary and tertiary level care (although in many resource-poor countries few districts have access to tertiary care). Table 2 shows a summary of the different interventions suggested for each level (up to secondary care). Interventions available at tertiary level (referral hospitals) are for complicated forms of TB and HIV-related diseases. Given the specialist management required, these interventions are not described. The interventions applicable at tertiary levels of the health care system are additional to those applicable at the primary and secondary levels respectively. Interventions for which close collaboration between TB and HIV/AIDS control programmes is necessary are indicated as collaborative TB/HIV programme activities. National health planners for each country need to define the interventions according to the services that are available at each level of their own health system.

TABLE 1

Interventions to control TB in high HIV prevalent populations

FULL IMPLEMENTATION OF THE DOTS STRATEGY ADDITIONAL INTERVENTIONS BEYOND EFFECTIVE CASE FINDING AND TREATMENT	
INTERVENTIONS DIRECTLY AGAINST TB	INTERVENTIONS AGAINST HIV (AND THEREFORE INDIRECTLY AGAINST TB)
Through TB case detection and treatment • People already presenting with symptoms suggestive of TB to general health service provider • Intensified TB case-finding in high-risk groups: - HIV-positive VCT clients - IDUs - Patients presenting with STIs - PLHA support groups - Home-based care patients - Prisoners - Patients accessing care from alternative care provider - Household contacts of TB patients - Other groups **Through prevention of new TB cases** • Isoniazid preventive treatment for PLHA - Treatment to prevent a first ever episode of TB - Treatment to prevent a recurrent episode of TB	**By preventing HIV transmission** • Condom promotion • Treatment of STIs • Voluntary HIV counselling and testing • Safe injecting drug use • Sexual behavioural changes • Prevention of mother-to-child HIV transmission • Safe blood • Universal precautions by health care workers • Targeted interventions to high-risk locations: e.g. factories, brothels, truck-stops • IEC activities • Lifeskills • Antiretroviral treatment **By increasing/maintaining immune function in PLHA** Antiretroviral treatment
By providing care for PLHA (HIV care gives direct opportunities for HIV and TB prevention, and also impacts on prevention by normalising community attitudes and reducing the stigma of HIV/AIDS) • Treatment of HIV-related diseases - Infections (including opportunistic infections) - Tumours • Prevention of HIV-related infections • Psychological support • Palliative care • Nutritional support	

TABLE 2

TB/HIV interventions and different levels of the health care system

LEVEL OF HEALTH CARE SYSTEM	TB/HIV INTERVENTIONS
HOME AND COMMUNITY (e.g. community-based organizations, non-governmental organizations, faith-based organizations, government community health programmes)	TB, HIV and STIs' IEC activities[#]
	Condom promotion[#]
	Nutritional advice and support[#]
	Psychological support[#]
	Community DOT for TB
	Community-based palliative and terminal care[#]
	ART[§]
PRIMARY CARE (e.g. government health centres, mission health centres, private health centres)	VCT
	TB case finding and treatment [‡]
	Intensified TB case finding *[#]
	IPT and CPT provision *[#]
	Condom promotion *[#]
	STIs treatment (syndromic management)[#]
	Syndromic management of HIV-related opportunistic infections and palliative care
	PMTCT[#]
	ART[§]
SECONDARY CARE (government hospitals, mission hospitals private hospitals)	Diagnosis and treatment of HIV-related diseases *
	In-patient palliative care
	ART[§]
	Safe blood

[#] Collaborative TB/HIV programme activities

[§] The level in the health system at which ART needs to be made available is a national policy issue and is currently debated in many countries. Whenever ART is provided to TB patients, this is to be considered a collaborative TB/HIV activity

[‡] The provision of single-use sterilised syringes for streptomycin injection as required per regimen is a collaborative TB/HIV programme activity

* Interventions available at home and community level as part of the community-based prevention and care services provision


TB:HIV

Part 2

Planning and establishing phased implementation of collaborative TB and HIV programme activities

The interaction between TB and HIV has implications for the public health approach to TB control among HIV-infected people. TB programmes and HIV programmes therefore share mutual concerns: prevention of HIV should be a priority for TB control; TB care and prevention should be priority concerns of HIV/AIDS programmes.

Several requirements are necessary for countries to strengthen general health service providers in implementing the interventions to control TB as part of the overall health service response to HIV/AIDS. These include: increased funding (by national governments and the donor community); changes in international and national policy away from specific HIV/AIDS activities towards responding to the care needs of high HIV prevalence populations through strengthened general health services; improved general health service capacity to deliver interventions (human resources, infrastructure and commodities); operational research to find out how best HIV/AIDS and TB programmes can work together to help general health services deliver an effective response; effective coordination of activities on the part of the many role players often involved.

Extract from the executive summary of "A Strategic Framework to Decrease the Burden of TB/HIV".


TB:HIV

3 National level

Overview of this chapter

The reform of the health sector and the decentralisation of planning and finance from national programmes to a district level has resulted in increased district autonomy. However, whether or not the health sector reform has occurred, districts will require guidance from national TB and HIV/AIDS programmes to give policy direction for phased implementation of country-wide TB/HIV activities. National guidance will ensure country-wide success of these activities.

This chapter will discuss:

- Purpose of NTP/NACP collaboration
- Models of collaboration between TB and HIV/AIDS control programmes
- Definition of executive responsibility and boundaries of TB and HIV/AIDS programme collaboration
- Development of a national collaborative TB/HIV strategic plan
- Development of tools to support district planning of collaborative TB/HIV activities
- Planning the process of phased implementation of collaborative TB/HIV activities
- Monitoring and evaluation of TB/HIV collaborative activities
- Assessing the cost of collaborative TB/HIV activities
- Research
- International support required for collaborative TB/HIV activities.

3 The purpose of NTP/NACP collaboration

Collaboration is not an end in itself. The NTP and NACP must carefully define the purpose of their collaboration. The most important reason for collaboration is to improve the TB and HIV care and prevention services provided by district health systems (including government, non-governmental and private services). The improvement of individual care and support is an adequate justification for collaboration in itself, however collaborative TB/HIV activities also have the potential to provide wider benefits. These benefits are summarised in Box 1.

Box 1 Benefits of NTP/NACP collaboration

Output benefits

- Reduction of the burden of the dual TB/HIV epidemics
  - Through TB/HIV prevention activities and TB care
  - Through HIV care and control activities
- Strengthening of the general health services.

Process benefits

- More cost-effective collaborative procurement and distribution
- More cost-effective implementation by avoiding duplication of activities
- Improved quality of services through sharing expertise between programmes
- More efficient and comprehensive services by traditional TB programme staff and HIV/AIDS/STIs staff.

3.1 Models of collaboration between TB and HIV/AIDS control programmes

Some countries have responded to the need for NTP and NACP collaboration by integrating the two programmes at central and sometimes regional and/or district levels. The reasons for NTP/NACP programme integration need to be clear in order for true programme collaboration to be made. Integration should provide definite synergistic benefits such as joint funding, staff, procurement and distribution mechanisms. In some countries the NTP and NACP report to a single director, but in practice they are still run entirely separately. In many countries the NTP and NACP have such different philosophies, structures, operations and funding channels that programme integration is difficult and counter-productive. Different programme structures however do not constitute a barrier to fruitful communication and collaboration on jointly identified areas of mutual interest. If both programmes share a common goal, such as provision of high quality comprehensive care and prevention for PLHA and TB, collaboration will be a natural process.

3.2 Defining executive responsibility and boundaries of TB and HIV/AIDS programme collaboration

The specific responsibilities for planning the TB/HIV strategy and activities will vary, but need to be defined by each country. As a minimum, the NACP should be invited for inclusion in the planning process of the NTP, and vice versa. Experience from ProTEST TB/HIV activities (in Malawi, South Africa and Zambia) suggests that NTP/NACP collaboration has the greatest chance of success when one or more specific individuals can be identified that have responsibility for collaborative activities.

One way for the NTP and NACP to define these responsibilities is to form **a national TB/HIV coordinating committee** that will develop collaborative strategic plans, policy consensus and implement joint TB/HIV activities. Members of the committee should be drawn from each programme. The committee could include representatives from urban and rural district health management teams, from the communities of PLHA and different stakeholders. If national TB or HIV patient support groups exist, then representatives could be included in the committee. The committee's membership and authority should be officially endorsed by the appropriate officials from the Ministry of Health.

One of the most challenging aspects of TB and HIV programme collaboration is the question of where the boundaries lie between the activities of the two programmes. This is an issue at both central and district levels, and can arise for a number of reasons. TB treatment and prevention form only one part of comprehensive care for PLHA, and can clearly be supported by the NTP. Conversely clinical problems related to HIV/AIDS in TB patients are very frequent. Provision of VCT and treatment of opportunistic infections and HIV/AIDS complications for TB patients needs the support of the HIV/AIDS programme. TB patients should not be preferentially treated for HIV/AIDS complications with resources from the TB programme.

NTP managers may be concerned that collaborative TB/HIV activities may overwhelm their core TB control activities. Therefore it is vital that the collaborative planning process enables core programme activities to be sustained, and that realistic assessment of programme capacity should be made. The routine monitoring and evaluation process should assist programme managers to ensure that core activities continue. Boundaries should be discussed and agreed as part of the planning process.

The model of programme collaboration adopted will depend on country-specific factors. In those countries where there has been integration of the NTP and NACP, development of a collaborative strategy and work plan should be an automatic result of programme planning. The TB/HIV strategy and work plan should then be incorporated within the NTP and NACP's own strategy and work plans.

3.3 Developing a national collaborative TB/HIV strategic plan that uses the synergies and strengths of the two programmes

A strategic plan for collaborative TB/HIV activities is required. This should have clear objectives and targets, and the roles for each collaborating partner should be documented. The process of developing a collaborative TB/HIV strategic plan involves:

- Recognising the burden of the overlapping TB/HIV epidemics
- Recognising the respective strengths and weaknesses of the NTP and NACP
- Defining the opportunities for collaboration that exist between the NTP and NACP at central and district levels.

3.3.1 *Recognising the burden of the overlapping HIV/TB epidemics*

The first step is for managers and policy makers from the NTP and NACP to meet and review country-specific information relating to the TB and HIV epidemics (Table 3).

TABLE 3 **Examples of national programme information that can be used in country analysis of the TB/HIV epidemic**

NATIONAL TB PROGRAMME DATA (WHEREVER POSSIBLE SHOWING TRENDS OVER TIME)	NATIONAL AIDS PROGRAMME DATA (WHEREVER POSSIBLE SHOWING TRENDS OVER TIME)
• New TB case notifications (pulmonary and extra-pulmonary)	• HIV rates (age stratified where possible to provide an indictor for incidence in the youngest cohorts)
• TB relapse rates and trends	- Antenatal clinic attendees
• Treatment outcomes of smear-positive PTB	- TB patients
	- Blood donations
• Age-specific data of TB cases and outcome	- STIs clinic attendees
• Treatment outcomes smear-negative PTB	- Army recruits
• Multi-drug resistant (MDR) TB rate	- Hospital admissions
- Primary MDR cases	- Intravenous drug users
- Secondary MDR cases	• HIV-related cancer notifications
• Proportion of TB cases that are HIV-Positive	• Number of AIDS cases
• Prevalence of other HIV-related complications in TB patients	• Number of VCT services • Number of clients accessing VCT services
• Community perceptions of the link between TB and HIV	• Community knowledge, attitudes and Practices around about modes of HIV transmission and prevention
• Community perceptions of TB treatment in PLHA	• Experience from home-based care programmes • Multi-sectoral approach

3.3.2 *Recognising the different strengths and weaknesses of the NTP and the NACP*

The second stage of developing a collaborative TB/HIV strategy is for the NTP and NACP to examine their different approaches through a programme analysis. Useful issues for discussion about each programme include:

- Programme development over time
  - When the programme was established
  - The objectives of the programme when first established
  - The organization of the programme at central and district levels
- Programme staff
- Programme activities
- Means of monitoring and evaluating programme activities, including links with existing health management information systems
- Financing of programme activities (budget, expenditure rate, etc)
- The main achievements of the programme in the last five years (i.e., progress towards established targets)
- The current challenges of the programme
- The current strategies of the programme.

During the discussions the following questions should be addressed:

- What are the strengths and weaknesses of each programmes' approach?
- What are the particular skills of each programme?
- Where do the potential synergies lie between the two programmes?

3.3.3 *Defining the opportunities for NTP/NACP collaboration*

3.3.3.1 *National level*

National TB and HIV/AIDS programmes need to record the opportunities for collaboration at central and district level, drawing on the different programme strengths that have been identified. These opportunities will then guide the national programmes to develop a collaborative strategy to support the district response. Examples of opportunities for collaboration at central level are summarised in Table 4.

TABLE 4 **Examples of central level collaborative TB/HIV activities, in relation to NTP and NACP strengths**

COLLABORATIVE ACTIVITIES	PROGRAMME WITH PARTICULAR SRENGTHS IN THIS AREA
• Joint advocacy	NACP
• Joint policy consensus	NTP/NACP
• Joint IEC strategies	NACP
• Joint training activities	NTP/NACP
• Joint procurement and distribution - Drugs - Consumables - Laboratory reagents	NTP
• Joint monitoring, evaluation	NTP/NACP
• Joint information systems	NTP/NACP
• Joint surveillance	NTP/NACP
• Joint research	NTP/NACP

3.3.3.2 District level

The National TB/HIV Committee needs to undertake an analysis of TB and HIV care and support provision at district level. Issues to be defined include:

- What elements of the network of comprehensive care for PLHA and HIV prevention are present at each level of district health services (including TB prevention and care)?
- What services is each service provider in the network of HIV/TB care and support services providing?
- What technical/policy decisions are required before activities can be implemented?
- Who/which organizations are responsible for providing each service/element of the package of care?
- What is required to enable individual services providers to work together to provide comprehensive care?
- Who/which organizations are responsible for ensuring that comprehensive services are available?

The HIV/AIDS care and prevention package may be part of a wider essential health care package (EHP) already developed by the Ministry of Health. In this case the process may simply require review of the EHP with a TB/HIV focus. In countries where no package has been defined then the descriptions of TB/HIV interventions in Part 1, Chapter 2 and the "Prioritized-activities Charts" in Part 3, Chapter 5 and the "Implementing-activity Boxes" in Part 3, Chapter 6 may be used to guide this process.

3.4 Developing tools to support district implementation

Once policy decisions have been made and guidelines for district implementation have been agreed, the central units of national programmes need to consult districts about the tools required to enable district implementation. The 'Implementing-activity Boxes' in Part 3, Chapter 6 give specific suggestions for materials that may need to be developed by the national programmes including:

- District TB/HIV manual (this may simply require revision of an existing HIV manual to include collaborative TB activities, or an existing TB manual to include collaborative TB/HIV activities)
- Generic terms of reference for district TB/HIV coordinating committees
- Implementation guidelines for prioritized TB/HIV activities
- Information packages for district staff
- Training manuals and modules
- IEC materials
- Monitoring and evaluation tools.

Some of these materials may need to be developed specifically for the new strategy, for example IEC materials explaining the link between TB and HIV. More general information on TB or HIV should also be produced by the NTP and NACP.

3.5 Planning the process of phased implementation of collaborative TB/HIV activities

Each level of TB and HIV programmes, from individual service providers through to the central programme unit, should plan implementation of collaborative TB/HIV activities with a phased approach.

- **Individual service providers:** should plan phased introduction of new services in order to upgrade current service provision, as described in "Prioritized-activity Charts" in Part 3, Chapter 5
- **District health management teams:** should plan phased introduction of collaborative activities between different service providers, and should provide technical assistance and support to enable planning by individual service providers.
- **Central units of national programmes:** should plan phased introduction of collaborative TB/HIV activities by district, until national coverage is achieved.

3.5.1 *Planning phased implementation*

Given the urgent need for a response to the TB/HIV epidemics, the National TB/HIV Committee should plan phased implementation of collaborative TB/HIV activities and subsequent phased expansion to national coverage. The number of phases required, and the speed at which national coverage is reached, will depend on the size of each country as well as the resources available. A small number of districts should be chosen in which to start the first phase of implementation. However, a clear plan and time-frame for roll-out of successful activities to other districts should be formulated at this stage. It is recommended that a five-year vision as well as an annual work plan for implementation of collaborative activities be developed.

3.5.2 Choosing where to start phased implementation

It is recommended that the first phase should consist of either one or a small number of districts. These districts should:

- Be representative of the different challenges found in districts across the country. For example, both urban and rural settings should be represented
- Have a good chance of successfully implementing collaborative TB/HIV activities. This means they should either have well-organised DOTS programmes, or strong HIV/AIDS care programmes, and preferably both. The range of different ProTEST TB/HIV sites (Malawi, South Africa and Zambia) included some districts with weak DOTS system (Zambia and South Africa). In these districts, TB control indicators were improved through TB/HIV collaborative activities. Conversely, in those districts with weaker HIV/AIDS services (Malawi), these were strengthened through TB/HIV collaborative activities.
- Have the ability to be able to monitor and evaluate their activities so that other districts can learn lessons from their implementation.

3.5.3 Criteria for starting phased implementation

The criteria for starting phased implementation of TB/HIV activities should be set by national programmes. For example, in a country where DOTS is not provided in every district, the first priority of the NTP should be to implement and expand DOTS, but those districts (or areas within a district) already providing DOTS might embark on collaborative TB/HIV activities. One advantage of phased strategy is that more advanced areas have the freedom to expand collaborative activities while other areas work to establish core TB/HIV activities.

3.5.4 Building district capacity to implement collaborative TB/HIV activities

In addition to the provision of tools to support district implementation of collaborative TB/HIV activities, some district staff will require training before implementation can take place. People chosen to be key district implementers and coordinators should be trained, for example, by the central units of national programmes, in the use of the national TB/HIV guidelines. “Training of trainer” modules would be helpful for the key staff of the Phase one districts.

3.5.5 Working with districts to plan and implement collaborative TB/HIV activities

The collaborative TB/HIV planning process in districts should be supported by National TB/HIV Programmes. Phase one districts may require assistance in planning from external facilitator, e.g. from national TB/HIV committee members. In the roll-out phase, the coordinators of collaborative activities in the phase one districts could facilitate the planning and implementation of activities in phase two districts.

3.6 Monitoring and evaluation of TB/HIV collaborative activities

The National TB/HIV committee should make an assessment against its work plan on a regular basis, e.g. every six-months. The assessment should include:

- Process indicators at central level such as
  - Meetings held
  - Issues discussed
  - Policy decisions taken
  - Materials developed
  - Progress made in HIV/TB districts
- Indicators of phased implementation of TB/HIV activities at district level including
  - Number of districts with a TB/HIV coordinating committee
  - Number of districts implementing each level of collaborative TB/HIV activity
  - Number of clients/patients accessing each service provider by district
  - Number of clients/patients using the different interventions
- Outcome indicators, as described in more detail in the series of Implementing-activity Box, Part 3, Chapter 6.

3.7 Assessing the cost of collaborative TB/HIV activities

3.7.1 *Assessing the cost of national TB/HIV activities*

The national TB/HIV committee must estimate the resources required for all the stages described above. Assessment of the cost of these resources will include:

- Cost of running the national TB/HIV coordinating committee
- Cost of joint activities:
  - Advocacy
  - IEC strategy
  - Materials development
  - Training activities
  - Procurement and distribution
  - Monitoring and evaluation
- Cost of facilitating district planning
- Cost of supervising district coordination and implementation
- Budget available for disbursement to the districts for collaborative TB/HIV activities

The committee should determine who will finance each of these costs. It is likely that many activities may be funded using existing NTP or NACP resources, especially where cost-savings are made through collaboration. Funding gaps should be identified.

Collaboration between national TB and HIV programmes is often hindered by the requirements of the different donors supporting the programmes. The NTP and NACP should request donors supporting their programmes to adopt unified support strategies and procedures.

3.7.2 *Assessing the cost of district TB/HIV activities*

The national TB/HIV coordinating committee must enable the districts to assess the cost of collaborative TB/HIV activities. Advice on cost assessment should be included in the TB and HIV manuals for district TB/HIV collaborative activities. The districts may also require the technical assistance of the national TB/HIV coordinating committee to enable them to produce a realistic budget for their activities. The national TB/HIV committee should make it clear what budget will be made available to districts from the central level. District TB/HIV committees should be encouraged to mobilise funds from as many local sources as possible, including:

- Privates companies
- Local businesses
- NGOs
- Charities
- Religious organizations

3.8 Research

Research should form an important part of the planning and implementation of collaborative TB and HIV programme activities.

- Few examples of NTP and NACP collaboration exist. Therefore, an operational research approach to the planning and management of TB/HIV programme collaboration and/or integration at central and district levels should form an integral part of the work-plan for collaborative TB and HIV activities.
- There is a need for new interventions against TB and HIV, and wherever possible TB and HIV programmes should work together with research institutes to encourage relevant basic science research and clinical trials.
- Evidence for the feasibility of collaborative TB and HIV activities is currently incomplete. Therefore district feasibility studies of collaborative TB/HIV activities will not only help to inform national TB/HIV policies, but also will inform international strategies being developed by the Global TB/HIV Working Group.

3.9 International support is required for national collaborative TB and HIV responses

International health agencies can support national collaborative TB and HIV strategic planning and implementation by:

- Coordinating with the Global TB/HIV Working Group. As new evidence and experience of feasibility, efficacy, affordability and cost-effectiveness of different TB/HIV collaborative interventions emerges policy briefings should be shared with the TB/HIV Working Group.
- Providing technical assistance to Ministries of Health and country programmes planning and implementing collaborative TB/HIV activities.
- Disseminating field-tested technical guidelines, training packages and IEC materials developed by countries implementing collaborative TB/HIV activities.
- Disseminating the experiences and lessons learned by countries implementing collaborative TB/HIV activities.
- Promoting and advocating for collaborative TB/HIV activities.

4 District level

Overview of this chapter

This chapter will describe practical steps to planning the implementation of collaborative TB/HIV activities at district level. These steps include:

- District situation analysis
- Establishing a district TB/HIV coordinating committee
- Planning TB and HIV/AIDS collaborative activities
- Principles to include during the planning process
- Cost of the work plan
- Coordinating district TB and HIV/AIDS collaborative activities
- Establishing a referral system
- Supporting the staff
- Monitoring and evaluation
- Documenting the process.

4 District TB/HIV analysis

The first step of phased implementation of collaborative TB/HIV activities in a district is an analysis of the district TB/HIV services. There are three parts to this analysis:

- The collection of baseline TB/HIV statistics
- The identification of groups at particular risk of TB and/or HIV infection
- A survey of existing district TB and HIV/AIDS service providers.

The overall responsibility for TB and HIV/AIDS care and prevention for a district usually falls under the district health management team (DHMT). The DHMT should therefore be responsible for organising the district analysis.

4.1 District TB/HIV data collection

This stage is also commonly referred to baseline data collection or situation analysis. Data should already be collected in the district through existing health management information systems. Other good sources of information include the district TB register, laboratory, ward and outpatient registers. Examples of data to be collected are shown in Table 5. Where data has been available for a number of years these should be collated to show the trends in district TB and HIV/AIDS cases over time.

TABLE 5 **Baseline district TB/HIV data collection**

SUGGESTED BASELINE DISTRICT DATA	POSSIBLE DATA SOURCES
TB CASE NOTIFICATIONS	
TB case rate/100,000 population	• District TB register, district population census
TB suspects referred for diagnosis Number of TB suspects giving sputum Smear-positive rate in TB suspects	• Chronic cough register, laboratory register
TB treatment outcomes	• District TB register
TB relapse rate	• District TB register
MDR rate	• National MDR surveys
HIV RATES	
In TB patients	• Surveys in TB patients
In antenatal clinic attendees	• Routine surveillance
In blood donors	• Laboratory registers
In VCT clients	• VCT services, laboratory registers
In military recruits	• Ministry of Defence data
CLINICAL DATA	
Number of STIs cases treated	• STIs clinic records
Number of AIDS-related hospital admissions	• Ward registers
Number of cases of *C. neoformans* meningitis/*S.pneumoniae/ S. typhimurium* cases diagnosed	• Laboratory records
Number of Kaposi's' Sarcoma cases non-hodgkins lymphoma cases diagnosed	• Histology register, cancer register
CONDOM DISTRIBUTION	
Numbers of condoms distributed	• District/partner condom stock records

4.1.2 *Groups within a district at increased risk of TB and or HIV*

The situation analysis should describe the presence within the district of groups considered to be at especial risk of TB and/or HIV/AIDS infection e.g. groups of people known to be HIV-infected and PLHA support groups, patients with STIs, prisoners, the military, commercial sex-workers and their clients, IDUs, and migrant groups such as seasonal labourers. If resources are limited, these groups should form the focus of TB/HIV activities.

4.1.3 *Survey of TB and HIV/AIDS service providers*

The district situation analysis should include a list of service providers with an assessment of:

- Target population/catchment area
- Numbers of clients/patients using each service
- Gender and ages of patients/clients
- HIV status of patients/clients
- Drugs available for HIV care at different clinical service providers.

As with data collection, trends of service use over time should be collected where possible. The results should include:

- A list of "who is doing what, and where" in terms of provision of TB and/or HIV.
- Identification of gaps in the package of prevention and care for HIV and TB within the district
- Identification of underserved populations.

A checklist of the service providers that should be considered is shown in Table 6.

4.2 Establishing a district TB/HIV coordinating committee

One of the key lessons emerging from the ProTEST TB/HIV districts is the importance of a district TB/HIV coordinating committee that meets regularly to enable networking and collaborative activities. If a coordinating committee dose not exist, the District Health Management team (DHMT) should establish one, with all relevant TB and HIV/AIDS care and support stakeholders invited to participate. The terms of reference and reporting structure for the group should be defined.

4.3 Planning TB/HIV collaborative activities

Guidelines for planning these activities should be developed at the national level, with a five-year vision for activities, and an annual work-plan with objectives and activities for each partner. Each TB or HIV/AIDS service provider should critically assess its own level of service provision according to the guidelines set out in the Prioritized-activities-Charts in Part 3, Chapter 5 and the Implementing-activity Boxes in Part 3, Chapter 6. This process may require facilitation from the central programmes, depending on the capacity of each district.

4.4 Principles to consider during the planning process

4.4.1 *Strengthening the general health care system*

TB/HIV activities should be implemented in such a way as to strengthen the general district health system. Funding and procurement channels should be examined to ensure that existing channels are used wherever possible. The potential risk of establishing a parallel health care system for PLHAs must be avoided.

4.4.2 *Ensuring the link of care and support to prevention*

Care for the chronically sick leads to many contacts between service providers, patients and their relatives. These numerous contacts provide opportunities for discussing and promoting TB/HIV prevention, and should not be wasted. Examples include:

- Monthly contact with PLHA collecting monthly IPT supplies, which gives at least six opportunities to review and reinforce strategies to prevent further HIV transmission
- Home-based care visits allow patient and carers to consider measures to prevent HIV transmission, including safer nursing practices and condom use
- Home-based care visits to TB patients provide an opportunity for TB prevention, by encouraging children and symptomatic adults to attend for TB screening
- Clinical contact with pregnant PLHA facilitates discussions about reducing the risk of mother-to-child transmission of HIV through promotion of safer breast-feeding practices, and ART if available.

Indicators of these prevention activities should be included in the assessment of care and support services.

TABLE 6 **Checklist of services to be included in baseline survey of district TB and HIV service-providers**

SERVICE	EXAMPLES OF POTENTIAL SERVICE PROVIDERS
TB care provision	• Community-based organizations • Health centres (primary care) • District hospital (secondary care) • Mission hospital • Private practitioners
Integrated VCT services	• Health centres • District hospital • Mission hospital
Free-standing VCT services	• Non-governmental organizations
PWA support groups	• Linked to VCT centres • Non-governmental organizations
Clinical HIV/AIDS care Diagnostic facilities Medical management	• Community-based organizations • Health centres • District hospitals • Youth-friendly services • Mission hospitals • Private practitioners • Traditional healers
STIs treatment **Family planning**	• Health centres • District Hospital • Non-governmental organizations • VCT centres
Condom promotion	• Community care groups • VCT centres • Family planning centres • Youth-friendly services • STIs clinics • Health centres • Hospitals
Nutritional support	• Community-based organizations • Non-governmental organizations • Mission hospitals/health centres • Government hospitals/health centres
Orphan care/social support	• Community-based organizations • Non-governmental organizations • Mission Hospitals • Social welfare department
Psychological support	• Community care groups • VCT centres • Non-governmental organizations

4.4.3 *Equity and confidentiality*

Services provided should be accessible to those who are known to often lose out when access to healthcare is concerned, such as the poor, women, those living in rural areas and marginalized groups. These services should run on the principle of respect for clients, and should be non-discriminatory and confidential. One service within the district partnership that breaks confidentiality, for example, can risk bringing the whole partnership into disrepute.

4.5 Assessing the cost of the work-plan.

In many countries it is realistic to expect that initially there may be few extra resources for collaborative activities. However activities do not need to wait for the arrival of new funds. Many beneficial collaborative activities are possible using the existing resources of the partners of the committee.

Some finances may be allocated to the district from a TB/HIV budget held by the national TB/HIV committee. Other sources of funds should also be sought from within the district, including:

- Private businesses
- Local companies
- NGOs
- Charities
- Religious organizations.

TABLE 7 **Potential resources to be identified for coordination of collaborative activities**

COORDINATING ACTIVITY	CHOICES	POTENTIAL INPUTS REQUIRED
Convening TB/HIV collaborative meetings	Means of communication • Radio • Written • Handwritten • Typed • Word-processed	• Time available to coordinator • Radio access by partners • Stationery supplies • Access to photocopying facilities
Circulating minutes, work-plans and reports	Means of delivery • Postal service • Hand-delivery • Email • Website	• Time available to coordinator • Funds for postage Access to most appropriate/available means of transport: - foot - bicycle - motorcycle - boat - vehicle

4.6 Coordinating district TB/HIV/AIDS collaborative activities

The coordinating officer should be able to encourage collaborative activities and have the capacity to document and monitor such activities. If an existing district officer is to be given this extra task then it is vital to ensure that his/her time is not already fully committed to other activities. The coordinating committee should identify existing resources that can be used for coordination. Funds may be required for the coordination process such as for communicating about the dates of meetings, for distributing minutes and for attending collaborative meetings. Cost-sharing between partners could facilitate this process.

4.7 Establishing a referral system

In many districts a number of TB and HIV/AIDS service providers already exist, but they often work in isolation. The result is that a network of care and support does not exist in the district despite the presence of comprehensive TB/HIV care and support providers. Therefore one of the first priorities of the district coordinating committee is to establish links between different service providers in order to create a **patient-centred referral system.** A patient-centred approach is a priority. The coordinating committee should seek to strengthen existing district referral systems so that patients with other illnesses can also benefit from the improved system. One strategy used by some districts to improve continuity of care is the 'health passport'. This is a small booklet that is carried by each patient and presented for clinical records to be made when healthcare services are accessed. Patients with chronic illnesses such as TB and AIDS often access care from a number of different service providers, and the health passport can enable rational prescribing and prevent duplication of treatments and investigations.

4.8 Staff support

4.8.1 Developing supervisory systems

One lesson that has been learned from the implementation of DOTS programmes is the importance of supervision with programme performance often being directly linked to the strength of the supervision system. Without supervision mistakes can continue uncorrected and even the most motivated of staff may start feeling their activities to be unimportant.

4.8.2 Developing staff support systems

An extension of the supervisory system is a system of staff support. District TB/HIV committees may invest considerable resources in training and motivating TB/HIV service providers as new activities are planned and implemented within the district. The complex emotional and psychological challenges of providing

care for chronically ill patients with a feared and stigmatised terminal illness such as AIDS are enormous. This can lead to considerable risk of 'burnout' and potential loss of trained care providers. This loss cannot be afforded when skilled human resources are already at critically low levels. Staff support policies of the Ministry of Health should be examined and implemented. Staff support strategies include:

- Regular meetings of service providers with senior staff able to advise on difficult cases
- Regular technical meetings to maintain and update the skills of service providers
- Confidential staff support meetings where staff can share their own emotional responses to the occupational stresses
- Regular supervision with supportive and constructive feedback to health care providers
- Good management to enable staff to take annual leave allowances
- Exchange visits with care providers in other districts
- Strategies to reduce the risk of TB and HIV in health staff include
  - Health promotion to staff, including promotion of VCT
  - Confidential occupational health services, with special attention to HIV/AIDS prevention and care
  - Facilitate placement of HIV-positive staff to areas where the risk of nosocomial TB infection are lower (e.g. surgical wards, operating theatre)
  - Offer IPT to HIV-positive staff
  - Provide the consumables required to implement universal precautions
  - Provide post-exposure prophylaxis with ART to staff following occupational exposure to HIV (e.g. needle-stick injury).

4.9 Monitoring and evaluation

Two forms of data collection are suggested. Firstly there should be six-monthly collection of data from partners on service use that would contain the same data as collected for the original survey. This allows changes in district TB/HIV service performance and use to be monitored. Secondly indicators identified for new activities should also be monitored and reported on a six-monthly basis. As far as possible this reporting should be part of the routine health management information system (HMIS). The central programmes' assessment of district reporting would be assisted by a six-monthly narrative report of activities. Where HMIS do not exist or function, the development of structured reporting by the national programmes would enable the reporting process. Where a provincial monitoring and reporting system exist, this should be part of the routine TB/HIV reporting process.

4.10 Documenting the process

The coordinator of the district collaborative activities should be responsible for documenting the process of planning and implementing collaborative TB/HIV activities, including the resources required. This is especially important for phase one districts. An important resource that may be forgotten by the partners is the time dedicated to collaborative activities, for example the time required for a TB officer to train VCT counsellors about TB. Such investments of staff time should be recorded carefully.

Part 3

Implementation

The public health approach to decreasing the burden of TB/HIV requires more effective delivery of the available interventions by health service providers, with increased population coverage. Whereas previously tuberculosis programmes and HIV/AIDS programmes have largely pursued separate courses, they need to exploit synergies in supporting health service providers to deliver these interventions.

Substantial increases in funding are necessary to strengthen the general health infrastructure to enable an effective comprehensive response to HIV/AIDS. ***Since it is not possible to achieve everything desirable all at once, explicit and rational criteria are necessary for prioritising implementation of interventions.***

Extract from the executive summary of "A Strategic Framework to Decrease the Burden of TB/HIV".


TB:HIV

5 Prioritized-activity charts

Overview of this chapter

- What is a Prioritized-activity Chart?
- Use of Prioritized-activity Charts.

What is a Prioritized-activity Chart?

Each Prioritized-activity chart is a checklist of the activities available for each service-provider within district level, and describes likely priority of collaborative TB and HIV programme activities according to human and material resource required and capacity building of the service provider.

The core activities are considered to form the basic essentials of services to be provided. The core activities are then followed by a number of additional collaborative activities, clustered in groups, between different service providers. These activities are designed to draw on the complementary strengths of existing partners within the committee. Group 1 collaborative activities are those that need little external input beyond the resources already available between the partners of the committee, apart from additional staff time. Group 2 collaborative activities require more resources while Group 3 collaborative activities require more resources and improved/new infrastructure.
Collaborative activities applicable at Group 1 are meant to be additional to the core activities and those applicable at Group 2 are additional to those applicable at Group 1, and so on.
Prioritized-activity Charts are provided for the following service providers:

- PLHA support group
- Home-based care services
- TB health care provider
- Stand-alone VCT services
- STIs care provider
- Primary health care centre, including reproductive health care facilities
- District hospital
- HIV clinic.

Details of reference materials and implementation partners are shown for each new activity in the Prioritized-activity charts. The steps required for implementation of these activities are detailed in 13 different “Implementing-activity Boxes” listed in Part 3, Chapter 6.

5.1 Use of Prioritized-activity Charts

These Prioritized-activity charts should be reviewed by central level TB and HIV programme planners, who should decide:

- Which of the above service providers are required within the national TB/HIV strategy.
- Which collaborative activities are recommended for each group described in the Prioritized-activity charts, for each service provider defined above.

According to these criteria, the Prioritized-activity charts should be revised in preparation for use by district planners for piloting at district level. The Prioritized-activity charts should be piloted by an experienced district health management team (DHMT). The DHMT should call together the different district service providers involved in TB and HIV care. Each service provider should then review its own activities according to the different groups of activities defined in the Prioritized-activity charts. The Prioritized-activity charts should be used to assess whether their core recommended services are being provided, and to plan for future collaborative TB/HIV activities. In those cases where a service provider is not yet implementing the core activities, the charts give reference materials for those activities. Prioritized-activity charts will need continuous updating to incorporate district experience and new evidence as this becomes available.

These guidelines are designed to encourage each partner to up-grade their services, and so the aim of each collaborative partnership is to help improve the overall TB/HIV services within a district. In some districts this may mean that initial effort is spent on establishing core activities. If these core activities alone could be implemented more widely there would be a great improvement in the services provided to both TB patients and PLHA.

Given that Group 1 activities should require few extra resources, most coordinating committees should aim to upgrade the services provided to Group 1 activities within the first planning phase of the committee, assuming that core activities are already being implemented. Successful establishment of these activities will encourage the morale of the group and help to mobilise any additional resources that may be required to enable the partners to move to the next level of collaborative activities.

CHART 1

Prioritized-activity: PLHA support group

		REFERENCE MATERIAL
Core activities	• Peer group psychological support	WHO/UNAIDS. Technical Consultation on Voluntary HIV Counselling and Testing: Models for Implementation and Strategies for Scaling of VCT Services
	• Promotion of positive living	WHO. Global Health Sector Strategy for HIV/AIDS 2003-2007. Providing a Framework for Partnership and Action
	• HIV prevention counselling	
	• Condom promotion and distribution	UNAIDS. Reaching Out, Scaling up. Eight Case Studies of Home and Community care for and by people with HIV/AIDS.
	• Referral for ongoing support	
	• HIV prevention outreach activities	
	• Income generating activities	
	• Advocacy for rights for PLHA	

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 1 activities Using existing resources and requiring extra time and planning	• Education of members about TB	• TB care providers
	• Display relevant NTP/IEC materials	• TB care providers
	• Education of members about STIs	• STIs care providers
	• Display relevant STIs/IEC materials	• STIs care providers

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 2 activities Require more resources	• Referral of members for TB investigation	• TB care providers
	• Referral of members for STIs treatment	• STIs care providers
	• Referral of members for IPT	• Offering IPT: - VCT centre - HIV clinic
	• Include TB/HIV messages in outreach activities	• TB care providers

CHART 2

Prioritized-activity: Home-based care groups

		REFERENCE MATERIAL
Core activities	• Nursing care	• WHO Fact Sheets on HIV/AIDS for nurses and midwives
	• Training and supporting family members caring for relatives with HIV/AIDS/TB	• UNAIDS: Comfort and hope (six case studies)
	• Training and supporting community HBC volunteers	• Healthlink: Making messages clear.
	• Help with household chores (shopping, cooking, cleaning)	• WHO/GPA: AIDS Home Care Handbook
	• HIV prevention counselling	
	• Bereavement counselling	• UNAIDS: Caring for the caregivers.
	• Condom promotion and distribution	
	• Treatment of HIV-related clinical problems	
	• Palliative care	• UNAIDS: AIDS: Palliative Care
	• Nutritional support, material needs	
	• Community mobilisation	
	• Links to orphan support services	

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 1 activities Using existing resources and requiring extra time and planning	• Patient and family education about TB	• TB care providers
	• VCT promotion	• VCT

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 2 activities Requiring more resources	• Referral of TB suspects for investigation	• TB care providers
	• Supportive care of TB patients	• TB care providers
	• Provision of direct observation of TB therapy	• TB care providers
	• Provision and supervision of ART	• HIV and TB care providers

CHART 3

Prioritized-activity: TB health care provider

		REFERENCE MATERIAL
Core activities	• DOTS Programme, achieving national targets for TB case detection[1] and cure[2]	• WHO Treatment of Tuberculosis, Guidelines for National Programmes

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 1 activities Using existing resources and requiring extra time and planning	• Discuss HIV with TB patients as part of routine patient IEC[3]	• VCT
	• Provide VCT to TB patients	• VCT
	• HIV prevention counselling, condom promotion and supply	• Family planning services • District AIDS services
	• Provide clinical care for PLHA with TB	• HIV care providers
	• Provide syndromic STIs treatment for TB patients	• STIs care providers
	• Referral of non-TB patients with STIs	• STIs care providers caregivers
	• Referral of non-TB patients with HIV	• HIV care providers

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 5 activities requiring more resources	• Intensified TB case-finding	• District laboratory services • Home-based care volunteers • Prisons • VCT centres • PWHA groups • Traditional healers • Private practitioners
	• Community involvement in DOTS	• Home-based care volunteers

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 3 activities Requiring new resources and new/improved infrastructure	• Cotrimoxazole preventive therapy for TB patients	• VCT services
	• Clinical care for patients with HIV and TB	• Health centres and district hospitals
	• ART for eligible patients with HIV and TB	• HIV care providers

[1] The WHO target is for detection of 70% of sputum smear-positive cases
[2] The WHO target is to cure 85% of detected sputum smear-positive TB cases. Countries with a high HIV burden may have difficulty reaching this target due to high mortality rates of HIV/TB patients.
[3] Health workers need additional training in IEC and patient communication which should include HIV/AIDS

CHART 4

Prioritized-activity: Stand-alone VCT services

		REFERENCE MATERIAL
Core activities	• Pre- and post-test counselling	• UNAIDS: Voluntary counselling and testing
	• HIV and STIs prevention counselling	• UNAIDS: Policy on HIV testing and counselling
	• HIV testing	• National HIV/AIDS Programme Manual
	• Condom promotion	• WHO: The importance of simple/rapid assays
	• Post-test club or referral for ongoing support • QA system for HIV testing • QA system for counselling	• UNAIDS: Tools for evaluating HIV VCT

	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 1 activities Using existing resources and requiring extra time and planning	• Client education about TB	• TB and HIV care providers
	• Client education about STIs	• HIV/AIDS/STIs care providers
	• Referral of HIV (+) clients for clinical care	• Health centres/district hospital

	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 2 activities requiring more resources	• Screening clients for TB	• TB care providers
	• Screening clients for STIs	• STIs care providers
	• Sputum collection point*	• TB care providers

	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 3 activities Requiring new resources and new/improved infrastructure	• TB diagnosis*	• TB care providers • District laboratory
	• TB treatment centre*	• TB programme
	• STIs syndromic treatment*	• STIs care providers
	• Isoniazid preventive treatment	• TB care providers • HIV services

* Activities suggested for free-standing VCT sites, as many integrated VCT services are likely to have sputum collection facilities within the same health unit.

CHART 5

Prioritized-activity: STIs care provider

		REFERENCE MATERIAL
Core activities	• STIs treatment • Health education • Partner screening and treatment • HIV prevention counselling • Condom promotion and distribution	• UNAIDS/WHO: The public health approach to STD control • National STIs treatment guidelines

	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 1 activities Using existing resources and requiring extra time and planning	• Offer VCT • Client education about TB • Referral of TB suspects for diagnosis	• VCT providers • TB providers • TB care providers

CHART 6 Prioritized-activity: Primary health care centre including reproductive health care facilities

		REFERENCE MATERIAL
Core activities	• Nursing care	• WHO Fact Sheets on HIV/AIDS for nurses and midwives
	• HIV prevention counselling	
	• Condom promotion and distribution	
	• Counselling and support for pregnant PLHA about breast-feeding options	
	• Treatment of STIs and counselling	
	• Treatment of common HIV-related clinical problems	
	• Palliative care	• WHO analgesic ladder • UNAIDS: AIDS: Palliative Care
	• TB referral/diagnosis/treatment	
	• ARV referral/treatment[4]	• WHO "Scaling up antiretroviral therapy in resource-limited settings-guidelines for a public health approach
	• Referral of patients to HBC services	
	• Medical support to HBC services	
	• Referral to other services/ongoing support	

	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 1 activities Using existing resources and requiring extra time and planning	• Referral for VCT	• VCT centres • MCH services

	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 2 activities Requiring more resources	• Establish integrated VCT services	• VCT centres • Laboratory services

	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 3 activities Requiring new resources and new/improved infrastructure	• Prevention of mother-to-child HIV transmission with ARV	• VCT services
	• Offer cotrimoxazole preventive patients therapy and ART to eligible HIV (TB)	• TB care providers • HIV/AIDS care providers
	• Offer TB screening and IPT to PLHA	• TB care provider • VCT centres

[4] The level of TB diagnosis/treatment and ART services provided at health centres is a policy issue that will depend on the degree of decentralisation of TB care and ART provision in each setting.

CHART 7

Prioritized-activity: District hospital

		REFERENCE MATERIAL
Core activities	• Nursing care • HIV prevention counselling • Condom promotion and distribution • Voluntary counselling and HIV testing • Treatment of STIs • HIV screening of blood supplies • Inpatient and outpatient treatment of HIV-related clinical problems (adult/paediatric) • TB referral/diagnosis/treatment[5] • ARV referral/treatment[5] • Palliative care • Referral to community care • Referral to other services • Universal HIV prevention precautions	• WHO Fact Sheets on HIV/AIDS for nurses and midwives • WHO Analgesic Ladder

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 1 activities Using existing resources and requiring extra time and planning	• VCT promotion	• VCT centres • MCH services
	• Referral of patients to HBC services	• HBC groups
	• Medical support to HBC services	• HBC groups

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 2 activities Requiring more resources	• Establish integrated VCT services	• Laboratory services • VCT centres
	• Initiation and supervision of first line ART	

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 3 activities Requiring new resources and new/improved infrastructure	• PMTCT of HIV with ART	• VCT services
	• Offer cotrimoxazole preventive therapy to HIV/TB patients	• TB care providers
	• Offer TB screening and IPT to PLHA	• TB care provider • VCT centres
	• Provide access to second line ART	• VCT services • Laboratory services

[5] The level of TB diagnosis/treatment and ART services provided at health centres is a policy issue that will depend on the degree of decentralisation of TB care and ART provision in each setting.

CHART 8

Prioritized-activity: HIV clinic

		REFERENCE MATERIAL
Core activities	• Supportive counselling • HIV prevention counselling • Condom promotion and distribution • Treatment of HIV-related clinical problems • TB diagnosis and referral • Syndromic STIs treatment • Palliative care • Referral to appropriate supportive services	• UNAIDS: The Public Health Approach to STD Control • WHO Fact Sheets on HIV/AIDS for nurses and midwives (Palliative/terminal care, fact sheet 8)

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 1 activities Using existing resources and requiring extra time and planning	• Cotrimoxazole preventive treatment* • Isoniazid preventive treatment	• TB care provider* • TB care providers

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	COLLABORATIVE ACTIVITIES	KEY PARTNERS
Group 2 activities Requiring more resources	• Antiretroviral treatment (ART)∞	• TB care provider • Laboratory services • PLHA support groups

* This activity will require a national policy decision to offer CPT to PLHA. Implementing-activity Box 4, Chapter 6, gives details of activities required to provide CPT to TB patients through the district TB programme.

∞ For further details refer to WHO "Scaling up antiretroviral therapy in resource-limited settings-guidelines for a public health approach".

6 Implementing-activity Boxes

Overview of this chapter

This chapter will describe

- What is an Implementing-activity Box
- Use of Implementing-activity Boxes.

6 What is an Implementing-activity Box?

Each Implementing-activity box is a detailed description of the policy issues that need to be resolved before TB/HIV collaborative activities can be implemented. Each Implementing-activity Box describes the steps to implementation of the below collaborative TB/HIV activities:

- Provision of VCT to TB, HBC and STIs patients
- Promotion of safer sexual practices and condoms to TB patients
- Intensified TB case-finding by NTP partners
- CPT to reduce the morbidity and mortality of PLHA and HIV-positive TB patients
- TB screening at VCT centres - Group 2 and 3 collaborative activities
- STIs screening at VCT centres (and PLHA support groups) and VCT promotion by STIs treatment care providers
- STIs treatment at VCT centres
- TB sputum smear-microscopy at stand-alone VCT centres
- TB treatment at stand-alone VCT centres
- Community involvement in the management of TB and HIV patients
- PLHA support group involvement in TB (or STIs) activities
- Isoniazid preventive treatment - example of implementation at a stand-alone VCT centre
- ART

6.1 Use of Implementing-activity Boxes

The Implementing-activity boxes are for use by health planners at both central and district levels. For central level planners they give an overview of the national policy decisions that are required before implementation of a given activity, and the preparation and materials required to support district implementation. Essential district criteria for implementation are given, with details of the activities for each collaborative partner. This gives both district and central planners the ability to assess which activities will be feasible in different settings.

Each Implementing-activity Box describes the national policy issues that need to be resolved before the activity can be planned and implemented. The districts need clear policy direction and guidance. For example, if a policy decision is taken that isoniazid preventive treatment should be part of the package of services offered to PLHA, then the districts will need clear guidance on technical issues such as the

target groups, method of screening PLHA for IPT, the means of excluding active TB before commencing IPT and the dose and duration of IPT (Implementing-activity Box 12). This requires national programmes to reach policy consensus on issues such as which groups should be offered IPT and whether tuberculin skin testing and/or chest X-ray are required as part of the screening process. Another example of a policy issue is that of cotrimoxazole preventive treatment (CPT) for PLHA, including HIV-positive TB patients (Implementing-activity Box 4). Before recommendations for the routine use of CPT are made, broad consultation with other stakeholders outside the usual TB/HIV committee is required. These stakeholders include malaria control programmes and programmes addressing childhood illnesses such as acute respiratory illnesses and diarrhoeal diseases, who may be concerned about development of resistance to sulpha-containing drugs with increased use of cotrimoxazole. Depending on country resources, STIs screening may be based only on symptoms and risk assessment. If resources are available, simple laboratory tests may be incorporated. Initially, STIs services may simply provide only information and education and condom distribution. Where resources are available this could up graded to syndromic management (with no laboratory support) or, in case of woman with vaginal discharge, the incorporation of rapid STIs diagnostic tests for gonorrhoea, chlamydia and syphilis.

Box 1 Provision of VCT to TB (HBC and STIs)[6] patients

Lead district coordinators	• TB health care provider	
Objectives	• To promote VCT services to TB patients and their relatives	
Key partners	VCT centres	
Beneficiaries	TB patients and relatives	
Essential district criteria for implementation	• A functioning DOTS programme • Access to HIV testing	
Preparatory phase at National Level	• Understanding of community perceptions of the link between TB and HIV/AIDS, the impact on diagnosis and TB treatment outcome • Inventory of existing counselling services	
Material development at National Level	IEC strategy with clear messages addressing the TB/HIV link and promoting VCT include: • Radio messages for the general public • Leaflets about TB/HIV and benefits of VCT for TB patients • Information booklets about TB/HIV and the benefits of VCT for TB officers • Also, scripts for discussing HIV with TB patients for TB officers • Information about TB of importance to VCT clients for VCT counsellors	
KEY DISTRICT ACTIVITIES	**TB HEALTH CARE PROVIDER**	**VCT CENTRE**
Preparation	TB officers orientation visit to VCT centres within the district	VCT centre staff orientation visit to TB offices
	Improve privacy for patients at TB offices if possible	Ensure that TB patients captured in VCT client data collected
	IEC materials obtained from national programme	IEC materials obtained
Training	TB officers trained about the link between TB and HIV	VCT counsellors trained about TB and TB treatment information for TB patients
	TB nurses and officers trained to routinely discuss HIV with all TB patients	
Implementation	TB officers and nurses discuss HIV and promote VCT to all TB patients	VCT provided to TB patients
Data collection	Number of TB patients registered	• Number of TB patients accessing VCT services • Number of TB patients testing HIV-positive

[6] The activities in this box would also apply to the promotion of VCT services to home-based care and STIs patients. Therefore in planning such an activity STIs services should follow the activities in this box, replacing the word “TB” with “STIs” or “HBC”

Box 2

Promotion of safer sexual practices and condoms to TB patients

Lead district coordinators	TB health care providers	
Objectives	• To correct potentially harmful misconceptions around sexual relationships when taking TB treatment • To promote safer sexual practices among TB patients	
Key partners	Family planning services, District AIDS Coordinator	
Beneficiaries	TB patients and partners	
Essential district criteria for implementation	A functioning DOTS programme	
Preparatory phase at National Level	Background research may be needed to inform this sensitive topic: • Understanding of community beliefs about sexual relationships while TB patients are taking TB treatment • Community attitudes and gender aspects of sexuality and condom use	
Material development at National Level	For TB officers: • "Scripts" for discussing sexual matters and HIV with TB patients • "Scripts" for promoting safe sex and condom use to TB patients For patients: • Health promotion leaflets about condoms	
KEY DISTRICT ACTIVITIES	**TB HEALTH CARE PROVIDER**	**FAMILY PLANNING SERVICE/ DISTRICT AIDS COORDINATOR**
Preparation	TB officers orientation visit to VCT centres and family planning services within the district	VCT centre/family planning staff orientation visit to TB offices
	Improve privacy for patients at TB offices if possible	
	Decide where condoms should be displayed condom display strategies	Advise TB officers and nurses on locally appropriate
Procurement	Supply of condoms within expiry date to TB offices and wards	Additional condom supplies ordered if necessary
	IEC materials obtained from national programme	
Training	TB officers trained about the link between TB and HIV *(as for Implementing-activity Box 1)*	VCT provided to TB patients
	TB officers trained to discuss sexual issues with TB patients and promote condoms when appropriate	Assist training of TB officers about how to discuss sexual issues and promote condoms to TB patients
Implementation	• TB officers discuss sexual matters HIV and promote VCT to all TB patients • Condoms available in TB offices	
Data collection	• Number of TB patients registered • Number of condoms distributed	

Box 3 Intensified TB case-finding by NTP partners

Lead district coordinators	TB health care providers	
Objectives	• To promote early diagnosis and treatment of TB in high risk groups • To increase the numbers of TB cases detected and cured	
Key partners	Community care providers (see Implementing-activity Box 10), VCT centres (see Implementing-activity Box 5), traditional healers, prison medical services, PLHA support groups, STIs services, MCH services, services targeting IDUs.	
Beneficiaries	TB patients and the wider community	
Essential district criteria for implementation	• DOTS programme with capacity to treat extra cases diagnosed[7] • Laboratory capacity to investigate additional TB suspects	
Preparatory phase at National Level	Identification of suitable partners for intensified TB case-finding Understanding of partners current knowledge and practices around TB suspects and TB patients	
Material development at National Level	Information materials about TB suitable for partners e.g. • Traditional healers • Private doctors • Prison officers • Community care volunteers • PLHA support groups • STIs care providers • MCH services Training pack for TB officers to enable effective training of partners	
KEY DISTRICT ACTIVITIES	**TB HEALTH CARE PROVIDER**	**PARTNERS**
Preparation	Partners for intensified case-finding chosen TB officers orientation visit to partners Referral system developed District TB officers may require additional management training and time	Partners agree to introduce TB case-finding Partners orientation visit to TB offices Referral system developed nurses on locally appropriate condom display strategies
Procurement	Adequate buffer stock of laboratory supplies and TB drugs	
	IEC materials and training packs from NTP	
Training	TB officers train partners about TB, referral/investigation of TB suspects	
Implementation	• IEC materials promoted • Additional TB cases registered and treated	Partners detect and refer TB suspects
Supervision and support	• Appropriate screening and referrals • Feedback of TB cases diagnosed	
Data collection	Numbers of: • TB patients registered • TB suspects referred by partners • TB patients diagnosed after referral • Outcomes of referred TB patients	• Number of TB suspects referred by partners

[7] The district TB programme must be functioning adequately and have the capacity to diagnose and treat extra TB cases that may be referred through enhanced TB case finding. It is more dangerous for the community to only partially treat TB cases than not to diagnose them at all, due to the risk of the development of drug-resistant *M.tuberulosis* strains.

Box 4

Cotrimoxazole preventive treatment (CPT) to reduce the morbidity and mortality of PLHA and HIV-positive TB patients[8]

Lead district coordinators	• TB health care providers • District HIV/AIDS services
Objectives	• To reduce the mortality and morbidity of PLHA and HIV-positive TB patients through CPT
Key partners	VCT centres, DOT centres
Beneficiaries	TB patients and PLHA
Essential district criteria for implementation	• A functioning DOTS programme • VCT services
National policy issues	• Decision to offer CPT to all HIV-positive TB patients and PLHA meeting The clinical criteria (This needs consensus with other treatment programmes using sulphur -containing drugs e.g. malaria and childhood illnesses) • Where/by who will cotrimoxazole for HIV-positive clients/TB patients be stored/dispensed? • Where will TB patients access CPT after completion of TB treatment? • Where PLHA should best access CPT?
Preparatory phase at National Level	• *Builds on activities laid out Implementing-activity Boxes 1 and 2* • Central procurement of cotrimoxazole, distribution through existing channels
Material development at National Level	• IEC materials Leaflets for patients Information pack for TB officers Guidelines for management of CPT side-effects • Programme materials Registers for CPT Referral forms CPT information added to supervisory check-lists

[8] Similar activities will be required, but on a wider scale if CPT is also to be offered to PLHA without TB.

Box 4 *(continued)*

KEY DISTRICT ACTIVITIES	TB HEALTH CARE PROVIDER	VCT CENTRES
Preparation	*As for Implementing-activity Boxes 1 and 2* Referral system established with	*As for Implementing-activity Boxes 1 and 2* Referral system established with TB offices
Procurement	Cotrimoxazole supplies and stationary supplies from national supplier	Patient leaflets
Training	*As for Implementing-activity Boxes 1 and 2* In addition, TB officers trained to: • Counsel TB patients about CPT • Register TB patients for CPT • Manage CPT side-effects	*As for Implementing-activity Boxes 1 and 2* In addition, VCT counsellors to refer counsel HIV/TB patients about CPT, and refer them the TB Office to start CPT
Supervision	• TB officers include CPT registers in their health centres supervision • Cotrimoxazole supplies	• CPT information included in regular evaluation of VCT counselling quality
Data collection	• Number of TB patients registered • Number starting CPT • Number with CPT side-effects • Number completing TB treatment and CPT	• Number of TB patients accessing VCT • HIV status of TB patients accessing VCT • Number of HIV/TB patients referred for CPT

Box 5

TB screening at VCT centres - Group 2 and 3 collaborative activities (as per Prioritized-activity Chart 4)

Lead district coordinators	District VCT services and TB health care providers	
Objectives	• To reduce TB transmission and mortality by prompt referral of VCT clients with TB symptoms to TB services for diagnosis and treatment	
Key partners	VCT centres, DOTS centres	
Beneficiaries	VCT clients, the general community (through reduced TB transmission)	
Essential district criteria for implementation	• A functioning DOTS programme • VCT services	
Policy issues	**Group 2:** VCT centres to ask all HIV-positive clients about symptoms suggesting active TB **Group 3:** VCT centres to become sputum collection points	
Preparatory phase at National Level	Materials development • Information pack about TB for VCT counsellors • Training materials for VCT counsellors • TB screening forms, referral forms for use at VCT centres • Training pack to enable TB officers to train VCT counsellors	
KEY DISTRICT ACTIVITIES	**VCT CENTRES**	**TB HEALTH CARE PROVIDER**
Preparation	**Group 2:** VCT counsellors orientation visit TB offices Referral system for VCT clients established with the TB offices	TB officers and laboratory staff orientation visit to VCT centres
	Group 3: Officer trained to use chronic cough registers and supervise sputum collection Transport system arranged for transport of sputum samples	
Procurement	**Group 2:** Screening questionnaires, referral forms	
	Group 3: Chronic cough register, sputum laboratory request forms, sputum collection pots and secure box for transport of specimens	Extra registration and diagnostic materials
Training	**Group 2:** VCT counsellors trained about TB and how to screen for active TB and refer RB suspects	TB officers organise/assist with training
	Group 3: Officer at the VCT centre trained to keep a chronic cough register and to supervise sputum collection and transport	TB officers organise/assist with training
Supervision and support	TB screening included in the evaluation of VCT counselling quality	TB officers to include VCT centres in supervision programme
Monitoring and evaluation	**Group 2:** Number of VCT clients referred for TB diagnosis **Group 3:** Number of sputum samples collected, number smear-positive, number of VCT clients started on TB treatment	• District TB officer to supervise the chronic cough register • Number of TB cases registered • Number of TB cases registered in VCT clients

Box 6 STIs screening at VCT centres (and PLHA support groups)[9] and VCT promotion by STIs treatment services

Lead district coordinators	VCT centres and STIs care provider	
Objectives	• To prevent new HIV infections through screening and treatment of STIs in VCT clients, and promotion of VCT to patients at STIs services	
Beneficiaries	VCT clients and partners, STIs clients and partners	
Essential district criteria for implementation	VCT centre	
National policy issues	Most resource-poor countries promote syndromic management of STIs and have national STIs syndromic management guidelines. Implementation of these STIs management guidelines differs between countries, with some countries promoting integrated management within general outpatient facilities and others promoting separate STIs clinics within health facilities. Therefore in this box "STIs services" could refer to either to a separate STIs clinic or to general outpatient services at local health centres/hospitals.	
Preparatory phase at National Level	Materials development • STIs screening tools and guidelines • STIs client information leaflets • STIs client partner notification tools	
KEY DISTRICT ACTIVITIES	**VCT CENTRES**	**STIS CARE PROVIDERS**
Preparation	VCT counsellors orientation visit to nearest STIs care providers	STIs care providers staff orientation visit to VCT centre
	Referral system agreed with STIs services	
Procurement	STIs screening questionnaire, guidelines and information leaflets	Leaflets for promotion of VCT services to STIs clients and their partners
Training	• VCT counsellors trained about - STIs symptoms - How to screen for STIs symptoms - How to refer clients with STIs symptoms	• Staff from STIs care providers trained to promote VCT to STIs clients
Implementation	• All VCT clients asked about STIs symptoms	• All STIs patients offered VCT care providers and given a VCT promotion leaflet
Data collection	• Number of clients asked about STIs symptoms • Number of clients referred to STIs services with each STIs syndrome • Number clients attending for VCT after referral from STIs care providers	• Number of clients received from VCT centre • Number of VCT clients treated for each STIs syndrome • Number of partners attending • Number of STIs clients referred for VCT

[9] The IEC and general training about STIs would also be relevant to PLHA support groups

Box 7 STIs treatment at VCT centres

Implemented by	VCT services	
Objectives	• To reduce new HIV infections through on-site treatment of STIs at VCT centres	
Key partners	• STIs services	
Beneficiaries	• VCT clients and partners • STIs clients	
Essential district criteria for implementation	• VCT centre with clinical capacity • Local research suggests that VCT clients may have difficulty accessing STIs treatment units, or suggests client preference for on-site STIs treatment at the VCT centre.	
National policy issues	Whether integration of STIs syndromic management at free-standing VCT sites should be recommended. Due to lack of human resources with the health sector the aim should be to utilise, and increase the capacity of, existing health-care facilities and staff whenever possible.	
Preparatory phase at National Level	*As for Implementing-activity Box 6*	
KEY DISTRICT ACTIVITIES	**VCT CENTRES**	**STIS SERVICES**
Preparation	*This activity builds on those in Implementing-activity Box 6* • Confidential clinical area identified and equipped for STIs examination and treatment	This activity builds on those in Implementing-activity Box 6
Procurement	*As per Implementing-activity Box 6* Clinical furnishings and equipment STIs management guidelines, treatment registers, partner notification slips Drugs recommended for STIs treatment in national guidelines (quantities to be estimated using data collected during implementation of activities described in Box 6), preferably through district procurement channels	*As per Implementing-activity Box 6* • Additional drug supplies may be necessary
Training	*As per Implementing-activity Box 6* VCT clinical staff to be trained/ reoriented about STIs syndromic management	*As per Implementing-activity Box 6* VCT centre staff to perform the training
Supervision and support		STIs services staff visit VCT centre staff to review records, treatment practices and drug stocks
Data collection	• Number of clients asked about STIs symptoms • Number of clients treated for each STIs syndrome • Number of partners attending for treatment • Difficult/recurrent cases referred to STIs services	

BOX 8

TB sputum smear-microscopy at stand-alone VCT centres[10]

Lead district coordinators	VCT services and TB health care provider	
Objectives	To provide convenient rapid diagnosis of TB suspects identified through screening of VCT centres	
Beneficiaries	VCT clients, the general community (through reduced TB transmission)	
Essential district criteria for implementation	A functioning DOTS programme with strong supervisory system VCT centre with a staffed laboratory Significant numbers of VCT clients identified as TB suspects	
Policy issues	• VCT centres approved as centres for TB diagnosis • Criteria defining VCT centres suitable for TB diagnosis developed, e.g. - Number of TB suspects seen - Availability of suitable laboratory room - Ability to safely dispose of sputum containers and laboratory waste	
Preparatory phase at National Level	Baseline research • Investigation of the acceptability of VCT centres for TB diagnosis and treatment with local community and VCT clients Materials development • Information pack about sputum collection for VCT staff • Training materials for VCT counsellors • TB screening forms, referral forms	
KEY DISTRICT ACTIVITIES	**VCT SERVICES**	**DISTRICT TB SERVICES**
Preparation	• Well-ventilated separate laboratory room identified/modified for sputum collection • Referral system established with radiology department for further investigation of smear-negative TB suspects • Referral system established with TB treatment centres	• Laboratory staff advise on laboratory modifications required • All staff briefed about referral arrangements made with VCT centres
Procurement	Laboratory equipment for sputum smear preparation and examination e.g: light microscope	
Training	Refresher training of laboratory staff if required	
Supervision and support		• Supervision of quality of sputum smear preparation/ examination, chronic cough register
Data collection	• Number VCT clients screened for TB • Number of VCT clients submitting sputum • Number sputum smear positive • Number referred for TB treatment	• Number of TB patients referred after diagnosis at a VCT centre

[10] This activity box would also be applicable for other types of organizations that see significant numbers of TB suspects such as private medical clinics, prisons, occupational health services

Box 9

TB treatment at stand-alone VCT centres[11]

Lead district coordinators	VCT services and TB health care provider	
Objectives	To offer TB treatment at free-standing VCT centres	
Beneficiaries	VCT clients, TB patients	
Essential district criteria for implementation	• A functioning DOTS programme with a strong supervisory system • VCT centre with capacity for registering and supervising TB treatment	
Policy issues	• VCT centres must be approved as centres for DOTS treatment • Criteria defining VCT centres suitable for DOTS treatment must be developed	
Preparatory phase at National Level	Baseline research • Investigation of the acceptability of VCT centres for TB diagnosis and treatment with local community and VCT clients Materials development • Information pack about TB registration and treatment for VCT staff • Training materials for VCT counsellors	
KEY DISTRICT ACTIVITIES	**VCT CENTRES**	**TB HEALTH CARE PROVIDER**
Preparation	Prepare a secure drug store for TB drugs	District TB officers may require additional management skills and resources (training, time)
Procurement	• TB programme registers, treatment cards, identity cards and documentation • TB programme manuals • Anti-TB drugs	Procurement of additional anti-TB drug supplies may be required
Training	VCT centre staff to be involved in TB treatment to be trained about • Registration of TB patients • TB treatment regimens • Management of side-effects • Management of defaulters	TB officers to train VCT centre staff
Implementation	VCT centre staff • Register TB patients • Supervise DOT • Dispense anti-TB drugs • Manage side effects and defaulters	
Supervision and support		• Supervision of registration, TB treatment, and recording of outcomes • Supervision of drug security
Data collection	• Routine cohort analysis according to TB programme guidelines	

[11] This activity box would also be applicable for other types of organizations that see significant numbers of TB suspects such as private medical clinics, prisons and occupational health services.

Box 10

Community involvement in the management of TB and HIV patients

Lead district coordinators	HBC group	
Objectives	• For HBC community volunteers to - Provide care and assistance to patients with TB and/or HIV - Supervise DOT of TB patients in the community - Eventually be involved in the provision of ART in the community	
Key partners	District TB services District HIV/AIDS services	
Beneficiaries	TB and HIV/AIDS patients, their household members and the wider community	
Essential district criteria for implementation	• Link with the HIV/AIDS and TB services • HBC volunteers understand and practice confidentiality • Community volunteers' involvement in TB and HIV/AIDS care acceptable to the patients (potentially stigmatising in some communities)	
National policy issues	• HBC volunteers acceptable as supporters of TB treatment and HIV/AIDS care • Criteria to be met before a district begins to involve HBC volunteers in TB treatment and HIV/AIDS care	
Preparatory phase at National Level		
Material development at National Level	• Training materials about TB and HIV/AIDS for HBC volunteers • Treatment charts appropriate for use by HBC volunteers	
KEY DISTRICT ACTIVITIES	**HBC GROUP**	**TB HEALTH CARE PROVIDER**
Preparation	HBC volunteers visit local TB and HIV/AIDS service providers	TB and HIV/AIDS service providers meet HBC volunteers in the community
	Consultation with patients and community leaders about acceptability of volunteer involvement in TB treatment and HIV/AIDS care	TB and HIV/AIDS service providers participate in community meetings
	Discussion of referral system between HBC volunteers, TB and HIV/AIDS service providers, and other logistics	
Training	HBC volunteers trained: • About TB treatmentand HIV/AIDS care • How to support patients • How to provide DOT • To recognise side-effects • To report defaulters	TB and HIV/AIDS service providers train volunteers in collaboration with HBC supervisors
Implementation	HBC volunteers support and supervise patients in the community	TB and HIV/AIDS service providers refer patients to the care of HBC volunteers
Supervision and support	Regular meetings and supervision of volunteers arranged	TB and HIV/AIDS service providers provide technical supervision and support
Suggested data collection	• Number of patients supported by volunteers • Number of TB patients with DOT provided by HBC volunteers	• Number of patients referred to community volunteers • Outcomes of patients supported by HBC volunteers

Box 11 PLHA support group involvement in TB (or STIs) activities

Lead district coordinators	PLHA support group	
Objectives	• To increase awareness of TB among PLHA support group members • To reduce the mortality and morbidity due to TB amongst PLHA support group members • To increase community awareness about TB	
Key partners	TB health care provider	
Beneficiaries	• PLHA support group members • Community members	
Essential district criteria for implementation	Functioning DOTS programme • PLHA group (with a drama group/peer education programme if TB/HIV community outreach planned)	
Preparatory phase at National Level	• Understanding of community perceptions of TB and HIV	
Material development at National Level	• IEC materials about TB and HIV, designed for PLHA • Fact sheets about TB and HIV for peer education • Guidelines for community drama, including some example scripts that include TB/HIV messages	
KEY DISTRICT ACTIVITIES	**PLHA SUPPORT GROUP**	**TB HEALTH CARE PROVIDER**
Preparation	PLHA support group members visit TB offices	TB officers visit PLHA support group
	Procure and review drama guidelines	Procure adequate IEC materials
Training	PLHA support groups members about TB and HIV	TB officers provide training
	Rehearse new dramas about TB and HIV	TB officers check the accuracy of the messages contained in the dramas
Implementation	• TB and TB/HIV IEC materials displayed • Community drama/peer education with TB and HIV messages	
Data collection	• Number of community drama/peer education sessions	• Routine TB programme outcomes

Box 12 Isoniazid preventive therapy-example of implementation at a stand-alone VCT centre[12]

Lead district coordinators	VCT services and TB health care providers	
Objectives	• To reduce the incidence of active tuberculosis in PLHA	
Beneficiaries	VCT clients, close contacts and the wider community (through prevention of TB transmission)	
Essential criteria for implementation	• A functioning DOTS programme with strong supervisory system • A national surveillance system for monitoring M. tuberculosis drug resistance • VCT centre with capacity for screening and monitoring clients for IPT	
Policy issues	• Whether primary IPT will be offered to PLHA • Whether secondary IPT will be offered to PLHA • Duration of IPT to be given (usually 6-9 months) • Policy for treatment of clients developing active TB while taking IPT • Whether IPT screening should include chest x-ray • Whether IPT screening should include tuberculin skin testing • Cut off to be used for positive reading of PPD skin tests • Whether VCT centres approved to hold stocks of isoniazid • Which cadres of VCT staff are able to screen for and prescribe IPT • Criteria defining VCT centres suitable for IPT • Whether pyridoxine to be given routinely with IPT, or only when clients develop symptoms of sensory neuropathy *Other potential target groups of PLHA for IPT include health care workers, prisoners, PLHA support groups.*	
Preparatory phase	Materials development • Information pack about IPT for VCT staff • Information pack about IPT for TB officers • Training materials for VCT counsellors • Client leaflets about IPT • IPT registers and IPT treatment cards Procurement • Additional supplies of isoniazid (100mg and/or 300mg tablets) • Pyridoxine 10mg tablets • Tuberculin, sterile syringes and needles if tuberculin skin-testing to be used for screening	
KEY DISTRICT ACTIVITIES	**VCT SERVICES**	**TB HEALTH CARE PROVIDER**
Preparation	*As for Implementing-activity Box 5* • Establish referral system with radiology facilities if chest x-ray to be included in algorithm • Establish refrigeration facilities if tuberculin skin-testing to be used	District TB officers may require additional resources in management (training, time)

[12] IPT may also be implemented in other settings such as occupational health services, prisons and HIV clinics.

Box 12 ***(continued)***

Preparation	• IPT registers, client identity cards • IPT patient leaflets • Isoniazid and pyridoxine supplies (through the district TB office)	• IPT registers, client cards • IPT patient leaflets • Isoniazid and pyridoxine supplies
Training	• VCT counsellors in how to screen and/or refer clients for IPT • VCT centre staff in how to register and support clients on IPT • VCT centre staff in chest x-ray interpretation (if part of IPT screening algorithm); or mechanism for reading by an external radiologist /clinician • VCT centre staff in PPD administration and interpretation (if included as part of IPT screening algorithm) • Promotion of IPT to members of PLHA support groups	• TB officers about how to screen, register and support clients on IPT • How to manage clients developing active TB while taking IPT • How to supervise and monitor centres prescribing IPT
Supervision and support	IPT information included in the routine evaluation of VCT counselling of HIV-positive clients	• Screening process at VCT centres • Isoniazid stocks (drug security) at VCT centres
Data collection	• Numbers of HIV-positive clients • Numbers of HIV-positive clients screened for IPT • Numbers of clients starting IPT • Numbers of clients completing required length of course of IPT • IPT clients developing active TB	

Box 13

ART

Lead district coordinators	District HIV/AIDS services
Objectives	• To reduce the morbidity and mortality of PLHA
Beneficiaries	VCT clients, known PLHA
Essential criteria for implementation	• VCT services • Functioning clinical services providing treatment of HIV- related complications, preventive treatments and palliative care • A national surveillance system for monitoring HIV drug resistance
National policy issues[13]	• Criteria for which levels of health facilities will prescribe and/or dispense and monitor ART • Criteria for which cadres of staff can prescribe ART • Criteria to define whether health facilities have the capacity to prescribe/monitor ART • Policy for ART use in the private sector • Policy for cost-recovery in the public sector • Which ART drug combinations will be used in ART regimens • Criteria for starting ART - whether this will be based on laboratory criteria (lymphocyte count/CD4 count/viral load) or on clinical criteria • Whether direct observation of therapy will be required • Whether ART will be supplied to children • Policy for starting/continuing ART in patients with HIV-related TB • Policy for monitoring ART (laboratory vs clinical) • Policy for management of adverse drug reactions with ART • Criteria for defining and managing ART failure • Strategy/policy for ensuring ART drug security • Strategy for ensuring uninterrupted ART drug supplies • Strategy for surveillance of HIV drug resistance • IEC strategy for raising community awareness of the risks and benefits of ART
Preparatory phase at National Level	Operational research questions: • What lessons can be learned from the NTP that would inform the design of systems for ART provision? - Problems/equity in access to TB treatment - Reasons for default from TB treatment - Factors enabling/preventing compliance with TB treatment • What lessons can be learned from clinical services offering preventive therapies (e.g. IPT and CPT) to PLHA (long term compliance, follow-up and disclosure issues? Materials development • Information pack about ART for - VCT staff - TB officers - Clinicians and nurses - Pharmacists / pharmacy technicians - Therapeutic and supportive counselors • Guidelines for clinical staff prescribing and monitoring patients on ART • Training materials for the above cadres • Training materials for laboratory technicians • ART registers and ART treatment cards • Client leaflets about ART • Materials to assist patients' compliance with ART Procurement • ART drugs • Laboratory equipment and supplies

[13] Many of these policy issues are being debated internationally, WHO "Scaling up antiretroviral therapy in resource-limited settings-guidelines for a public health approach" will aid this process.

Box 13 ***(continued)***

KEY DISTRICT ACTIVITIES	CLINICAL SERVICES[14]	TB HEALTH CARE PROVIDER
Preparation	• Assessment of capacity of health facility to provide ART • Strengthen drug security at the pharmacy • Strengthen the laboratory if local laboratory monitoring required	• Assessment of capacity of TB services to provide ART[15] • Strengthen drug security at the TB services • Strengthen referral system between TB services and clinical services
Procurement	• ART registers, treatment cards • ART patient leaflets • ART drug supplies • Training materials • Laboratory equipment/reagents • Increased procurement of general clinic supplies e.g. condoms (anticipating an increase in numbers of PLHA accessing services when ART becomes available)	• As for clinical services if the TB services are also going to manage TB patients on ART
Training	• VCT counsellors: - Promotion of ART - Support clients on ART - Side-effects of ART • Clinical staff, community health care workers and community leaders: - Refresher course in general HIV/AIDS clinical care - Linking care to prevention - Patient selection for ART - Counselling for compliance - Management of adverse reactions to ART - Registering patients for ART - Monitoring ART - Counselling and supportive follow up service for those taking ART - Counselling/managing patients unable to take ART	• TB officers about ART and interactions with TB treatment • As for clinical and nursing staff if TB services are to manage ART
Supervision and support	Strong support needed from the central programmes, with regular supervision	Strong support needed from the central programmes, with regular supervision
Data collection (these data items are suggestions. Final indicators not ready yet)	• Numbers of PLHA screened for ART • Number meeting criteria for ART • Numbers of patients starting ART • Numbers of patients with adverse reactions to ART • Number of patients defaulting from ART • Number of patients failing ART • Condoms distributed by ART services • Samples collected for surveillance of HIV drug resistance	• Numbers of TB patients accessing VCT • Number of HIV-positive TB patients screened for ART/referred to clinical services • Number of HIV-positive TB patients meeting criteria for ART *As for clinical services*

[14] The level of clinical service where ART will be provided is a national policy issue.
[15] The TB services may either manage their own TB patients on ART, or may refer TB patients for VCT (see Implementing-activity box 1) and ART.

ANNEX 1

Contact details of international organizations involved in TB and HIV activities

CDC Global AIDS Program (GAP)
Centers for Disease Control and Prevention
1600 Clifton Road
Mailstop E-41
Atlanta, GA 300333
USA
Website: www.cdc.gov
Tel: +1 404 639 3311

FHI
Family Health International
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2101 Wilson Boulevard
Arlington, VA, 22201
USA.
Website: www.fhi.org
Tel: +1 919 544 7040
Fax: +1 919 544 7261

IUATLD
International Union Against Tuberculosis and Lung Disease
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Website: http://www.iuatld.org
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Fax: +33 14 329 9087

KIT (Koninklijk Instituut voor de Tropen)
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KNCV
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Fax: +31 70 358 4004

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Website: www.liv.ac.uk
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Fax: +44 (0) 151 708 8733

London School of Hygiene & Tropical Medicine
Keppel Street
London, WC1E 7HT
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Fax: +44 207 436 5389
Website: www.lshtm.ac.uk

RATN
Regional AIDS Training Network
PO Box 16035
Nairobi
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Fax: +254 272 6626

UNAIDS
United Nations Joint Programme on HIV/AIDS
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Website: http: //www.unaids.org
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Fax: +41 22 791 4165

WHO
World Health Organization
20 Avenue Appia
CH-1211
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Switzerland
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Website: http: //www.who.int
Tel: +41 22 791 2708
Fax: +41 22 791 4268

ANNEX 2

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How to use these guidelines

These guidelines are intended for use by national health planners (especially those in TB and HIV/AIDS programmes in consultation with STIs programmes' representatives) and by district health management teams. The document is divided into colour coded parts to guide readers through the necessary steps to implement collaborative TB/HIV activities. Each part is introduced by an extract from the executive summary of the "Strategic Framework to Decrease the Burden of TB/HIV".

Part 1: Background information

This section provides background information on the overlapping TB/HIV epidemic and includes possible interventions for its control.

1 The overlapping TB and HIV epidemic

1 ***Global HIV and HIV-related TB epidemiology***

In some sub-Saharan Africa countries, up to 70% of patients with smear positive pulmonary TB are HIV-positive. TB, although curable, is one of the most common causes of HIV-related illness and death.

1.1 ***How the HIV epidemic drives the TB epidemic***

HIV promotes progression to active TB in people with recently acquired and latent M tuberculosis infection. HIV is the most powerful known risk factor for reactivation of latent tuberculosis infection to active disease.

1.2 ***How HIV changes the clinical course of TB***

As HIV-related immunosuppression increases, the clinical pattern of TB disease changes, with increasing numbers of smear-negative pulmonary TB and extra-pulmonary TB cases. TB is more likely to be disseminated and more difficult to diagnose as a result.

1.3 ***Impact of HIV on TB control programmes and impact of TB on HIV control programmes***

TB and HIV/AIDS are threatening the TB and HIV/AIDS national programmes. HIV increases the number of TB cases and TB is a leading cause of death in PLHA.

1.4 ***Current TB control strategy***

The current internationally recommended TB control strategy, DOTS, is a five-point policy package. This package is the cornerstone of global TB control, even when HIV is common. It represents the core business of TB control, namely case-finding and adequate treatment, which render patients non-infectious and no longer able to spread the disease to the community.

1.4.1 ***Current HIV/AIDS control strategy***

This strategy includes prevention and health promotion as well as treatment and care to people with HIV/AIDS. Part of this strategy is also a strong emphasis on involving the community sector and encouraging HIV/AIDS diagnosis and testing.

1.5.1 ***Rationale for joint TB/HIV programme activities***

Previously TB programmes and HIV/AIDS programmes have largely pursued separate courses. However, there is a strong need to exploit synergies between these two programmes so that health service providers can deliver the best interventions. The new strategy for TB control in high HIV prevalent populations includes interventions against TB and interventions against HIV (and therefore indirectly against TB).

2 Interventions to control TB in high HIV prevalent populations

2 ***Additional measures beyond TB case -finding and treatment***

The control of TB in high HIV prevalent populations requires additional measures beyond effective case finding and cure. These measures include intensified TB case-finding and treatment, TB preventive treatment and interventions against HIV.

2.1 ***TB/HIV interventions for each level of the health system***

National health planners for each country need to define the interventions and services that should be available at each level of their own health system.

PART 2: PLANNING AND ESTABLISHING PHASED IMPLEMENTATION OF COLLABORATIVE TB AND HIV PROGRAMME ACTIVITIES

This section outlines steps to be taken at both national and district levels to begin planning phased implementation of collaborative TB/HIV activities.

3 National level

3 ***Purpose of NTP/NACP collaboration***

Combined TB/HIV activities have the potential to provide definite synergistic benefits such as joint funding, staff, procurement and distribution.

3.2 ***Defining TB and HIV/AIDS programme collaboration***

One of the most challenging aspects of TB and HIV programme collaboration is the question of where the boundaries lie between the activities of the two programmes at both a national and a district level.

A national TB/HIV coordinating committee is one way a country can define the responsibilities of the NTP and NACP.

3.3 ***Developing a national collaborative TB/HIV strategic plan***

The TB/HIV strategic plan should have clear objectives and targets. The roles for each collaborating partner should be defined.

3.3.1 ***Recognising the burden of the overlapping HIV/TB epidemics***

National TB and HIV/AIDS managers and policy makers should meet and review country-specific data relating to both epidemics.

3.3.2 ***Recognising the strengths and weaknesses of the NTP and the NACP***

Analysis of these two programmes is needed.

3.3.3 ***Defining opportunities for NTP/NACP collaboration at a national and district level***

The opportunities identified at a national level will guide the development of a strategy for a district.

3.5 ***Planning phased implementation of collaborative TB/HIV programmes***

The districts chosen first for phased implementation should stand a good chance of establishing collaborative TB/HIV activities. They should either have well-organised DOTS programmes or good HIV/AIDS programmes, or preferably both. Criteria for starting TB/HIV collaborative activities are described.

3.6 ***Monitoring and evaluation of TB/HIV collaborative activities***

Both national and district TB/HIV committees should report on their activities every six months. Indicators are discussed in this section.

3.7 ***Assessing the cost of collaborative, national and district TB/HIV activities***

This section describes how to estimate the resources required to initiate and maintain TB/HIV collaborative activities.

3.8 ***Research***

There is a need for new interventions against TB and HIV. This section describes the role of research as a component of TB/HIV collaborative activities.

3.9 ***Need for international support***

International support is an essential component to coordinate technical assistance and disseminate lessons learned from field sites.

4 District level

4.1 ***District TB/HIV situation analysis***

The first step of phased implementation of collaborative TB/HIV activities at a district level is a situation analysis of services. This chapter describes practical steps to plan collaborative TB/HIV activities from district situation analysis to monitoring and evaluation.

PART 3: IMPLEMENTATION

This section represents the core of the document and describes **what** joint TB/HIV activities to implement, **how** to implement them and by **whom**.

5 Prioritized-activity Charts

These charts are a checklist of the different collaborative TB/HIV activities available for each service provider within a district level. The charts describe different activities, depending on the human and material resources available to the service provider.
The charts should be reviewed by central level TB and HIV programme planners and be piloted by an experienced district health management team.

- **Chart 1** PLHA support group
- **Chart 2** Home-based care groups
- **Chart 3** TB health care provider
- **Chart 4** Stand-alone VCT services
- **Chart 5** STIs care provider
- **Chart 6** Primary health care centre including reproductive health care facilities
- **Chart 7** District hospital
- **Chart 8** HIV clinic

6 Implementation-activity Boxes

These boxes outline the policy issues and activities required at central and district levels by health planners to support phased implementation of each collaborative TB/HIV activity.
Details of the implementation activities for each collaborative partner are described.

- **Box 1** Provision of VCT to TB (HBC and STIs) patients
- **Box 2** Promotion of safer sexual practices and use of condoms to TB patients
- **Box 3** Intensified TB case-finding by NTP partners
- **Box 4** CPT to reduce the morbidity and mortality of PLHA and HIV-positive TB patients
- **Box 5** TB screening at VCT centres
- **Box 6** STIs screening at VCT centres and VCT promotion by STIs treatment services
- **Box 7** STIs treatment at VCT centres
- **Box 8** TB sputum smear-microscopy at stand-alone VCT centres
- **Box 9** TB treatment at stand-alone VCT centres
- **Box 10** Community involvement in the management of TB and HIV patients
- **Box 11** PLHA support group involvement in TB (or STIs) activities
- **Box 12** Isoniazid preventive therapy-example of implementation at a stand-alone VCT centre
- **Box 13** ART

ANNEXES

Annex 1: Contact details of international organizations involved in TB and HIV activities

Annex 2: Suggested further reading.

Stop TB Department
Communicable Diseases Programme
HIV/AIDS Department
Family and Community Health

WORLD HEALTH ORGANIZATION
20 avenue Appia
CH-1211 Geneva 27, Switzerland

TB:HIV

For further information about
tuberculosis or
communicable diseases,
please contact
Information Resource Centre
Communicable Diseases
World Health Organization
20 avenue Appia
CH-1211 Geneva 27, Switzerland
cdsdoc@who.int
tel +41 22 791 3504
fax +41 22 791 4285

You can also visit our website at
http://www.who.int/gtb

For further information
about HIV/AIDS, please contact
Information Resource Centre
HIV/AIDS Department
World Health Organization
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